

tadikinatom



For Steve Clover, who made me see the life in music and the music in life.

Tadikinatom

Improvisation and its Guiding Principles in Percussion Playing in South Indian Classical Music

“Tadikinatom is common, but your look is different from mine” (NG Ravi, personal conversation)

“An artist’s individual imagination and the rigid laws to which he has to conform are like the two wheels of a chariot, both of them being equally indispensable for its movement” (Lath Mukund, quoted in Sankaran 1986:109)

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1. introduction



1. Introduction

So far I made two fieldwork trips to South India, three months in 1998 and six months in 2000-2001. These two study projects resulted in, amongst other things, the present study. I strongly believe that the only way of gaining real insight in the way a music culture is organised is studying the culture from within. Practical study, learning how to play the initial lessons, is, as Brown (1965:x-xi) puts it, “one of the most reliable means of acquiring an understanding of performance techniques.”

I studied the mridangam with MT Rajakesari, and theory and concepts with mridangists BC Manjunath, NG Ravi, and VR Chandrasekhar, mridangist/multi percussionist Anoor Anantha Krishna Sharma (Shivu), mridangist/kanjīrist TR Sundaresan, and singer Jahnavi Jayaprakash. All this was in Bangalore and Chennai. In Bangalore, Chennai, and Mysore I conducted interviews with mridangists Guruyavur Dorai, TV Gopalkrishnan (TVG), PG Lakshminarayana, Karaikudi R Mani, Bangalore V Praveen, Vellore Ramabhadran, NG Ravi, Mysore N Sudarshan, HS Sudhindra, Bangalore K Venkataram, ghātam player Ghatam S Karthick, kanjīrist V Nagarajan, violinist and Head of the Music Department of Mysore University dr Mysore M Manjunath, and musicologist R Satyanarayana. I attended workshops, masterclasses, lecture-demonstrations, and concerts.

In this study, we shall have a look at the role and shape of musical improvisation in percussion playing in South Indian classical music. Western musicians and musicologists often consider improvisation to be total freedom, a view that we will see is idealised and limited. In this study, I will show that musical improvisation in general and improvisation in South Indian music in particular are controlled by guidelines of several types, some more restrictive than others.

In South Indian drumming, a number of different techniques are used. The improvisation guidelines control the musical content of the pattern, its structure, and/or the choice of pattern. I have named the improvisation following these types of guiding principles musical content improvisation, structural improvisation, and contextual improvisation respectively. If and when which type of guideline is determining the shape and importance of improvisation depends on a number of factors that we will look at: the way the drummer has learnt to play his instrument, the type of technique, and the context that the drumming takes place in, the type of ensemble and the occasion of the concert.

In order to adequately assess the role, shape, and importance of improvisation in South Indian drumming, we first need to look into what improvisation and South Indian drumming actually are.

Introduction

As I said, I will show that the phenomenon improvisation cannot be considered without examining its controlling principles. In chapter 2 we will look at the traditional and the contemporary view on improvisation, using the studies by Bailey (1992), Berliner (1994), Mak & Jansma (1995), Nettle & Russell (1998), and Sloboda (1993), among others. I will proceed to propose another view that invites us to involve the guiding principles in the discussion on the process of improvisation in the second section of the chapter.

In chapter three we will investigate both the basic principles of South Indian drumming and the way a drummer learns his art, using my own experiences and the relevant literature, including Brown's pioneering study (1965), and literature written by Indian authors and available only or mainly in shops and libraries in India.

Chapter 4 deals with the actual topic of this study: improvisation in South Indian drumming. In the first section, we will look at the context of percussion playing as a factor that determines what kind of improvisation takes place in what way, very much like we look at the education of a drummer in chapter 3.2. In the second section of chapter 4 I will attempt to categorise the different techniques used in South Indian percussion playing, based on to how they are structured. To my knowledge, a classification of this kind has not been attempted before. Having done this, we will examine how the type and shape of improvisation depend on which technique is used.

Terminology in South Indian music has long been a problem. Different individuals, different playing traditions, musicians from different contexts (mainly dance and concert music), different states all have their own terms. Sometimes one phenomenon is known by several terms; sometimes one term is understood differently by different musicians.

In western writing on South Indian music, a similar confusion exists. "The cadential formulas of *Karṇāṭak* drumming are referred to variously as *mohara*, *arudi*, *tīrmānam*, *kōrvai*, and *ta din gi ṇa tom*. A survey of the accounts provided in the few existing non-Indian writings on the subject leads to the impression that fundamental misunderstandings abound among scholars concerning every aspect of these formulas. This situation is not a result of shoddy scholarship, since there is no 'standard definition' for any of these terms among musicians or writers in India. Instead, it is the natural consequence of the fact that the non-Indian writers have been principally oriented as scholars and only secondarily as performers of the music" (Nelson 1991:43).

I have chosen to use the Tamil terms, since Chennai (Madras) arguably is today's musical centre in South India. I use the terms that most of the people I spoke to used. Regarding the name of the musical style itself; "South Indian music" seems to be the most clear and most

neutral term, nowadays. The music is also known as “karnatak music”, also spelled as “carnatic” or “karnatic”. This, according to most, stems from the place of origin of South Indian classical music, the state Karnataka. Because of the above mentioned importance of Chennai in present day music, I have chosen to stay with the term South Indian music¹.

The transliteration I have used is the generally used one for Devanagari and Dravidian scripts. Names are written in the Roman transliteration the bearer prefers or that is conventional, as are musical terms.

The underlinings in the Indian notation system are similar to the beams of notes in the western staff notation system. Notes that are not underlined (Ki Ta Tha Ka) have the length of one beat. Single underlining (Ki Ta Tha Ka) indicates a doubling of the basic speed: in the time of one beat, two strokes are played. Double underlining (Kitathaka) means a quadrupling of the original speed: four notes per beat. Three lines (Kitathaka) indicate a doubling of the quadruple tempo: for one beat, eight attacks are played. In Indian, terms, the speeds are called first, second, third, and fourth speed respectively. Fourth speed is used mainly in grace notes, insofar my lessons are concerned. These speed indications are also adjusted for different subdivisions of the beat.

A dot indicates a rest and is relative to the strokes it is attached to; it is governed by the same underlinings as the strokes. Spaces and new lines are used to represent the phrasing, but have no durational function. The syllables in first and sometimes second speed are written detached, to suggest their slower speed. In third, fourth, and occasionally second speed, the syllables are linked to indicate the phrasing. I have indicated the tāla in case a technique deviated from the original pulse in a way that was still meaningfully related to it. In the case of more complex odd groupings, I have not done so, since the phrasing of the pattern itself is more important than its relation to the original pulse.

In the South Indian system, strokes are indicated with syllables: each stroke has its own. The syllables are to some extent onomatopoeic, though some strokes are indicated with various syllables. Also, different banis use different syllables for the (common) strokes, and different strokes for the (also common) syllables. In general, I used the syllables used by my informants.

I used the South Indian notation since I believe it is best to study music in its own context, in the way it studied in the place of origin. However, South Indian music being very much an oral tradition, the notation system is a memory aid more than a description system. In some cases it

¹ For a view on the name Karnatak vs South Indian, as well as a history of the division of North and South Indian music, see Satyanarayana (1987:29-35).


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lacks the means to adequately show the rhythmic complexities and intricacies. In such cases, I used western staff notation.


Throughout this study, I have used masculine pronouns, not because I deny that there are female percussion players as well, but because most, including those who I studied or conducted interviews with, are male. Using double pronoun forms would add unnecessary unreadability to this study.

For those who doubt whether someone foreign to a music tradition can describe it adequately and possibly even make a contribution, I would like to quote the American writer Kevin Whitehead, who wrote a book on jazz in the Netherlands. “No American has written extensively about a foreign jazz scene. Wilfrid Mellers’ 1964 book *Music in a New Found Land*, an English’ scholar’s meditation on American music, made me see the possibilities. Mellers misses out on some connections obvious to Americans, but makes others that native commentators had missed” (Whitehead 1998:vii).

Whitehead’s vision is not unheard of in the world of ethnomusicology. Mantle Hood (1971:374) stated that the western musicologist, “because of *who* he is—that is to say, what he has succeeded in becoming through the years of training—is capable of insights and evaluations, as a transmitter of a non-Western music, which no Javanese, even with training abroad in Western methods, could ever duplicate.” Nettl (1983:259-260) adds that the converse is true of the Javanese scholar, and that, because of the differences between the insider’s and the outsider’s perspectives also mentioned by Whitehead, both make a contribution.



2. improvisation and its guiding principles



2. Improvisation and its Guiding Principles

2.1. Definitions

The Traditional View: the Dichotomy

The word improvisation is derived from the Latin “improvisus”, which means “that what was not foreseen”. Nettl (1998:1) defines improvisation as “the creation of music in the course of performance”; other often used definitions (a number of which are listed by Nettl 1998:10) are similar. In most definitions the term improvisation is described as a term with a single meaning. The concept is described as musical freedom or unprepared musical creation. Inspiration is seen as the determining factor, while practice and other forms of preparation are often not considered to be important. This definition of improvisation opposes it directly to composition, the way of creating music that is supposed to control beforehand everything that is played. Composed music is seen as entirely fixed, entirely controlled, while improvised music is believed to be free from any guiding or organising principles at all. This view may stem from the fact that western art music in its presently most important form, the music from the classic-romantic era, is entirely notated and therefore supposed to be entirely fixed. The fact that many compositions exist in various versions and that many composers were improvisers in their own right is conveniently overlooked¹. The supposed “anything goes” mentality of improvisation is both idealised and looked down on in the world of notated western art music.

The Contemporary View: the Continuum

With the growing status of jazz and non-western musics², and the resulting academic attention for these musics, the traditional view came under attack. The realisation that the traditional view is entirely western-centric, the need for a redefinition of improvisation emerged. Sorrell (1990, quoted in Sutton 1998: 70) states: “Because the word 'improvisation' has no absolute meaning it must always be used with care and myriad qualifications”. Improvisation, it is argued, is not just playing anything, as in the traditional interpretation of the term, but it is putting together, in “the course of performance” to use the term coined by Nettl, elements that have been prepared,

¹ For descriptions of improvisation in western art music, see Bailey (1992).

² Using the term “musics” rather than “music” is the necessary result of the desire to describe and discuss different musical worlds in ethnomusicology. Using a singular word for such a diverse and pluralistic phenomenon is simply impossible.

practised beforehand¹. The idealised idea of improvisation as unlimited freedom has been replaced by the notion of the existence of guidelines and other organisational models. “What distinguishes improvisation from composition is primarily the pre-existence of a large set of formal constraints which comprise a ‘blueprint’ or ‘skeleton’ for the improvisation (...) a model which is, in most cases, externally supplied by the culture, and which he embellishes and ‘fills in’ in various ways” (Sloboda 1993:139). “Musical improvisation in any context depends on the rearrangement of learned and traditional materials, no matter how unconscious and unorganized they may be, and no matter how far the performer moves from his established base. Improvisation never starts from zero” Brown (1965: 140-141).

Sloboda (1993:149) describes how musicians work with these models: “what absolves the improviser from the task of evaluation and long term planning is the relatively rigid formal ‘frame’ within which his improvisation takes place, and which dictates the large scale structure of his performances. Because this frame persists over many improvisations, the performer builds up a repertoire of ‘things that have worked well in the past’”.

The realisation of the importance of guiding and controlling models results in the denial of the dichotomy between improvisation and composition in recent studies, in the ethnomusicological field as well as in other areas such as the psychology of music. “[It is] necessary to discard this simple line of demarcation between improvisation and pre-composition” (Nettl 1991:16). Instead, complete musical freedom, symbolised by the word “improvisation”, and complete musical fixedness, indicated with the word “composition”, are considered two extremes of a continuum. All music has a place somewhere on this continuum, a classical symphony being close to the “composed” extreme, a jazz tune closer to the “improvised” side.

Nettl (1998:13-14) uses the South Indian composition form *rāgam-tāṇam-pallavi* to illustrate the continuum. In this form, various forms of improvisation, with varying amounts of freedom for the performer, are used, ranging from improvisation limited only by a scale and its characteristic melodic formulae, to improvisation restricted by a metre, a melodic theme that often recurs, and all sorts of rhythmic and melodic models.

¹ The term “instant composition”, coined by Dutch jazz musicians from the Amsterdam improvised music scene, is possibly a better one, provided that composition is understood in its literal meaning of “putting together”. See also Whitehead (1998).

Suggestion for Another View: the Unity

The above described approach acknowledges the multi-faceted nature of musical improvisation and discarded the traditional idealised view. Nevertheless, the old dichotomy is still present in contemporary theory: composition and improvisation are still considered opposites, though not in a dualistic sense. “The concept of improvisation is actually broader and encompasses more types of creative activity than the concept of composition, defined as an individual writing a score” (Nettl 1998:4). The merit of these studies is that the nothingness between the black-and-whiteness of the two opposites has been filled with a complete scale of greys.

However, most of the world’s musics do not know the dichotomy between composition and improvisation. Most musical cultures realise that improvisation never stands alone, but is strongly tied to and based on an existing musical canon. Whether this repertoire is notated or not depends on cultural factors such as literacy and the importance thereof, but is not of great importance. Hence, I propose seeing improvisation as the default way of making music, instead of considering improvisation and composition two theoretical extremes of a musical continuum. Improvisation defined in this way is always, to different extents, based on fixed models (notated or not). In other words, I do agree with the importance of models as emphasised by the scholars of the continuum persuasion, but I do not accept their holding on to the dichotomy. Rather, I propose seeing any fixed musical entity as such a model, be it a traditional song or a western art music score. Nettl (1991:15-16), though without reaching my conclusion, seems to have similar thoughts: “it may be stated as an article of faith that improvisers always have a point of departure, something which they use to improvise upon. There are many types, extending from themes, tunes, and chord sequences to forms, from a vocabulary of techniques to a vocabulary of motifs and longer materials, from what is easy or ‘natural’ for the hand to what is intellectually complex”.

Arom (quoted in Lortat-Jacob 1987:67) agrees with the importance of the model: “l’improvisation *es nihilo* n’a pas cours: toute musique improvisée se réfère toujours à un modèle”. My point here is that in this sense, all music is improvised, since all music is guided by a model. For so called composed music the model is more detailed, but there is no essential difference between these ways of making music. Improvisation is how music is made, the element of composition being the amount of organisation, control, and guidance in that process. How directly the improvisation is based on an fixed frame and how strictly it follows rules and models varies not only for different musical cultures, but also within cultures, genres, and even musical pieces themselves, as we saw in Nettl’s rāgam-tāṇam-pallavi example. As Berliner (1994:222) writes on the way a jazz musician improvises, “at one moment, soloists may play radical, precomposed variations of a composition’s melody as rehearsed and memorized before

the event. The next moment, they may spontaneously be embellishing the melody's shape, or inventing a new melodic phrase". Musical improvisation is the process of making music, in which the performer makes a number of decisions about the shape of the music in the course of the performance. These decisions can be the adjustment of the phrasing of precomposed material or the creation of an entire musical piece, based on in previous practice automatised patterns, idiomatic concerns, the input of other musicians, the reaction of the audience etc.

2.2. The Process

As we saw, fixed guidelines are the skeleton of musical improvisation. But how are they dealt with, and is played to get a sounding result? Improvisation, according to Sutton (1998:71, 86), usually involves the realisation of one or more parts are constrained by a model: a melody, a rhythmic pattern, a chord progression, sounded or not, that is known to the player. The improvised part should articulate the model by referring to it, as frequently as required by the idiom. Inventiveness comes in choice of existing formulae, of building blocks. "Musical improvisation (...) is not free expression constrained only by the inspiration of the moment, but a complex and multilevel process, one that must be learned and practised".

Apart from pre-fixed guiding principles, a whole repertoire of phrases, formulae, "things that work well" (Berliner 1994:221) is used by the musician. "In creating solo after solo, jazz improvisers continually explore the relationships of musical ideas, negotiating among a mixture of fixed elements, which derive from their storehouses" (Berliner 1994:221). Mak & Jansma (1995:96-99) state that in improvisation certain long term memory plans are used; the short-term memory is not capable of dealing with each note separately. Improvisation, no matter where from, is based on fixed idiomatic rules on top of the fixed guiding principles. Musical formulae are freely used, more as a frame of mind than literally. The bigger an improviser's repertoire of formulae, the freer he can play and the more possibilities he has. Coker (1998, as quoted in Matare's SOAS paper, 2000) states that standard, therefore known, musical elements make improvisation possible. According to Sankaran (1986:101), in all types of improvisations "constant re-arrangements of traditional materials, and a systematic elaboration on the themes and variations take place".

Mak & Jansma (1995: 103-104) state that planning in advance determines the choices that are made while playing. This planning is conscious, it activates certain sets of knowledge about the form, the idiom, the composition, the style. By consciously reflecting on the musical results, improvisers and composers can discover new possibilities. Musical thinking, in whichever form, takes place within self-made or traditional rules. This is necessary because our cognitive system works with links and connections; by rules some get activated earlier than others. The exploration space gets smaller and thus becomes workable.

Improvisation can be taken apart into different aspects. As we shall see in chapter 4.3, in South Indian music we find controlling principles for improvisation on the level of musical content, on a structural level, and improvisation in relation to the context of the music. Not all these forms are equally free, nor do they exist independently or without overlaps.

An interesting question here is what the Sanskrit term “manodharma” exactly means. It is usually translated with “improvisation”. Menon (1995:115) describes manodharma as “improvisational and (...) produced instantaneously and without forethought”. This is as vague and limited as the traditional interpretation of the term “improvisation” we have seen. I propose to redefine manodharma as mainly contextual improvisation, since all my informants emphasised the importance of aesthetic considerations when choosing what techniques to use in which contexts as a part of manodharma. This type of improvisation is also arguably the type that affects the sounding musical result the most. In this way, we can also understand why Venkataram (see chapter 3.1) equalled manodharma to the playing practice.



3. south indian drumming

3. South Indian Drumming

3.1. Basic Principles

This study does not intend to give an exhaustive overview of South Indian music theory. Improvisation is very much an alive phenomenon that cannot be seen apart from performance practice. For that reason, the treatises from India's great musicological history are not dealt with. The concepts, however, are the founding principles of South Indian classical music, and the frame in which improvisation takes place. As Venkataram said, the playing practice, the *manodharma* (for a discussion of the complex term *manodharma*, see chapter 4.3), is more important, but you do need the theory. Kuppuswami & Venkata Subramaniam (1993:ix-x) describe the importance of theory. Indian music is indebted to the *candasāstra*, the theoretical treatises, for numerous models. "The theorists succeed in (a) enumerating the rules in lucid and clear cut style (b) developing compact schemes of tabulation (c) reducing the schemes to arithmetical operations and (d) revealing the pragmatic applications for theoretical techniques".

Tempo or speed is called *laya*. Deva (1995:39) states that the tempo, the actual pulse, is more or less subjective, but the relative durational values of the different tempi are definite: *druta* is twice the speed of *madhya*; *madhya* is double *vilamba*. Geekie (1984:700) states that "the slow tempo *talas* are associated with older compositions".

South Indian metre is organised in the *tāla*. Deva (1967:134) defines *tāla* as "a cyclic arrangement of terms in a definite pattern." Sambamurthy (1998b:101) states that a *tāla* needs minimum three *aksharas*. *Tāla* differs from the western concept of the timecycle, the "measure" or "bar" in that it has a musically important inner division. A *tāla* consists of a number of *aṅgas*, parts (literally limbs). *Tālas* can be synonymous, ie have the same number of *aksharas*, beats, but still be very different because of their subdivision. Brown (1965:6) states, perhaps somewhat optimistically, that the substructure, whether indicated with the *kriyā*, the movements that show the *tāla*, or not, is always in the mind of the player and the audience. According to Sankaran (1986:104), *tālas* "have their own individuality and their distinct structures or groupings influence the drumming in a significant way. In this manner *tālas* themselves provide specific rhythmic contours, and the regular beats in a *tāla* cycle is the foundation upon which off-beat timing and cross rhythm are built."

Tālas are classified in *tālasystems*; South Indian music history has known many¹. Brown (1965:5) states there are hundreds of *tālas*, which differ "according to historical period or

¹ See for a very complete description of about all *tāla* systems from past and present Sundaram (no date). Brown (1965), Chelladurai (2000:153-156), Deva (1995), Sambamurthy (1998a, 1998b, 1999a, 1999b), Shankar (1999:61-84), and Subramaniam & Subramaniam (1995:55-77) give good descriptions of the currently used *tāla* systems. For

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stylistic division”. The main tālas today are the 35 sulādi tālas, consisting of three types of aṅgas, and the four chāpu tālas, shorter, simpler, and faster ones. In exceptional cases, eg for a special pallavi, a tāla from the old system of 108 tālas, using more different types of aṅgas, is used. A fourth type of tālas is formed by the Tiruppugal tālas: used in the repertoire with the same name by the 15th century poet saint Aruṇagirinādar. These tālas are often intricate, regulated by long and short syllables in the verse. More tālas exist: “*mṛdaṅgam* players often experiment with theoretically-derived talas, but these experiments tend very rarely to result in public performances” (Geekie 1984:700).

The sulādi tālas are classified using top-level combinations and subdivisions within those. A sulādi tāla consists of maximum three different types of aṅga.

anudrutam	indicated with U	1 beat
drutam	indicated with O	2 beats
laghu	indicated with l	3, 4, 5, 7, or 9 beats

The first classification is based on the combination of the aṅgas, of which there are seven.

dhruva	l O l l
matya	l O l
rupaka	O l
jhampa	l U O
triputa	l O O
aṭa	l l O O
ēka	l

As Sundaresan explained in his lecture-demonstration on yatis (see chapter 4.2), some tālas follow a yati structure.

dhruva	damaru yati
matya	damaru yati
rupaka	srotovaha yati
jhampa	damaru yati

the history of different tāla systems including the sulādi tāla system, see Satyanarayana (1987:46-49). Chaudhary (1997:1-150) describes tālasystems and their history, including extensive information on the ancient treatises.

By changing the *jāti*, the *laghu* class, these seven possible combinations become 35 *tālas*. As Brown (1965:9) puts it, “the *jāti bheda* (‘classification difference’) has made possible the expansion of a system of seven original *tālas*, the *Sapta Tālas* (“seven *tālas*”) into a system of thirty-five.” There are five different types of *laghu*: 3, 4, 5, 7, or 9 beats, indicated with *l*₃, *l*₄, *l*₅, *l*₇, and *l*₉. Not all of the 35 possibilities are in frequent use. *Ādi tāla* is by far the most used *tāla*. Ghosh (1983:185) even argues that *ādi tāla* could be the first formalised *tāla*, the origin of all *tālas*, including *hindustani tritāl*.

The *chāpu tālas* probably have their origin in folk music, in “old and indigenous time-measures” (Sambamurthy 1952:76). Sambamurthy (1952:156) explains that the name *chāpu* comes from *śāyppu*, Tamil for bent. One of the two constituent *aṅgas* is shorter. The *chāpu tālas* are *tisra* (3), *khaṇḍa* (5), *miśra* (7), and *sankīrṇa chāpu* (9). *Khaṇḍa* and *miśra chāpu* are most frequently used of these. Sambamurthy (1952:76) describes that *chāpu* usually means *miśra chāpu*, if *tisra* or *khaṇḍa chāpu* is meant that is indicated. *Sankīrṇa chāpu* is rare. *Chāpu tālas* are generally played in a higher tempo than the *sulādi tālas*.

Each *akshara*, beat, of a *sulādi tāla* can be subdivided, “the internal pattern thus becomes very important musically and aesthetically” (Deva (1995:40). The subdivision can be *tisra* (3 *mātrās* or units, Indian musicians often call it syllables in English), *chatusra* (4), *khaṇḍa* (5), *miśra* (7), *sankīrṇa* (9). Thus, the above mentioned 35 *tālas* become 175 *tālas*.

<i>tisra</i>	3 <i>mātrās</i> per <i>akshara</i>	<i>takiṭa</i>
<i>chatusra</i>	4 <i>mātrās</i> per <i>akshara</i>	<i>takadimi</i>
<i>khaṇḍa</i>	5 <i>mātrās</i> per <i>akshara</i>	<i>takatakiṭa</i>
<i>miśra</i>	7 <i>mātrās</i> per <i>akshara</i>	<i>takiṭatakadimi</i>
<i>sankīrṇa</i>	9 <i>mātrās</i> per <i>akshara</i>	<i>takadimitakatakiṭa</i>

The order of the groupings of syllables can be altered (eg *miśra* can also be *takadimitakiṭa*).

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Multiples of the number of mātrās per akshara are called different speeds: 8 mātrās per akshara is chatusra second speeds. Often used second speeds have their own syllables.

tisra 2nd speed	takatakadimi
chatusra 2nd speed	takadimi takajono

The subdivision is called gati or nadai. Many musicians consider these terms to mean the same. Recently, however, a debate is going on about a splitting up of these terms. According to Venkataram and other musicians affiliated to the Bangalore Percussive Arts Centre, such as Manjunath and Shivu, as well as to Sundaresan from Chennai, gati is shown in the krīyā, the movements that count the tāla. Gati thus is fixed and it is used in the name of the tāla: eg khaṇḍa jāti triputa tāla, khaṇḍa gati. Nadai is not fixed in the tāla and hence is flexible.

As Nelson (1991:19) describes, “there is no implied accent structure within any gati. Any pulse may be accented; accents are generated by phrase groupings. This fact leaves the drummer great freedom in the generation of material”.

The ten tāla dasa prānas, the “life giving elements” for the tāla, describe several rhythmic features of South Indian classical music¹. Sambamurthy (1998b:108-112) states that the first five are the mahā prānas or main ones, the others are upa prānas or secondary elements. The mahā prānas deal with the basic elements of a tāla, as described above. In chapter 4.3 we will look in more detail at some of the upa prānas: the seventh tāla dasa prāna, the grāha or eḍuppu; the ninth, the yati; and the tenth, the prastāra².

A unifying principle influencing all South Indian music is the desire for system, for logic, and when appropriate for symmetry.

Music Example 1: Systematic Calculation of a Solkat

The systematic development of a khaṇḍa chāpu solkat (an ardi, in the shape of a gopuccha yati in its most developed form, see chapter 4.2), a second sketch lesson Rajakesari taught me, illustrates this desire for logic.

The basic calculation is very simple: two cycles of khaṇḍa chāpu have 10 beats, or 20 half beats. Playing the simplest figure available, Takadhina, lasting four half beats (ie second speed,

¹ For more on the tāla dasa prānas, see Chelladurai (2000:157-170), Sharma (1999:71-80), and Subramaniam & Subramaniam (1995:69-75).

² For a thorough description of prastāra, the tenth tāla dasa prāna, see Sharma (1992).

hence singly underlined), twice, with a kārvaī, a gap of four half beats as well, fills these: 4 + 4 kārvaī + 4 + 4 kārvaī + 4 = 20. The kārvaī can be silent or attacked. (In chapter 4.2 we will discuss this further.) In this case, it is attacked: the stroke Dhin is played. Dhin is also played to conclude the phrase on the downbeat of the next cycle.

<u>Ta Ka</u>	<u>Dhi Na</u>	<u>Dhin .</u>	<u>..</u>	<u>Ta Ka</u>	<u>Dhi Na</u>	<u>Dhin .</u>	<u>..</u>	<u>Ta Ka</u>	<u>Dhi Na</u>	Dhin
1	2	3	4	5	1	2	3	4	5	1

Now we double the speed of the phrase (not the kārvaī). Thus, the phrase has to be played twice to fill the cycle.

<u>Takadhina</u>	<u>Takadhina</u>	<u>Dhin .</u>	<u>..</u>	<u>Takadhina</u>	
1	2	3	4	5	
<u>Takadhina</u>	<u>Dhin .</u>	<u>..</u>	<u>Takadhina</u>	<u>Takadhina</u>	Dhin
1	2	3	4	5	1

Decreasing or increasing patterns are often preferred over equal patterns. Thus, 2 + 2 + 2 is replaced by 1 + 2 + 3. (This is the solkat as we actually saw it in the lesson.)

<u>Takadhina</u>	<u>Dhin .</u>	<u>..</u>	<u>Takadhina</u>	<u>Takadhina</u>	
1	2	3	4	5	
<u>Dhin .</u>	<u>..</u>	<u>Takadhina</u>	<u>Takadhina</u>	<u>Takadhina</u>	Dhin
1	2	3	4	5	1

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To take the use of addition and reduction even further, the kārvais are included: they are decreased from 4 to 3 mātrās. The two mātrās we “win” in this way are added to the last phrase, which is slowed down into tisra so it still consists of three times the four stroke phrase.

<u>Takadhina</u>	<u>Dhin .</u>	<u>. Taka</u>	<u>dhina Taka</u>	<u>dhina Dhin</u>	
1	2	3	4	5	
<u>. .</u>	<u>Takadhi</u>	<u>na Taka</u>	<u>dhina Ta</u>	<u>kadhina</u>	<u>Dhin</u>
1	2	3	4	5	1

3.2. Learning

The curriculum of a South Indian drumming student consists of elements on various levels, all affecting and determining the role of improvisation: playing techniques (fingerings), characteristic phrases, characteristic structures of eg *kaṇakkus*, and the choice of patterns and techniques in a musical situation. All these can, to various extents, be different for different *banis*, playing traditions. Different teachers, belonging to different *banis*, playing traditions, may teach in different ways, with different emphases, certain stylistic features, certain approaches etc. However, the differences are of minor importance, it seems. As Brown (1965: 289) puts it, “the range of difference is very small compared to the range of similarity” for different *banis*’ lessons. A thorough description of the distinction between different *banis* is beyond the scope of the present study¹; we will limit ourselves to the factors that affect improvisation and its controlling principles. Other possible ingredients do not affect improvisation in the way these do.

“The choice of patterns depends on many small imponderables like the mood of the teacher, or the day to day needs of the student and his particular physical capabilities and limitations. As the lessons are given, traditional procedures and patterns move in a constantly shifting re-arrangement that is always fresh and creative” (Brown 1965: 107).

Brown (1965:113) describes how the student will “to the last possible degree [absorb] his teacher’s repertoire, style, and very mannerisms of improvisation”. Learning, improvisation, and individuality are thus very intertwined in South Indian classical music performance. This already starts in the learning stage: “although the student is learning a truly enormous vocabulary of set patterns in drumming, their presentation (much dependent on the fact that the tradition is oral) keeps him constantly at the breaking edge of creative growth. Tradition and creativity are indissolubly merged, and within a short time he will have a hard time knowing whether he is playing patterns that the *guru* has given him or is creating new ones of his own within the system” (Brown 1965:141).

Fingerings, taught in the beginner’s lessons, affect musical content improvisation. What strokes are used where, the sound of the strokes, whether or not grace notes are used, the *pharans*, the characteristic phrases can be different for different *banis*, and all determine how the music is improvised on the level of the sounding result.

On a structural level, the construction of both timekeeping patterns and *kaṇakkus*, taught in basic and advanced lessons, is important: the structures become internalised and guide the

¹ For a thorough analysis of *tani avartanam*s by players from different *banis*, see Nelson (1991).

improvisation. The percussionist can either fill in the models he learnt (strictly this is musical improvisation) or construct his own, based on the learnt models. In practice, the distinction between these two is hard to make. Aesthetic differences between different banis and different players exist. A very clear one is whether being systematic is regarded as important or not.

Music Example 2: Bani-Dependent Calculation

An example of the differences between banis on a structural level, affecting structural improvisation, is the difference in opinion about a certain kōrvai. Shivu taught me this kōrvai, mentioning that this is one of the most famous kōrvais. The ardi is as follows:

Ta Dim .
Taka Dim . .
Takita Dim . .
Tadikinatom Tadikinatom Tadikinatom

This kōrvai, though, is incorrect, as Shivu told me, but nevertheless very popular. The calculation is not incorrect: the length of the gap is not constant; the increase of the phrase is not systematic.

2 + 4 (sounding kārvaī)
2 + 3 (sounding kārvaī)
3 + 3 (sounding kārvaī)
5 + 5 + 5

When Sudarshan spoke of the importance of structures being systematic and symmetrical, I asked him about this kōrvai. He told me this kōrvai is incorrect, but that it can be corrected easily:

Ta Dim . .
Taka Dim . .
Takita Dim . .
Tadikinatom . Tadikinatom . Tadikinatom

The calculation is systematic in this way:

1 + 3 (sounding kārvaī)
2 + 3 (sounding kārvaī)
3 + 3 (sounding kārvaī)
5 + 1 (silent kārvaī) + 5 + 1 (silent kārvaī) + 5

Ravi acknowledged the fact that the original kōrvai is theoretically incorrect, but strongly objected against changing it. He argued that its beauty has not been beaten, and that it is well known. The audience will immediately realise that a section is being finished when they hear this kōrvai, while something new may not be recognised all that well. When the kōrvai is adjusted, as happens nowadays, the audience will consider it wrong. Apparently this discussion is not new: Nelson (1991:69-70) describes the very same kōrvai and its adjustment.

Arguably the most influential on an overall level is the form of improvisation I call contextual: which patterns and techniques are chosen in performance. The structure and content of the patterns and techniques obviously determines their character, but the overall performance, in my view, is most affected by what patterns and techniques are chosen. The main contextual improvisation technique in South Indian percussion playing is combination and permutation. Wade (1979:142) also observes this: “the basic idea behind rhythmic development in Karnatak drumming is to take a set of primary materials—a wealth of forms and a wealth of patterns—and constantly rearrange, change, and extend them.” Sankaran (1986:101) elaborates: “there are many guidelines to our improvisation offered by tradition and in the presentation of our music, tradition and creativity are indissolubly merged. To develop a theme means to unfold its latent energies, to search out its capacities for growth and bring them to fruition. Thematic development represents the constructional as well as creative element in music.”

Vedavalli (1995:2) describes the same for singing. “Manōdharma Sangīta is music which is improvised by the musician on the spot, without any previous preparation. Of course many exercises and compositions in various rāgas have to be learnt and practiced as a prerequisite by the students of music to make an attempt to sing it. But out of the many phrases (...) which are practiced by the students, only those phrases which can succeed one another from the aesthetic point of view have to be presented, while singing this branch of the art.”

The teaching system of a bani has some influence: it teaches how ideas are linked and structured in bigger sections. This is different from structural improvisation, which determines the actual structure of an idea itself. However, this section based type of improvisation is not very important in actual performance, since the percussionists have a submissive role in accompaniment. For most of the concert (see chapter 4.1 on context) they have to follow the formal structure as given by the main artist. Within these sections, the true contextual improvisation takes place, the choice of material from the repertoire of learnt patterns, techniques, and models. As Brown (1965: 60) describes: “each performer, in a sense, has his own style of playing. Because he has a great deal of freedom in the way in which he puts together the *materia technica*, his style may vary from one performance to the next”.

Brown describes how the mridangist shapes his playing and adds material. The insertion of new patterns may be infix, prefix, suffix: in, before, after already established larger pattern. “Smaller patterns may be fragmented or extended. They may be arranged in certain formal configurations of a pre-determined type, like the cadential *mōra*. The basic shape of a main germinal pattern may be altered so that it will fit, for example, the structural framework of another *tāla*. All of these procedures except those specifically related to *tāla* are learned in the preliminary lessons” (Brown 1956: xvi).

Sankaran (1986:104) states: “an enormous vocabulary of structural materials and archetypal forms can be found in a drummer’s repertory. The insight of a great master, which adds new features to the elaboration of rhythms, tends to become an established rule for his pupils and many of his contemporaries. The phenomenon gives birth to a specific school (...) In other words, the tradition has given us a number of models that provide scope for a systematic improvisation.”

Though some say this contextual level is not dealt with in the lessons, the general view is that it is learnt by a combination of listening, being taught, and trial and error (the famous “experience”), the ratio of which may slightly differ for different banis. In Nagarajan’s words: “the guru teaches also, but mainly you go to concerts and hear hear hear”. Ravi described how he used to listen to Sivaraman on the radio, trying to copy what he heard only by ear, devising his own methods. Taught or not, improvisation is without doubt a more obscure topic than the basic lessons, and not only in South India. Flamenco guitarist Paco Peña, quoted by Bailey

(1992:109) explains. “I prepare to be able, technically, to reach anything I want to reach on the guitar and for that, of course, I do my exercises and so on. But not specifically for improvising.”

Brown (1965:110-112) describes how the student learns contextual improvisation. “The number of lessons within each germinal type, and probably the number of germinal types themselves, is to a large extent arbitrary (....) The system is capable of endless expansion. In fact, one of its most striking features is that it provides the performer with the *means* for this expansion. The development of the lessons as a structure points out the method for continued growth (....) In short, the drum lessons provide the performer with the tactics of improvisation (....) The thousands of patterns used in performance develop from hundreds of shorter ones, which in turn are derived from a relatively small number of germinal patterns made up of combinations of the (...) basic strokes on the drum.”

One of the elements listed here by Sankaran (1986:104-105) deserves special attention at this point. The “permutation and combination of phrase patterns” shapes percussion playing at its root level. General patterns are learnt in the most common *tālas*; the pupil learns how to adapt them. From then on, he is free to adapt any pattern to any *tāla*. As Brown (1965:xv) states, “four *tālas*, eight, seven, five, and three counts in length, are the most important in present-day South Indian, or Carnatic, music, and a musician who can perform in all four of them can transfer his rhythmic patterns to other *tālas* by a process of permutation and combination”.

Brown goes on (1956: xvi): “The drummer’s musical vocabulary consist of certain sounds that are used in a more independent or isolated way than others, but mainly of short phrases in great variety that can be combined in different ways to form larger formal structures. The performer mentally categorizes the phrases according to germinal source patterns.... By means of an oral tradition, a *mṛdaṅga* player learns a large stock of structural patterns of different types, as well as the method of their creation. He is thereby prepared for his role as soloist and accompanist in the tradition of continuous improvisation that is the essence of *mṛdaṅga* performance technique”.

Sudhindra stated something similar. Improvisation is not directly taught. The basics are taught. When the teacher improvises and uses something the student knows from the basic lessons, it is left to the student to try and do something along the same lines. According to Karthick, learning to improvise, in the meaning of deciding on the stage what to play, comes by experience. Improvisation is learnt by playing and attending lots of concerts, not by being taught, though the teacher does give certain guidelines. He compared learning contextual improvisation to learning how to drive: you learn most after you stop taking classes. Most of my informants stated that their gurus gave them some guidelines, some general outline of how

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to improvise on the stage. Some, including Dorai, Ravi, Sudarshan, and Sudhindra, described teaching by having their students play with a vocalist and commenting on what they play. Mani emphasised that listening to a lot of music is as important as practicing the instrument.

Ravi described contextual improvisation very accurately. “Calculations are one thing, but it’s about presentation, how you give it. Raw, halfbaked, baked, etc. Tadikinatam is common, but your look is different from mine. That is our music. Purely individual, nobody can follow anybody. A student cannot follow his guru (...) I teach them: watch me, and try to play however you can (...) I insist, don’t play like me. You cannot play like me; I cannot play like my master. Take it and try to play it with your own mind, not with mine. However it comes, it is good for you (...) We give the ingredients, you build as you like.”

Music Example 3: Improvisation Lesson

TVG explains how he teaches his students how to improvise. In the simplest version of the first ādi tāla flow pattern, he makes his students improvise the last line.

Nam	Dhin	Dhin	Nam
Nam	Dhin	Dhin	Nam
Nam	Dhin	Dhin	Nam
<u>Taka</u>	<u>Taka</u>	<u>Taka</u>	<u>Taka</u>

Improvisation options for the fourth line: Takadimi Takadimi, Takadimi Talan . gu, Takadimi Tarikitarikita, Takadimi Tathom . ., Ta . Ta Tadikinatam, etc

After this is mastered, the elaborate version of the flow pattern can be used:

Nam	Dhin	Dhin	Nam
<u>Namnam</u>	Dhin	Dhin	Nam
<u>Tarikita</u>	Dhin	Dhin	Nam
<u>Taka</u>	<u>Taka</u>	<u>Taka</u>	<u>Taka</u>

Improvisation options for the fourth line: Tataku Tataka Jina, Tajam Tirakita Kitathaka Kitathaka, this last one leading into a final variation

Nam	Dhin	Dhin	Nam
<u>Tajam</u>	<u>Tirakita</u>	<u>Kitathaka</u>	<u>Kitathaka</u>

Nam	Dhin	Dhin	Nam
<u>Tajam</u>	<u>Tirakita</u>	<u>Kitathaka</u>	<u>Kitathaka</u>

with a concluding ardi (see chapter 4.2)

Tajam	<u>Tirakita</u>	<u>Kitathaka</u>	<u>Kitathaka</u>	Dha	.
Tajam	<u>Tirakita</u>	<u>Kitathaka</u>	<u>Kitathaka</u>	Dha	<u>Kitathaka</u>
<u>Kitathaka</u>	Dha	<u>Kitathaka</u>	<u>Kitathaka</u>	Dha	

Rajakesari's lessons aimed at the same goal. By playing one flow pattern for a while, varying the fourth line and basing ardis or kōrvais (see below) on the variations. This way, the student learns different possible variations and how they fit the music on a larger scale.



4. improvisation and its guiding principles in south indian drumming

4. Improvisation and its Guiding Principles in South Indian Drumming

As we have seen in the chapter on improvisation, and as we will see more extensively in this chapter, there are different types of improvisation. Apart from musical content improvisation and structural improvisation (concerning the musical content and its shape), there is what I call contextual improvisation: the choice of which patterns to play in a given musical situation.

4.1. Context

Different Roles and Functions of the Percussion Instruments

The main guideline for contextual improvisation is the musical environment, which includes whether the drummer is an accompanist or soloist (see below). On a second plane, the main performer's taste and capacities, the type of composition, the contents of the lyrics, the occasion, the venue and audience etc affect this type of improvisation. Ravi explains that for an audience of what he calls "common people" he would play differently than for an audience in a sabha, consisting of musicians and connoisseurs. For a "common" audience, he would play less complex, with more "body energy, make them dance". He would not play a long solo section, since that kind of audience is mainly interested in hearing songs. Knowing how to please which audience comes by experience, he said. TVG stated that nowadays the audience comes to "hear songs, not the music". Everything other than songs has become irrelevant. This does not need an interpretative approach from the percussionists; their function is reduced to mere timekeeping. That the occasion of the concert affects the style of playing is also described by Sambamurthy (1999a:102), who states that sabhas are demanding venues: "the modern sangita sabha is not a mere place of entertainment. It is a place where one gets food for musical thought".

More important than these second-level factors is the musical context that the percussionist has to function in. When playing as an accompanist with a singer or other instrumentalists, in other words in a regular concert ensemble, percussionists have a supportive, submissive approach. In a percussion only context, that can be a solo section in a regular concert or a complete concert by a laya vinyasa ensemble, percussion ensemble, the drummers can show a different side of percussion playing. Mysore Manjunath described the difference in approach for the two contexts: in accompaniment, the percussionist has to be submissive and cannot play for him or herself. In the solo section, it is entirely up to the percussionists, or rather, as we shall see, to the mridangist, what happens. The intricate *kanakkus* are reserved for the solo section.

Asking whether the individuality of a player shows more in tani avartanam or in accompaniment, I got different, at first sight contradictory answers. Manjunath told me in accompaniment individuality shows most, while Sudhindra stated that the tani is most individual, since the patterns are specific for schools or players. Manjunath pointed out the difference between what he called an “aspect”, that what is actually played, and style. This corresponds with our distinction between structural and contextual elements.

In tani, kaṇakkus (see below) are played, which possibly have been used before by numerous other musicians. However, some aspects, or the way they are treated, are characteristic for certain styles or individual players. In accompaniment, to some extent one also finds “aspects”: the timekeeping patterns (see below) are common to a certain extent. However, in Manjunath’s view, individuality can be expressed more in contextual than in structural elements, possibly because the latter gives less scope for improvisation. Sudhindra does not look for individuality in freedom, but in clearly recognisable structures, indeed a field where, in thinking up structures, a player can show his individual taste and skill.

Percussion Accompaniment in the Concert Ensemble

A drummer, or at least the mridangist (see below) in a regular concert ensemble is more or less free to play whatever he wants, as long as it does not disturb the even flow of the tāla or impedes the free development by the main artist. Ravi explains the attitude a percussionist should have in accompaniment: “I’m there as an accompanist, that’s the first dharma. We have to follow”.

Sambamurthy (1952:145-146) explains: “the function of the Rhythmic accompaniment is two-fold: (1) To aid the principal performer and his musical accompanists to maintain *laya suddha* i.e., accuracy in rhythm. (2) To draw the pointed attention of the audience to: (a) the rhythmic beauties underlying the sangatis and musical construction of the compositions; (b) to emphasise the beauties underlying the sequences of tāna jātis and phrase-patterns in the kalpana svaras developed by the Principal; and (c) to make them perceive in a patent manner the points like *arudi*, (*padagarbham* or *sam* or stressed point), *mudivu* (conclusion) and *eḍuppu* (commencement) of the themes of musical compositions”. In other words, accompaniment goes beyond just keeping time: “it should be remembered, that when a mridangam player accompanies a musician [sic] (...) he does not merely beat the sarva laghu, but provides a cross-rhythmical accompaniment based on the style, movement and rhythmical construction of the pieces rendered. This ‘*rhythmical harmony*’ provided by the mridangam player contributes to the excellence of a concert of Indian music” (Sambamurthy 1998a:18).

Brown (1965:296-297) describes accompaniment. “In those places where he is expected to furnish a particular type of pattern, such as a *mōrā* to link two large sections of a

song form, his actions must be rather specific” though there is still quite a bit of choice. Most of the performance, the mridangist is quite free to play anything that seems “stylistically appropriate”. Used patterns stem from learnt ones or originate in the moment, always within the “stylistic traditions determined by his training and experience. The principles and procedures of accompaniment, too, then, derive directly from the continuity of his training.”

Fox Strangways (1914: 225) also lists two possibilities. The drum is to articulate the melody’s metre or “add variety to it by means of a cross-metre”. In practice, this could be translated as using timekeeping patterns or more calculative patterns.

TVG listed the major roles of the percussion accompanists: maintaining the tempo, enhancing the spirit of the song, and keeping the balance between the violin and the vocalist (the usual main artist and accompanist). According to Sankaran (1994:138-142), the main function of the mridangam is accompaniment, using sarvalaghu ie timekeeping patterns. In line with the trend towards simplification mentioned in the description of motta kaṇakku (see below), the complexity in accompaniment seems to decrease as well. “Formerly the *mṛdaṅga* played in a more independent style of cross-rhythmical counterpoint with the soloist. Nowadays the drum is more likely to reinforce and embellish the melodic line in close rapport” (Brown 1965: 284). Geekie (1984:700) also emphasises that mridangam playing is submissive but at the same time beyond a purely metronomic function. He describes the tathākara approach for accompanying. “The *mṛdaṅgam* supplies a rhythmic counterpoint to the repeated pattern of accents provided by the melody instrument or voice, along with rolls and flourishes.”

According to TVG, there are two possible ways to accompany: “sometimes you play for the padagharbam, the landing point, sometimes you play for the sāhityam, the lyrics.” Venkataram described two ingredients of mridangam playing: vallinam or ghana, a heavy, forceful way of playing, and mellinam or naya, a soft approach. This, as he explained is not a possible classification for different drummers, but all drummers should combine these approaches. Shivu also mentioned the need to be careful not to disturb the main artist, to support him or her. Only a few, he said, give freedom to the mridangist. Karthick compared the process of playing together to writing: the main artist writes the essay; the percussionists add the commas etc. “We make the accompaniment as a small beautiful garland and put it for the song, who may be the lady or the god or the deity of whatever.”

Sudhindra talked about the considerations when choosing what to play. According to him, sarvalaghu is used when the artist's laya is not very strong or when he is not interested in anything but sarvalaghu. This is a compromise: though you have the ability to play more interesting things, you yield to the main artist’s taste and capacities. Satyanarayana also mentioned the primary role of timekeeping patterns. Mysore Manjunath mentioned another use of timekeeping patterns: when a song is unknown to the drummer. But even when he does

know the song, Mysore Manjunath continued, he will mostly have to stay with playing timekeeping patterns, because most main artists prefer its “pleasing effect” above “intricate maths”. However, timekeeping patterns here include, he specified, following the rhythm and phrasing of the music and playing embellishing phrases.

Ravi mentioned that by playing only takadimi takajono, you do nothing but keep the tāla. You should give a contribution, though. This is not the same as using kaṇakkus; it just means that the flow patterns should follow and adjust to the song. In some krītis, only that is enough, while in other ones the accompaniment should be more forceful and active. Silence, pharans, 2nd speed, calculations, and different nadais can be used there. “Normally, tisra in chatusra really adds to the beauty if you do it well. Just a few beats, it gives the kick, lifts up.” For neraval and svara kalpana, kaṇakkus can be used.

According to Nagarajan different gatis in accompaniment can be used, but it depends on the taste and capacity of the main artist. According to Satyanarayana, playing timekeeping patterns in the beginning is not musically necessary, but in the midst of the performance nadais can give great beauty, an inner harmony. In pallavi, the timekeeping patterns are only used in the beginning, to figure out how the composition is structured. In vilamba and āti vilamba kaḷā, slow and very slow tempos, sarvalaghus cannot be used, according to Venkataram, Shivu, and Sudhindra. Instead, the pulse should be played, interlaced with quick pharans phrases in the gaps, when appropriate.

Kaṇakkus or gati bheda should not be used during the composition itself, according to Nagarajan, because it will force the main artist to concentrate on the tāla, so he or she will not be able to optimally sing the song. According to Venkataram, the gati can be changed for a very short moment, “like a pickle”, depending on the percussionist’s “aesthetic appreciation”. However, the main artist should not be disturbed: he or she should be able to keep his or her mind with the rāga, without being concerned with the tāla. Some main artists do have the ability to keep the tāla whatever you do; it depends on who you are accompanying. Shivu stated that timekeeping patterns are no must, not even for krītis: if you know the song, you can take some liberties that suit the composition. According to Sudhindra, just playing flow patterns does not lift the performance. If you know them, you should go with the sangatis, the composed variations on the lines of the song.

The timekeeping patterns used in performance are combinations of taught patterns, self-made patterns, and patterns made up on the stage. When the main artist starts using kaṇakkus, such as the final kōrvai, the mridangist should go with him. Praveen emphasised the importance of a clear distinction between the non-mathematical and the mathematical sections: mathematics are only used after the krīti and the neraval. Then comes the svara kalpana section, where the percussionists should accompany very alertly. They should not throw in their own

mathematics, but rather follow the main artist like a shadow and anticipate his or her *kaṇakkus* with the quick calculation that comes by experience. He explicitly stated that accompanying means following, which includes following the rhythm of the lyrics.

Praveen stated that just like the violinist or other accompanist has to follow the main artist, so should the mridangist. Also in the mathematical sections, the mridangist should stick to the frames played by the main artist, rather than playing his own. In other words, here the structural improvisation is non-existent. The musical content is not specified, though, so there is scope for improvisation there. According to Karthick, the first priority are timekeeping patterns. Some “small crackers”, such as changing the *gati* in gaps in the composition, can be added, like a pickle. The pickle should relate to the composition, follow its mood. Overdoing is neither appropriate nor necessary: in their solo, the percussionists get the chance to show their abilities. TVG stated not to use calculations: “I think it's silly, it won't gel with the song, unless the calculations are played in such a way that they are part of the song.” Calculations on themselves are useless. Besides, the use of calculations is limited by the ability of the main performer to keep time.

Nagarajan explained that *kṛitis* all follow the same format, which makes it easy to follow what is happening, even if you do not really know the composition itself. These timekeeping patterns can be a good start, but then everybody starts improvising.

Karthick stated that knowing the music and the words makes you a better accompanist, because you can follow the phrasing of the song and illustrate the words. However, it is not a problem if you do not know a song, then you can simply go along by playing timekeeping patterns and make sure you do not disturb anything. According to TVG, it is very important for a percussionist to learn vocal music, because “everything is intended for, derived from, and applicable to vocal music. Once you know the song, your perception of accompaniment will definitely change.” Still, not knowing a composition is not a problem either: you just go along with the tempo. According to Ravi, knowing the lyrics enables the accompanist to “bring out the best of the song”. Mani stresses the importance of knowing vocal music, which would enable the percussionist to play with the feeling of the song. Mysore Manjunath also stated that knowing the compositions, though not necessarily being able to sing it, is good. If you know the turns, the specialities of the song etc, you can adapt your playing to embellish the composition.

A percussionist should play different for different types of compositions¹, and, as Geekie (1984:700), Manjunath, Mani, and TVG described, for different sections of one composition.

¹ For a description of different forms, see Chelladurai (2000:171-186) and Sharma (1999:94-117). For a description of what to play for different forms, see Sankaran (1986:102).

Karthick stated that there are different approaches for accompanying different types of compositions. Knowing all these mainly comes with listening to music a lot. Shivu mentioned that a pallavi, if known well, gives the mridangist a wider scope to play than any other composition¹. The most important difference within one composition is between the rendition of the main theme and the section when the other musicians improvise. Karthick also mentioned the difference between playing for vocal and instrumental music.

Mysore Manjunath mentioned the distinction between accompanying for the composition and for the section where the main artist improvises. For the latter, the mridangist “must be more sensitive, more sharp to follow all the ideas. It’s a tough job: he should be accompanying melodic as well as mathematical aspects.”

Apart from being different for different composition types and sections main artists, accompaniment is different for different artists as well. According to TVG, you have to understand his or her temperament and personality. It is important to know whether he or she sticks to set patterns or highly creative, whether his or her singing or playing is hard to understand, all this. Again, this all comes by experience, according to TVG. Sudarshan added that the bani of the singer should be known, as well as his or her personal style, by listening to recordings, because it determines both his or her way of interpreting the composition and the way he or she improvises. Ravi mentioned that the percussionist’s mood, the main artist’s mood, and the mood of the composition influence what is played. As a result, you always play different. Satyanarayana also mentioned the adjustment to the main artist: the percussionist has to play a final kōrvai that is related somehow to the one played by the main artist. After a long svara kalpana, TVG would take an element of the main artist’s ardi and improvise on that.

Satyanarayana explained the way the mridangist improvises in a concert. The mridangist may employ the same kind of curriculum, with a set of known ardis, kōrvais, and other formulae, the things, in other words, which are usually passed on by the guru. However, the main performer is seldomly predictable, and tries to establish his or her superiority by surprising the mridangist. Accepting musical challenge, according to him, is the main part of a musical performance. The mridangist has to prove himself by being as good in for instance the pallavi as the main performer, which means he has to improvise. In the case of a difficult composition, the mridangist will not immediately play along with it, but play some cycles of timekeeping patterns until he understands it. Accompaniment is a new experience each time.

¹ For more on the various forms used in South Indian concert music, see Satyanarayana (1987:53-56) and Sankaran (1994:10-11). For more on South Indian concert conventions, see Satyanarayana (1987:67-69).

Satyanarayana mentioned the repertoire of practiced material from which the mridangist can draw. Lakshminarayana did so as well, and added that how to use these, what to pick, is a matter of decision on the stage. Also, the basic practical material has to be adjusted to suit the circumstances: takadimi takajono is preset, but it cannot be played just like that. The tempo, the pauses in the music, etc have to be taken into account.

According to TVG, the rendition of the composition itself features improvisation as well, on the level of interpretation: “all the time the concert is in a flux. Within the well known composition is improvisation all the time: interpretations. And also, in the concerts the accompanists never follow exactly what he sings, at that level they improvise. Also the violinist.”

Percussion On Itself in the Tani Avartanam & The Laya Vinyasa Ensemble

In percussion only contexts, the tani avartanam and the laya vinyasa ensemble, the percussion ensemble, the drummers can play their own things without restrictions (at least for the mridangist, see the paragraph on the interaction between the various percussion instruments below); they do not have to interact with the main artist and consider his or her taste and competence. The structure and the mood of the song are less important in these contexts. All this results in a lesser importance of improvisation. Of course for the secondary percussionist a fair amount of on the spot playing remains in reacting to the phrases played by the first mridangist. Also, in these contexts, drummers want to show their abilities, and therefore are likely to use more complex formulae, more *kaṇakkus*. For reasons we will see in the chapter on classification, these structures involve less improvisation.

The tani, as it is popularly known, still has a relation to the rest of the concert, TVG explained. The tani depends on the main item. Then, he structures what he plays according to the moment, the atmosphere, the song, and the position in the concert, which according to TVG can vary, though I have only seen the tani be part of the main item in the concert, which takes place towards the end and is in fact the last serious composition, only followed by songs of a lighter type. Mani also described a connection with the main item: some elements of the main composition may be used, and how the tani is started depends on the composition that preceded it. According to Praveen, the percussionists should stick to the tempo of the preceding composition. Karthick mentions how sometimes the vocalist sings a *tisra kōrvai*, so the tani starts in *tisra*.

The length of the tani generally varies between a few minutes and half an hour. In the past, several opportunities would be given for longer or shorter tanis: Sambamurthy (1959:269) states that “the principal performer should give at least two solo chances (...) to the mṛdaṅgam

player during a concert. These solos should be given in different tālas and in convenient tempos, so that the drummer may exhibit *his* best. If there are secondary tāla accompanists, they must be given at least one solo chance each during the first half of the concert. At the conclusion of the pallavi, these secondary tāla accompanists may perform in conjunction with the mṛdaṅgam player.” Can we see the striking difference between the old and the present day situation as another proof of the trend towards simplification I mentioned in the paragraph on motta kaṇakku?

A step beyond the tani is the laya vinyasa ensemble, the percussion ensemble. Here, the drummers are amongst likeminded souls, and they can show their most intricate rhythmic innovations. As Brown (1965: 50) describes it: “the *tāla vādyā kacceri* in fact, often becomes a kind of contest in rhythmic dexterity, with each of the several performers trying to outdo the others in imaginative play”. Satyanarayana also mentions the great scope for percussive arts in the laya vinyasa ensemble.

According to Sankaran (1986:107-108), “the use of multi-various rhythmic structures and the superimposition of syncopating rhythms upon them is the core of a virtuosic drum solo.” Sudarshan described the contents of the solo section. The mridangist plays his ideas for a while, followed by the other percussionists. In the second round, another gati is used. After that, koraippu, pharans, mohara, and kōrvai follow. All this cannot possibly shown in all its splendour because of lack of time. In this respect, a percussion only concert gives more scope for percussionists.

Geekie (1984:700) also describes the tani. The solo consists of “improvising with as many different *jati* and *jati* sequences as possible within the framework of the fixed tala”. The strong beats are not played but shown by the *kriyā* of the principal performer. “In this way the complex and varying relationships between the rhythmic accents of the *jati* sequences and the strong beats of the tala are made accessible to the spectators”. Towards the solo’s end the increasing density heralds the climax, which lasts a minute or two. In this climax, the metre-rhythm relationship is at maximum complexity and variability. The conclusion of the solo is formed by “three repeats of a pre-arranged terminal *jati*”, landing on the starting point of the melody.

According to Satyanarayana, the exact repetition of the mridangist’s phrases by the other drummers in the koraippu is appealing because of the various timbres of their instruments. Satyanarayana describes how the tani progresses from the end of the koraippu, when all drummers play in unison. Pharans and mohara and kōrvai are played. The secondary percussions listen first till they understand the structures, and then follow. They either

recognise the *kōrvai* when it is started, or they join in for the second rendition. Mani plays slow for the first round; in the second round he uses some *kōrvais* he tells the secondary percussionists before the performance. When there are more percussionists, *koraippu* is included, followed by playing *pharans* and the *mohara* and *kōrvai* together. After the *kōrvai*, the *pallavi*, the first line of the song, is rendered once more, followed by an *ardi* by the percussionists.

Sankaran (1986:105-106) describes the construction of a solo. The drumming sequences and cadences and what he calls *mōra* and *kōvai* (see chapter 4.2) lead to *eḍuppu*. In soloing, there is no prescribed style to follow, though Mani Iyer and Palani set a norm. Generally, solos are constructed as follows: an introduction, a middle bit with *gati bheda*, and a conclusion. “At each stage certain fundamental characteristic *tāla* patterns (structural patterns) are introduced in *vilamba kālam* (slow speed), *madhyama kālam* (medium speed) and *durita kālam* (fast speed), also in any combination of the three tempi.” The general progression of a solo is from slow to fast. “At each stage the drummer keeps the flow patterns alive, and suggests certain motives either in the form of a drum sequence of a *pharan* (fast rhythmic pattern), improvises upon them and finally concludes in the form of a *mōra*, a cross rhythmical cadential phrase-pattern repeated three times.”

Sankaran (1986:106) goes on: *gati bheda* or *nada* change (changing the subdivision, see the chapter on classification of concepts), called metric modulation by Sankaran, is a flight from *chatusra*, “depending on either his plans or the inspiration of the moment”. Phrase patterns, *mōras*, and *kōvais* are played in this new *gati*. After using a different *gati* this way, the drummer usually goes back to the original *gati*. He then plays patterns leading into *pharan* section. “In this section [*pharan* section] fast rhythmic patterns are played in repetition as well as variations and a climax is built by them. Finally the solo is concluded (...) with a long *mōra* (if it is *ādi tāla*, usually four cycles) followed by a *kōvai*, repeated three times.” The *kōrvai* lands on the *eḍuppu*, and the principal artist joins in for a last rendition of the melody.

Ramabhadran, well known for his style that is based on flow patterns, states never to take much time for the *tani*. After playing *sarvalaghu* in some different *gatis*, he plays *koraippu*, *pharans*, and *mohara* and *kōrvai*. After the rest of the ensemble comes back in, he plays an *ardi* of one or two cycles.

Venkataram describes the considerations when playing the solo section. The first thing is maintaining the *eḍuppu*. Subsequently, the mood and the rhythm, and the inner structure of the *tāla* have to be respected. Percussionists nowadays try to project the pattern of what the main artist has rendered. After the first round, considering all this, optional different *gatis* are played. Then the speed is changed to *madhyama kaḷā*. *Pharans*, and *mohara* and *kōrvai* eventually land on *eḍuppu*, preceded by *koraippu* in case there are several percussionists. The

repeat in the koraippu should be at least similar, ideally almost identical. However, the mridangist may have practiced something that is too complex to immediately repeat. In rāgam-tāṇam-pallavi, the mridangist will also attempt trīkālam and playing the pallavi in tisra, to show his skill. The different sections are separated by ardis.

As we shall see in the chapter 4.2 on classification, kaṇakkus offer less opportunity for improvisation. According to Venkataram, all the final calculations in tani are more or less composed. It is not necessary for the mridangist to tell the other percussionists beforehand, since the structures are traditional. For the kōrvai, the secondary percussionists listen to one rendition, so then can join the second time and play it “full easy” the third time. According to Sudarshan, everything used in percussion solo sections is prepared. Karthick states not to know beforehand, because it is up to the mridangist to decide what is being played. For the upa pakka vadyam, everything is on the spot playing. The structure of the koraippu might be told beforehand, so he can prepare something there. Kōrvais are also improvised, within the known system. This last comment shows that for kōrvais musical content improvisation is possible, within a fixed framework (see the description of kōrvais in section 4.2). The choice of framework, the contextual improvisation, is free again.

The Interaction Between Different Percussion Instruments

As any South Indian concert shows, and as all my informants and all the relevant literature agree on, the mridangam is the main percussion instrument in South Indian music. The upa pakka vadyam, the other percussion instruments, follow the mridangam. The relations in a South Indian ensemble are hierarchic: the violinist and other accompanying melodic instruments, if present, follow the main artist; the mridangist follows the main artist and, to a lesser extent, the melodic accompanists. The secondary percussionists follow the mridangam, while also keeping an ear open to what the main artist does. Suresh (interviewed in Venkateswaran & Bhaskar 2000:5-6) explains: “Sri TVG has always been saying that whatever I play, it should have some relevance to the rhythms created by mridangam artiste. That way, I could add meaning to the music”.

The mridangam, according to my informants, is the “king of percussion” (Venkataram’s words) because of its rich variety of sounds and its sruti being pitched. Sudarshan explained that because of the limited timbre possibilities the secondary instruments do not have the same bhāva, the same lifegiving capacities. Karthick, who is currently working on a PhD dissertation on the occurrence and the role of percussion instruments in Sanskrit literature, adds that the mridangam has more religious and mythological connotations. Another reason for the reign of the mridangam is that the bulk of percussion patterns originate with the mridangam, as do the syllables used to recite percussion music and quite some of the strokes used for the upa pakka vadyam. However, the fact that the mridangam is the main percussion instrument does not make the other percussion instruments inferior, Karthick explained: each instrument has its own splendour; the quality of the music depends on the musician rather than on the instrument.

Satyanarayana links contribution to the position in the hierarchy: the mridangam is the leader, followed by the ghātam and the kanjīra, in that order. These two instruments are most used in performance; Satyanarayana did not speak on the position of the mōrsing and konnakol in the hierarchy. Judging by the frequency they are used, I conclude that respectively mōrsing and konnakol come after the three mentioned instruments. The hierarchy, Karthick explained, does not mean that all percussion action is initiated by the mridangist; this also depends on the musician rather than on the instrument. TVG agreed: the mridangist should follow the other drummers if they play something more appropriate, “you don’t have to be the Lord”.

Still, no doubt exists about the difference in function, explained clearly by Venkataram: the secondary percussion instruments are additional, to “spice up” the “staple food” formed by the mridangam.

Opinions about how closely the mridangist’s patterns should be followed vary slightly. TVG states that he should be copied exactly (and expresses his frustration about the fact that this

never happens). According to Ravi, it is the dharma, the rule, that the upa pakka vadyam follow the mridangam, just like the mridangam follows the main artist. At the same time, it is the task of the mridangist to make the secondary percussionist feel at home, and to assess his level and take that into consideration. According to Lakshminarayana, things that work well on mridangam may have to be adjusted to varying extents to suit the instruments. Karthick said something similar: some things will not work on the ghātam, such as for instance long kārvais, while they would work on a kanjīra. Faster patterns, on the other hand, work better on the ghātam than on the kanjīra. Therefore, “we have to pick things that suit the instrument”.

The immediate following of complex structures poses a problem: the secondary percussionist is not always able to understand what is going on. Some mridangists feel that this is his problem, others, like Ravi, will take time before the performance to inform the other drummers which difficult things he will use and how they are constructed. After all, he said, a concert should be teamwork.

According to Karthick, the secondary drummers have to be more alert. There are, he said, no rehearsals, everything is based on manodharma, on the spot improvisation. Having discussed guidelines to improvisation before, it is tempting for us to discard this statement. However, we should realise that for the secondary percussionist virtually everything is new, not on a musical level, but on a structural and definitely on a contextual level. When the mridangist plays something new, the secondary percussionists have to react immediately. Karthick’s remark that this only takes a fraction of seconds proves that once the context, the choice of technique, is clear, the structure and the musical content can be guessed because of the strong idiomatic features.

Interaction in the Concert Ensemble

The interaction between the mridangam and the secondary percussion instruments in the concert ensemble quite strictly follows the general description included above. Lakshminarayana stated that the upa pakka vadyam should follow the mridangist. Occasionally, playing something different may suit, but not generally. According to Mysore Manjunath, the secondary percussionists should always follow the mridangist, even if they know the composition being played by the ensemble as good as or better than him. Only when the mridangist stops playing, as occasionally happens, the second percussionist has some scope for his own ideas. I have to add here that this is only valid for non-koraippu situations. Koraippu is the musical dialogue described earlier, in this case between the main artist and his or her first accompanist. Like the secondary percussionists imitate the mridangist, the accompanist imitates the main artist.

Music Example 4: Complementary Patterns

Karthick explained why it is useful for the secondary percussionists to know the composition: not because he in that case would not have to follow the mridangist, he would. But when he knows the composition, he can fill the gaps in the melody. With the mridangists timekeeping patterns, he can sometimes play complementary patterns; this depends on the interplay between them.

Mridangam	<u>Tarikita Takadhina</u>	<u>Tadhim . Ka</u>	<u>Tadhim . Ka</u>	<u>Tadhim . Ka</u>
Ghatam	<u>Tarikita Takadhina</u>	<u>Tadhim . Ka</u>	<u>Tadhim . Ka</u>	<u>Tadhim . Ka</u>
pattern a				
Ghatam			<u>. . Taka Takadhina</u>	<u>Tadhim . Ka</u>
pattern b				
Ghatam			<u>. . . . Taka</u>	<u>Takatadhinathadhina</u>
pattern c				

Nagarajan explained that a secondary percussionist has to follow the patterns of the mridangist, otherwise “it will be terrible for the main artist”. If the mridangist plays something good, the upa pakka vadyam follow, but the opposite is also true. If both think they started something great and refuse to follow the other, the concert will be spoilt. The timekeeping patterns will be played together; they are common for all generations and players, while kaṇakkus may be more different for different players.

Interaction in Percussion Only Sections

A special form of interaction in percussion only music is the koraippu. Karthick explained that, as in the whole of the tani avartanam, the mridangist can plan whatever he wants to do in the koraippu: “khaṇḍa koraippu, miśra koraippu, in there in tisra or whatever complications”. The secondary percussionists have to play all this immediately. Ghātam player Karthick makes it a point to ask before the concert what is going to happen. The fact that he explicitly stated not to have any inhibitions about this shows that this is not the common way. It is often a matter of prestige not to ask and not to tell. By knowing it beforehand, Karthick stated to be able to play it “by my manodharma”. This may sound contradictory, but it is not: by knowing the structure in advance, Karthick can deal with it more freely, more improvisational. TVG expressed his dislike of koraippu for related reasons: it is either meaningless because the other percussionists have no way of knowing the prepared things the mridangist plays, or boring because the

percussionists are from the same tradition and hence already know what will happen. Nowadays, koraippu is irrelevant, he stated.

Here, as in the interaction between the mridangam and the upa pakka vadyam in the regular concert ensemble, the mridangam clearly takes the lead. According to Praveen, the rule is that the upa pakka vadyam play the exact phrases of the mridangist. Like TVG, he laments that nobody follows the rule nowadays. Ghātam player Suresh (interviewed in Venkateswaran & Bhaskar 2000:5-6) nuances the view a little, but basically agrees: “when I get my chance in Thani avartanam, I basically keep circling the same areas, but with a little innovation here and there”.

According to Lakshminarayana, the secondary percussionists can play their own ideas in the beginning of the solo, but they are expected to repeat the mridangist’s phrases in the koraippu, if possible. “But brain limitations might be there.” The conclusion of the tani avartanam, sarvalaghu and pharans followed by a mohara and kōrvai (see chapter 4.2) is played by all together. The necessary anticipation “comes by experience, understanding will be there”. Karthick and Nagarajan both agree with Lakshminarayana: in the first round, it is neither necessary nor possible to repeat exactly what the mridangist played.

After a number of rounds, the koraippu section follows. In general, this is a question-and-answer section, in which the phrases systematically get shorter. Alternation takes place between the main artist and the accompanist(s) at the end of the improvised svāra kalpana section, and between the mridangist and the other percussionist towards the end of the tani avartanam. The first musician plays a phrase, the second and optionally other musicians repeat it, to a greater or lesser extent identical to the original. This extent depends on the vision of the concerned musician; different musicians and banis have different ideas about the requested exactitude of the repetition. The length of the phrases is decreased systematically, usually by halving them a number of times.

The koraippu is guided by the mridangist’s statements, and possibly by certain frames, such as eg miśra koraippu or khaṇḍa koraippu (phrases of seven or five mātrās respectively). In the koraippu improvisation can be used by secondary percussionists in their responses: changing the order of the phrase’s motives (randomly or reverse), changing the gati, changing the length of the phrase systematically including compensation, and altering the phrase to suit the instrument. Karthick mentions that usually the overall idea as introduced by the mridangist should not be changed: no different gatis etc. Within these parameters, the secondary percussionist can play his own ideas, similar patterns or different patterns that he feels comfortable with or that suit the instrument.

Music Example 5: Koraippu Response

In this koraippu response, Karthick uses motta kanakku (see chapter 4.2).

The image shows two staves of musical notation. The top staff is labeled 'mridangam' and the bottom staff is labeled '2nd perc instr'. Both staves have a treble clef and a key signature of one sharp (F#). The mridangam staff contains three measures of music, each with a dotted quarter note followed by an eighth note, and a quarter note. The 2nd perc instr staff contains four measures of music, each with a dotted quarter note followed by an eighth note, and a quarter note. Below the mridangam staff, the syllables 'Ta Di Ki Na Tom' are written under each measure. Below the 2nd perc instr staff, the syllables 'Ta Di Ki Na Tom' are written under each measure. A bracket labeled '15' spans the first three measures of the 2nd perc instr staff.

mridangam

Ta Di Ki Na Tom Ta Di Ki Na Tom Ta Di Ki Na Tom

2nd perc instr

15

Ta Di Ki Na Tom Ta Di Ki Na Tom Ta Di Ki Na Tom

According to Nagarajan, for the koraippu practical considerations are vital: the secondary percussionist will repeat what he understands immediately, if not, he will play something else, possibly in the same frame but at least in the same amount of time. In case the mridangist's phrase is repeated, the secondary percussionist can show his taste and intelligence by slightly changing it, for instance by reversing it (eg 3 + 4 + 5 repeated as 5 + 4 + 3). According to Mani, phrases can be altered slightly, by for instance reversing them, but the gati should not be changed. Nagarajan seemed to have his doubts about changing the gati, but according to Karthick, whom I also heard doing this in practice, it can be done as long as it "goes with the system", in other words is mathematically correct and similar to the mridangist's phrase. Sambamurthy (1959:270) states that the mridangam is the principal rhythmic instrument; the secondary percussion instruments are subordinate. In the tani, they "should respond faithfully to the rhythmic sequences of the mridangam player and not take a forward step".

The final kōrvai, Nagarajan explained, is picked up by listening to it once; the second and third time the upa pakka vadyam join in. "It is not that difficult because we have so much experience." Though he did say it would not be bad to do so, Nagarajan stated never to ask the mridangist about anything that he would play. It is the same as the interaction between the main artist and the percussionists: some main artists may inform them about the tāla, eḍuppu etc for the tani avartanam, but most will not, and most percussionists will not ask. TVG stated never to have asked in his life, but at the same time he does tell his secondary percussionist his mohara and kōrvai in advance.

The Instruments

A great variety of percussion instruments, both ghana vadyam, ideophones, and avanaddha vadyam, membranophones, are used in South Indian classical music. In concerts, the

instruments used are usually limited to the mridangam, occasionally a second mridangam, the kanjira, the ghātam, the mōrsing, and konnakol. In music for dance performances, other instruments such as tavil, chenda, edakka, and tābla may be used as well. In tāla vadyam or percussion ensembles a great variety may be used, including the instruments mentioned above and possibly a second mridangam. In this study, which is concerned with South Indian concert music, I will limit myself to brief descriptions of the five instruments mainly used in concerts¹.

The mridangam is a doubleheaded, barrelshaped drum, nowadays usually made of jackwood. The two multilayered heads are kept tense by a leather brace laced through 16 holes in the braided leather hoops attached to the head keeps tensed. According to most sources, the name comes from the fact that the body of the drum was made of clay (mrid) in the olden days. Raghavan (1953:135-136) has another explanation: in the olden days the valantalai, the high head, was loaded with “the fine bluish mud deposited at the waterbrink of rivers” rather than with the mixture of iron filings, tamarind, and boiled rice that is used today for this so called soru. The soru gives the head a definite pitch. The pitch has to be the tonic of the singer’s or main instrumentalist’s key; mridangists possess several instruments to be able to choose the appropriate one. According to Sachs (1923:71) states the valantalai could also be tuned to the fifth or the fourth. Jahnvi mentioned tuning the mridangam to the fifth below the tonic an option for very high female voices. Tuning the mridangam to the tonic would make it sound like a tābla, she said, which apparently is not something very desirable. The tuning of the right head to a specific pitch is a unique feature of some Indian drums, shared with the tābla and the pakhāvaj². A number of different strokes are possible on the valantalai; Brown (1965:71) lists eleven, while in my classes I learnt seven. These strokes, as well as the strokes on the bass head (see below) are of two types: resonant and non-resonant, or dampened and undampened, to use Wade’s (1979:141) words.

The toppi, the bass head, has a non-permanent load of rava, semolina, to obtain the desired booming sound, that according to some should be tuned to the Sa, the tonic, or the Ga, the third note in an Indian scale. Brown (1965:63) states that it should not have a definite pitch at all. Brown (1965:67-68, 71) describes three different strokes for the bass head. The two main ones are a dampened and an undampened stroke. The third one, gumki, is a variant of the

¹ For thorough descriptions of other percussion instruments, including classical and folk instruments from all parts of the South Asian subcontinent, see Deva (1987 and 1993), Sachs (1923), Satyanarayana (1987:63-67). For more detailed descriptions of the mridangam, see Sankaran (1994), Brown (1965), Geekie (1984), Murphy (1965). Powers (1984) gives a detailed overview of the history of the instrument. For more on the kanjira and the ghātam, see Venkataram (1996).

² Raman (1934) and Ramakrishna (1994) described the acoustic properties and behaviours of Indian tuned drums.

undampened stroke. This is an “advanced technique, the optional substitution of which is up to the performer”. His findings are identical to mine.

The kanjira is a small singleheaded framedrum with one or more jingles (often coins) in the jackwood frame. The singlelayered head is made from varanus skin. The technique of playing the kanjira is based on the mridangam technique: “Its brilliant technique must be influenced by the fact that it is frequently used in conjunction with *mṛdaṅga*” (Brown 1965: 50). The big differences are that the kanjira is played with only one hand, and that it only has to basic sounds: resonant and non-resonant. The resonant stroke can be bent by applying pressure with the fingers of the hand that holds the instrument; this is the kanjira’s gumki. According to Wade (1979:132), Pudukkottai Mamundiya Pillai popularised the kanjira as a concert instrument in the late 19th and early 20th century. The kanjira is usually found in the tāla vadyam kacceri (Wade 1979:132).

The claypot ghātam is, according to Sachs (1923:32), “ein seltsames Überlebsel der Vorzeit”. Different strokes with different parts of the hands give different timbres. My ghātam lesson with Karthick showed that on the ghātam the actual mridangam strokes are used, in a slightly altered way. Wade (1979:133) states that the ghātam has been used in concerts for at least the last hundred years.

Not much has been written on the South Indian jew’s harp, the mōrsing. Plate (1992:152) states the name “moursing” for the South Indian jew’s harp, without discussing it any further. Bakx (1992:80) describes its roles as a semiclassical instrument and in the percussion ensemble. He (1992:80) also states that the way of playing and the function of the South Indian mōrsing as we know it today was initiated by Morsing Sitarama Iyer in the early 20th century.

Konnakol is the recitation of the syllables. South Indian rhythm knows an elaborate solfege-system; all mridangam sounds are indicated by different syllables. When used as learning tools, the syllables are known as solkattu. The syllables do however not only serve to learn how to play a percussion instrument. Though Brown (1965:60) states that solkattu is not usually used in performance, I have heard the syllables used as an instrument in their own right, mainly in percussion only contexts. Some syllables from the solkattu get changed so the phrases can be pronounced more quickly. Dhithomthomka for instance becomes Takadhina; Dhitakinamthom becomes Tadhikinathom or simply Tadikinatom.

Like the mōrsing, konnakol is employed less frequently as a secondary percussion instrument than kanjira and ghātam in the regular concert ensemble. In tālavadyakacceri,

konnakol is always used. “There is as much scope for extemporisation in reciting jatis as in singing kalpana svaras. Konugōl artists are engaged to provide rhythmic accompaniment in concerts of classical music” (Sambamurthy 1959:324). On rare occasions, the konnakol is the only percussion instrument that is used, together with the voice. On one of these occasions, during a concert with TR Sundareshan, singer S Rajam spoke out in favour of a more frequent usage of the konnakol as the only percussion instrument.

4.2. Classification of Percussion Techniques

Improvisation is used in different ways and to varying extents in different musical techniques. In the classification of South Indian drumming techniques below, these roles of improvisation will be described. Apart from our research on improvisation, such a classification, which to my knowledge has not been attempted before, is interesting on itself. My classification contains the core of South Indian percussion concepts; the techniques that are in general use and that are similar if not identical for different players and banis. South Indian classical music being a very alive and diverse form of music, many techniques, more or less specific for individual musicians or banis, exist outside the canon. Some of these may over time find their way into the general repertoire.

South Indian percussion techniques can be classified in two categories: timekeeping patterns, and *kaṇakkus*, patterns that break up the flow of the *tāla* by means of regrouping the *mātrās*, the units. At first sight, this division may look rather artificial, considering that in some timekeeping patterns, the so called *nadais* (see below), the grouping of *mātrās* is changed as well. Nelson (1991:29) also notes this: “not all the played material sorts neatly into one of the two categories; they represent the ends of a spectrum of possible behavior.” However, as we shall see, the difference between the two categories is not the use of calculations as such, but whether or not the flow of the *tāla* is supported.

Timekeeping Patterns

A timekeeping pattern, called flow pattern by Sankaran (1994:139), is a simple, repetitive pattern, whose primary function is to keep the tempo in a non-intrusive way. Nelson (1991:29) describes timekeeping patterns as “all the groups of patterns, syncopated or not, in any *gati*, that serve a primarily propulsive, rather than cadential function”. They should, “in order to have the necessary propulsive effect, (...) be repeated frequently enough to be established as the dominant rhythmic force within a passage” (Nelson 1991:41). Timekeeping patterns are “tonal, semi-melodic phrases are arranged in patterns that bear an integral relation with the given *akṣara* structure” (Nelson 1991:29). This type of pattern is opposed to the type called *kaṇakku* or calculation (see below), which often does have a cadential function. As Sankaran (1994:140) points out, different timekeeping patterns exist for different tempos.

Though in South Indian classical music the *tāla* is usually shown by either the singer or one of the performer’s student and it is therefore not necessary for the *mridangist* to stick to one clear, *tāla*-defining pattern, these more or less fixed timekeeping patterns do play an important role (see below). Sankaran (1994:40-41, he describes the same in 1986:106) calls all these flow

patterns or sarvalaghu patterns: “these patterns, called sarvalaghu patterns, are used in accompaniment and to link the various sections of a solo.”

The strokes used for timekeeping patterns are often resonant. Open bass strokes are used to provide the structure, and, according to Sankaran (1986:10) tonal variation. In the right hand we find mostly resonant strokes on the pitched *mīṭṭu*, including the louder stroke *Nam* on the beat or exactly in between the beats. Nelson (1991:40) compares the use of strokes to the *kaṇakkus*: while tonal strokes are predominant in sarvalaghu: *tom*, *gumki*, and *mīṭṭu*, non resonant strokes may predominate in *kaṇakku*.

In timekeeping patterns, we often find that the bass sounds from the left head are omitted in the third quarter of the pattern (no matter how long the pattern is). This bassless part, called *vīsu*, is usually introduced by one non resonant *Tha* stroke, possible to dampen whatever sound may still be ringing.

As we see, Sankaran considers all timekeeping patterns to be sarvalaghu patterns, flow patterns of one kind. However, I would like to make a distinction. Amongst many of my informants, Mani and Rajakesari do so. Nelson (1991:20) describes it as follows: “generally speaking, sarvalaghu patterns have one of two types of relationship with the beat, or *aḱṣara*. They may reinforce the beat by organizing pulses in such a way as to emphasize its structure, or they may use a contrasting organization of pulses, thereby generating a more complicated relationship with a beat or pair of beats”.

Whether or not calculation is used within the timekeeping patterns should not be confused with the *gati*. Contrary to what Sankaran (1994:139-140) states, timekeeping patterns are not limited to the use of simply structured *chatusra*. As Mani and Sudarshan emphasised, timekeeping patterns can use any *gati*, as long as the pattern retains a forward motion that supports the flow of the *tāla*.

Within the boundaries described above, drummers are free to vary existing patterns in any way they see fit, or to devise or develop entirely new ones. The criteria here is that the main artist should not be disturbed. When this happens differs for different main artists. According to Sankaran (1994:140) the articulation of the sarvalaghu pattern, the way it is used in the context of the song, and the transition between different sarvalaghu patterns depend on the taste and the skill of the drummer.

The improvisation in timekeeping pattern takes place on a musical content level and on a contextual level. The choice which stroke to use is free to a certain extent, and *pharans* and other filler variations can be introduced when the drummer likes to, as long as it suits the music. The latter already concerns some contextual considerations. More clearly contextual, based on the song, are the choice of pattern, and the use of accents, bass patterns and other elements that

follow the song. The tempo, the mood, the singer's use of gamakas, and the singer's taste also determine what the drummers do.

Sarvalaghu

What I propose, in accordance with the information I found on the subject, to define as a sarvalaghu pattern is a timekeeping pattern of the first type: the type that uses no complex calculation (see below) and that more or less clearly reflects the inner structure of the tāla. No arithmetic, to use Venkataram's words, is used in sarvalaghu patterns. Sharma (1999:66) describes sarvalaghu as "a free unconstrained movement of rhythm". The well known 3+3+2 pattern (see below) may be used, mainly in the bass head. Sarvalaghu patterns maintain, in other words, the pulsating flow of the tāla. The line between sarvalaghu and nadai (see below) is very thin.

As Venkataram explained, sarvalaghu patterns are used mainly when the main artist sings without the use of calculation. Sudarshan expressed his doubts about the proper use of sarvalaghu patterns: he suspects that they are mainly used when the drummer does not know the composition that is being played and therefore resorts to simply keeping time. Shivu labels this defensive playing, realising that situations of this kind cannot always be avoided.

In my classes with Rajakesari, I learnt many sarvalaghus and nadais. Interestingly, although he did distinguish between the two in theory, he never mentioned what was which type in the lessons. Based on his theoretical description I have distinguished between his sarvalaghus and his nadais (see below).

Music Example 6: Sarvalaghu

Typical sarvalaghus, with variations, here in khaṇḍa chāpu but adjusted to all tālas, is the following. A dot above or an apostrophe before a stroke indicates that the resonant bass stroke Thom is played with it.

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin Dhin Dhin

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin 'Dhin Dhin

Nam Dhin 'Dhin Dhin Nam Dhin Dhin Nam Dhin Dhin

Nam Dhin Dhin Dhin Nam Dhin Dhin Nam Dhin Dhin

Improvisation and its Guiding Principles in South Indian Drumming

Nam Ka Ka 'Dhin Nam Ka 'Ka Dhin Nam Ka
Nam Ka Ka Dhin Nam Ka Ka Dhin Nam Ka

Variation

Thomkañamka Nam 'Dhin Nam Ka 'Ka Dhin Nam Ka
Nam Ka Ka Dhin Nam Ka Ka Dhin Nam Ka

Thakanamka Nam Dhin Nam Ka 'Ka Dhin Nam Ka
Nam Ka Ka Dhin Nam Ka Ka Dhin Nam Ka

Thomka'namka 'Nam 'Dhin Nam Ka 'Ka Dhin Nam Ka
Thakanamka Nam Dhin Nam Ka Ka Dhin Nam Ka

Thomka'namka 'Nam 'Dhin Namkanamka 'Nam Dhin Nam Ka
Thakanamka Nam Dhin Namkanamka Nam Dhin Nam Ka

Variation

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin Dhin Dhin
Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin 'Dhin Dhin

Nam Dhin 'Dhin Dhin Nam Dhin Dhin Nam Dhin Dhin
Ki Ta Thakadhina Dhin Thakadhina Thakadhina Dhin

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin Dhin Dhin
Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin 'Dhin Dhin

Nam Dhin 'Dhin Dhin Nam Dhin Dhin Nam Dhin Dhin
Namtha Dhi Thakadhina Dhin Thakadhina Thakadhina Dhin

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin Dhin Dhin
Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin 'Dhin Dhin

Nam Dhin 'Dhin Dhin Nam Dhin Dhin Nam Dhin Dhin
Kitathaka Dhi Thakadhina Dhin Thakadhina Thakadhina Dhin

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin Dhin Dhin
Ki Ta Thakadhina Dhin Thakadhina Thakadhina Dhin

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin Dhin Dhin
Namtha Dhi Thakadhina Dhin Thakadhina Thakadhina Dhin

Nam Dhin 'Dhin Dhin Nam Dhin 'Dhin Dhin Dhin Dhin
Kitathaka Dhi Thakadhina Dhin Thakadhina Thakadhina Dhin

The following sarvalaghus in miśra chāpu show how the same material is adapted for different tālas. It also shows how calculations, though here in the form of regrouping phrases, have a place in even the simplest musical material such as these sarvalaghu patterns.

Nam Dhin Dhin Dhin Dhin Dhin
Nam Dhin Dhin Dhin Nam Dhin Dhin Dhin

Nam Dhin Dhin Dhin Dhin Dhin
Nam Dhin Dhin Dhin Nam Nam Dhin Dhin

Nam Dhin Dhin Nam Dhin Dhin
Nam Dhin Dhin Nam Dhin Dhin Nam Dhin (3+3+2)

Nam Ka Ka Dhin Nam Ka
Nam Ka Ka Dhin Nam Ka Ka Dhin

Namkanamka Nam Dhin Nam Ka
Nam Ka Ka Dhin Nam Ka Ka Dhin

Nam Dhin . Nam Dhin .

Nam Dhin . Dhin Nam Dhin . Dhin

Nadai

A nadai, also called *ṭhēkā*, is a timekeeping pattern as described above that uses calculation. According to Mani, permutation and combination, possibly involving cross rhythms, are used in nadais. Sometimes, however, the pattern should fall on the beat, “because we are no machines”. He states that different banis have their own approaches to nadais.

Music Example 7: Nadai

One of the nadais Rajakesari taught me is a chatusra nadai in *miśra chāpu* (2nd sketch).

Nam Dhin Ka Nam Ka Nam Dhin Ka Nam Dhin Ka Nam Kitathaka

Thomnamkadhin . ka Nam Ka Nam Dhin Ka Nam Dhin Ka Nam Kitathaka

Music Example 8: Preparation of a Nadai in Khaṇḍa

In *ādi tāla* (2nd sketch), the same nadai is used to make the transition between chatusra and khaṇḍa (see nadai *bhedam* below). The first line is played thrice, including *vīsu*.

chatusra	<u>Nam Dhin Ka Nam</u>	<u>Ka Nam Dhin Ka</u>	<u>Nam Ka Nam Dhin</u>	<u>Ka Nam Kitathaka</u>
khaṇḍa	Nam Dhin Ka Nam Ka	Nam Dhin Ka Nam Ka	Nam Dhin Ka Nam Ka	Ta Ka Nam Dhin Ka

Apart from the types of improvisation mentioned above, structural improvisation is part of playing nadais in the choice of regrouping frame is chosen.

Nadai Bhedam

Nadai *bhedam* (nadai change) is the change of the subdivision of the beat without breaking up the original pulse. Nadai here means subdivision, a meaning not to be confused with its above described meaning of a certain timekeeping pattern. Nadai *bhedam* is usually done in the different sections of the *tani avartanam*. According to Sudarshan, it can be used in climactic moments in accompaniment as well. Satyanarayana expressed the view that usually, only chatusra and tistra are used. He also said that the *gati* should not be changed too often, both because it is hard to do for the performer and because it is hard to follow for the audience.

Nadai bheda involves all types of improvisation. The choice of nadai and the preparation by regrouping the previous gati are structural factors, while the actual phrase and stroke use is musical content. Which pattern is used when is related to the gaps and other features of the composition and the taste and competence of the main artist, hence is contextual.

Kaṇakkus

Kaṇakkus (Tamil for mathematics), also called calculations, are patterns that have an inner structure that does not follow the tāla structure but that is shaped by an independent regrouping of the total number of mātrās for a certain period of time, for instance one or more cycles¹. In other words, kaṇakkus break up the steady flow of the tāla. While in sarvalaghu patterns the calculations take the shape of syncopation as we know it in western music, which serves to emphasise the steadiness of the beat, in kaṇakkus the flow of the tāla is broken by musical events that entirely ignore the pulse, and instead assume a pulse function themselves.

Ghosh (1983:189) clarifies: “South Indian music and dance where the third man keeps the timings (...) at times, both go far away from the orbit of the tala cycle and then they try to create puzzlement or confusion in each other’s minds while keeping the correct tempo and the tala cycle in the subconscious mind, and then both return exactly to the sam and re-establish the original plane of music. This is supposed to be the most exciting and thrilling section of the whole performance. Here the ideal accompanist sometimes helps the main artiste by indicating indirectly the graha (...) of the tala cycle, and simultaneously provides the rhythmic synchronisation. In this section both artistes sometimes apply not only various metres but cross rhythms too.”

Ravi warns for confusion resulting from too much use of kaṇakkus: too much calculation, too much off beat playing disturbs the others. The generated tension should be resolved by playing timekeeping patterns. When composing any kaṇakku, one should always keep in mind how it sits on the beat, so the tālakeeper’s job is not an impossible one. Likewise, while playing one should always know where the beat is as well, so one can correct possible mistakes, made either by oneself or by the tālakeeper.

Venkataram addressed the role of manodharma in this respect. A drummer cannot just do anything, because whatever is played “may be intelligent, but it should touch your heart also”. He stated that kaṇakkus should be “in your mind earlier”, fixed beforehand in other words, but the way the prepared material comes out depends on your instrument, the audience, the main artist. How it comes out depends on the general mood, in other words; that is manodharma.

¹ For more on kaṇakkus, mainly ardis and kōrvais, see Nelson (1991:43-86). For thorough descriptions and examples of various types of regroupings, with their calculations, see Rajagopala Iyer & Krishna Murthy (2000).

“The feeling should be there, anubhāva”. These things cannot be rationalised or planned; it is learnt by experience, by listening a lot. Without the “wisdom of hearing”, everything will sound the same.

Kaṇakkus are of two types: those that temporarily disturb the pulse of the tāla by replacing it by a pulse in a different tempo, ie impose a different pulse on the original one, and those that do so by playing phrases in odd groupings. Increasing and/or decreasing phrases, much used in South Indian classical music, fall in the latter category.

According to TVG, there is a number of commonly known and used kaṇakkus. In those, there is not a big role for improvisation. In many cases, however, the drummer devises his own kaṇakkus. The most important improvisation in the kaṇakkus that are not common is structural. From a large repertoire of possible regroupings of the total number of mātrās, drummers very quickly, while playing timekeeping patterns or other simple patterns that precede the improvised kaṇakku, choose a combination that will work well in the tāla (see Ravi’s and Chandrasekhar’s information and exercises in the paragraph on regular odd groupings). When the combinations are very sophisticated, which can be the case in for instance Karaikudi Mani’s bani, this choice may be done in advance, but very often this process takes place on the dais, relating to the structure of the song, characteristic (rhythmical) turns, something done by the main artist etc. Here we see structural and contextual improvisation getting very close to one another.

The musical content can also be improvised, though for certain parts, like the mohara and the above mentioned kōrvai uttaradam, a standard phrase is usually taken. When reacting (either to the main artist or, for a secondary percussionist, to the mridangist), a special, restricted form of contextual improvisation is used. The given material can be repeated identically or slightly varied in ways we saw before; the variation would obviously be improvised.

According to Mak & Jansma (1995: 81-84), the amount of complexity of a music is not depending on the extent to which it is improvised; improvisations can be very structured. In other words, structures can be improvised as well, as we saw, and in case they are not, that does not prevent any other types of improvisation, here mainly musical content, to be used. Guiding principles in kaṇakkus are mainly structural: the kaṇakku is shaped to follow certain structural points, such as eḍuppu or ardi. Contextually, certain kaṇakkus have a fixed position, such as for instance the mohara and trīkālam.

Polypulses

A polypulse occurs when a new pulse layer is superimposed on the original one while retaining some relation to it, usually for a short period of time. The above mentioned assumed pulse

function is regular. Stewart's (1964:68) definition of a rhythmical pattern is useful here: "a series of patterned impulses, the criteria for the use of the word 'pattern' being the presence of one or more repetitions of a group of one or more pulses." If two or more of these patterns occur at the same time, we are dealing with a polypulse. Stewart (1964:71) describes the function of superimposing different time layers. "It consists of a superimposition of a secondary pattern upon a primary pattern of beats (...) within the Indian system the purpose is to emphasize the ultimate unity which arises with the resolution of this discord."

The superimposed pulse always has a relation to the original one, however complex that relation may be. "The *mṛdaṅgam* performs always in rhythmic patterns that both create, and at the same time derive from, an underlying periodicity of pulse (...) By the performance of this rhythmic pattern, its corresponding underlying pulse is generated in the mind of the listener. One may, conceivably, hear more than one level of pulses at the same time, if above a steady progression of pulse units established by a succession of rhythmic patterns the musician performs a patterns with a different pulse. When this occurs in Indian drumming, the two pulse patterns will always exist in some sort of regular relationship. The second pattern may be two, three, four, or any number of times faster or slower than the first. It may even stand in a complex relationship to the pulse, say three to two, or five to four, but it will always be derived from, and, in a sense, provide an embellishment of, that original pulse movement" (Brown (1965: 2-4).

Stewart (1964:68) goes on: "rhythm is motion capable of being perceived as a succession of occurrences. It implies, in whichever context it is used, a series of regular or haphazard pulses, seen or heard to be at variance with the surrounding medium". In our context (different from the one she used this in), "rhythm" is the superimposed pulse layer, while the "surrounding medium" is the original pulse or tempo.

The musical material in the fixed polypulse framework is freely chosen, like a timekeeping pattern is freely chosen within the parameters of the song. In fact, timekeeping patterns are often played in the imposed pulse, to clearly show the contrast between the imposed and the original pulse. The context of course plays a role as well. As with all *kaṇakkus*, whether or not polypulses can be used depends on the type of composition, its mood, the taste and competence of the main artist, the audience, etc. Specific controlling principle for this *kaṇakku* is the number of beats it takes for the polypulse to resolve, ie to land on a beat or structural point.

Superimposed Pulses: Displaced Pulse, Half and Double Speed

A superimposed pulse can have a simple relationship to the original one, such as being displaced, or being half, double (*dvikālam*), or quadruple (*catuskālam*) the original tempo.

Music Example 9: Displaced Pulse

Venkataram gave me an exercise to learn how to play with a displaced pulse by replacing the last four mātrās of an ādi tāla cycle with a phrase of five mātrās: takatakita in stead of takajono.

<u>Takadimi</u>	<u>Takajono</u>	<u>Takadimi</u>	<u>Takajono</u>	<u>Takadimi</u>	<u>Takajono</u>	<u>Takadimi</u>	<u>Takataki</u>
<u>ta Takadi</u>	<u>mi Takajo</u>	<u>no Takadi</u>	<u>mi Takajo</u>	<u>no Takadi</u>	<u>mi Takajo</u>	<u>no Takadi</u>	<u>mi Takata</u>
<u>kita Taka</u>	<u>dimi Taka</u>	<u>jono Taka</u>	<u>dimi Taka</u>	<u>jono Taka</u>	<u>dimi Taka</u>	<u>jono Taka</u>	<u>dimi Taka</u>
<u>takita Ta</u>	<u>kadimi Ta</u>	<u>kajono Ta</u>	<u>kadimi Ta</u>	<u>kajono Ta</u>	<u>kadimi Ta</u>	<u>kajono Ta</u>	<u>kadimi Ta</u>
<u>katakita</u>							

Doubling the tempo is called anuloma. According to some, halving is called pratiloma; according to the common view, however, pratiloma is the opposite of anuloma in another way. While anuloma is changing the speed of the music while the speed of the tāla remains fixed, pratiloma is the opposite. The music stays constant, the speed of the tāla is doubled. Though primarily an educational device, it is occasionally used in performance, mainly in pallavis.

Halving and doubling the speed is a formal feature of the pallavi form, a rhythm oriented type of composition that used to be the highpoint of a concert and in some cases, mostly on prestigious occasions such as music conferences, still is. Here it is called trīkālam, meaning three tempos. Trīkālam is usually done in chatusra, with the addition of one or optionally more speeds of tisra, but can be done in any gati, Shivu told and showed me. Doubling and halving the tempo are used apart from this formal use as well, by other musicians as well as by drummers. According to Lakshminarayana, the use outside the pallavi context, eg in slow krītis, is less systematic. He also told me that various speeds are used in some kōrvais. According to Ravi, different speeds are not used in krīti rendition because the meaning of the lyric only comes out in the given speed. In percussion playing it is used, though mainly in the tani avartanam. Varying the speed can be used to adapt patterns to different tālas: all ādi tāla (8 beats) patterns can be adjusted to a 7 beat tāla by playing them once in first, once in second, and once in third speed.

A guiding principle added to the ones mentioned in the general paragraph on superimposed pulses is the formal requirement to use trīkālam in certain sections, such as the improvised part of the composition type pallavi.

Superimposed Pulses: Regrouped Mātrās

A more complex relationship between a basic pulse and a superimposed one occurs when the mātrās of the original subdivision are regrouped in regular groups. The result is a pulse in a different tempo with a different subdivision. Lakshminarayana, Satyanarayana, and Manjunath use the term *jāti* for this, and so does Nelson (1991:18): “the term [*jāti*] can also be applied to any phrase, group of phrases or composition whose pulse total is in an integral numeric relationship with one of the five (....) A five-pulse phrase, for example, will be referred to as a *khaṇḍa jāti* phrase; an eighty-pulse *kōrvai* will likewise be referred to as a *khaṇḍa jāti kōrvai*, even though its phrases may not be arranged in five-pulse groups.”

For example: the original division of the original pulse is *chatusra*, so three beats have twelve mātrās. By regrouping these in groups of three, we get four beats in the time of the original three, subdivided in three.

Music Example 10: Tisra Nadai Chatusra Jāti

In one *tisra nadai* in the 2nd sketch, this type of calculation is used. The mātrās are regrouped in four initially, which gives the impression the tempo and *nadai* change while the speed of the individual mātrās remains constant. Subsequently, groupings of six and eight are used, by systematically adding two mātrās at a time. This could be considered a *yati* (see below). The six and eight mātrā variations do not generate the feeling of a new pulse as strongly, but still break up the flow of the basic *tisra* pattern.

Dhin . . Takita | Dhin . . Takita | Dhin . . Takita | Dhin . . Takita |
Dhin . . Takita | Dhin . . Takita | Dhin . . Takita | Thaka Thakadina |
Dhin . . Takita | Dhin . . Takita | Dhin . . Takita | Dhin . . Takita |
Dhin . . Ka Thaka | dina Dhin . . Ka | Thakadina Dhin . . | . Ka Thakadina |
Dhin . . Takita | Dhin . . Takita | Dhin . . Takita | Dhin . . Takita |
Dhin . . Takita | Dhin . . Takita | Dhin . . Takita | Thaka Thakadina |
Dhin . . Takita | Dhin . . Takita | Dhin . . Takita |
ThakaDhin . . Ka | Thakadina Thaka | Dhin . . Ka Thaka | dina ThakaDhin . . | . Ka Thakadina |

Dhin . . Takita | Dhin . . Takita | Dhin . . Takita | Dhin . . Takita |
Dhin . . Takita | Dhin . . Takita | Dhin . . Takita | Thaka Thakadina
Dhin . . Takita | Dhin . . Takita |
Thakathaka Dhin . . | . Ka Thakadina | Thakathaka Dhin . . | . Ka Thakadina |
Thakathaka Dhin . . | . Ka Thakadina |

On the level of the tāla itself this phenomenon also occurs: the sapta tāla gīta, as described by Sambamurthy (1998b:107), is the concept of regrouping beats: in 420 beats, all seven types of tālas (repeated different times) will land on the same downbeat. On a more practical level, the two tāla type of pallavi can use this relation: two different tālas are kept at the same time by the vocalist while singing the pallavi and executing its rhythmic intricacies.

Ravi stressed the importance of the interpretation of this technique (as he did with all other techniques as well): he stated that the drummers all know these techniques, but they are without value if they are not properly used in performance. Using this material freely and in improvisation is possible because it has been practiced over and over again. Drummers do not have to calculate how to use these things in the course of performance, they simply know by experience. An example of these little bits of knowledge is the fact that everything that fits in ādi tāla in chatusra will also fit when played three times in tisra. Facts like this are numerous and well known to all players.

Brown (1965: 285) tells us that Palani Subramania Pillai sometimes regrouped chatusra in khaṇḍa and played variations and everything in it. “Such extensive cross-rhythmic alignment requires profound musicianship in the appreciative listener, not to mention what is required of the performer to be able to do it.”

Motta Kaṇakku

In motta kaṇakku, different techniques are combined: the nadai, the subdivision within a superimposed pulse is changed; in other words this is a nadai bheda combined with a jāti technique. Motta kaṇakku is also called after the original nadai and the new nadai. For example, let us have a look at tisra chatusra. We take the above example: in the time of three beats, subdivided in four mātrās each, we have four beats, each subdivided in three. Now, we replace these three mātrās by four: nadai bheda within the new pulse.

This polyrhythmic technique is rather controversial. It is said to have originated with tavil players. Not being considered classical musicians, tavil players do not usually have as thorough a knowledge of theoretical backgrounds. Their playing ādi tāla phrases in all other tālas is said to have been the beginning of motta kaṇakku.

The controversy seems to have started with Palghat Mani Iyer having condemned this technique. Ravi explained why this technique should not be used. The rejection came with the realisation that the calculations as used in this technique are incorrect, since the number of mātrās per beat is fractional. It is, in Venkataram's words, no nadai, no gati. Tavil players still use it, but according to Ravi this technique is incorrect. Ravi did admit that some might use it, but only in soloing. Mani was very strong in his opinion: “this terrible technique should

absolutely not be used, never”. Given the very systematic nature of his phrases (see the chapter on banis), this is not surprising. He stated that permutation and combination can be used to their extremes, but squeezing in phrases that do not comply with the pulse only shows that the drummer does not have any discipline. He argued it is not intelligent, and unnecessary as well, with all kinds of intelligent alternatives available. The beauty of South Indian classical music is in going as far as possible within the given boundaries. Mani also quoted Palghat Mani Iyer’s rejection.

TVG expressed a different view. Without seeming to be particularly charmed by this technique, he does not consider it incorrect. Rhythm, as he said, is about playing with intervals: between two beats, two cycles, any number of cycles. Conventionally, a cycle can be filled with a number of mātrās, depending on the nadai. But why should that govern everything? Anything can be put in between, as long as it is done accurately. He did state that it is unfair to use this technique in accompaniment, because it would confuse the other musicians. Besides, in a krīti there are many accented notes that do not fall on a beat. Motta kaṇakku can be used like a pickle, to spice up things, in gaps in the composition, and in soloing.

Karthick expressed a rather neutral view, not surprising considering that he is a ghātam player and hence has to follow the mridangist: “the problem is, I don’t choose”. He considers it a clever gimmick that can be justified or rejected according to taste. It does depict your cleverness. As all the others said, Karthick stated that this is more a tavil technique, and, again as the others did, expressed a deep respect for their rhythmical capacities.

Not to assume that this is the truth, but for completeness’ sake, I offer another view on the rejection of motta kaṇakku. Contemporary South Indian classical music shows a trend towards simplification. Concert durations have gone down drastically, the complex pallavi is becoming a rarity, the 108 tāla system got out of use. “Unfortunately we do not come across with artistes who can understand the use of all one hundred and eight rhythms” (Kuppuswami & Venkata Subramaniam 1993:xi). Rather than a new mathematical consciousness rejecting the use of motta kaṇakku, it could be this general trend towards simplification. This would also explain why certain mridangists, whose teachers maintained the high standards, and who still maintain high standards, do know about these complexities, even though they might not use them.

Nagarajan described the use of motta kaṇakku, a much used thing according to him though not accepted by everyone, in interaction between percussion instruments. According to him, this kind of thins, which are beyond the conventional, does not have to be repeated identically by the secondary percussionist, though if he is really sure he could.

In motta kaṇakku, the improvisation is again very similar to improvisation in choosing timekeeping patterns, because that is how the imposed pulse is established firmly. Besides, like

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with the previously described polypulses, the number of beats it takes to resolve are a contextual guideline. Taste and competence of the main artist are very important here, given the complex and controversial nature of this type of kaṇakku.

Music Example 11: Motta Kaṇakku with Various Nadais

Ravi showed how to fit new nadais in a superimposed pulse.

7/8 Ta ka di mi ta ka Ta ka di mi ta ka jo no Ta ka di mi ta ka jo no Ta ka di mi ta ka jo no

6 Ta ki ta ta ki ta Ta ki ta ta ki ta Ta ki ta ta ki ta Ta ki ta ta ki ta Dhi na ta ki ta Dhi na ta ki ta Dhi na ta ki ta Dhi na ta ki ta

5 Ta ka di mi ta ki ta Ta ka di mi ta ki ta Ta ka di mi ta ki ta Ta ka di mi ta ki ta

9 Ta ka di mi ta di ki na tom Ta ka di mi ta di ki na tom Ta ka di mi ta di ki na tom Ta ka di mi ta di ki na tom

Music Example 12: Motta Kaṇakku: Ādi Tāla Mōra in Khaṇḍa Chāpu Tāla

To play the ādi tāla mohara in khaṇḍa chāpu, Manjunath started as follows. After having introduced the imposed pulse, he played the normal ādi tāla mohara (see below) in this new pulse, while continuing clapping the khaṇḍa chāpu tāla.

The musical notation consists of three staves. The first staff is in 5/8 time, indicated by a '5' in a circle. It contains four measures of music with the following lyrics: 'Ta Ka Ta Ki Ta', 'Ta Ka Di Mi', 'Ta Ka Di Mi', and 'Ta Ka Jo No'. The second staff is in 4/4 time, indicated by a '4' in a circle. It contains four measures of music with the following lyrics: 'Ta Ka Di Mi', 'Ta Ka Jo No', 'Ta Ka Di Mi Ta Ka Jo No', and 'Ta Ka Di Mi Ta Ka Jo No'. The third staff is in 6/8 time, indicated by a '6' in a circle. It contains four measures of music with the following lyrics: 'Dhi', 'Tham Tha Ka Di Gu Ta Ri Ki Ta Tha Ka Tha', 'Dhi Tham Tha Ka Di Gu Ta Ri Ki Ta Tha Ka', and 'Dhi Tham Tha Ka Di Gu Ta Ri Ki Ta Tha Ka'. The first measure of the third staff is labeled 'start of mohara'. Above the second and third staves, there are groupings of notes indicated by brackets and the number '8'.

Odd Groupings

In contrast to the above mentioned polypulses, an odd grouping is a grouping of strokes or tones that breaks up the flow of the original pulse not by replacing it with another steady pulse, but with a series of irregular accents, that each take the function of a “downbeat”. In this way, an “irregular pulse” is superimposed on the original pulse.

Prastāra

Prastāra, the tenth tāla dasa prāna, theoretically is the rearrangement of aksharas, beats of a tālacycle, by means of permutation and combination. The total number of beats is regrouped into different aṅgas. In practice, however, prastāra is often used denoting all forms of permutation and combination. As Venkataram said, prastāra is the number of possible combinations of two or more strokes, notes etc. Some of these combinations are acceptable, some are not. The importance of permutation and combination is explained by Fox Strangways’ (1914:213) description of the construction of tālas: “the secret of all these Tāls is that the units are taken as sums, not multiples.” Though he talks about tāla, the description is valid for the rearrangement of motives and individual strokes as well. The calculation is concerned with the

total number of mātrās, not with the underlying pulse. In extreme cases such as the yatis, ardis, and kōrvais described below, the result is that the pattern sounds like an independent musical entity, without any relation to the tāla pulse or construction.

The rearrangement of musical elements as done in prastāra is one of the freest forms of structural improvisation. Since the material is known to fit in the tāla, no calculation is needed. Hence, the rearrangement can follow any shape. Musical content improvisation is limited to pharans and other short fills, since otherwise the rearrangement, prastāra's main feature, would be obscured. Contextual improvisation is hardly important: when a certain technique is chosen, what happens inside that is not of great influence. Prastāra is a technique rather than a formula, and as such is, viewed on a larger scale, a form of musical content improvisation. Brown (1965:167 & 216-223) describes the improvised permutation and combination.

In the music examples for the nadais and the kōrvais, amongst others, we encounter prāstara.

Decreasing/Increasing Groupings

Reducing and increasing are much used tools in South Indian classical music in general, and in South Indian drumming in particular. This practice is started on a very basic level: the first mridangam lessons are structured in this way, on a formal level. After a section consisting of four lines has been played, the section is reduced by omitting the second and third line. The lesson subsequently is concluded with an ardi (see below) based on the fourth line. In this manner, the feeling of reduction gets deeply engrained in the student's psycho-motoric memory. A bit later, techniques using systematic increasing follow (see below).

Yatis

A yati, the ninth tāla dasa prāna, is a rhythmical shape. In the case of the first four ones, the pattern systematically decreases and/or increases by adding or subtracting strokes or tones. There are six types, six different combinations of increasing and decreasing patterns. The increase or decrease takes place by adding or omitting cells at the beginning or the end of the phrase, not by changing the lengths.

gopuccha yati	decreasing, like a cow's tail
srotovaha yati	increasing, like the mouth of a river
mridanga yati	increasing, then decreasing, like the barrelshape of the mridangam
damaru yati	decreasing, then increasing, like the hourglass shape of the damaru, Shiva's drum
sama yati	not changing
visama yati	changing non-systematically

According to Frishman (1985:14), sama yati is also referred to as pipīlika yati, a row of ants.

Yatis can be used independently or as part of a kōrvai (see below). According to Sundaresan, the structure of a yati is usually calculated in advance.

The most important form of improvisation in yatis is structural: what is taken off on one side, has to be added on the other. Again, in case of very elaborate reducing and increasing, this compensation will be calculated beforehand. The improvisation in for example kōrvais, though, often is of this type. The overall calculation frame is a contextual consideration, as is the usual question whether it suits the music.

Music Example 13: Gopuccha Yati

A beautiful gopuccha yati in khaṇḍa chāpu (Rajakesari, 2nd sketch) is the following.

<u>Ki Ta</u>	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
<u>Dhi</u>	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
		<u>Thakadhina</u>	Dhin
		<u>Thaka</u>	Dhin
			<u>Cha . .</u>

<u>Ki Ta</u>	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
<u>Dhi</u>	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
		<u>Thakadhina</u>	Dhin
		<u>Thaka</u>	Dhin
			<u>Cha . .</u> <u>Cha . .</u>

<u>Ki Ta</u>	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
<u>Dhi</u>	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
	<u>Thaka</u>	<u>Thakadhina</u>	Dhin
		<u>Thakadhina</u>	Dhin
		<u>Thaka</u>	Dhin
			<u>Cha . .</u> <u>Cha . .</u> Cha

Koraippu

Koraippu is a pattern that systematically decreases on an overall level. The decrease can be in the length of the strokes or notes. The term is applicable to any systematically decreasing pattern: Manjunath called some of the lessons he gave me koraippu, Jahnvi named the occurrence of koraippu as one of the identifying features of a mohara (see below). The term koraippu is also used for a section of question and answer in a South Indian musical performance (see above).

Music Example 14: Koraippu

A form of koraippu is used in a conventional kōrvāi (see below) in two cycles ādi tāla.

1	2	3	4	5	6	7	8	1
Ta	Di	Ki	Na	Tom	<u>Ta..</u> <u>Di</u>	<u>..</u> <u>Ki</u>	<u>.</u> <u>Na</u> <u>..</u>	
<u>Tom..</u> <u>Ta</u>	<u>.</u> <u>Di</u> <u>Ki</u>	<u>.</u> <u>Na</u> <u>Tom</u>	<u>.</u> <u>Tadiki</u>	<u>na</u> <u>Tham</u>	<u>Tadikina</u>	<u>Tom</u> <u>Tham</u> <u>Ta</u>	<u>dikina</u> <u>tom</u>	<u>Tham</u>

Mohara

A mohara is a percussion only structure that after two renditions of the entire frame is systematically decreased (koraippu) and ends with an ardi (see below). It is used to indicate the end of the tani avartanam. To this end, the mohara has a very clear and recognisable structure, always ending with some combination of the strokes Thalong . Ka Thom (in my bani) or some other clear ending phrase, adjusted to fit the tāla, to make the ending very clear to the other musicians. Occasionally, the mohara is played from eḍuppu to eḍuppu, but usually from sam to sam. In that case, the concluding kōrvai is ideally played from sam to eḍuppu (see below).

Like ardi and kōrvai, a mohara is a cadential formula. “Cadential types are an important classification, in the two types, mōrā and kōrvai” (Brown 1965:281). Cadential formulae mark and emphasise a structural point by leading to and landing on it.

The structure of a mohara is as follows:

Line A	Line B	Line A	Line C
Line A	Line B	Line A	Line C
Line A	Line B	Line A	Half of Line C
Line A	Half of Line D	Line B	Ardi based on Line C

Line A and B are closely related, as is shown by the examples below. Line C is the above mentioned ending pattern (Thalong - Ka Thom or otherwise).

The mohara is composed beforehand. There is a rather large repertoire of traditional moharas, independent of banis. The basic one is the ādi tāla mohara; moharas for other tālas are adapted version of that one. For that reason, it is not too much of a problem when a mridangist does not tell his secondary percussionists which mohara he will play (see below). When the mridangist plays a new and unconventional mohara it is harder for the upa pakka vadyam to directly follow what is happening. The mohara being a structure with clearly defined traditional content, there is a precarious balance between personal invention and keeping the mohara recognisable as such.

In quite some literature (Brown 1965, Nelson 1991, Frishman 1985, Sankaran 1994, Pesch 1999) the term mōrā is used for what I understood is called an ardi (see below), while calling what I call mohara (the difference with mōrā in pronunciation is minute) periyā mōrā, big mōrā. Mani, Karthick, and Sundaresan knew about this confusion, but made it clear (as did others who did not know about the issue, such as Ramabhadran) that nowadays the above described structure is called mohara or mōrā, while what some call (or called) mōrā is called ardi.

There is not much improvisation on the levels we saw earlier in the mohara. Which mohara is chosen is contextual improvisation, but not usually on a very sophisticated level since the repertoire is rather fixed. When a new, non-traditional mohara is attempted, not much improvisation is involved either, since it will be well prepared by the percussionist who dares to question the traditional repertoire of moharas. For the upa pakka vadyam, a certain amount of improvisation is used in following and embellishing the mohara.

Music Example 15: Traditional Mohara

Dhi	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
<u>Tha Dhi</u>	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
Dhi	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
<u>Thalong . Ka</u>	<u>Thom Ka</u>	<u>Thalong . Ka</u>	Tham
Dhi	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
<u>Tha Dhi</u>	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
Dhi	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
<u>Thalong . Ka</u>	<u>Thom Ka</u>	<u>Thalong . Ka</u>	Tham
Dhi	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
<u>Tha Dhi</u>	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
Dhi	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
<u>Thalong . Ka</u>	Tham	Dhi	<u>Tham Thaka</u>
<u>Digutari</u>	<u>Kitathaka</u>	<u>Thalong . Ka</u>	Tham
<u>Tha Dhi</u>	<u>Tham Thaka</u>	<u>Digutari</u>	<u>Kitathaka</u>
<u>Thalong . Ka</u>	<u>Thom Ka</u>	Tham	<u>Thalong . Ka</u>
<u>Thom Ka</u>	Tham	<u>Thalong . Ka</u>	<u>Thom Ka</u>
Tham			

Music Example 16: Elaborate Mohara

The mohara below can be used for any tala measuring eleven beats. For readability's sake, the notation is half the actual speed. The notation does not follow the tāla as in the examples above, but rather the phrasing, to clearly show its structure.

Tadikinatom Dhi Tham Kitahaka Tarikitathaka

Tadikinatom Nam Dhi Tham Kita Digutarikitathaka

Tadikinatom Dhi Tham Kitathaka Tarikitathaka

Tadikinatom Thalong . Ka Thom Ka Thalong . Ka Tham

Tadikinatom Dhi Tham Kitahaka Tarikitathaka

Tadikinatom Nam Dhi Tham Kita Digutarikitathaka

Tadikinatom Dhi Tham Kitathaka Tarikitathaka

Tadikinatom Thalong . Ka Thom Ka Thalong . Ka Tham

Tadikinatom Dhi Tham Kitahaka Tarikitathaka

Tadikinatom Nam Dhi Tham Kita Digutarikitathaka

Tadikinatom Dhi Tham Kitathaka Tarikitathaka

Tadikinatom Thalong . Ka Tham

Tadikinatom Dhi Tham Kitathaka Tarikitathaka

Tadikinatom Thalong . Ka Tham

Tadikinatom Dhi Tham Kitathaka Tarikitathaka

Tadikinatom Thalong . Ka Thom Ka Tham

Thalong . Ka Thom Ka Tham

Thalong . Ka Thom Ka Tham

Regular Odd Groupings

The category I have called regular odd groupings consists of patterns that are odd groupings in the sense that they adhere to neither the flow of the tāla nor the flow of any superimposed regular pulse. They are, however, regular in another way: they are played thrice, either identically or varied in a systematic way, with a gap in between, landing on a structural point. The gap or kārvaī can be of any length, including 0 mātrās. The last or only component of the structure (see below) looks as follows:

phrase + kārvaī + phrase + kārvaī + phrase | landing on structural point (sam, eḍuppu, see above, or aruḍi, see below)

The gap can be silent or attacked. The latter could lead to confusion: it sounds as though the last mātrā of the last time the phrase is played coincides with the structural point. This is not the case, the attacked structural point comes after the last rendition of the phrase, where in previous renditions the kārvaī was attacked. Nelson (1991:45) also describes this.

In music throughout the world, the tendency to break up the flow of the underlying pulse can be found. The breaking up of an eight pulse cycle into two groups of three and one of two is universal. South India is no exception. In timekeeping patterns, this rhythm is used, and in my view, the concept of regular odd groupings actually originates with this 3+3+2 figure. The ardi and the uttarardam of the kōrvai are systematically developed forms of this 3+3+2 figure. The above described concept of non-syncopation is essential. An ardi consists of a phrase played thrice, with a gap of any length (see above) in between. Reinterpreting the above mentioned 3+3+2 pattern according to this structure, we get (2+1)+(2+1)+(2), 1 being the gap. This reinterpretation will be dealt with more extensively in the paragraph on kōrvais (see below).

Both the ardi (see below) and the kōrvai (see below) often use some form of the phrase tadikīnam (the use of the word in this context should not be confused by the way some senior Chennai musician use it, indicating a kōrvai). Some ardis entirely consist of it, while the second paḍa of a kōrvai, the uttarardam, virtually always consists of this phrase.

Music Example 17: Uttarardam Phrases

Chandrasekhar gave me a number of possible Tadikinatam-based uttarardam phrases and kārvaī phrases.

Phrase	Mātrās	Phrase	Mātrās
		Ta	2
		<u>Tan . gu</u>	3
		Ta Ga	4
Tadikinatam	5	<u>Tag . Ga . Ga</u>	5
Tadim . Kinatom	6	Ta Ga Ga	6
Tad . Dim . Kinatom	7	<u>Tag . Ga . Ga . Ga</u>	7
Tadim . Ki . Na . Tom	8	Ta Ga Ga Ga	8
Tad . Dim . Ki . Na . Tom	9	<u>Tag . Ga . Ga . Ga . Ga</u>	9
Takitadim . Tadikinatam	10	Ta Ga Ga Ga Ga	10

Ravi made me calculate and memorise a number of different possibilities for the uttarardam phrase, including the mātrā they should start on to land on the downbeat. Having all this down, a drummer can easily improvise the pūrvardam part of a kōrvai. He can think of a phrase, calculate its number of mātrās, and complete it with an uttarardam for the remaining number of mātrās. The reverse is also true: with the memorised ratios, a fitting pūrvardam phrase can be constructed equally easily.

Phrases can number three (five in Chandrasekhar's sheet) to ten mātrās; kārvaīs can number zero to ten mātrās. The phrase is played thrice, with kārvaīs, or gaps, in between. Hence, the kārvaī is played twice. The phrase itself can consist of one or three times the chosen number of mātrās. For example, if 3 is chosen for the number of mātrās, the phrase can be either 3 or 9 mātrās. In order to land on the sam, the downbeat, the whole formula may have to be started a certain number of mātrās after the sam. The number of mātrās that have to be counted before starting the formula is 32, or, in the case of longer formulae, 64 (two 32 mātrā cycles) minus the number of mātrās of the complete formula.

Music Example 18: Calculations

wait phrase kārvaī phrase kārvaī phrase sam

The example below is in ādi tāla (8 beats) chatusra gati (4 subdivisions per beat), and lists all the possible kārvaīs with the phrase consisting of three mātrās played thrice and the amount of mātrās before the whole thing should be started.

phrase	kārvaī	phrase	kārvaī	phrase	leftover mātrās	wait
9	0	9	0	9	$32 - 27 = 5$	1 beat, 1 mātrā
9	1	9	1	9	$32 - 29 = 3$	3 mātrās
9	2	9	2	9	$32 - 31 = 1$	1 mātrā
9	3	9	3	9	$64 - 33 = 31$	7 beats, 3 mātrās
9	4	9	4	9	$64 - 35 = 29$	7 beats, 1 mātrā
9	5	9	5	9	$64 - 37 = 27$	6 beats, 3 mātrās
9	6	9	6	9	$64 - 39 = 25$	6 beats, 1 mātrā
9	7	9	7	9	$64 - 41 = 23$	5 beats, 3 mātrās
9	8	9	8	9	$64 - 43 = 21$	5 beats, 1 mātrā
9	9	9	9	9	$64 - 45 = 19$	4 beats, 3 mātrās
9	10	9	10	9	$64 - 47 = 17$	4 beats, 1 mātrā

The example below is in the same tāla and nadai, and shows all the possible choices for the number of mātrās, played once, with kārvaīs of zero mātrās.

phrase	kārvaī	phrase	kārvaī	phrase	leftover mātrās	wait
3	0	3	0	3	$32 - 9 = 23$	5 beats, 3 mātrās
4	0	4	0	4	$32 - 12 = 20$	5 beats
5	0	5	0	5	$32 - 15 = 17$	4 beats, 1 mātrā
6	0	6	0	6	$32 - 18 = 14$	3 beats, 2 mātrās
7	0	7	0	7	$32 - 21 = 11$	2 beats, 3 mātrās
8	0	8	0	8	$32 - 24 = 8$	2 beats
9	0	9	0	9	$32 - 27 = 5$	1 beat, 1 mātrā
10	0	10	0	10	$32 - 30 = 2$	2 mātrās

If we combine the Ravi's and Chandrasekhar's material (both musicians studied with the same guru, Bangalore TAS Mani), we get an idea of how South Indian musical improvisation works. A clear repertoire of standard phrases exists. The calculation of the structures is known and practiced, and can be used instantaneously. What we see here is a clear example of structural and contextual improvisation. Structural, because with known building blocks, something is created on the spot. Contextual, because where to use this structure is up to the drummer, though affected by a number of different factors (see chapter 4.1).

Ardi

An ardi is a cadential pattern consisting of a phrase that is repeated three times, with gaps in between, and lands on the sam, the downbeat of the tāla. The phrase can be a form of the phrase tadikinatam (see above) or any other phrase, played thrice, either identically or varied in a systematic manner. Ardis, consisting only of three phrases, as opposed to kōrvais that consist of at least two parts (each in turn usually consisting of three phrases, see below), can but do not have to start on the sam.

As we saw, the ardi is called mōrā in a number of less recent studies. Frishman does use the term ardi (spelled “arudi”) (1985:19) but reserves it for an ardi that does not land on a particular place in the cycle.

Music Example 19: Simple Ardi

Takadhina Dhin . Takadhina Dhin . Takadhina | Dhin

As Sudarshan said, an ardi is, like a kōrvai (see below), an ending, but a small, very short one. It is used to show endings within kṛitis or pallavis. Ardis that suit the composition should be selected.

Ardi, or arudi, literally meaning conclusion, also has another, related meaning, described by Sambamurthy (1952:28) as the padagarbham or dividing point between prathamāṅga and dvitīyāṅga, the two sections of the pallavi. The padagarbham note is stressed and similar to starting note: it is the same, or an octave, fourth, or fifth higher. The percussion formula called ardi is used to emphasise this point, and similar spots in other types of compositions. Nelson (1991:64) also describes this: “the third most important point in any tāla structure is arudi; in ādi tāla this is beat five of the cycle in which an eḍuppu resolution occurs. It is customary, but not absolutely necessary, for Karṇāṭak drummers to follow major compositions in a tani āvartanam with a simple mōrā that resolves at this point. Especially when

the eḍuppu does not coincide with a clap, this cadence resolving on a clapped beat signals a firm re-entry into the tala flow”. Nelson also calls this type of cadential formula arudi.

Sudhindra described the point of ardi: a stressed point to which small calculations lead, such as the small kōrvai we here call ardi.

A very often used ardi in Rajakesari’s lessons is the one below. This ardi is used in several tālas; the beginning moment is adjusted so the pattern lands on the downbeat. Similarly, it could be adjusted to land on the eḍuppu or any other structural point.

Music Example 20: Ardi

Nam Nam Ka Dhin . .

Nam Nam Ka Dhin . .

Nam Nam Ka | Dhin

Another ardi, started on a place that makes it land on the downbeat in three cycles khaṇḍa chāpu:

Dhin . Dhi Ka Dhi Thom Tham Ka Dhin Ka

. Nam Nam Ka Dhin . .

Nam Nam Ka Dhin . .

Nam Nam Ka | Dhin

A special type of ardi is the purutam: the drummer starts the pattern of the first few words of the composition before the line itself is repeated. This is not done for all songs.

The improvisation in the ardi is firstly on a musical content level: ideally, the ardi phrase is based on a phrase from the song or from the main artist’s improvisation. In practice, phrases from the known repertoire of ardiphrases, such as tadikinatam, are often taken instead. The calculations can be called contextual improvisation: based on the location of the structural point the ardi leads to and the number of mātrās it takes to get there, the drummer chooses a frame from his repertoire on the spot.

Kōrvai

A *kōrvai* is a cadential pattern consisting of at least two *paḍas*, parts. There are many different types, distinguished by the type of phrase and development they feature¹. It is usually played from *eḍuppu* to *eḍuppu*, except for the *kōrvai* that concludes the *tani avartanam*, which, according to Mani, Ravi, and the numerous concerts I heard, ideally starts on the *sam* and lands on the *eḍuppu*. According to Sudhindra, the latter is a recent development, independent from *bani* but disapproved of by some older players. This could explain why in some cases both the *mohara* and the *kōrvai* are played from *eḍuppu* to *eḍuppu*, even though the variations in the *tani avartanam* usually start and land on the *sam*. One thing I have not encountered is the final *kōrvai* landing on the *sam*. This contradicts Wade's (1979:126) view, who lists *eḍuppu* as one of the two important points in *tāla*, the other one being *sama*. She states that the *sam* is not necessarily emphasised as ending of melodic phrasing, because the *eḍuppu* usually is, but that the drummer's ultimate cadence is almost always on *sam*. All my evidence, as I said, indicates the opposite.

As the other structures based on odd groupings (see above), the *kōrvai* does not follow the flow of the *tāla*. It is a structure that clearly indicates an ending, on a higher level than the above described *ardī* does. It is used to conclude the *svara kalpana* section and the *tani avartanam*. In the latter case, it follows the *mohara*.

According to some, the increase and/or decrease in the *pūrvardam*, the first half, compensated in the *uttarardam*, the second half, is improvised. The *pūrvardam* can be any phrase; it can be a *yati*. The *uttarardam* usually consists of a combination of the stroke sequence *Tadikīnatom*, counting one to ten *mātrās*, played three times, with or without a gap. According to Mani, the *uttarardam* ideally has no gaps, while the first part does.

Again, important in this respect is musical content improvisation. The *pūrvardam* phrase of the *kōrvai* ideally reflects material from the composition or the main artist's elaborations. The *pūrvardam* phrase can also be taken from a repertoire of appropriate phrases. In the latter case, "the central theme of a *kōvai* can be indicated as motives in the first place, then developed and crowned at the end with a *kōvai*" (Sankaran 1986:106-107).

¹ For an extensive classification of different types of *kōrvais*, see Ramamurthy (1987).

Music Example 21: Pūrvardam Phrases

According to Sudhindra, the pūrvardam is mainly a preamble to the uttarardam. He gives some phrases from a common repertoire of conventional phrases used for this preamble.

Dhi Tham Thaka Digutira Kitathaka

Ta Dhi Takadina

Tha Kuta Jam Tari Ta

The uttarardam, as we saw, is usually known. On a structural level there is improvisation as well: when some phrase is picked on the spot to be the pūrvardam, the length of the uttarardam has to be quickly calculated and filled in with musical content. Improvisation may also take place in the repeats of the kōrvai: the pūrvardam phrases can be increased or decreased and compensated in the uttarardam. Different gatis can also be used but require more complex calculations, and are, possibly for that reason, more seldomly employed. As we saw before, very elaborate frames are usually prepared.

Music Example 22: Common Kōrvai

Mysore Manjunath showed me a very common kōrvai when I accompanied him in a class.

Tadi . Tom . Tadi . Tom . Tadi . Tom .

Tadikinatom . Tadikinatom . Tadikinatom

Pūrvardam and uttarardam are very related in this kōrvai, which is why it makes musical sense without necessarily being related to any of the musical material from the composition, or so I concluded.

Music Example 23: Kōrvai Variations

In Rajakesari's 2nd sketch khaṇḍa chāpu lessons, a number of different kōrvais is based on the same pūrvardam phrase. This phrase is used in the lessons for the other tālas as well.

Kōrvai 1

. Ki Ta Kitadhina Tirakita Digutira Kitathaka Ta Ka . Dhi Na . Ta Ka Dhi Na
Thakadhina Dhin . .

Ki Ta Kitadhina Tirakita Digutira Kitathaka Ta Ka . Dhi Na . Ta Ka Dhi Na
Thakadhina Thakadhina Dhin . .
Thakadhina Thakadhina Dhin . .

Ki Ta Kitadhina Tirakita Digutira Kitathaka Ta Ka . Dhi Na . Ta Ka Dhi Na
Thakadhina Thakadhina Thakadhina Dhin . .
Thakadhina Thakadhina Thakadhina Dhin . .
Thakadhina Thakadhina Thakadhina Dhin . .
Thakadhina Thakadhina Dhin . .
Thakadhina Thakadhina Dhin . .
Thakadhina Thakadhina Dhin . .
Thakadhina Dhin . .
Thakadhina Dhin . .
Thakadhina | Dhin

Kōrvai 2

Kitadhina Tirakita Digutira Kitathaka

Thakadhina Dhin Thakadhina Dhin Thakadhina Dhin . .

Dhi Kitadhina Tirakita Digutira Kitathaka

Dhi Thakadhina Dhin Dhi Thakadhina Dhin Dhi Thakadhina Dhin . .

Ki Ta Kitadhina Tirakita Digutira Kitathaka

Ki Ta Thakadhina Dhin Ki Ta Thakadhina Dhin Ki Ta Thakadhina Dhin

..

Ta Dhi . Ki Nam Thom Tadhi . Kinathom

Ta Dhi . Ki Nam Thom Tadhi . Kinathom

Ta Dhi . Ki Nam Thom Tadhi . Kinathom Dhin . .

Ta Dhi Ki Nam Thom Tadhi . Kinathom

Ta Dhi Ki Nam Thom Tadhi . Kinathom

Ta Dhi Ki Nam Thom Tadhi . Kinathom Dhin . .

Ta Dhi Ki Nam Tadhi . Kinathom

Ta Dhi Ki Nam Tadhi . Kinathom

Ta Dhi Ki Nam Tadhi . Kinathom | Dhin

Kōrvai 3

Ki Ta Kitadhina Tirakita Digutira Kitathaka

Thakadhina Dhin

Thakadhina Dhin

Thakadhina Dhin . .

Dhi Kitadhina Tirakita Digutira Kitathaka

Dhi Thakadhina Dhin

Dhi Thakadhina Dhin

Dhi Thakadhina Dhin . .

Kitadhina Tirakita Digutira Kitathaka

Ki Ta Thakadhina Dhin

Ki Ta Thakadhina Dhin

Ki Ta Thakadhina Dhin

Ta Dhi Ki Nam Thom

Tadi . Kinathom

Ta Dhi Ki Nam Thom

Tadi . Kinathom

Ta Dhi Ki Nam Thom

Tadi . Kinathom

Ta Dheem . Ki Nam Thom

Tadi . Kinathom

Ta Dheem . Ki Nam Thom

Tadi . Kinathom

Ta Dheem . Ki Nam Thom

Tadi . Kinathom

Ta Dheem . . Ki Nam Thom

Tadi . Kinathom

Ta Dheem . . Ki Nam Thom

Tadi . Kinathom

Ta Dheem . . Ki Nam Thom

Tadi . Kinathom

Music Example 24: Elaborate Kōrvai

A kōrvai with a more elaborate form of the Tadikinatom phrase in the uttarardam is the one below. Kōrvais this elaborate are not usually improvised, since the calculation is beyond choosing a phrase for the pūrvardam and choosing a basic form of Tadikinatom for the remaining mātrās in the uttarardam.

Ki Ta Thakadhina Dhin Thakadhina Thakadhina Dhin Cha . .
Namtha Dhi Thakadhina Dhin Thakadhina Thakadhina Thakadhina Dhin Cha . .
Kitathaka Dhi Thakadhina Dhin Thakadhina Thakadhina Thakadhina Thakadhina
Dhin Cha . .

Ta . Ka Dhi . Ka Ki . Ka Nam . Thom . Ka Tadikinathom
Ta . Ka Dhi . Ka Ki . Ka Nam . Thom . Ka Tadikinathom Tadikinathom
Ta . Ka Dhi . Ka Ki . Ka Nam . Thom . Ka Tadikinathom Tadikinathom
Tadikinathom

Music Example 25: Structural Kōrvai Improvisation

Sudhindra described structural improvisation in a different way, actually approaching musical content improvisation. “You increase the silence, do some improvisation there (...) This we do on the stage.”

Ta Dhi Takadina Dhi
Dhi Takadina Dhi
Takadina Dhi
Tadim . Kinatom
Tadim . Kinatom
Tadim . Kinatom

A kōrvai is played thrice. In the first rendition, nothing is changed. One possible type of improvisation is changing the length of the kārvaī in the pūrvardam in the repeats, compensating this in the uttarardam. In the first rendition, the kārvaī lasts four mātrās. This is reduced to three and two mātrās in the repeats. The uttarardam phrase is increased by one mātrā at the time.

Ta Dhi Takadina Dhi . .

Dhi Takadina Dhi . .

Takadina Dhi . .

Ta . Dim . Kinatom

Ta . Dim . Kinatom

Ta . Dim . Kinatom

Ta Dhi Takadina Dhi

Dhi Takadina Dhi

Takadina Dhi

Tadim . Ki . Na . Tom

Tadim . Ki . Na . Tom

Tadim . Ki . Na . Tom

Improvisation and its Guiding Principles in South Indian Drumming

A second type of improvisation is changing the nadai of the uttarardam phrase, in the following case combined with compensating the reduction of the kārvaī in the pūrvardam. In the second and third rendition of the pūrvardam, motta kaṇakku (see above) is used to adapt the phrases.

3/4 TaDhiTaKaDiNaDhi DhiTaKaDiNaDhiTaKa DiNaDhiTaDimKiNaTom TaDimKiNaTomTaDimKiNaTomTaDimKiNaTom

TaDhiTaKaDiNaDhiDhi TaKaDiNaDhiTaKaDiNa DhiTaDimKiNaTomTa DimKiNaTomTaDimKiNaTomTaDimKiNaTom

TaDhiTaKaDiNaDhiDhi TaKaDiNaDhiTaKaDiNaDhi TaDimKiNaTomTaDim KiNaTomTaDimKi NaTomTaDimKiNaTom

4.3. Improvisation and its Guiding Principles in South Indian Drumming

According to Lakshminarayana stated, “it is difficult to define manodharma, because many things are preset.” This difficulty can be overcome when we leave behind the idea of improvisation as the opposite of composition, when we realise that improvisation, in Brown’s words, never starts from zero.

The way an ardi or the uttarardam of a kōrvai is improvised (see the paragraph on regular odd groupings in chapter 4.2) can serve as a model for improvisation in South Indian drumming in general. The main improvisation, or rather the most influential improvisation, takes place on a structural and a contextual level. Structural: with known ingredients, something is created on the stage, in the course of performance. Contextual: the use of the resulting musical shape is not fixed beforehand, but is left to the drummer’s initiative, who is guided by a number of different factors we have seen in chapter 4.1.

The classification showed that there are basically two types of rhythmic techniques in South Indian music. This division can be found in the roles of improvisation as well: there is an essential difference between the importance of improvisation and the way it is used in timekeeping patterns and in kaṇakkus. In general, techniques from the category of the timekeeping patterns are far less complex than the techniques using calculation. In South Indian music in general and its drumming in particular, for a reason explained below this complexity also determines the role and importance of improvisation: the more complex, the more fixed a technique is. Hence, kaṇakkus are fixed to a greater extent than timekeeping patterns.

Complexity in South Indian music means leaving the steady pulse by means of regrouping the musical material. These complex calculations can be done on the spot, but are also prepared in many cases. However, it is mainly the calculation, in other words the framework, that is fixed, not necessarily what musical material that framework is filled with. The choice of phrases and strokes is similar to the choice of phrases when working with timekeeping patterns, though for kaṇakkus there are much clearer “ideal sounds”, such as the traditional mohara phrases or the tadikinatam in the second half of the kōrvai. We can, though, state that in both categories the choice of musical material is free, though of course based on a repertoire of known phrases, while the kaṇakku models are usually fixed beforehand.

We have to be careful not to misunderstand this conclusion. As we have seen, different percussion players have different tasks and therefore face different problems. Kaṇakku models may be fixed by and/or known to the mridangist, but this does not necessarily mean anything to the secondary percussionists. The fact that they can catch up with these composed frames very

quickly indicates that also these adhere to some kind of idiomatic standard. The examples in the classification chapter showed that they indeed do so.

In chapter 2.1, Nettl (1991:15-16) named a number of possible guiding principles: “from themes, tunes, and chord sequences to forms, from a vocabulary of techniques to a vocabulary of motifs and longer materials, from what is easy or ‘natural’ for the hand to what is intellectually complex”. In the classification of South Indian rhythmic techniques above, we encountered a number of these different types of guiding principles. We have seen basic patterns that could be varied by changing the order of the motives, free choices of stroke/sound, and optionally by changing the gati and by decreasing and/or increasing motives or phrases, while compensating for the lack or surplus of mātrās somewhere else. All these variation techniques are to do with the actual sounding result, with the musical material that is used.

We can, in other words, state that the guiding principles in South Indian drumming are on the one hand the idiomatic collection of motives and phrases, and on the other hand the repertoire of calculation models, both either handed down by older players or developed by the drummer himself. A third guiding principle, arguably even more important because affecting the overall music to a larger extent, is the formal requirement by the song: some structures have a fixed place in the composition, such as *trikālam* and the *mohara*, while others, eg *nadai bhedam* and superimposing another pulse, can be used at the discretion of the musician.

For all *kaṇakkus* involving the substitution of the original pulse with another regular pulse, however complex the relation of the new pulse and its subdivision to the original pulse may be, the improvisation is more or less identical to the improvisation in timekeeping techniques. This is because the desired polypulse feeling is only obtained by very clearly stating the new pulse. Using any calculations in the new pulse, apart from small cadential formulae once the new pulse is firmly established, would break the flow, which would destroy the desired feeling of a new pulse. Hence, simple and clear patterns are played on the superimposed pulse.

Apart from what is improvised and how in the techniques themselves, we should not overlook contextual improvisation, the actual use which is improvisatory as well: it is mostly up to the drummer to decide when he is going to use certain techniques and how. This is possibly the most distinguishing factor for different *banis*, more so than the musical content of the techniques or the structure of the calculations.



5. conclusion



Conclusion

5. Conclusion

The investigation of the role and shape of improvisation and its controlling principles in percussion playing in South Indian drumming has proven the proposed view of improvisation to be correct, at least for South Indian drumming.

Improvisation is not an independent phenomenon but always related to some kind of guiding principle. The guiding principle can be of many types, hence, different principles are restrictive to different extents.

South Indian drumming knows a variety of techniques, that can be roughly categorised in timekeeping patterns and *kaṇakkus*, techniques involving calculations. The main difference between the two is that timekeeping patterns follow the flow of the *tāla*, while *kaṇakkus* break that flow, replacing it with a different regular pulse or an odd grouping with its own internal logic. The type of guideline for improvisation depends on the technique; timekeeping patterns tend to allow a more extensive use of a greater number of different types of improvisation.

Apart from the technique, the type of improvisation and guideline that are used depend on a number of different factors, the ensemble and the type of music the drummer functions in being the most influential. The *bani* the drummer belongs to may affect improvisation, more so for the *mridangist* than for the secondary percussionists. Other, less influential factors are the type of audience, the occasion of the concert, the mood of the player etc.

The guiding principles we have seen in our study of South Indian classical drumming affect the musical content, the structure, and the contextual level. The Indian term *manodharma* mainly indicates contextual improvisation, we can conclude from various sources' comments. This may explain part of the reason why South Indian classical music is often described as entirely improvised, while in fact many of its aspects follow rather strict controlling principles. For the player they are all improvisation levels are equally important, but for the overall shape of the music, the sounding result, contextual improvisation is most important. Next is structural improvisation, which is not used to an equal extent. Musical content improvisation mainly determines the sound of the drummer himself in the ensemble.

Suggestions for Further Research

To find out more about the level of fixedness in *karnatak* music, it would be helpful to make comparative studies of *mridangam* playing in concert, *harikatha*, and dance music. Studying the influence of *tavil* playing on *mridangam* playing could shed a light on the origin of certain complexities, and also on certain differences between *banis*. Another factor that affects the importance *banis* are the changes in teaching, ie the shift from the traditional *gurukula* to teaching in groups, music schools, universities, and the bigger availability of material from

Conclusion

other banis through cassettes etc. Further examination of the 3+3+2 figure in the musics of the world could tell us more about differences and similarities between musics and cultures.



6. references



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6. References

6.1. Literature

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6.2. Lectures

- Matare, Joseph “A Cross Cultural Study of Musical Intelligence” (paper presented at the Kusanganisa Festival of Zimbabwean Performing Arts, London: SOAS, April 2000)
- Sundaresan, TR “The Beauty of *Yati* Patterns” (paper presented at the Homage to Max Mueller Conference, Chennai: Max Mueller Bhavan, German Cultural Institute)

A horizontal carved frieze featuring a series of figures, possibly deities or mythological characters, in a classical or medieval style. The figures are depicted in various poses, some standing and some seated, with intricate details in their clothing and attributes.

glossary

A horizontal carved frieze featuring a repeating pattern of stylized acanthus leaves and scrolls, typical of classical architectural decoration. The carving is detailed, showing the veins of the leaves and the flowing lines of the scrolls.

Glossary

ādi tāla	8 beat <i>tāla</i> , the most common <i>tāla</i> in present day South Indian music, full name <i>chatusra jāti triputa tāla</i>
akshara(kāla)	beat
anāgala eḍuppu	<i>eḍuppu</i> falls after <i>sam</i>
aṅga	literally limb, part of a <i>tāla</i>
anudrutam, anudruta	1 beat <i>aṅga</i>
anuloma	multiplying the speed
arai chāpu	kind of stroke that brings out the second harmonic
ardi, arudi	1. short cadential <i>kaṇakku</i> 2. structural point in the middle of the composition
aṭita eḍuppu	<i>eḍuppu</i> lies before <i>sam</i> , ie at the end of a presumed prior <i>avartanam</i>
avartanam	cycle
bani	playing tradition
bhedam	change through replacement
cadential	leading to a structural point, such as <i>sam</i> or <i>ardi</i>
calculations	<i>kaṇakkus</i>
chāpu	resonant <i>mridangam</i> stroke that brings out the first harmonic
chāpu, cāpu tālas	the other now regular <i>tālas</i> , probably from folkloric origin, the name <i>chāpu</i> comes from <i>śāyppu</i> , Tamil for bent
chatusra	1. four 2. subdivision: four <i>mātrās</i> per beat
dhin	resonant <i>mridangam</i> stroke that brings out the tonic
dhruva	type of <i>sulādi tāla</i>
druta	2 beat <i>aṅga</i>
durita kāla(m)	fast speed
eḍuppu	starting point of the melody (Tamil)
gamaka	melodic ornamentation
gati	subdivision fixed in <i>tāla</i> rendition
ghātam	claypot
grāha	<i>eḍuppu</i> (Sanskrit)
gumki	resonant bass stroke involving pitch bending, percussion equivalent of <i>gamaka</i>
guru	guide, teacher
gurukula	<i>guru-shisya system</i>

Glossary

guru-shisya system	traditional way of learning an instrument by living with the guru
half chāpu	<i>arai chāpu</i>
improvisation	creation of music in the course of performance
jati	1. syllables 2. quick phrases such as pharans
jāti	classification type (3, 4, 5, 7, 9)
jhampa	type of <i>sulādi tāla</i>
kacceri	concert
kaḷā (kaḷai)	subdivision of the beat in counting, one of the <i>tāla dasa prānas</i>
kalpana svara	improvised section based on varying the notes
kalpita	prepared music
kaṇakku	structures involving regrouping of <i>mātrās</i> not following the pulse of the <i>tāla</i> , creating tension
kanjira	single headed tambourine
Kannada	language of Karnataka, one of the four South Indian states
karnatak, carnatic, karnatic music	South Indian classical music
kārvai	gap
khaṇḍa	1. five 2. subdivision: five <i>mātrās</i> per beat
khaṇḍa chāpu	fast five beat <i>tāla</i> , not belonging to the <i>sulādi</i> system
konnakol	use of solkattu in concert
koraippu	1. reducing structure 2. decreasing question and answer in improvised section
kōrvai, kōvai	final cadential structure (Tamil)
krīti	type of composition, often referred to as “song”
kriyā	movement for <i>tāl</i> counting
laghu	3, 4, 5, 7, 9 beat <i>aṅga</i>
laya	tempo
laya vinyasa	the intricacies of <i>laya</i> ; vinyasa is expansion
laya suddha	accuracy in rhythm
madhya	medium
madhyama kālam	medium speed
mahā prānas	the first five or main <i>tāla dasa prānas</i>
Malayalam	language of Kerala, one of the four South Indian states
manodharma	improvisation (Sanskrit)
mathematics	calculations to systematically regroup a number of <i>mātrās</i> as used in <i>kaṇakkus</i>

mātrā	unit, often called syllables in English
miśra	1. seven 2. subdivision: three seven per beat
miśra chāpu	fast seven beat tāla, not belonging to <i>sulādi tālas</i>
mīṭṭu	1. outer ring of the <i>valantalai</i> 2. type of stroke: resonant on the outer ring
mohara, mōrā	percussion only cadential formula to indicate the ending of the percussion solo section
mōrsing	jew's harp
motta kaṇakku	using a new <i>nadai</i> in a superimposed pulse
mridangam, mrudangam, mrdangam mrdangam, mrdanga, etc	doubleheaded barrelshaped drum, main South Indian percussion instrument
mudivu	conclusion of a phrase
mukhtaya	<i>kōrvai</i> (Kannada)
mukhtayam	<i>kōrvai</i> (Telugu)
nadai	1. subdivision of the beat 2. timekeeping pattern with <i>calculation</i>
nam	resonant stroke on the <i>mīṭṭu</i>
nāṭu	type of stroke: non resonant on the <i>soru</i>
neraval	type of melodic improvisation based on altering the pitches while retaining the rhythmical frame
paḍa	part of <i>kōrvai</i>
pallavi	1. first section of the composed part of a <i>krīti</i> 2. <i>tāla</i> oriented type of composition
pharans, farans	fast, characteristic filler patterns on percussion instrument
polyrhythm	a rhythmic phenomenon that gives the feeling that the music, temporarily, has a different tempo by suggesting different subdivisions and/or a different pulse
prastāra	permutations and combinations
pratiloma	1. changing the <i>tāla</i> speed while keeping the music in the same tempo (mainly used as an exercise 2. halving the tempo
pūrvardam	first <i>paḍa</i> of a <i>kōrvai</i>
rāga	mode and characteristic phrases, turns etc
rāga bhāva	the mood of a <i>rāga</i>
rupaka	3 or 6 beats, common <i>tāla</i> , full name <i>tisra jāti rupaka tāla</i>
sabha	concert venue with knowledgeable audience

Glossary

sam	first beat of a <i>tāla</i>
sama eḍuppu	<i>eḍuppu</i> coincides with <i>sam</i>
sangati	composed variation on the <i>pallavi</i>
saṅgīta	music
sankīrṇa	1. nine 2. subdivision: nine <i>mātrās</i> per beat
Sanskrit	India's scholars' language
sapta tāla gīta	the knowledge that in 420 beats, all seven types of <i>tālas</i> will land on the same downbeat
sarvalaghu	timekeeping pattern without <i>calculation</i>
sketch	level of learning in Karaikudi Mani's <i>bani</i>
solkat	variation in drumming
solkattu	drumming language: syllables used in percussion for learning and performance (see also <i>konnakol</i>)
sulādi (sapta) tālas	the now common <i>tālas</i> , there are seven types with five possibilities each
svara kalpana	free melodic improvisation technique, section in elaborated composition
symmetry	systematic organisation of musical structure
tadikinatam	stroke combination often used in <i>uttarardam</i>
tāla	time cycle
tāla dasa prānas	the ten "life giving elements" for the <i>tāla</i>
tāla pradhana	<i>tāla</i> oriented composition type
tāla vadyam	percussion instruments
Tamil	language of Tamil Nadu, one of the four South Indian states
tāṇam	permutation based melodic improvisation technique, unmetred section in the <i>rāgam tāṇam</i> pallavi form
tani avartanam	percussion solo section in a concert
tavil	percussion instrument used in temple music and <i>laya vinyasa</i> ensemble
Telegu	language of Andhra Pradesh, one of the four South Indian states
thom	bass stroke on the <i>mridangam</i> ; resonant
tillāna	lighter type of composition
tīrmānam	dance term for <i>kōrvai</i> , sometimes used to indicate <i>ardī</i>
tiruppugal, tiruppugazh	<i>tālas</i> by the 15th century poet saint Aruṇagirināḍar: often intricate, regulated by long and short syllables in the verse
tisra	1. three 2. subdivision: three <i>mātrās</i> per beat
to sit	to coincide with a beat of the <i>tāla</i>
trikālam	three speeds: first, second (double), third (quadruple)
triputa	type of <i>sulādi tāla</i>

tukṛa	the last section of a concert, after the main item, consisting of lighter songs
upa pakka vadyam	secondary percussion instruments
upa prānas	the secondary <i>tāla dasa prānas</i>
urtus	see <i>pharans</i>
uttarardam	last part of a <i>kōrvai</i> , usually a form of the phrase <i>tadikinatam</i>
valantalai	high head of the <i>mridangam</i> , tuned to the tonic
varnam	type of composition used in teaching and to open a concert
vilamba kāla	slow speed
viloma	reverse
virāma	old term for <i>anudrutam</i>
vīsu	or the empty part of the <i>tāla</i> , usually on the half of the <i>avartanam</i> ; the equivalent of the hindustani khali
yati	rhythmical shape