

Tracing present Carnatic Music styles to ancient Tamil Music works.

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Was there a single system of classical music in India which later split into two (Hindustani and Carnatic)?

Some writers have claimed that there was only one system which later split into two. For instance in the book 'History of Indian Music' by P.Sāmbamoorthy (Ref 1), it is claimed that the bifurcation came after the 13th century, citing the work *Sangīta Sudhākara* of Haripāla of the 14th century. Many web sites also carry this information. Apparently the reference is to a verse in the work of the same title by the 20th century writer Pandit Kāshinath Appā Tulasī, wrongly attributing it to Haripāla of the 14th century (Ref 3 and 3a). In *Sangīta Sudhākara* of Haripāla there is apparently no such mention of two systems.

The other view is that the music of South India could have originated independently. The musicologist T.S. Parthasarathy, in his article 'The Unifying Role of Indian Music' says that "the grass roots of what is now called Carnatic Music are to be sought in the music of the ancient Tamil" (Ref 3). Many writers who have studied the *Tamizh* works having reference to musical theory have held similar views.

The two systems have many things in common, such as solfa notes 'sa ri(re) ga ma pa da(dha) ni', the concepts of *rāga* and *tāla*, names for some *rāgas*, the emphasis on extemporisation, continuity between notes, use of *gamakas* etc., but the styles are distinct and some of the musical terminology is also different. The terminology of note names (such as *Śuddha*, *Komal*, *Prati* etc. to distinguish the varieties of notes with the same symbol) are different. As for style, for example, no one can confuse Carnatic *Śrīranjani* with Hindustani *Bāgeṣri* even in areas of common notes and phrases. Apart from the styles, the present *mela* system of Carnatic music is based on works about 400 years old while the *Thāt* system of Hindustani music is about a century old. The *Tamizh* works had their own nomenclature for many technical terms.

The *Tevāram* (or *Devāram*) music sung in south Indian temples is undoubtedly ancient. The lyrics were composed during 7th and 8th centuries AD and anecdotes (Ref 4) ascribe 10-11th century AD for the '*Paṇs*' (பாண் - Tamizh term for *Rāga* or *Rāgam*) to which the *Tevārm* hymns are set. As these were sung by hereditary '*Oduvārs*', we can presume that the tunes and styles continued unchanged from generation to generation. The present Carnatic music style, especially in the *gamakas*, is very close to the *Tevāram* music. The *Tamizh Isai Sangam*, Chennai in its annual conferences from 1949 onwards, had correlated the *Paṇs* of *Tevārams* with the present day *rāgas* (Ref 6), which was possible because of the closeness of style. Though there are no parallels in *Tevāram Paṇs* for many of the present day Carnatic *rāgas*, those which are used in the *Paṇs* are distinctly Carnatic in *rāga bhāva* - for instance (*rāga*) *Sāma* – (*Paṇ*) *Andalikkuranji*, *Ahiri* – *Panchamam*, *Bhairavi* - *Kausikam*, *Kedāragaula* – *Gāndhārapanchamam* etc. This could be another evidence for the evolution of Carnatic music from the local regional music system.

This paper tries to find evidence in the ancient musical works in *Tamizh* for the style and system used in Carnatic music. Some of the premises may be hypothetical but the purpose is to initiate a process which could lead to discovery of more material and evidence.

Musical works in *Tamizh*

Admittedly, practically no musical work in *Tamizh* is available in its complete form. The only complete work published is *Panchamarabu* by Arivanār (Sakthi Aranilayam, Coimbatore, 1973, Ref 8) but doubts have been expressed as to whether it is the original *Panchamarabu* by Arivanār, mentioned in the commentary of *Silappadhikāram* or a collection of well known verses (Ref 9). In his book 'Lost Tamizh works', Mylai Seeni Venkatasāmy lists 10 lost musical works for which references are found in later works. *Panchamarabu* is included in the list of lost works. As regards the other works we get information on ancient *Tamizh* musicology in many non-musical works like *Silappadhikāram* or commentaries on them.

Of the works which throw considerable light on the technical aspects of music, the epic *Silappadhikāram* by Ilankovadigal (Ref 2), commentary on it by Adiyārkkunāllar and notes by Arumpadavuraiāsiriyar are major sources of information. Many verses in *Panchamarabu* are quoted in these commentaries. Whether the published work *Panchamarabu* is the original or not, the verses are presumably very old (as they are quoted by authors ascribed to 10th century or earlier) and also throw light on some fundamental aspects. In addition to the above, *Pingala Nighantu*, *Chūdāmani Nighantu* and *Chēntan Divākaram* (dictionaries or encyclopaedias) provide some information.

Musicologists who have worked on the musical works in *Tamizh* have often drawn attention to the similarities in concepts found in the *Sanskrit* and *Tamizh* works, such as *Samvādīva* – கிளை (*Kilai* in *Tamizh*), modal shift of tonic etc. “*Tamizh Music in Silappadhikaram*” is a detailed study of musicology in *Silappadhikāram* by Dr. S.Ramanathan (Ref 5). However, it is not often that the differences have been highlighted and interpreted.

Nomenclature:

The *Tamizh* works had their own nomenclature for the 7 notes. They were *kural*, *tuttam*, *kaikkilai*, *uzhai ilī*, *viḷari*, *tāram*. (கூரல், துத்தம், கைக்கிளை, உழை, இளி, விளரி, தாரம்). There have been different interpretations but it is generally accepted that *kural* corresponds to *śaḍja*, *tuttam* to *ṛṣbha* etc. (The other interpretation is that *ilī* corresponds to *śaḍja*). The word *Paṇ* was used to describe *rāgas* (but some *Paṇ* names end in the word '*rāgam*' – ex. *Paṇ Pazhantakka rāgam*) The terms '*kiḷai*' (parallel or branch), '*Naṭpu*' (friendship), were used to indicate '*samvādi*' and '*Iṇai*' (parallel) to indicate '*anuvādi*'. (*Iṇai* has also been interpreted as same note in different octaves). The description of these terms are similar but the definition of '*pakai*' (or '*pagai*') (enmity) is quite different from the definition of '*vivādi*' (dissonant).

Here we will deal with 3 aspects of Carnatic music where we find evidence in the *Tamizh* works.

Vivādi notes.

The concept of consonance has been a fundamental part of the ancient *Sanskrit* works as old as Bharata's *Natyāśāstra* and the terms used are संवादि *samvādi* (consonant), अनुवादि *anuvādi* (assonant), विवादि (dissonant) with reference to वादि (dominant). The *Sanskrit* works defined these on the basis of 22 *śrutis* system. Notes at 9th or 13th *śruti* from the *vādi* are *samvādi* (having 8 and 12 *śrutis* in between, for instance sa and ma, sa and pa), and notes at the second *śruti* (with one *śruti* in between) are *vivādi* (for instance ri and ga of the original *śuddha* notes).

In the current theoretical approach of classification based on *mela* system and using 12 positions in the octave as the basis for formation of scales, we may equate the *vivādi* of older *Sanskrit* works to

the semitone i.e. the tone between adjacent notes. A 2 *śruti* or a semitone difference seems to introduce the sense of dissonance. Even in Western musicology, notes separated by a semitone are considered dissonant. (Ref 7). A detailed discussion on '*vivādi*' may be seen in Ref 18.

The concept of *vivādi* is now used in Carnatic Music theory even to cover scales ('*vivādi mela*'). The current *Mela* system of Carnatic Music with 72 scales was proposed by Venkaṭamakhi in *Caturdandiprakāśika* (17th century). Venkaṭamakhi placed the notes in such a manner that 32 scales do not have any pair separated by 2 *śrutis* and consequently only the other 40 scales had *vivādi* pairs. These 32 scales can be derived by choosing either of the 2 variations of ri,ga,ma,da and ni in a 12 note system (the black or white note on a keyboard with 'C' as tonic). In the revised nomenclature (which may be considered as definitions and which is now in use) proposed by Govinda in *Sangrahachūdāmani* (18th century, Ref 14) every adjacent pair of notes has a 2 *śruti* difference (except for *Prati madhyama-panchama* and *Kākali nishāda- śadja* pairs). This would make all melas except 65 as *vivādi* melas as they have one or more 2 *śruti* intervals. (In Govinda's placement of notes 36 of the 40 '*vivādi melas*' actually have triads of notes where the adjacent pairs of notes are separated by 2 *śrutis*, or 2 *śrutis* and 1 *śruti* in a few cases).

In the *Tamizh* works the notes which are at the fifth or fourth position (in the 7 note system) and are termed as கிளை '*kilai*' (literal meaning 'branch' or 'related'). Thus *iḷi* (equivalent of *panchama*) and *uzhai* (equivalent of *madhyama*) are *kilai* to *kural* (which may be considered as *śadja*). While this is similar to the definition of *samvādi* in Sanskrit works, the description of *vivādi* (*pakai* in *Tamizh* – literally meaning enmity) is quite different.

The term *pakai* is explained in Adiyārkkunllār's commentary (Ref 2, 8:33-34 – p 232) as

கிளை - ஐந்தாம் நரம்பு , பகைஎன்றது - ஆறும் மூன்றும் .. கூடமெனினும்
பகையெனினுமொக்கும்

(meaning) “related (consonance)– fifth string, enmity – six(th) and three (third) – may be called prohibited or enmity”.

Arumpadavuraiāsiriyar explains the 4 different *pakai*'s *sempakai*, *ārppu*, *kūtam*, *athirvu* and that *kūtam* does not make the music 'level' and it is playing the 6th string which is *pakai* to the original string.

கூடம் இசை நிறவாதது தன் பகையாகிய ஆறாநரம்பினிசையிற்குன்றித்தன்னோசை
மழுங்கல் (Ref 2, 8:29-30 – p 220)

The third and the sixth notes considered as *pakai* in *Tamizh* works would correspond to *gāndhāra* and *dhaivata* (in a 7 note system based on present day Harikāmbodi *melam* or Khamāj *thāt*). S.Ramanathan (Ref 5, p 105) has explained this by ascribing the relative frequency of 81/64 for the third note *kaikkilai* (equivalent to *gāndhāra*) and 27/16 for the sixth note *vilari* (equivalent to *dhaivata*) as these are not simple ratios and were considered as *kūtam* (prohibited) or *pakai* (inimical). These would be the frequencies if these notes are arrived at by cycle of fifths from *śadja* and may be valid for the harp with simultaneous playing of more than one note. It is however, significant that there is no mention of *pakai* for the pairs of adjacent notes of third *kaikkilāi*(ga) – fourth *uzhai*(ma) and sixth *vilari*(da)-(seventh) *tāram*(ni) in the basic scale of *Tamizh* music. These would be adjacent notes in a 12 note system. The *Tamizh* works did not consider a 2 *śruti* interval as dissonant. The *Tamizh* works which speak of 22 *śrutis* also assign 2 *śruti* difference between notes of these pairs (Adiyārkkunallār in Ref 2, 8:31-32, p 220)

While the term dissonance is itself capable of different interpretations, the resolution of dissonance of semitone is a problem in both polyphonic and melodic monophonic music, though less so in the latter. In Hindustani music this is usually overcome by avoiding connecting such pairs especially in

slow movements. A comparison of the two *rāgas* Hindustani *Bāges̄ri* Carnatic *Śrīrañjani* can illustrate this. Both use ri-ga (*Chatuśruti ṛṣbha-Sādhāraṇa gāndhāra* in Carnatic music and *Śuddha ṛṣbh-Komal gāndhār* in Hindustani music) and da-ni (*Chatuśruti daivata-Kaiśiki nishāda* in Carnatic music and *Śuddha Dhaivat- Komal nishād* in Hindustāni music) pairs separated by a semitone (though *Bāges̄ri* omits ri in the ascent). In *Bāges̄ri* the ga and ni are oscillated upwards (even up to ma and sa respectively) and not connected to ri and da by oscillation. (Fig 1 and Fig 2 – pitch graphs of live music – *Rag Bāges̄hri*)

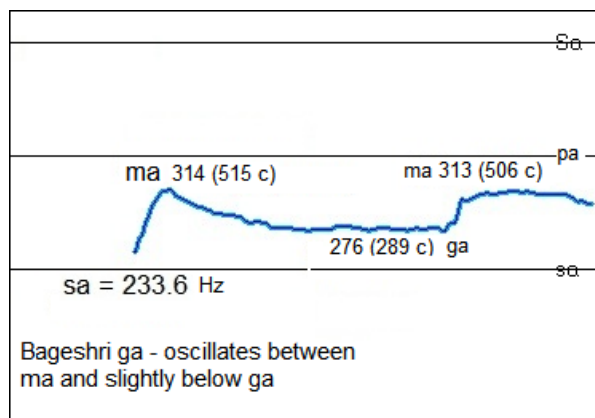


Fig. 1

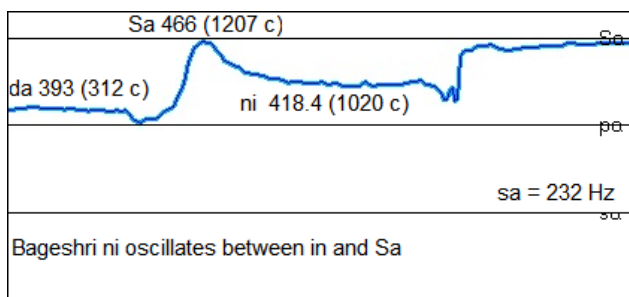


Fig. 2

In Carnatic music however, these two notes would be oscillated from the lower notes ri and da in *Śrīrañjani*. Ni of *Śrīrañjani* is shown in Fig 3. This manner of bridging notes separated

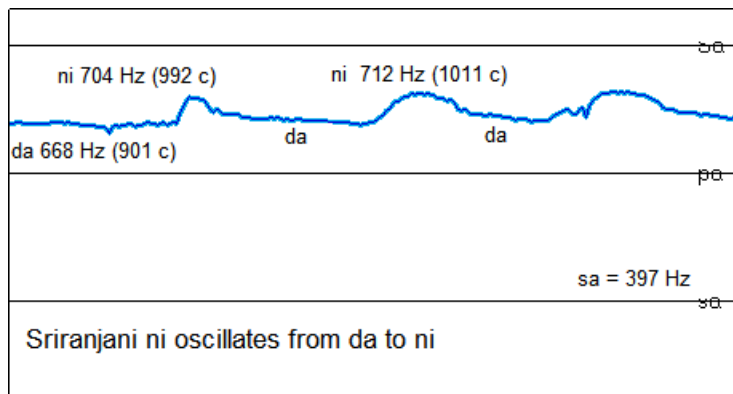


Fig 3

by a semitone (oscillating from the lower notes in case of *Śuddha rishabha*, *Sādhāraṇa gāndhāra*, *Śuddha daivata* and *Kaiśiki nishāda* and oscillating from pa downwards in the case of *Prati madhyama*, thus actually connecting through the semitone interval) to overcome the dissonance is a constant feature in Carnatic music. Thus the 2 *rāgas* *Bāges̄hri* and *Śrīrañjani* having similar notes, have a remarkable melodic *bhāva* difference due to the manner in which these 2 notes are held. In the case of Carnatic *Śuddha ri* (corresponding to Hindustani *komal ri*) it is oscillated from sa even twice or thrice if the note is prolonged (Fig 4 shows *Māyāmālavagowḷa ri*). In Hindustani music the ri is held straight or oscillated up from its own position (Fig 5 - Hindustani *Bhairav*) or in *Āṇḍolan* when oscillated downwards it does not reach sa.

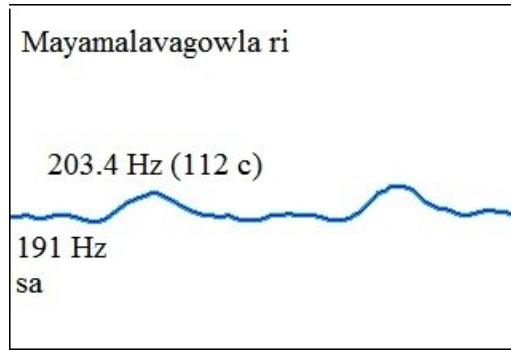


Fig 4

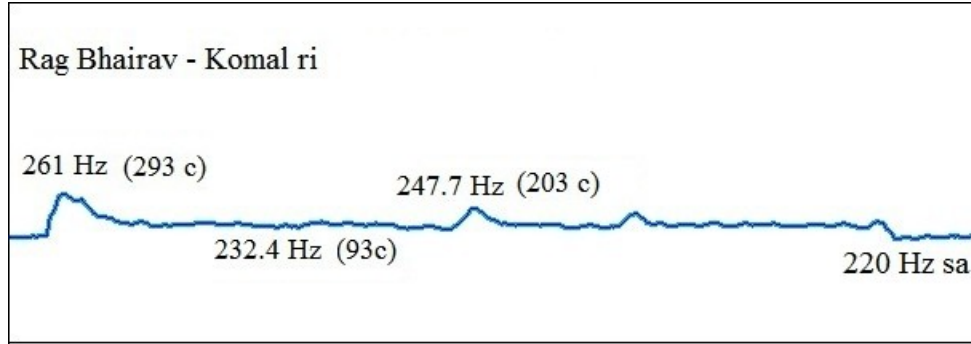


Fig 5

Similar differences may be noticed between Carnatic *Chakravāham* and Hindustani *Āhirbhairav* in the notes ri and ni. In his article on 'Gamakas in Hindustāni Music', Ratanjankar says “For instance, the rāga Bhimpalāsi is a Janya, a derivative of the Kāphi thata.....the Komal or Kaishik Ni of this rāga when it is sung in an Ārohi passage, i.e., a passage up the scale, it rises up slightly, simply because it is always sung with the grace note of the Sa of the top octave attached to it. All Komal ni's occurring in the Ālapas of Bhimpalāsi in the passages up the scale will have this grace of sa attached to them” (Ref 15). Another strategy adopted to avoid 2 semitone difference is the usage of phrases like ni-ri or ma-da in rāgs like *Toḍi*. This difference in style is so well known that it has not been written about much!

A Thanjāvūr style Carnatic *vīna* player rarely touches the *Kaiśiki nishāda* (equivalent to *Komal nishād*) fret when playing rāgas like *Śriranjani* or *Chakravāham*. Even in a rāga like *Madhyamāvati* which does not use *daivata*, the note *Kaiśiki nishāda* is played by deflection of the string from 'da' fret. Playing 'ni' in its own position or oscillation from 'ni' to 'sa' would completely deviate from *Madhyamāvati* and introduce a Hindustani flavour.

The basic scale of *Māyāmālavagowla* taught to beginners in Carnatic music has 4 pairs separated by semitones and when the student is ready to sing with gamakam, he is taught to connect pairs sa-ri, pa-da by gamakam and a student of *veena* is asked to play ri and da by deflecting the string from sa and pa respectively and ga and ni are held with gamakam often touching ma or Sa.

Carnatic rāgas where such a strategy is not possible, like *Hindoḷam* (having the same notes as *Mālkaus*) which has *Sādhāraṇa* ga but does not have the lower note *Chatuśruti* ri, often project a closer mood with Hindustani music and chosen for 'jugal bandhi'

Thus the handling of semitones is basically different in the two systems and we find evidence in the ancient *Tamizh* works for the current style of handling semitones in Carnatic music, since semitone is not *pakai* in Tamizh works, while a semitone (*dviśruti*) is *vivādi* in Sanskrit works. It may also be noted that the strategy of oscillating from a lower note is not possible for more than one note in a

triad of notes where 2 adjacent pairs have 2 *śrutis* difference unless the middle note is sa or pa. The 36 scales which have such triads are considered *vivādi* in the 72 scale system.

The absence of associating a semitone with dissonance in old *Tamizh* works would appear to support the current style of singing or playing notes separated by a semitone.

However, there is no explicit mention in the earlier *Tamizh* works about *gamakas*. The only reference is in Adiyārkkunallār's commentary (Ref 2, 3:26, p 105). Satisfactory interpretations of the different finger actions on the *yāzh* (the stringed instrument described in *Tamizh* works) described in various works are not available. However, lutes with fingerboard were perhaps in use even in the *Silappadhikāram* period as there is a reference to *senkottiyāzh* (a *yāzh* with straight *kodu* or *dandi*) in the main *Silappadhikāram* itself (Ref 2, 13:106, p 334). Archaeological evidence also suggests existence of fingerboard instruments during 5th Century. Such instruments would allow playing of *gamakas* which would not be possible in a harp like instrument.

A direct link between the historical works and current style is difficult to establish. However, considering that often grammar follows art, the descriptions may be said to reflect the styles then existing and continuing till date.

The system of twelve note positions in an octave.

The Sanskrit works assigned to period prior the 16th century use the 22 *śruti*, *grāma* and *jāti* system along with *amsa*, *graha*, *nyāsa*, usage of *vikṛta* notes and *alpatva* and *bahutva* to describe a *rāga*. The position of *vikṛta* notes were obtained by a *Śuddha* note 'sacrificing' one or more of its *śrutis* to another note. It was only in the Sanskrit works (most of them from Southern India) written around or after the 16th century, the *mela* system (attributed to *Vidyāranya* of 14th century whose work *Sangīta Sāra* is not available) was conceived. *Swaramelakalānidhi* by Rāmamātya (16th century)(Ref 16) and *Rāgavibodha* by Somanātha (17th century) (Ref 17) used 14 and 16 positions to describe the melams but the *Vīnās* described by them mention 12 positions in an octave. Eventually the current system of 12 positions in an octave as a theoretical foundation was used by Venkaṭamakhi in *Caturdanḍiprakāśika* to propose 72 scales and has been in use since then. Though Venkatamakhi used the original nomenclature of *Śuddha* swaras and names such as *Shadśruti* to indicate the positions he uses only 12 positions in the 22 *śrutis* to define his Melas (though they had 16 names, for positions having 2 names the alternative is chosen according to the context). Practically every other system of music also uses 12 positions in an octave. The Hindustani classical music system adopted the same principle in the *Thāt* system. It is the realisation that the notes sung could be grouped into 12 (perhaps with fine variations in pitch) that has led to systematisation of the theory. The use of fretted instruments with 12 frets in an octave could also have aided the process.

The *Tamizh* works also refer to the 22 *śruti* system (*śruti* is called *alaku* or *mātra*) assigning 4 *śrutis* for *kural*, *tuttam* and *iḷi*, 3 *śrutis* for *kaikkilāi* and *vilari* and 2 *śrutis* for *tāram* and *uzhai*. This would correspond to *shadjagrāma* if *kural* is taken as *madhyama*. However, in the *Tamizh* works (written centuries before the Sanskrit works mentioned above) the concept of 12 positions in an octave is also present. This is done by drawing a chart of the 12 constellations of the zodiac and assigning positions to notes in 7 of these 12 'houses'. There is no equivalent of this in any older Sanskrit work. Thus a verse can define a note by assigning it a position in the zodiac chart instead of using adjectives like *Śuddha* or *Chatuśruti*. A stanza from Panchamarabu is given below:

ஏத்து மிடப மலவனுடன் சீயம்
கோற்றனுக்கும்பமொடு மீனமிவை பார்த்துக்
குரன்முதற் றார மிறுவாய்க் கிடந்த
நிரலேழுஞ் செம்பாலை நேர்.

(Panchamarabu, Ref 8 – 1:23, p 31, also quoted by Adiyārkkunallār in Ref 2, 17:13, p 449) (meaning) “The notes *kural* to *tāram* arranged in order, reside in Taurus (constellation *Ṛsbha*), Cancer (*Karkaṭa*), Leo (*Simha*), Libra (*Tulā*), Sagittarius (*Dhanus*), Aquarius (*Kumbha*), Pisces(*Mīna*) and result in *Chempālai* “

The layout will be (occupied houses in bold starting with 'kural')
Mesha, **Ṛsbha**, Mithuna, **Karkaṭa**, **Simha**, Kanya, **Tulā**, Vrischika, **Dhanus**, Makara, **Kumbha**, **Mīna**.

Mīna Tāram ni	Mesha	Ṛsbha Kural sa	Mithuna
Kumbha Viḷari da			Karkaṭa Tuttam ri
Makara			Simha Kaikkiḷai ga
Dhanus Iḷi pa	Vrischika	Tula Uzhai ma	Kanya

Another reference puts the notes somewhat differently (this can be obtained by starting with ma as sa in the above arrangement)

இனி இடபம் கற்கடக மாம் விளரி சிங்கம்
தளராத்தாரமதுவாம் தளராக்குரல் கோற்றனுத்
துத்தங்கும்பங்கிளையாம், வரலாலுழை மீனமாம்

[*Arumpadavurai* - Ref 2, 17:13 p 439]

(meaning) “*Iḷi Rishabha* (constellation), *Karkaṭa Viḷari*, *Simha Taram*, *Kural Tula*, *Dhanus Tuttam*, *Kumbha Kaikkiḷai*, *Uzhai Mīna*.”

Mesha	Ṛsbha	Mithuna	Karkaṭa	Simha	Kanya	Tula	Vrischika	Dhanus	Makara	Kumbha	Mīna
	Iḷi		Viḷari	Tāram		Kural		Tuttam		Kaikkiḷai	Uzhai
	pa		da	ni		sa		ri		ga	ma

Two more stanzas describing similar arrangements are found in the commentaries of *Silappadhikāram*, one corresponding to *Kharaharapriya melam (Kāfi thāt)* of today (in Adiyārkkunallār – Ref 2, p 439) and the other in *Arumpadavurai* (Ref 2, p 449), corresponding to the *Harikāmbodi melam (Khamāj thāt)*. *Arumpadavurai* is itself assigned to 9th century or earlier.

The use of zodiac positions to define notes has been discussed by many writers who have researched into the *Tamizh* works. The usage of both 22 *śruti* system and the 12 note system was considered to be a contradiction by Lewis Rowell (Ref 11). A careful examination would however,

show that in the main text of *Silappadhikāram* itself there is no reference to the zodiac arrangement and the references are only in the commentaries written later. A harp like instrument enabling harmony may require a complex method of tuning. In a lute with or without frets, pitch can be varied at will. In the case of fretted lute deflection of the string would provide for variations in pitch. With such instruments a musical theory grouping pitches into 12 positions would be more appropriate (corresponding the the 12 frets in an octave). B.C.Deva has observed “The tendency to describe musical scales in terms of 12 notes may be traced to the influence of finger board instruments” (Ref 12). In spite of the usage of *śruti* values in Sanskrit works of the *mela* period (16th century and later), classification itself was based mostly on 12 positions.

It would appear that the idea had its origin in the south well before the 12th century (the latest date ascribed to Adiyārkkunallār) and even before 9th century which is the date ascribed to *Arumpadavurai*. This would be well before the *mela* system of Sanskrit works, but later than the period of *Silappadhikāram* which is ascribed a date of 5th century or earlier.

The idea of using 12 positions for classification does not seem to have been taken to the next logical step of describing scales other than those obtained by modal shift of tonic from the basic scale (which can give only 7 modes) and defining *Paṅs* (*rāgas* including *janya* *rāgas*) in the period before 16th century. Perhaps the concept was used in some of the lost works. See Appendix for one instance of use of this method for describing more *rāgas* in a palm leaf manuscript ascribed to 16th century.

The concept of classification based on 12 notes in an octave and selection of notes from them has led to adoption of a larger number of 'scales' in Carnatic Music and development of new *rāgas* from them. In fact the recognition of 12 positions around which notes could be grouped in an octave as the basic structure for musical grammar has greatly influenced the subsequent development of musicology in the Sanskrit works of 16th century and later. The *Tamizh* works mentioned above had made this approach centuries earlier.

Style of singing Ālāpana (Ālāp)

The following stanza from Panchamarabu explains the manner of singing '*Ālatti* ' ஆளத்தி (*Ālāp*):

மகரத்தினொற்றாற் சுருதி விரவும்
பகரிற் குறினெடிலாற் பார்த்து நிகரிலாத்
தென்னா தெனாவென்று பாடுவரே லாளத்தி
மன்னாவிச் சொல்லின் வகை

(Ref 8, 1:43, p 80, also quoted without source by Adiyārkkunallār Ref 2, 3:28, p 104) (meaning) “The *śruti* is blended with '*makara*' and the incomparable *ālatti* is sung using 'Thennā', 'Thenā' and (judiciously) applying long and short vowels.” The next verse in *Panchamarabu* (Ref 8, 1:44, p 80) also speaks of usage of the consonants 'tha', 'na', and 'ma' in *ālatti*.

The present style of singing *ālāpana* in Carnatic music liberally uses the consonants 'tha' and 'na' and judicious mixture of short and long vowels (tempos) in contrast to the Hindustani style of using only *akāra* for singing *ālāp*. Though this may appear to be a trivial aspect, it throws light on continuity of traditions in the style of singing.

The use of the word '*śruti* ' to indicate 'drone' rather than intervals is also significant and may indicate the early use of the concept of *ādhāra śruti* or fixed Tonic in music in the south.

Appendix

Palm leaf manuscript using Zodiac chart for describing *Rāgas/ Paṇs*

The idea of using the astronomical chart for describing the notes selected seems to have been attempted subsequently in the 16th century to describe more *rāgas*. In the annual conference of the *Tamizh Isai Sangam* held in 1960 at Chennai Śri S.Irāsan of Malaysia, spoke of a palm leaf manuscript in his possession, describing about 24 *paṇs* by ascribing the positions of the notes to the constellations. (Ref 6, Discussions of 1960, pp 168-171). While the references in old *Tamizh* works using zodiac chart referred only to 2 scales (with all the 7 notes), the palm leaf manuscript has dealt with equivalent of *janya* *rāgas*. An example is *paṇ Nattapāḍai*. The verse quoted by Śri Irāsan puts *kural* in *Tula*, *kaikkiḷai* in *Kumbha*, *uzhai* in *Meena*, *iḷi* in *Ṛṣbha* (*rāsi*), and *tāram* in *Kanya* (corresponding to modern *Carnatic Gambīranata*, a pentatonic *rāga*).

Tula	Vrischika	Dhanus	Makara	Kumbha	Mīna	Mesha	Ṛsbha	Mithuna	Karkaṭa	Simha	Kanya
Kural				Kaikkiḷai	Uzhai		Iḷi				Taram
sa				ga	ma		pa				ni

In the discussions of the conference the verses corresponding to *Nattapāḍai*, *paṇ Takka rāgam* and *Indalam* have been quoted and for others the results of the assignment as in the verse are mentioned with the names of the corresponding modern *rāga*. The discussion went on to *rāgas* for which the manuscript's description was at variance with the current practice of singing. For instance the description of the *paṇ Panchamam* in the manuscript as given by Irāsan corresponds to modern *Malayamārutam* whereas the *Tevāram* verses in *paṇ Panchamam* are sung in modern *Āhiri*. The description of *Indalam* in the manuscript would correspond to modern *Hindolam* whereas *Tevāram* verses in *Indalam* are sung in modern *Māyāmāḷavagowḷa*. As regards the dating of the manuscript it was said to contain mention of the year 'kali 4700'. If this is taken as the *Kaliyuga* calendar in use in Indian almanacs, it would correspond to 1598 A.D. - near about the time the Mela system was taking shape in the southern Sanskrit works. Although Śri Irāsan attended the next year's conference there was no talk about the manuscript. It is a pity that no attempt was made to obtain and preserve the palm leaf manuscript and publish it.

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