

# SOUTH INDIAN MUSIC

## BOOK IV



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## PREFACE

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This is the concluding volume in the series of books dealing with the Theory of South Indian Music. Portions of Chapters III, VI and XI were contributed originally as Papers to the All-India Oriental Conference and All-India Music Conference. They have since been amplified in the light of the Author's further researches. To complete the topic of Manodharma Sangita, the article on "Pallavi" which was contributed to the Madras University Journal has been reproduced in Chapter II with further additions and examples. For the first time in the history of South Indian Music, such topics as Contemporary Music, Comparative Music, Kachcheri Dharma and Musical Prosody are given a systematic treatment. In addition to the Pallavis given in Chapter II, ten more standard Pallavis are given in notation in the Appendix.

My thanks are due to the Rev. H. A. Popley for his kindness in correcting the proofs.

THE AUTHOR.



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## CHAPTER I

### MANODHARMA SANGĪTA

Concert music

Kalpita sangīta  
(compositions previously  
composed, memorised  
and performed.)

Manodharma sangīta  
(extemporised music)

The distinctive feature of Indian music is Manodharma sangīta. It is an important part of Sabhā gānam (concert music). Almost a third part of the concert time is taken up with the performance of this type of music. Singing or performing Manodharma sangīta indicates the highest degree of musical culture. Manodharma sangīta is art music in its purest form. The ideal of *absolute music* is reached in this branch of the art.

Manodharma sangīta is *improvised* music. It is music *created on the spot* and sung or performed. It is not a piece of music already composed by some one else or even composed by the performer himself and memorised and reproduced. It is music created and sung by him on the spur of the moment and flows out of him spontaneously. This music is the off-hand creation of his own fertile imagination. Bearing in mind the detailed lakṣhāna of the raga, its jīva svaras and nyāsa svaras, and its raga ranjaka combinations and viśeṣa prayogas, the musician elaborates the raga in such a manner as to bring out its several points of excellence. The welling musical thoughts

generated within him struggle to find expression through his voice or the instrument. And even as only a small portion of the ice-berg is visible above the water surface, so also the amount of creative music that comes out of the musician is but a small fraction of the music that he can possibly create and perform. It is during the performance of Manodharma sangīta that gifted musicians are able to make the audience forget this mundane existence and elevate them to a higher plane. Performers of classical music take a delight in displaying their powers of creative skill in this sphere of the art. They feel all their labours amply rewarded if they find somebody in the audience *genuinely* appreciating their flights in the sphere of creative music. It is only Manodharma sangīta that has kept alive Indian music all these centuries.

Improvisation or extemporization has been in existence in Europe for some centuries, but now has dwindled into insignificance. India stands at present as the one country in the world, with extemporization as a regular feature of its musical system. Countries like Persia and Arabia, which possess some kind of extempore music are indebted to India for this branch of their art.

Manodharma sangīta in India dates back to the time when the concept of raga had its birth. Considerable progress was made in this branch of the art during the ancient and medieval periods. Musicians of the modern period found that it was possible to specialise only in certain aspects of Manodharma sangīta. Titles, suggestive of the branches of creative music they specialised in, were bestowed on eminent musicians. Posterity remembers with pride such names as Todi Sitarāmayya (who sang the Todi raga for eight days and broke all previous records and who,

once being in want, was obliged to pledge his favourite Todi and raise a loan from a jealous musician), Athāna Appayya, Sankarābharana Narasayya, Nārāyanaganāla Kuppayyar, Begada Subrahmanya Iyer (another name for Patnam Subrahmanya Iyer) and Todi Sundara Rao, who were all specialists in the ālāpanas of the respective ragas and who made them the subject of their exclusive and intensive study. Ghanam Sinayya and Ghanam Krishnayyar were adepts in singing ghanam; and Pallavi Gopalayyar and Pallavi Seshayyar were adepts in singing pallavi. Tyagaraja himself was a distinguished Pallavi singer; but his greatness as a composer has eclipsed his greatness in other spheres of the art.

When a musician composes a new piece, he is also *creating* music. But here, he has at his disposal unlimited time to complete the piece; and even after completing it, he can correct it, embellish it and have it further recast or remodelled and then release it to the world when he feels that the piece has reached perfection. He may also release it as an anonymous composition and if he finds that the reception is good, he may reveal the authorship. The composer has thus ample time to exercise his thought, judgment, attention, skill, discretion and imagination in perfecting the piece and can release it at his leisure. There is no risk involved in such cases. But in the realm of Manodharma sangita, the performer has to speak the language of music *extempore*. The one ideal ever present in the mind of the performer, while attempting this branch of music, is the presentation of the melodic beauties of the raga in all its rich colours. He keeps in mind the detailed lakshana of the raga as also its characteristic progressions and develops these.

The delineation of a raga has two aspects:—*positive* and *negative*. The presentation must be such that the melodic entity of the raga as well as its individuality are clear right through. During the portrayal of the raga there should not be even the remotest suggestion of another raga; *i.e.*, combinations which even in a very remote manner directly or indirectly suggest another raga should be avoided. The former is the positive and the latter the negative aspect of the exposition of a raga. *Raga suddha* or the purity of the raga must be maintained throughout.

*Extemporization* in South Indian Music admits of five divisions:—

1. Raga ālāpana.
2. Madhyamakāla (tāna, ghanam).
3. Pallavi.
4. Svaram.
5. Niraval.

Of these, Raga ālāpana is unmeasured music and is without strict rhythm. Madhyamakāla has some perceptible rhythm. Pallavi is measured music and is in a definite tala. Kalpana Svaras sung to the pallavi or to any section of a kriti is also measured music since it is in the tala of the theme to which it is sung. Niraval or sāhitya prastāra, either of the pallavi or of an appropriate section of a kriti, is also measured music for the same reason.

Raga ālāpana has been in existence in some crude form from very early times. But its systematic development dates from the time of Matanga, who is the father of the modern raga paddhati. Madhyamakāla, an aspect of raga ālāpana, came later. The art of singing Pallavi and Svaram, though hinted at in the Sangīta Ratnākara, attained

its full development in South Indian Music only two centuries ago.

### ( I. Rāga ālāpana paddhati or the procedure for the development of a raga

The terms Ālāpana, ālāpa and ālapti are all synonymous and mean the exposition of a raga.

The following procedure is adopted whenever a detailed and extensive ālāpana of a raga is planned, as for instance as a prelude to a pallavi in the middle of a concert. Usually rakti ragas admit of such elaborate treatment, as they lend themselves to ālāpana in slow tempo and quick tempo. In ghana ragas, the madhyamakāla ālāpanas shine by contrast. On account of their limited scope, it is not possible to develop elaborate ālāpanas of desya ragas. Ragas like Todi, Bhairavi, Kāmbhoji, Sankarābharana and Kalyāni, which admit of elaborate treatment, are referred to as major ragas and the rest as minor ragas. It is also usual for a musician to sing, as a prelude to kritis and other melodic compositions, a short ālāpana of the raga of the piece. Rāga ālāpana is also referred to as *rāga vistāra*.

In the ālāpana of a raga, only the syllables *ta da ri nam tom* should be used. This is the correct sampradāya. These are euphonious syllables, pleasant to hear and also possess a mystical meaning. Unmusical phrases like *ra ra ra, la la la* and *ya ya ya* should be avoided.

The ālāpana of a raga consists of three main stages :—

1. *Ākshiptika* or the Introduction.
2. *Raga vardhani* or the body of the ālāpana.
3. *Sthāyi and Makarini* constituting the conclusion. Makarini is called *Vartani* by some.

*Ākshīptika* is the introductory part of the *ālāpana*. *Āyittam* is another name for *Ākshīptika*. In this introductory part, the *ālāpana* is commenced on the *madhya sthāyi shadja* and followed up with appropriate *sanchāras* in the *mandra* and *madhya sthāyis* with occasional flights in the *tāra sthāyi*. A return is finally made to the *madhya sthāyi shadja*. Sometimes the ragas are also commenced on *tāra shadja* or other notes, wherever tradition favours the departure. Some methods of commencing a raga have become classical on account of their being associated with eminent musicians in the past. *Ākshīptika* is a condensed or *sangraha ālāpana* and the idea is to make clear the identity of the raga to the listeners. It is a miniature *ālāpana* giving its characteristic features in broad outline and is, in a sense, an epitome of the raga.

In concerts where printed programmes are not given to the audience beforehand, the listeners have a spiky time in identifying the ragas sung by musicians. Especially when rare ragas are sung, the intellectual pleasure that one derives in identifying those ragas is great and can be compared only to the pleasure that one derives when solving riddles or other problems involving the use of intelligence.

The second part of the *ālāpana* known as *Raga vardhani* is the substantial part of the *ālāpana*. *Raga vardhani* has four stages and for each of these stages there is the commencement or *eduppu* (எடுப்பு) and the conclusion or *muktāyi*. This *muktāyi* is called *vidāri*. Thus *Vidāri I*, *Vidāri II*, *Vidāri III* and *Vidāri IV* mark the crowning conclusions of the four stages of *Raga vardhani*. *Karanam* is another name for *Rāga vardhani*.

*Raga Vardhani: Stage I.* Here the *ālāpana* is commenced on the *madhya sthāyi shadja* and continued in the

mandra sthāyi for the most part, now and then touching the middle octave notes. Svaras are sounded with appropriate gamakas. Phrases which reveal the melodic entity of the raga and which throw light on the visesha sanchāras and the rakṭi prayogas of the raga should be introduced. Bahutva svaras should not be sparingly used, nor should alpatva svaras be profusely used. This part of the ālāpana, though mostly in the vilamba kāla (slow tempo), is occasionally interspersed with madhyama kāla and druta kāla sanchāras. Phrases which tend to disfigure the raga should be carefully avoided. A few madhyama kāla sanchāras going up to the tāra shadjā are sung at last and the *prathama raga vardhani* is rounded off finally by making a dashing descent to the madhya sthāyi shadjā.

*Raga Vardhani: Stage II.* This begins as before but the sanchāra is now confined principally to the madhya sthāyi with occasional flights in the other sthāyis. One can go up to tāra sthāyi madhyama and even panchama and then descend in a dashing manner and finish on the madhya sthāyi shadjā. Sanchāras containing new phrases and prayogas, suggestive of the variegated colours of the raga and vichitra kalpanas revealing the latent beauties of the raga should figure here. Whereas the routine and standard sanchāras can figure in Stage I, in the *dvitiya raga vardhani*, the phrases must be such, that they reveal the individuality, creative talents and imaginative skill of the performer.

*Raga Vardhani: Stage III.* Ālāpana to be continued on the same plan as in Stage II, but the sanchāras to be confined mostly to the tāra sthāyi.



The three stages of Raga vardhani are thus localised regions in the three sthāyis for the development of the raga—the effective range being well defined in each case.

*Raga Vardhani: Stage IV.* Murchhana prastāra or sanchāras in quick tempo is the dominating feature of this part of the ālāpana.

Sometimes these four stages are blended into two and the Raga vardhani in such cases is finished in two stages.

Now we come to the last part of the ālāpana. the conclusion.

### Sthāyi

If in the course of sanchāra, one starts on a note and finishes on the same note, that note is called a sthāyi svara.

*Sthāyi* is of two kinds:—

*Ārohana sthāyi* and *avarohana sthāyi*.

In the ārohana sthāyi, the sthāyi svaras are in the ārohana krama, but the sanchāras themselves, beginning with each sthāyi svara, progress downwards. In other words, the highest note touched in each sthāyi sanchāra is the sthāyi svara itself.

(In this connection, the reader will do well to observe that the commencing notes of the charanas of Syama Sastri's famous Bhairavi svarajati "*Kāmākshi*" are in the ārohana krama.)

In the avarohana sthāyi, the converse is the case. The sthāyi svaras are in the avarohana krama, but the sanchāras themselves progress upwards, the lowest note touched in the sanchāras in each case being its own sthāyi svara.

The sthāyi sanchāra is thus another sanchāra paddhati in the raga ālāpana and it is done in the madhyamakāla (medium tempo). The procedure for the ārohana sthāyi sanchāra is as follows:—

Start on the madhya sthāyi shadja and without touching any of the notes above it, make sanchāras in the mandra sthāyi, going down till mandra shadja and then come back to madhya shadja. Stop on this note for some time and again make sanchāras in the mandra sthāyi, reaching the mandra shadja and come back to madhya shadja and conclude. This is *madhya shadja sthāyi ālāpa*.

Now take the middle octave rishabha as the sthāyi svara and without touching any of the notes above it, make sanchāras going down to mandra sthāyi rishabha twice as before and conclude on the madhya sthāyi rishabha; and so on for *ga, ma, pa, dha, ni* and *sa*. The effective range of the sanchāra in each of these cases is thus an octave, *s* to *ṣ*; *r* to *ṛ*; *g* to *ḡ*; *m* to *ṁ* etc. In each case, the sthāyi svara is the highest note and since these sthāyi svaras are in the ascending order of pitch, this sanchāra is called as the *ārohana sthāyi*.

*Avārohana sthāyi*. Now take the tāra sthāyi shadja as the sthāyi svara and without touching any of the notes below it, make sanchāras in the tāra sthāyi twice as before, going up to ati tāra shadja and then finish on the tāra shadja. Likewise for *ni, dha, pa, ma, ga, ri* and *sa*. The effective range of the sanchāra here also is one octave in each case: *s* to *ṡ*; *n* to *ṇ*; *d* to *ḍ*; *p* to *ṡ* etc.

Thus with the middle octave notes as the basic svaras, a series of attractive and beautiful sanchāras are developed, firstly in the downward progression and later in the upward progression. It is only people endowed with a

good voice, having an effective range of three octaves, who can do justice to this part of the raga ālāpana.

Brilliant musicians, who have set up records in the past for raga ālāpana, followed this traditional procedure. Todi Sitaramayya sang the Todi raga for 8 days; Tyagaraja sang Devagāndhārī for 6 days while in Madras as the guest of Kovur Sundaresa Mudaliar; Pallavi Seshayyar sang Sāveri raga for 8 hours and the Gaulipantu raga for 3 hours, all of which are records.

Finally, raga ranjaka combinations extending over the whole range of the three sthāyis are sung in quick tempo and the ālāpana concluded on the madhya sthāyi shadjā.

All these rules of procedure and a mere knowledge of the facts relating to raga lakshana will not help a person to give a good ālāpana, unless he possesses creative skill and imagination and is gifted with the *raga sense* and also possesses the talent for the proper grasp and presentation of the raga bhāva.

All this ālāpana is essentially in chowka kālā though interspersed here and there with madhyamakālā sanchāras.

## II. Madhyamakālā or tāna

The next important branch of raga ālāpana is *tāna* or *madhyamakālā*. This is the most lively and bewitching part of the raga exposition and comes as a welcome relief after the long drawn-out chowka kālā ālāpana. This is really ālāpana in the madhyamakālā or medium speed. There is perceptible rhythm here. The rhythmical flow of music is very fascinating. *Tānam* is *madhyamakālā gānam*. Whenever a *nyāsam* is made, some slow speed sanchāras

around the nyāsa svara are permissible. The phrases *tānamtā*, *tānanna*, *tānamna* should be used in this style of raga exposition. The music is in a sense measured, though not into specific āvartas. A uniform tempo is maintained and variety is introduced by the change of figure (நடை) now and then. Expert vainikas play *trikāla tānas*. *Makarini* and *Vartani* are other names for this style of music.

Tānam in druta kāla is called *ghanam*. Music in quick tempo is the dominant feature of this exposition and while singing nyāsa, madhyama kāla and vilamba kāla sanchāras can come in.

From the point of view of the varieties of figure or svara group pattern that can be presented in this style of exposition, eight varieties of tāna have been recognised. Six of these varieties have been given the names of animals and birds which have characteristic gaits, interesting from the point of view of rhythm. The other two names are self-explanatory. The eight varieties of tāna are:—*Mānava tāna*, *As'va tāna*, *Gaja tāna*, *Markata tanā*, *Mayūra tāna*, *Kukkuta tāna*, *Mandūka tāna* and *Chakra tāna*. Sattanur Panju Iyer, an eminent singer of the last century, was an adept in singing these different types of tānas.

Of late it has become the habit of one or two musicians to follow up the tāna of the principal raga with short tānas in ghana ragas: Nata, Gaula, Ārabhi, Sri and Varāli. This departure is open to the objection that the beautiful impression created by the main ālāpana gets obliterated. When the Pallavi in the main raga is taken up after the tāna in the ghana ragas, it ceases to have that appeal, which otherwise it is bound to have.

The following table will give an idea of the relative proportion and duration of the several stages of an ideal raga ālāpana:—

TABLE I

Sections of the ālāpana.	Duration 1 hour.
Akshīptika	5 min.
Raga Vardhani :	$\left. \begin{array}{l} 10 \text{ min.} \\ 10 \text{ ,,} \\ 7 \text{ ,,} \\ 5 \text{ ,,} \end{array} \right\} 32 \text{ min.} \left. \vphantom{\begin{array}{l} 10 \text{ min.} \\ 10 \text{ ,,} \\ 7 \text{ ,,} \\ 5 \text{ ,,} \end{array}} \right\} 45 \text{ min.}$
Stage I	
Stage II	
Stage III	
Stage IV	
Sthāyi	8 min.
Madhyamakāla or Tāna	15 min.

For every raga there are certain svaras around which one can weave an ālāpana; *ś p g s* are such svaras for Sankarābharana. Again in a raga only some svaras are useful as *nyāsas*. For example in Kedāragaula, whereas *p* and *r* are good nyasa svaras, *d* is not a nyasa svara. A jiva svara need not necessarily be a nyāsa svara in a raga. Particularly in those bhāshanga ragas where the anya svaras happen to be also jiva svaras, it will be noticed that they are not nyāsa svaras. These truths have to be borne in mind if one is to make a good raga ālāpana.

The ālāpana of a raga can be compared to an essay. Just as an essay has an introduction, body and conclusion, the raga ālāpana also has the same divisions. The stages of Rāga vardhani correspond to the several paragraphs occurring in the body of the essay.

## CHAPTER II

### III. PALLAVI

Now we come to the Pallavi, the most important branch of creative music. The performer's creative talents, his mastery of rhythm and grasp of technical details are all put to the utmost test here. It is in this branch of manodharma sangīta that the musician has ample opportunities of displaying his creative talents, imaginative skill, artistic sense and musical intelligence. There have been instances of musicians who, not possessing the gifts for making good raga ālāpanas have shone as eminent singers of pallavis. Similarly there have been instances of musicians who had a genius for raga ālāpana but who were very poor at pallavi. The pallavi proper, including the sangatis, belongs to the sphere of kalpita sangīta, since the whole thing is well thought out beforehand, and composed either by the performer himself or by some other musician. But the manipulation of the pallavi, which is the most important part of it belongs to the sphere of manodharma sangīta. The presence of musical and literary beauties in some pallavis adds a charm to the theme.

It is in the realm of pallavi that great musicians fought historic\* contests and won laurels. To listen to a good pallavi exposition is a rare privilege and a treat to the ear.

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\* A pallavi contest is conducted in the following manner :—

Supposing *A* and *B* are the contending Vidwans. A senior musician is chosen as the umpire. It is either mutually agreed upon as to who should begin or this is decided by tossing a coin or by casting lots.

Though the art of Pallavi-singing is hinted at in a vague manner in the *Sangīta Ratnākara* of Sārṅgadeva (early 13th Cent.), yet it did not attain its full development until the eighteenth century. This art is unquestionably the highest product of the South Indian musical genius. The Pallavi is the largest item in a South Indian concert and contributes greatly to its intellectual value. Raga ālāpana is unmeasured music, while pallavi is measured music. The pallavi constitutes the necessary counterpart of the long drawn-out ālāpana of a major raga. The detailed ālāpana and the pallavi rightly occupy the central place in the South Indian concert scheme. Pallavi is in a sense raga ālāpana in measured form woven round a stock theme. Eminent musicians and composers in the past have distinguished themselves as great pallavi performers. Many pallavi contests have taken place in the samasthanas of Rajas and Zamindars. Posterity remembers with pride and zeal the historic events that brought forth some of the excellent pallavis that we possess now.

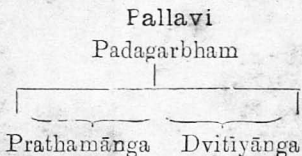
The term 'pallavi' is formed from the initial syllables of the three words :—*Pa*dam = words; *Lay*am = time and

---

If *A* has to begin, he sings a raga of his choice in an elaborate manner. When *A* elaborates the raga, *B* has to identify the raga and after identifying, compose a pallavi on the spot bristling with all intricacies. When *A*'s ālāpana is over, *B* follows him with his newly composed pallavi. If *A* is able to correctly reproduce the pallavi, then the tables are turned. *B* begins the raga and while he does so, *A* plans an elaborate pallavi and sings it when his turn comes. If *B* is also able to correctly reproduce *A*'s pallavi, then it becomes a drawn game. Warm encomiums are then bestowed upon both the Vidwans by the umpire and the senior musicians present. Usually in such contests, one of the parties either fails to identify the raga sung by the other or fails to grasp the opponent's pallavi. Drawn game pallavi contests are a rarity. Even on such occasions, a fresh contest is held on a subsequent date and the matter decided.

*Vinyasam* = variations. The words of a *pallavi* may be either on a sacred or secular theme and can be in any language. The words may also be of an amorous, satirical or humorous character. The *sāhitya* may also be of a funny character. The *sāhitya* of a few *pallavis* consists of the first words of some well-known songs. *Pallavis* in *manipravāla* *sahityas* also exist.

*Prathamāṅga* and *Dvitiyāṅga* are the two parts of a *pallavi* and the dividing point is called the *padagarbham* or *arudi* (பதகர்ப்பம், அருதி). At this point there is a period of rest or *visrānti*. In *Adi tala* *pallavis*, the *padagarbham* coincides with the beat of the first *drutam*.



The two parts may be of equal or unequal length. In the latter case the *prathamāṅga* is longer than the *dvitiyāṅga*. Just as there are major ragas and minor ragas, so also there are major *pallavis*, which admit of a long and detailed treatment, and minor *pallavis*, which are intended for use in concerts of shorter duration. Example 1 on the next page is an instance of a major *pallavi* and Example 2 that of a minor *pallavi* :—



# Ex. 1. SANKARABHARANA—ADI

సక్కరా నీ భజన జేసేవారికి

తక్కువ గలదా శ్రీరామా దినదినము॥

1.	O	O
; s r G G G G , g M chak ka ga ni . . . bha ja gr S N—sr d d P m g g r r s s n d n . . . . ta . kku . . va . ga . la . da . . . r n    na mu	G - g r G m P m na je . se . . . S ; ; , m sri . . . Ra	m g g r r s - r g m g va . . ri . ki . . . . P ; , p m g ma . . di na di

## Ex. 2. HINDUSTHAN KAPI—RUPAKAM

మృగకా ఉన్లైన నమ్మినే నేయి పన్నీరు కైయి

p r s n d n p m Mu ru ga . . . unnai	P d n d n p m G , g r s nam . . . . bi ne . ai . .	R ; r s ya . . pan	r m r - m p m - p n p m p n ni . . ru . . kai . . ya . .
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A musician may show his talents by handling some well-known classical pallavi in an artistic manner, or by composing a pallavi bristling with technical beauties and intricacies of rhythm. Some pallavis have become classical on account of their having been sung by distinguished musicians in the past. A pallavi may be composed in any raga, tala and tempo provided it otherwise satisfies the ordinary rules of musical composition. Pallavis may be composed in common ragas like Sankarābharana, Bhairavi or Todi, or in uncommon ragas like Subhapantuvarāli and Mandāri. They may also be composed in ragas which are known for their admittedly limited scope like Gaulipantu, Sāma and Surati. Pallavis in common tālas like Adi, Rūpaka, Jhampa and Triputa exist in plenty. A musician may cut a new path by composing pallavis in the less common sulādi talas and in the 108 talas. Patnam Subrahmanya Iyer (1845-1902) has earned for himself undying fame by composing a pallavi in the Simbanandana tala, an āvarta of which takes 128 aksharakālas or units of time. The dhātu (musical setting) of a pallavi is sometimes coloured with the introduction of varieties in figure (பெட்டி) in the prathamānga or the dvitīyānga portion. Pallavis involving gati bhedas and pallavis in 16 and 32 kalas are more complex. There are also pallavis in mixed tempos. A pallavi with the prathamānga in trisra gati and the Dvitiyānga in chaturasara gati or *vice versa* may also be composed. The handling of such intricate pallavis with accuracy and thoroughness is a herculean task, human capacity being what it is. Adi tala and Jhampa tala pallavis are usually of the length of one or two āvartas. Rūpaka and Triputa tala pallavis are of the length of two or four āvartas. (See Ex. 3, 4 and 5 on p. 19). *Rattai Pallavis* (double pallavis are an interesting variety and are unique by themselves.

The whole pallavi in this case consists of two independent pallavis, with independent padagarbhams, perfect in themselves and melodically blended. The first pallavi naturally suggests and leads on to the second. Both of them admit of independent treatment.

Sometimes we come across literary beauties like the Svarākshara sandhi and the Gopuchcha and Srotovahayatis in the pallavi sāhitya. The classic instance of a svarākshara pallavi is the famous one in Mohana raga “*sariga pāgā ichchene—sādā pāgā ichchera*” where the italicised syllables are examples of svarāksharas. The well-known Kāmbhoji pallavi composed in honour of H.H. Swati Tirunāl of Travancore, “*Saguna nidhi chandra Kulasekharendra*”, admits of a treatment after the manner of gopuchcha yati thus: *Saguna nidhi chandra, gunanidhi chandra, nidhi chandra, chandra, Kulasekharendra*. (See Ex. 6 on p. 20). There are pallavi sāhityas containing the name of its raga and tala. There are also pallavis wherein the dhātu contains the five varieties of svara group patterns. Such pallavis can be enjoyed in full only when heard.

The starting-point or *eduppu* of a pallavi may be *sama* (i.e., the music and the tala commencing simultaneously) *atita*, (i.e., the music starting before the commencement of the tala) or *anāgata* (i.e., the music starting after the commencement of the tala). *Atita eduppu* is a necessity in those pallavis which have a longer prathamānga. The starting-points in the *atita* and *anāgata* pallavis may be on any fractional point of the tala. *Atita* pallavis with the *eduppu* +  $\frac{1}{4}$  +  $\frac{3}{8}$  +  $\frac{1}{2}$  and +  $\frac{3}{4}$  and *Anāgata* pallavis with the *eduppu* -  $\frac{1}{4}$  -  $\frac{1}{2}$  -  $\frac{3}{4}$  -  $\frac{7}{8}$  - 1 -  $1\frac{1}{4}$  and -  $1\frac{1}{2}$  are well-known. *Sama eduppu* pallavis are relatively easier to handle.

Ex. 3. SANKARĀBHARANA—RŪPAKA (మహిమ తెలియ తరమా రామ)

s r g r s n  
ma hi ma te li ya

d n S s n ॥  
ta ra mā Rā ma ॥

6 NOV 1941

Ex. 4. KALYĀNI—RŪPAKA (తిరిగి జూడ రాదా అటవే ఓ లలనామణి)

s s n d p m  
ti ri gi ju . da

pm pd pm P , m pm  
rā . . . . dā . a ta .

P ; m p d n  
ve . o . . .

s s s nd p d n ॥  
la la nā . . . ma ni ॥

Ex. 5. SANKARĀBHARANA—TRIPUTA (నిఖిల భువన నాథ)

| 3

○

○

| 3

○

○

, , , s N  
... ni khi

P ;  
la

m g M  
. . bhu

P ; P  
va . na

m p d n  
nā . . .

S s n  
tha . .

p d n ॥  
. . . ॥

Ex. 6. KĀMBHOJĪ—TRIPUTĀ (సమనాధిచంద్ర కులశేఖరేంద్ర)

3	○	○	3	○	○
G , m g r re . . . n	, , , s ... sa  g r s    dra . .	r g m g gu na ni dhi	g r s - p D chan . dra kula	S ; se .	; s r . kha .
r s - r g m g . ndra gu na ni dhi G , m g r re . . . n	g r s - m cha . ndra ni g r s    dra . .	g g r s dhi cha . ndra	g r s - p D cha . ndra kula	as follows : , , s r sa gu S ; se .	g m g - g na ni dhi cha ; s r kha .

### *Procedure for developing a Pallavi*

When the principal performer finishes the detailed ālāpana of the pallavi raga, a brief period of rest ensues. During that period the mridangam player tunes his instrument accurately and gets ready for his task. The violinist also gets alert. The attention of the audience is all on the principal performer at this moment and they eagerly wait to listen to his pallavi. The accompanists listen to him with even greater attention, because their reputation rests on the quickness with which they grasp and respond to the pallavi. The first few minutes of the pallavi music are really tense moments to all excepting the performer, and the audience listens to the music in pin-drop silence. Whereas the mridangam player is concerned only with the rhythmical construction of the pallavi, the violinist is concerned with its musical setting as well. The pallavi is the most powerful weapon in the hands of a principal performer and he can spring surprises on his accompanists by presenting intricate pallavis. With the pallavi weapon, leading violinists and mridangam players in the past have been humbled before large and cultured audiences by even junior vocalists. Kachcheri dharma requires the principal performers to give all reasonable opportunities to the accompanists to grasp the pallavi. If familiar pallavis are sung, the accompanists have an easy time.

The stages in the development of a pallavi are :—

(1) *Enunciation*.—The principal performer who has the privilege to start sings the pallavi of his choice in a clear manner, pronouncing the sāhitya syllables correctly and indicating in unambiguous terms, the eduppu, the padagarbham and the distribution of the words in the āvarta. If he refrains from making any of these points

clear in this preliminary stage, he is said to *abuse* his position as the principal performer. By this act of omission on his part, he does grave injustice to his accompanists, whose duty it is, in this brief time to grasp, assimilate and reproduce the pallavi in their turn. The drummer and the other tala accompanists are concerned only with the rhythmical construction of the pallavi; but the violinist is concerned with its musical setting as well. On such occasions, the senior musicians and the *rasikas* present in the audience have a moral right to ask the principal performer to be fair to his accompanists. There have also been instances, when the principal performers went out of their way and openly gave clues to the accompanists and so helped them to grasp difficult pallavis.

In the case of solo stringed instrumental concerts, the Kachcheri dharma requires that the performer should *sing* the pallavi three or four times so that the audience may better appreciate it. Even instrumentalists who do not possess good voices should do it as a matter of course.

(2) *Sangatis*.—The presentation of the pallavi with its sangatis or variations constitutes the second stage. These variations are usually variations on parts of the theme and not on the whole theme. (See Ex. 7 on p. 23).

(3) *Niraval*.—Niraval is literally filling up *i. e.* filling up portions of the pallavi theme with fresh and appropriate music. The pallavi is presented in new melodic garbs, the rhythmical setting being kept intact. Niravals gradually tend to become variations on the whole theme. The singer reverts to the original theme at the conclusion of each niraval.

(4) *Anuloma* and *Pratiloma*.—Anuloma consists in keeping the tala constant and singing the pallavi at double

Ex. 7. SANKARĀBHARANA—ĀD<sub>I</sub> (అందరికి చల్లనైన-చందమామా)

! 4	O	O
<p>1 ; s s r g M m g g r s n d n  anda ri . ki chal . la . nai . . .</p> <p>2. s n - s s r G , m P m m g g r s n d n  . . anda ri . . ki . . chal . la . nai . . .</p> <p>3. s n - s s r G , m P m p m G m g R  . : anda ri . . ki . . chal . . la . .  g r s n d n  nai . . . . .</p> <p>4. s n - s s S , n P , m p m G m g R  . . anda ri . . ki . . chal . . la . .  g r s n d n  nai . . . . .</p> <p>p m g r - s s S , n P , m p m G m g R  . . . . anda ri . . ki . . chal . . la . .  g r s n d n  nai . . . . .</p>	<p>S ; ; g m  na . . chanda</p> <p>S ; ; g m  na . . chanda</p> <p>S ; ; s n  na . . chanda</p> <p>S ; ; p m g r  na . . chan . .</p> <p>S ; ; ;  na . . .</p>	<p>P ; , m g r  mā . . . mā .</p> <p>P ; , m g r  mā . . . mā .</p> <p>P ; , m g r  mā . . . mā .</p> <p>s r g m - p d n s r g m g  da . . . mā . . . . .  r s n d  ma . . .</p> <p>; ; ; ;     . . . .   </p>



and quadruple speeds ; as a consequence the pallavi music will be heard twice and four times respectively within the space of the original period of duration. *Pratiloma* consists in keeping the speed of singing constant, but reckoning the tala at double and quadruple speeds ; as a consequence the tala will be reckoned twice and four times respectively within the space of the original period of duration. A high degree of laya-jñānam is required to perform with accuracy the anuloma and pratiloma of a pallavi. Anuloma and pratiloma and also the rendering in shatkāla (six degrees of speed) are possibilities only in chowka kāla (slow time) pallavis.

The above four stages relate to the development of the pallavi theme proper.

(5) *Kalpana svaras*.—The ideal underlying the singing or performing of kalpana svaras, as in other branches of manodharma sangita, being the delineation of the raga in all its melodic richness, a true musician delights his audience by presenting svara combinations of varied lustre and form and revealing thereby the latent beauties of the raga. At first kalpana svaras of half, one, two, four and eight āvarta duration are attempted and they are then followed with svaras of duration of multiple āvartas. Extempore svaras coloured with jāti bhedas and nadai (நடை) bhedas are then taken up.

Sometimes, in the pallavi theme, a few words of the sāhitya are replaced here and there by equivalent lengths of kalpana svaras. This intermingling of svaras with sāhitya syllables offers a welcome variety.

In order to heighten the effect and at the same time to give an emphatic and ornamental finish to the kalpana

svara passages, it is usual to conclude them with *makutam*s (மகுடம்)—literally crown-like endings. These *makutam*s give timely hints to the mridangam player of the approaching conclusion. Taking the clue, he accompanies the singer with vigour and the resultant effect is very pleasing. Short kalpana svaras are concluded with short *makutas* and kalpana svaras of multiple āvartas, with well-planned-out longer *makutas*. Concluding with a *makutam* is however not obligatory, but it is desirable within certain limits. The charm underlying some of the chitta svaras (solfa passages) adorning classical kritis like *Ni madichallaga* in Ānanda-bhairavi is due to the beautiful *makutam*s at the close.

Talented musicians sing kalpana svaras to the different words or phrases of the pallavi sāhitya as well. In such cases the *muktāyippu* (conclusion) changes its position each time.

(6) *Rāgamālīka*.—Extempore svaras in different ragas are now attempted so as to form a garland of ragas. In each case the extemporized solfa passage is concluded with a brief complementary svara passage in the pallavi raga and the original pallavi is then sung. Sometimes the pallavi itself is transformed into the new raga, the rhythmical setting being kept intact, and the svara passages are concluded with this new pallavi. After the metamorphosed pallavi is sung once, a couple of āvartas of svaras in the original pallavi raga may be sung and finished with the original pallavi.

The performer may provide additional fare to the audience by performing single or double āvarta kalpana svaras in the ragas that figured in the *rāgamālīka*, in the *viloma krama* or inverse order and finally conclude with the original pallavi. The audience will not only recapitulate the ragas rendered but will also appreciate its sequence.

At the conclusion of the rāgamālika, a string of extempore svaras in the original pallavi raga is rendered and the pallavi concluded. Thus this section of the pallavi development is brought to a formal close.

(7) *Tālamālika*.—A few gifted musicians make a tālamālika of the pallavi. Here the pallavi is gradually compressed or expanded into other talas (*i.e.*, talas which differ from the original tala by a few aksharakālas) and presented. In the tālamālika process, each new resulting pallavi may be viewed as a separate regular pallavi and treated accordingly. Kalpana svaras to the pallavi in the new tala as well as rāgamālika kalpana svaras to the pallavi in the new tala can be attempted.

Tiruvottiyur Tyagayyar, the son of Vina Kuppāyyar, used to spring surprises on his audiences by his thought-provoking tālamālikas of the pallavi.

A further variety can be obtained by making a *raga tāla mālika* of the pallavi, *i.e.*, by presenting each of the tālamālika form of the pallavi in a new raga as well. In fact the varieties that are possible in the sphere of pallavi are unbounded and limitless.

(8) *Change of tempo*.—As a crowning conclusion, the tempo of the original pallavi is slightly quickened and sung. A few āvarta madhyama kāla kalpana svaras are also sung and the pallavi is formally brought to a close with a brief ālāpana of the pallavi raga.

The Table on the next page will give an idea of the relative proportion and duration of the several stages of Pallavi elaboration :—

Table II

Stages.	Duration.
Enunciation, inclusive of Sangatis }	5 min.
Niraval.	10 min.
Anuloma and Pratiloma.	5 min.
Kalpana svaras.	15 min.
Rāgamālika and Tālamālika.	20 min.
Rendering in quicker tempo.	5 min.
	—
	Total 60 min. or 1 hour.
	—

The Pallavi elaboration can be compared to an essay and has an introduction, body and conclusion. The stage of enunciation constitutes the introduction and the rendering in quicker tempo the conclusion. All the intermediate stages constitute the several paragraphs of the pallavi essay.

#### IV. KALPANA SVARAS.

The next branch of manodharma sangita is the singing of kalpana svaras. Here the musician has the opportunity of presenting the various rich and colourful aspects of the raga bhāva through the medium of svara sanchāras, the notes being rendered with their characteristic srutis, gamakas and intonation. Some musicians indulge in singing svaras modelled on tala mnemonics (jati combinations). This is not the correct style and further this cannot

be called *manodharma sangita*, since these are previously thought out and modelled on some *tala* frame-work.

Kalpana svaras are sung to the pallavi as already mentioned and also to the pallavi, anupallavi, charana or other suitable section (as for example—*Pranava svarâpa* in the charana of *Vâtâpi Ganapatim*), of a kriti. Clever musicians sing svaras for phrases of intricate eduppu like *Tambura chekoni* in *Koluvamaregada* (Todi), and *Akhanda sacchidānandam* in *Chintaya mā* (Bhairavi). Kritis like *Buddhi rādu* (Sankarābharana) and *Amba paradevate* (Rudrapriya) contain phrases which admit of a treatment after the manner of *srotovaha yati* for this purpose. Thus the effect is enhanced when one sings svaras consecutively to *Amrita pānamu*, *Vāgamrita pānamu* and *Bhaktula Vāgamrita pānamu* in *Buddhi rādu* and *Devate*, *Paradevate* and *Amba paradevate* in the other piece. Wherever appropriate, the singing of kalpana svaras should be preceded by a short *niraval* of the chosen theme. For example the phrase: *Tanuvuche vandana monarinchu chunnāra* in *Pakkala nilabadi* and *prema juchi nāpai* in *Sitapate nā manasuna* admit of both *niraval* and kalpana svaras. There are many themes which would invite the singing of kalpana svaras but which will not admit of *niraval*. The pallavis of the following kritis : *Vâtâpi Ganapatim* and *Nenendu vetakudura* which are good for the purpose of singing kalpana svaras will not admit of *niraval*. Rarely extempore svaras are also sung to parts of other art-forms like the *varna*.

### Rules.

1. A kalpana svara passage must as a rule conclude on the (admissible) note immediately below the commencing note of the theme. The following half-āvarta svaras

for the pallavis of two well-known kritis will bear out this point:—

**Ex. 8.** *Vātāpi Ganapatim* (Muthuswami Dikshitar.)  
Hamsadhvani—Adi.

○	○	
s r g p	g r s r	( <i>Vātāpi gana</i> )
g p n p	g r s r	( <i>Vātāpi gana</i> )
p n ṣ n	p G r	( <i>Vātāpi gana</i> )
n ṣ n p	p G r	( <i>Vātāpi gana</i> )

**Ex. 9.** *Sri Raghuvarāprameya*. (Tyagaraja)  
Kāmbhoji—Adi.

○	○	
m g p d Ṣ ;	ṣ n d P m p d	( <i>Sri Raghu</i> )
p d ṣ r g Ṣ ,	n d P , m p d	( <i>Sri Raghu</i> )
P , n d p m g	p d ṣ N d p d	( <i>Sri Raghu</i> )
Ṣ , ṣ r g Ṣ	ṣ n d p m P d	( <i>Sri Raghu</i> )

2. A kalpana svāra passage may also be concluded on the (admissible) note immediately above the commencing note of the theme. The following example will illustrate this point:—

**Ex. 10.** *Svāra rāga sudhārāsa* (Tyagaraja).  
Sankarabharana—Adi

○	○	4
P , d d p m g	m p m d P p m	g r ( <i>svāra rā</i> )
G , m g r ṣ n	ṣ r g m p m p m	g r ( <i>svāra rā</i> )
D p ṣ n d P	r ṣ n d P p m	g r ( <i>svāra rā</i> )
Ṣ , ṣ n d P	ṃ g r ṣ n d p m	g r ( <i>svāra rā</i> )

3. A kalpana svāra passage may also be finished on some other note provided the terminal phrase of this passage along with the commencing note of the chosen theme forms a ranjaka prayoga for the raga. For instance, in Kāmbhoji the phrases,  $\dot{s} \dot{r} \dot{g} \dot{S}$  and  $p d M$  are ranjaka prayogas. Therefore if the theme commences on the tāra shadjā, the kalpana svaras may be concluded on the tāra sthāyi gāndhāra; likewise if the theme commences on madhyama, the kalpana svaras may be concluded on dhaivata. Likewise in Bhairavi, the phrase  $n \dot{r} \dot{S}$  is a ranjaka prayoga and, if in a Bhairavi song the theme commences on tāra sthāyi rishabha, the kalpana svāra passage can be concluded on the nishāda. The following examples well illustrate these points:—

Ex. 11. *Sri Subrahmanyāya namaste* (M. Dikshitar.)

Kāmbhoji—Rūpaka

(Theme—*Vāsavādi*—in the Anupallavi)

---

$m g p d \dot{S} \quad P d \dot{s} \dot{r} \dot{g}$	( <i>Vāsavādi</i> )
---	---------------------

$m g m P \quad p d \dot{s} \quad d \dot{s} \dot{r} \dot{g}$	( <i>Vāsavādi</i> )
---	---------------------

$d n d p \quad m g m p \quad d \dot{s} \dot{r} \dot{g}$	( <i>Vāsavādi</i> )
---	---------------------

$\dot{S}, \dot{s} n d \quad P, \dot{s} \dot{r} \dot{g}$	( <i>Vāsavādi</i> )
---	---------------------

Ex. 12. *Koniyādina nāpai* (Vina Kuppayyar).

Kāmbhoji—Adi

(Theme—*Bāludau Mārkaṇḍeyuni*—Charana)

O	O	4
$m g m P m d p$	$d \dot{s} N d P d$	( <i>Bāludau</i> )
$m g r S r g m$	$p d P, m p d$	( <i>Bāludau</i> )
$D, n d p m g$	$m p d N d p d$	( <i>Bāludau</i> )
$\dot{s} n d P m g r$	$\dot{S}, r g m p d$	( <i>Bāludau</i> )

Ex. 13. *Ni pādamule* (Patnam Subrahmanya Iyer)  
Bhairavi—Adi

○	○		4
m p d n Ṣ;	ṣ n d P - M p	d n	( <i>Ni Pādamule</i> )
d n ṣ r Ṣ;	ḡ r ṣ n d p m p	d n	( <i>Ni Pādamule</i> )
Ṣ, ḡ r ṣ n d	P, n d p m p	d n	( <i>Ni Pādamule</i> )
m ḡ r Ṣ n d p	m ḡ r G m P	d n	( <i>Ni Pādamule</i> )

4. A Kalpana svara passage may also be concluded on some other note, provided the resultant phrase formed by the ending notes of the passage and the starting note of the theme can be justified from the point of view of the ārohana and avarohana sequence of the raga. For example, if kalpana svaras are attempted for *Nenendu vetakudura* in Karnāṭaka byāg raga, since the avarohana of the raga is ṣ n d n p d m ḡ r ḡ S, kalpana svaras can be finished on the dhaivata and the pallavi which begins on madhyama played.

Kalpana svaras attempted in madhyamakāla (medium degree of speed) will be charming and interesting. Gati bhēdas and nadai (நடை) bhēdas will lend additional colour to this style of extemporization. A performer can reveal his thorough mastery of technical intricacies by attempting kalpana svaras to difficult eduppus and to themes in difficult ragas.

## V. NIRAVAI.

*Niraval* (நிறைவு), the last branch of creative music, is literally sāhitya prastāra. Niraval as a stage in pallavi



elaboration has been referred to. Some sections of kriti admit of beautiful niraval. Niraval is extemporising variations, first on parts of the theme and then on the whole theme, keeping the rhythmical setting intact.

## Historical

The branches of manodharma sangīta treated of above relate to the *ādhunika paddhati* (modern practice). This paddhati itself is the result of centuries of experiments. Of the five branches of manodharma sangīta, raga ālāpana is very old. It sprang into existence when slokas came to be recited to some raga or other. The term jāti to some extent answers for ragas in the works written during the pre-Christian era. Madhyamakāla developed much later. Pallavi singing, though hinted at in the *Sangīta Ratnākara*, is a still later development. Pachimiriam Adiyappiah (18th cent.) is credited with having systematised the art of pallavi elaboration. With the dawn of kriti composition the arts of niraval and developing kalpana svaras received fresh attention at the hands of musicians.

Sārṅgadeva, in his *Sangīta Ratnākara* (13th cent.) talks of *Ālapti* and *Rūpaka ālapti*. These are also mentioned in the *Sangita Makaranda* (Nārada) and *Sangita Samayasāra* (Parsvadeva).

Raga ālapti is a case wherein a theme is not required for the exposition of the raga. That ālapti which is employed in the raga along with a rupaka or form and in conformity with tala is Rupaka ālāpti. It is this Rupaka ālāpti that has later on blossomed into the art of Pallavi.

The four *svasthānas* mentioned for ālapti by Sarangadeva are localised regions within which ālāpas should be

developed. These svasthānas find a parallel in the later Raga vardhani stages.

The *Sangita Sudhā* of the royal author Raghunātha Naik (17th cent.) gives in detail the method of Ālāpa and states that these have been taken directly from the *Sangita Sāra* of the holy Vidyāranya. The six ālāpana angas of the *Sangita Sāra* are :—

- |         |   |
|---------|---|
|         | 1. Ākshiptika or Āyittam  |
| Edupu { | 2. Raga vardhani  |
|         | 3. Vidāri   |
|         | 4. Sthāyi   |
|         | 5. Vartani (or Makarini). This is Tāna or Madhyamakāla                  |
|         | 6. Nyāsa—This is conclusion and is known as Mukṭāyi in common parlance. |

Music is a progressive art and no lakshanakāra can possibly enunciate a system which will hold good for all time. The earlier *asampurna melas* naturally gave way to the later *sampurna melas*. A raga is conceived by a genius but it attains its full stature only at the hands of a subsequent composer or composers. Many ragas reached their maximum melodic growth in the songs of Tyagaraja. His compositions employ all the resources of the most gifted voices.

With the dawn of the idea of absolute music, the way was paved for the development of raga ālāpana and other branches of manodharma sangita. This period constitutes an important land-mark in the history of Indian music. In manodharma sangita we hear some rare flashes of raga-bhāva which we cannot ordinarily hear in compositions. Many rare talas live through Pallavis coined by geniuses in

the past. Pallavis rendered by incapable musicians tend to become dry, uninteresting and insipid.

In the early stages, the opening section (pallavi) of a song was chosen for Pallavi elaboration and hence the origin of the term *pallavi* for this style of singing. Later independent themes, unconnected with songs came to be composed for the purpose of Pallavi elaboration. Illustrious musicians like Shatkāla Narasayya and Shatkāla Govinda Marar were able to sing Pallavis in six degrees of speed. Kundrakudy Krishnier was an adept in singing Rattai Pallavis. The improvisations in Pallavi are so original and variegated in their character that the performer when encored is seldom able to repeat the music over again.

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## CHAPTER III

### RAGA CLASSIFICATION IN ANCIENT MUSIC

The modern classification of ragas into janaka ragas and janya ragas and the further classification of janya ragas into: janya sampurnas, varja ragas, vakra ragas, upānga ragas and bhāshānga ragas, nishādāntya, dhaivātāntya and panchamāntya ragas and the classification of ragas in general into:—(a) ghana, naya and desya ragas (b) Karnāṭaka and desya ragas and also the classification from the point of view of their rasa, time of singing etc., have all been referred to at length in Books II and III of this Series. We will now study the system of raga classification that prevailed in Indian music before the advent of the janaka-janya system. The nucleus of the janaka-janya system is seen in some crude form even in the *rāga-rāgini-parivāra* and the *pan - tiram* systems. But it crystallised into a definite form only in the fourteenth century. It gained added importance from the time of the historic 72 melakarta scheme of Venkatamakhi. Today the janaka-janya system of raga classification is the accepted and the accredited system throughout the length and breadth of India.

The subject of raga classification in Ancient Music has a three-fold aspect:—

(1) The system of classification that prevailed during the pre-Matanga period, *i.e.*, prior to the 4th cent. A.D.

(2) The system that prevailed during the post-Matanga period, and till the advent of the janaka-janya system.

(3) Raga classification in Ancient Tamil Music.

Matanga, the author of *Brhaddesi*, is the father of the raga concept. Although the idea of raga came into vogue during the few centuries that preceded him, yet it took a definite shape only from his time. The term raga is casually met with in Bharata's *Nāṭya Sāstra*. We find references to it in Kalidasa's *Abhijnāna Śākuntalam*, also. In one of the *Panchatantra* stories (ass as a singer) again we find a reference to the term raga.

Since the term *jāti* in ancient music answered to some extent to the later raga, it is not totally inaccurate to speak of raga classification during the Bharata and pre-Bharata periods.

The *Grāma-Murchhanā-Jāti* system was the classification in vogue during the pre-Matanga period. Still earlier, music was sung to a few simple scales.

All standard musical works in Sanskrit mention that Brahma derived music from the Sāma veda:—

सामवेदादिदं गीतं संजग्राह पितामहः ।

In the scale of Sāma gāna, all the seven notes were included whereas in the recital of the Rig and Yajur vedic hymns, fewer notes were used. The Sāma gāna scale formed the basis for the later shadja grāma, which again laid the foundation for the development of murchhanās and jātis. It is these murchhanās and jātis that opened up the possibilities for the development of sampūrṇa ragas and varja ragas in later times. Hence the original source for the art music of India is the Sāma veda. Some idea of the scale of Sāma gāna can be got if the reader will imagine in his mind a Bhairavi raga, wherein the same kind of notes that are found in the arohana occur in the avarohana also. We may call this raga as *Sāma gāna raga*, since there is no raga in modern South Indian music that correctly

represents the scale of Sāma gāna. \* Kharaharapriya is however a close approximation to the Sāma gāna scale although its gāndhāra and nishāda are in some places slightly higher than the corresponding notes of the Sāma gāna. The notes figuring in Tyagaraja's *Nāda tanu-manisam* as traditionally sung, represents the notes of the Sāma gāna.

The Sāma saptaka itself was arrived at after many centuries of experiments. In reciting the Rig veda, the most ancient of the vedas, three notes: Udātta, Anudātta and Svarita were used.—

उदात्तश्चनुदात्तश्च स्वरितश्च स्वरास्त्रयः ।

Pānini and Nārada Siksha

The middle note was the Svarita *s*: Udātta was the higher note *r* and Anudātta was the lower note *n*.

उच्चैरुदात्तः नीचैरनुदात्तः ।

NOTE.—The term 'svarita' has been given other interpretations by later writers.

In the very early stages the Rig veda was recited plainly and then with the Udātta and Anudātta svaras. Such statements as: Ārcino gāyanti (Eka svari gāyana or Ārcika gāyana), Gāthino gāyanti (reciting to two notes) and Sāmino gāyanti (reciting to three notes) deserve notice in this connection. When later the Sāmika scale was repeated from Madhyama and Panchama as fundamental notes, the way was paved for the development of the svara saptaka.

The scale of three notes first developed into a pentatonic scale *g r s n d* and later into a hepta-tonic scale

\* Siva is pleased by Sama gana and it is but apt that the raga closely approximating to it should be termed *Harapriya*, *Khara* standing only for the Katapayadi formula.

*m g r s n d p* i.e., with the addition of *ma* above and *pā* below. The scale of Sāma gāna was a downward scale and *m g r s* and *s n d p* were perfectly symmetrical and balanced tetrachords. When the phrase *s n d p* was sung an octave higher, the idea of a complete octave was immediately perceived. The dawn of the concept of the octave constitutes an important land-mark in the history of Indian music. We have the real beginnings of art music from this period.

It was incidentally noticed that in this complete scale *s r g m p d n s* the intervals between *ga* and *ma*, *ma* and *pa*, and *ni* and *sa* were the same; and that the intervals between *sa* and *ri*, and *pa* and *dha* were the same; and also that the intervals between *ri* and *ga*, and *dha* and *ni* were the same.

In the Rik Prāti Sākhya, mention is made of three octaves and seven notes for each octave and also that the notes of the second and third octaves were twice in pitch compared with the notes of the corresponding lower octaves. It is also mentioned that the same seven notes of one octave are repeated in the other octaves. This clearly proves beyond doubt that the Indian musical scale with seven notes of defined pitch was fixed more than three thousand years ago and also that three octaves or registers were recognised even in that distant past.

When the notes of the Sāma gāna were further studied and analysed, it was found that they had the sruti values: 4 3 2 4 4 3 2. In other words, the interval between the following pairs of notes: (1) *n* and *s* (2) *g* and *m* and (3) *m* and *p* was found to be a chatusruti interval (major tone 9/8); that between the pairs: (1) *s* and *r* and (2) *p* and *d* was found to be a trisruti interval

(minor tone 10/9); and that between the pairs: (1) *r* and *g* and (2) *d* and *n* was found to be a *dvivruti* interval (semi-tone 16/15). In other words if  $s=1$ , the frequencies of the other six notes were as follows:—

<i>s</i>	<i>r</i>	<i>g</i>	<i>m</i>	<i>p</i>	<i>d</i>	<i>n</i>	<i>ś</i>
1	10/9	32/27	4/3	3/2	5/3	16/9	2

The notes of the *Sāma gāna* were styled the *suddha svaras* and the other notes that gradually came into use in secular music were styled *vikṛta svaras* i.e., changed notes, or notes which had not the *suddha* character.

Thus the *suddha svvara saptaka* of Ancient music is the scale of *Sāma gāna*. The notes *sa*, *ma* (*suddha*) and *pa* have retained their values even now.

We have already seen that a single note *prayoga* was referred to as *Ārcika*; a scale of two notes as *Gāthika*; and a scale of three notes as *Sāmika*. Scales of four, five, six and seven notes were referred to as, *Svarāntara*, *Audava*, *Shāḍava* and *Sampūrṇa*:—

एकस्वरप्रयोगो हि आर्चिकस्त्वभिधीयते ।

गाथिको द्विस्वरो ज्ञेयस्त्रिस्वरश्चैव सामिकः ।

चतुस्वरप्रयोगो हि स्वरान्तरक उच्यते ॥

औडवः पञ्चभिश्चैव षाडवः षट् स्वरो भवेत् ।

संपूर्णः सप्तभिश्चैव विज्ञेयो गीतयोक्तृभिः ॥

### GRĀMA—MŪRCHHANĀ—JĀTI SYSTEM

We now come to the next period when the *Grāma-Murchhanā-Jāti* system of classification prevailed.



The term grāma originally denoted a heptatonic scale. Sa-grāma and Ma-grāma were two such scales. With the progress of the art, the musical potentialities of more notes in the octave were perceived and later on the term grāma came to be used in an extended sense to denote a collective scale, including within it all the suddha svaras and vikṛta svaras used in music. It is in this extended sense, that writers from the time of Matanga define this term. The word 'grāma' gave birth to *gamma* (Greek) and *gamme* (French) and \**gamut* (English). Thus in later times, the term grāma came to mean the entire or whole musical scale, comprising all the notes between the fundamental and the octave.

Matanga is the earliest to define the term grāma. He says that even as the members of a joint family live together, so too all the svaras are brought together under a grāma. In other words, the grāma was the collection of all the svaras used in music. In it figured all the svaras that were used in sacred and secular music. The following definitions of grāma given by Matanga and others after him only reflect the same idea :—

यथा कुटुम्बिनः सर्व एकीभूत्वा वसन्ति हि ।

सर्वलोकेषु स ग्रामो यत्र नित्यं व्यवस्थितः ॥

—*Brhaddesi.*

ग्रामः स्वरसमूहः स्यात्

—*Sangita Makaranda and  
Sangita Ratnakara.*

स्वरनिकरो ग्रामः स्यात्

—*Raga Vibodha.*

ग्रामः स्वराणां समुदायरूपः

—*Sangita Sudhā.*

\* In fact, it is sa-grama that gave rise to the word gamut ; gamut is gamma ut (ut is doh or shadja) i.e., gamma sa, or grama sa i.e., sa grama.

# स्वरसमूहात्म ग्रामलक्षणम्

—*Chaturdandi Prakāśika.*

When Rāmāmātya wrote that all the Desi ragas were those of sa-grāma :—

देशी रागश्च सकलाः षड्जग्राम समुद्रवाः ।

—*Svaramela kalanidhi.*

He meant that all the svaras (suddha and vikṛta varieties) used in the Desi ragas (*i.e.*, current ragas) were found in the sa-grāma, which in other words meant that sa-grāma was the *encyclopaedic scale* or repository of all the notes used. Sa-grāma used in this extended sense rules out the possibilities of any other grāma.

Thus, though the term sa-grāma originally denoted a particular heptatonic scale, later on with the progress of the art and with the increase in the number of ragas, it came to mean merely a collective scale. From its very nature, there can be only one collective scale and hence it is that subsequent writers refer only to the sa-grāma and not to any other grāma.

Bharata, in his *Nāṭya Sāstra* speaks of two grāmas : Shadja grāma and Madhyama grāma. The notes that figured in the Shadja grāma were called suddha svaras and their values can be determined from the following sloka :—

चतुश्चतुश्चतुश्चैव षड्जमध्यम पञ्चमाः ।

द्वे द्वे निषादगान्धारौ त्रिस्त्री ऋषभधैवतौ ॥

s	r	g	m	p	d	n
4	3	2	4	4	3	2

That is, in other words, the frequencies of the notes and the intervals between them were as follows :—

1	$10/9$	$32/27$	$4/3$	$3/2$	$5/3$	$16/9$	2
<i>s</i>	<i>r</i>	<i>g</i>	<i>m</i>	<i>p</i>	<i>d</i>	<i>n</i>	<i>ś</i>
Interval of a minor tone		Interval of a semi-tone		Interval of a major tone		Interval of a major tone	
$10/9$		$16/15$		$9/8$		$9/8$	

*Note.*—The fractions above the notes represent their frequencies, while the fractions below, represent the intervals between the bracketed notes. The frequency of any note multiplied by the interval between it and the next higher note gives the frequency of that higher note. Thus gandhara's frequency  $\frac{32}{27}$  multiplied by the interval  $9/8$ , gives  $4/3$ , which is the frequency of suddha madhyama and so on.

The ma-grāma was the same as the sa-grāma except that the fifth (Panchama svara) was diminished by one sruti. It is this slightly diminished fifth that is referred to variously as Chyuta Panchama, Mrdu Panchama, Laghu Panchama, Kaṣiki Panchama and Trisruti Panchama. By the process of the modal shift of tonic *i.e.*, by taking the different notes of the grāma as the tonic note, seven resultant scales called mūrchanās were derived from each grāma. Of these 14 mūrchanās (*chaturdasa murchhanās*), some were found to be repetitions. Eliminating the repeating mūrchanās, seven of these were ultimately retained. These became the seven jātis. The Mūrchanā also was a scale and it corresponds to the modern concept of a *pure* mela. But when a melodic individuality was imported into a Mūrchanā with jiva svaras and nyāsa svaras, it attained the status of a jāti.

(In modern music also we have a parallel instance. Till the beginnings of the 19th century it was thought that a good number of the 72 melas could never attain the status of ragas. But the compositions of Tyagaraja and those of other later composers in these melas have disproved this and have established their melodic worth. So that, whatever might have been the case a couple of centuries ago, to-day it is not incorrect to talk of the 72 mela ragas. Music is a progressive art and it is but natural that melas should also attain the status of ragas in course of time).

The Table on the next page gives the names of the mūrchanās belonging to the shādja, madhyama and gāndhāra grāmas. The gāndhāra-grāma became obsolete long ago and is merely referred to here for the sake of completeness. The gāndhāra-grāma is not mentioned in Bharata's Nāṭyā Sāstra.

**TABLE III**  
**Murchhanas**

Name of the grāma.	Name of the Murchhanā	The initial note of the Murchhanā
Shadjā grāma	Uttaramandra	sa (s to ṣ)
	*Rajani	ni (n to ṇ)
	Uttarāyata	dha (ḍ to ḍ)
	Suddha Shadjā	pa (p̣ to p̣)
	Matsari kruta	ma (ṃ to ṃ)
	Asyakraṇta	ga (g̣ to g̣)
	Abhirudgata	ri (ṛ to ṛ)
Madhyama grāma	Sauvira	ma (ṃ to ṃ)
	Harināsava	ga (g̣ to g̣)
	Kalōpanata	ri (ṛ to ṛ)
	Suddha Madhya	sa (ṣ to ṣ)
	Mārgi	ni (ṇ to ṇ)
	Pauravi	dha (ḍ to ḍ)
	Hrushyaka	pa (p̣ to p̣)

\* Also called Ranjani by Narada and others.

Name of the grāma	Name of the Murchhana	The initial note of the Murchhana
Gāndhāra grāma	* Nandā	ga (g to ḡ)
	Visāla	ri (r to ṛ)
	Sumukhi	sa (s to ṣ)
	Vicitra	ni (n to ṇ)
	Rohini	dha (ḍ to ḍ)
	Sukha	pa (p to p)
	Ālāpa	ma (m to m)

Note that the initial notes of the murchhanās are in the avarohana krama—downward order.

Sa-grāma Murchhanās:—

आदावुत्तरमन्द्रा स्याद्रजनी चोत्तरायता ।  
 चतुर्था शुद्धषड्जा च पञ्चमी मत्सरीकृता ॥  
 अश्वक्रान्ता तथा षष्ठी सप्तमी चाभिरुद्रता ।  
 षड्जग्रामाश्रिता ह्येता विज्ञेयाः सप्त मूर्च्छनाः ॥

Ma-grāma Murchhanās:—

सौवीरी हरिणाश्वाथ स्यात्कलोपनता तथा ।  
 शुद्धमध्या तथा चैव मार्गी स्यात्पौरवी तथा ॥

\* 'Samra' is the name for this murchhana in Narada's *Sangita Makaranda*.

हृष्यका चेति विज्ञेया सप्तमी द्विजसत्तमाः ।

मध्यमग्रामजा ह्येता विज्ञेयाः सप्त मूर्छनाः ॥

Chap. 28. *Natya Sāstra* (Bharata)

Ga-grāma Murchhanās.

नन्दा विशाला सुमुखी चित्ता चित्रावती सुखा ।

आलापा चेति गान्धार ग्रामे स्युः सप्तमूर्छनाः ॥

Of the seven jātis which were in practical use, four belonged to the shadja grāma and three to the madhyama grāma. The four jātis of the shadja grāma were, Shādji Naishadi, Dhaivati and Ārshabhi. The three jātis of the madhyama grāma were, Gāndhāri, Madhyama and Panchama. These were the seven suddha jātis.

Transilient scales which were subsequently discovered and used were also called jātis.

Next we have Matanga's intelligent classification into *suddha*, *chāyāлага* and *sankirna* ragas. (For details relating to this classification see Chapter I, Book 3 of this Series. This system paved the way for the later janaka-janya system and the classification of janya ragas into upānga ragas and bhāshānga ragas.

Pārsvadeva in his *Sangita Samaya Sāra*, written sometime between 1165 and 1330 A. D. speaks of the following kinds of ragas ;—

Rāgānga sampūrnas, Rāgānga shādavas and  
Rāgānga audavas.

Upānga sampūrnas, Upānga shādavas and  
Upānga audavas.

Bhāshāṅga sampūrṇas, Bhāshāṅga  
shādavas and Bhāshāṅga audavas.

Kriyāṅga sampūrṇas, Kriyāṅga shādavas  
and Kriyāṅga audavas.

Narada in his *Sangita Makaranda* (written slightly before the *Sangita Ratnākara*) mentions the classification of Puruṣa ragas, Stri ragas and Napumsaka ragas i.e., masculine, feminine and neuter ragas evidently based on the gender of the raga names. Sanskrit writers are not all unanimous regarding the gender of some of the raga names, with the result that the terminations of the raga names differ in many cases. As a consequence we are likely to import a difference where actually none such was intended. For instance, Bhairava and Bhairavi are two separate ragas. But Saurāshtra and Saurāshtri are not separate ragas. Likewise, Revagupta and Revagupti are the same; and Mangalakaisika and Mangalakaisiki are the same.

Narada also mentions an interesting classification of ragas based on the gamaka of the svaras of the raga :—

(1) Muktaṅga kampa ragas i.e., where all the notes figuring in the raga were Kampa gamaka svaras; (the modern sarva svara gāmaka varika raga corresponds to this.)

(2) Ardha kampa ragas, i.e., ragas where only some notes were played with gamaka and the rest pure.

(3) Kampa vihīna ragas, i.e., ragas whose notes can be played pure, without any gamaka whatever.

Classification of ragas, according to the time of singing into morning, noon and evening ragas is also mentioned in this work. The same work also mentions ragas of Suryāmsam and Chandrāmsam.



Sārṅgadeva, in the *Saṅgita Ratnākara* speaks of Mārgi ragas and Desi ragas. Mārgi ragas were classified into :—

- |                |                  |
|----------------|------------------|
| 1. Grāmā raga  | 4. Bhāsha        |
| 2. Upa raga    | 5. Vibhāshā      |
| 3. Suddha Raga | 6. Antara bhāshā |

He enumerates the names of many of these Mārgi ragas and mentions the types to which they belong.

These ragas however became obsolete long before his time. Only Desi ragas were current in his time. Desi ragas were classified into :—

- |            |              |
|------------|--------------|
| 1. Ragāṅga | 3. Bhāshāṅga |
| 2. Upāṅga  | 4. Kriyāṅga  |

*Prāk-prasiddha* ragas or *Purva prasiddha* ragas, i.e., ragas which were in vogue before his time and *Ādhuna Prasiddha* ragas, i.e., ragas which were in vogue in his time are also mentioned by him. This classification is useful from the historical point of view.

From the point of view of suitability for compositions, Rāmāmātya classified ragas into *uttama* (good) *madhyama* (mediocre) and *adhama* (inferior) ragas. Uttama ragas were pure ragas and had no trace of other ragas in them. They were suitable for compositions, ālāpāna and taya. Madhyama ragas were used only to sing portions of songs. Adhama ragas were unsuitable for compositions. This classification was endorsed by Somanatha but later fell into oblivion.

Works like *Raga tala chintāmani* speak of Purva sampradāya melas. These are 20 according to some and 19 according to others. These were the melas in vogue

during the pre-Venkatamakhi period. Venkatamakhi refers to them as Kalpita melakartas.

### Classification in Ancient Tamil Music.

Here we find the classification into *pan* (பண்) and *tiram* (திறம்). Pan was a general name for a raga. It also denoted a generic type. A pan was not always a sampūrna—sampūrna raga. Some of them were like the asampūrna melas of Venkatamakhi. Each pan had a number of derivatives called திறம். Tiram was a varja raga or a transilient scale. Panniyatriram (பண்ணியற்றிதிறம்) was a shādava raga, tiram was an audava raga and tirattiram (திறத்திறம்) a svarāntara raga.

According to the time of singing, Pans were classified into :—

(1) Pagal pan (பகல் பண்) i.e., those which should be sung during day,

(2) Iravuppan (இரவுப்பண்) i.e., those which should be sung during night, and

(3) Poduppan (பொதுப்பண்) i.e., those which could be sung at all times.

Of the 24 pans, 12 were pagal pans, 9 were iravu pans and 3 were poduppans. The Vilarippan had no derivatives.

The names of such pans as Gāndhāra panchamam, Panjaram, Mālavakausikam, Natta rāgam, Kauvānam, Kolli kauvānam etc., reveal sanskritic origin.

In passing, it may be useful at this stage to refer to the Rāga-Rāgini parivāra system which has held sway for some centuries in Hindusthāni music. Six male ragas were adopted and to each of these, there were 5 Rāginis (bhārya ragas or wives). Each male raga had again

8 putras and a wife to each of these putras (*i.e.*, 8 daughters-in-law). This gives us the total number of ragas as :

$$6 + 30 + 48 + 48 = 132 \text{ in all.}$$

Amongst the different schools of Hindusthāni music, there is no unanimity of opinion regarding what were the six fundamental ragas.

There are also the *dhuti* ragas.

\*

\*

\*

A study of the raga names reveals certain interesting features :—

There are ragas which suggest a provincial origin as Drāvīda Gujjari, Dakshina Gujjari, Mahārāshtra Gujjari, and Saurāshtra Gujjari; Karnāṭaka Bangāla, Drāvīda Gauda; Āndhri, Shadjāndhri; Turushka Gauda and Turushka Todi; Nepāla, Nepāla Gauda, Kalinga.

Such ragas as Dvitīya Saindhavi, Tritīya Saindhavi, Chaturtha Saindhavi and Dvitīya Kedāram suggest that these are slightly different forms of Saindhavi and Kedāram respectively.

There are ragas with dual names. Āndolika and Mayūradhyanī are one and the same raga; likewise are Sindhu dhanyāsi and Udayaravi chandrika; Rāma manohari and Ramā manohari; and Vanāli and Rasāvali.

The names of some ragas have undergone a slight change. Dhanyāsi is referred to in earlier works as Dhannāsi, Dhanāsi, Dhanāsi, Dhanāsri, Dhanāsari and Dhanyaśi. Yadukulakāmbhoji is referred to as Erukalakāmbhoji, Yarakalakāmbodhi, Edukulakāmbhodi etc.

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## CHAPTER IV

### 22 SRUTIS

In the history of world music, Indian music is one of the earliest to use quarter-tones. It is the use of quarter-tones or micro-tones that imparts a peculiar charm and flavour to the music of India. Twenty-two such notes *i.e.* ten notes in addition to the universal twelve notes of the gamut have been in use for centuries. Many ancient Sanskrit and Tamil works refer to the 22 srutis as the foundation of the Indian musical scale. With the progress of the art, a few more srutis have come into the scale. Theoretically, the number of srutis figuring in Indian music has been estimated by various scholars as 22, 24, 27, 32, 48, 53 and 96. Though in modern music we use a few srutis in addition to the 22, the number 22 represents the barest minimum of srutis that has been actually used in Indian music from ancient times. A few of these srutis figure in rare ragas and they live only through those ragas. A well-trained ear can perceive and identify at least 50 notes in an octave. In music, however, we are concerned only with those srutis which actually occur in ragas and which are in concordant relationship with one another. The rest are discarded. The use of these subtle tones is in fact the glory of Indian music and testifies to the highly developed aural powers of the Indian musician. Musicians are not, generally speaking, conscious of the precise frequency values of these srutis, but keeping the melodic picture of the raga in their minds, they are able to sing or play the srutis accurately.

The subject of 22 srutis is one of the most difficult branches of the science of Indian music and can be understood only by persons with many years of musical training.

In fact those janya ragas, which can possibly claim more than one janaka mela are put under particular melakartas on the basis of the sruti values only. The melodic individuality of a raga is revealed only when its characteristic srutis are sounded.

A sruti is a note of minute pitch which a refined and trained ear is capable of distinguishing. It is the smallest audible difference of pitch. It is a fraction of a semi-tone. There is no such thing as a unit sruti with a constant value. An *eka sruti* (single sruti) interval is of three sizes. When we say that there is an interval of one sruti between a pair of notes the value of this sruti interval will be any one of these according to the notes forming the pair. The \*values of these srutis are, in the increasing order of pitch:  $\frac{81}{6}$  (comma of Didymus: 22 cents),  $\frac{25}{4}$  (70 cents) and  $\frac{256}{3}$  (Pythagorean Limma: 90 cents).  $\frac{81}{6}$  is called the *pramāna sruti*. The other two srutis may be termed *nyuna sruti* and *purna sruti* respectively. The term *purna sruti* simply denotes the *eka sruti* interval of the highest pitch. The term *nyuna sruti* means the sruti that is slightly less than the *purna sruti*. The octave is divided into 22 intervals of unequal pitch. In other words, the sthāyi is conceived of as the sum total of 22 srutis of unequal size. Notes which are separated from one another by an interval of less than a *pramāna sruti* are not reckoned.

A *dvisruti interval* has two values:  $\frac{16}{3}$  and  $\frac{135}{8}$ . The former is the diatonic semi-tone and may be styled the *purna dvisruti interval* (112 cents). The latter is slightly less than the semi-tone and may be styled the *nyuna dvisruti interval* (92 cents). Between the shadja and the

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\* The values of srutis can be expressed in terms of vibrations per second or as ratios to the fundamental or in cyclic cents.

suddha rishabha is a semi-tone  $\frac{1}{2}$ . But between suddha rishabha and chatusruti rishabha is the slightly flattened semi-tone  $\frac{1}{2}\frac{5}{8}$  or *nyuna dvistruti* interval —  $\frac{1}{2} \times \frac{5}{8} = \frac{5}{16}$ .

A *tristruti* interval has a constant value  $\frac{1}{3}$  (182 cents) and corresponds to the minor tone. A *chatusruti* interval has also a constant value  $\frac{2}{3}$  (204 cents) and corresponds to the major tone.

A *chatusruti* interval comprises two *pramāna* srutis (commas), one *nyūna* sruti and one *pūrṇa* sruti (limma)  $\frac{8}{16} \times \frac{8}{16} \times \frac{2}{4} \times \frac{2}{4} \frac{5}{8} = \frac{5}{8}$ . A *chatusruti* interval comprises a *pūrṇa dvistruti* interval and a *nyūna dvistruti* interval  $\frac{1}{2} \times \frac{5}{8} = \frac{5}{16}$ .

A *panchaseruti* interval is equal to  $\frac{3}{2}$  (294 cents). Between the *chatusruti* rishabha and the *suddha madhama* is a *pancha sruti* interval —  $\frac{3}{2} \times \frac{2}{3} = \frac{4}{3}$ .

A *shatsruti* interval is equal to  $\frac{5}{3}$  (316 cents). There is a *shatsruti* interval between *antara gāndhāra* and *panchama*:  $\frac{5}{4} \times \frac{4}{5} = \frac{3}{2}$ .

The difference between a *shatsruti* interval and a *panchaseruti* interval (6 – 5) is a comma  $\frac{8}{16}$  or *pramāna sruti*.

The difference between a *panchaseruti* interval and a *chatusruti* interval (5 – 4) is a limma  $\frac{2}{4}\frac{5}{8}$  or *pūrṇa sruti*.

The difference between a *chatusruti* interval and a *tristruti* interval (4 – 3) is a comma  $\frac{8}{16}$  or *pramāna sruti*.

The difference between a *tristruti* interval and a *dvistruti* interval (3 – 2) is  $\frac{2}{4}\frac{5}{8}$  or a *nyūna sruti*.

The difference between a *dvistruti* interval and an *ekaseruti* interval of the *pūrṇa* type (2 – 1) is a comma  $\frac{8}{16}$  or *pramāna sruti*.

European musicians, brought up in the tradition of equal temperament while listening to Indian music employing quarter-tones are likely to get the impression that impure notes are being played. This is an erroneous

notion. It is of interest to note that in recent years attempts have been made in Europe to write quarter-tone music and pianos containing 24 keys to the octave have been made. A whole opera employing quarter-tone music was performed some years ago in Germany.

It is possible to have 22 frets on the vīna finger-board to indicate the 22 sruti-sthānas and play music, but the arrangement will become too unwieldy. The present arrangement by which we produce the srutis by deflecting the string from the lower svarasthānas is quite satisfactory. The distribution of 22 srutis over the 12 svarasthānas is an easy and workable arrangement.

In ancient music, the 22 srutis were distributed over all the sapta svaras. But later on when *sa* and *pa* came to be regarded as *avikruta* svaras, (i.e., changeless or not admitting of varieties) *sa* and *pa* took one sruti each and the remaining 20 srutis were distributed amongst the 5 notes: *ri ga ma dha* and *ni* at the rate of 4 for each note. Thus  $4 \times 5 = 20 + 1 + 1 = 22$  srutis. Hence the significance of the statement: *svaras are 7, svarasthānas are 12 and srutis are 22.*

A musical scale is a collection of all the notes used in the octave in a particular country. A musical scale is a gradual evolution. It is the result of centuries of musical thought and practice.

The 22 srutis are the foundation of the original scale and they were derived primarily for fixing the values of the *suddha svaras* [i.e., the notes of the *sāma gāna*. Excepting for the notes *sa*, *ma* and *pa*, the term *suddha svara* in ancient music and modern music denotes notes of entirely different pitch. The frequencies of these notes have been given in the preceding chapter. The srutis are derived upon the principle of *samvāditva* or consonance. The 22

srutis were evolved by the Cycle of Fifths and Fourths *i.e.*, by the *sa-pa* and *sa-ma* methods (*samvāda dvaya*).

**षड्जपञ्चमभावेन श्रुतिर्द्वाविंशति जगुः ॥**

—Ahobala's *Sangita Pārijāta*

*i.e.* the 22 srutis are arrived at by the shadja-panchama bhāva.

(Note. A Panchama lower down gives the suddha madhyama.)

The traditional mention of Panchama and Madhyama as the basis of derivation should be taken only as illustrative and not exhaustive. The Cycle of Thirds *sa-ga* series will furnish other srutis as well.

All the 22 srutis become svaras in some raga or other. Srutis actually used in a raga attain the status of svaras for that raga and the other notes remain merely as srutis.

It will be useful at this stage for the student to become familiar with the frequencies of the easier srutis and then to study the more difficult ones.

From the Harmonic Series, we see that the values of the successive intervals are:—a sthāyi (octave), a panchama (perfect 5th), suddha madhyama (perfect 4th), antara gāndhāra (major 3rd), sādharana gāndhāra (minor 3rd), etc. From the 8th to the 9th is a chatursruti (major tone), from the 9th to the 10th is a trisruti (minor tone) and from the 15th to the 16th is a dvisruti (diatonic semi-tone). The other successive intervals are of interest only from the academic point of view and are not of musical importance.

The Harmonic Series again gives us the values of Panchama as  $\frac{3}{2}$ ; Antara Gāndhāra as  $\frac{5}{4}$  and Chatursruti Rishabha as  $\frac{9}{8}$ .

There is an interesting point about these three notes:—



Panchama is the harmonic mean of shadja and tāra shadja, i.e.,  $\frac{1+2}{2} = \frac{3}{2}$ .

Antara Gāndhāra is the harmonic mean of shadja and panchama  $\frac{1+\frac{3}{2}}{2} = \frac{5}{4}$ .

Chatusruti Rishabha is the harmonic mean of shadja and antara gāndhāra  $\frac{1+\frac{5}{4}}{2} = \frac{9}{8}$ .

The *sa-pa* series or the Cycle of Fifths gives us the following notes:—

*sa* (the starting-note of the cycle) = 1 ; Panchama =  $\frac{3}{2}$ .

Panchama of this Panchama is the tāra sthāyi Chatusruti Rishabha  $\frac{3}{2} \times \frac{3}{2} = \frac{9}{4}$  which is a \*compound interval. This note in the madhya sthāyi will have the value  $(\frac{9}{4} \div \frac{2}{1}) \frac{8}{8}$ .

The Panchama of this Chatusruti Rishabha gives us the Chatusruti Dhaivata  $\frac{9}{8} \times \frac{3}{2} = \frac{27}{16}$  which is the Pythagorean major 6th.

The Panchama of this Chatusruti Dhaivata gives us a note in the tāra sthāyi which is slightly above the Antara Gāndhāra  $\frac{27}{16} \times \frac{3}{2} = \frac{81}{32}$ . This note in the madhya sthāyi =  $\frac{81}{32}$  divided by 2 =  $\frac{81}{64}$ . This note is higher than the Antara gāndhāra by a comma interval  $\frac{5}{4} \times \frac{81}{64} = \frac{81}{16}$ . This note is called the Tivra Antara Gāndhāra or the Chyuta Madhyama Gāndhāra and is the Pythagorean major 3rd.

Its Panchama gives us the note : Tivra Kākali Nishāda or the Chyuta Shadja Nishāda  $\frac{81}{16} \times \frac{3}{2} = \frac{243}{32}$ . This note is the Pythagorean major 7th.

The *sa-ma* series or the Cycle of Fourths gives us the following notes:—

*sa* (the starting-note of the cycle) = 1

Its suddha madhyama =  $\frac{4}{3}$ .

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\* A compound interval is an interval greater than an octave.

The suddha madhyama of this madhyama is the flattened Kaisiki Nishāda :  $\frac{4}{3} \times \frac{4}{3} = \frac{16}{9}$ .

The suddha madhyama of this nishāda is the tāra sthāyi flattened sādharana gāndhāra :

$\frac{16}{9} \times \frac{4}{3} = \frac{64}{27}$ . This note in the madhya sthayi will have the value  $\frac{64}{27}$  divided by  $2 = \frac{32}{27}$ .

The suddha madhyama of this gāndhāra is the flattened form of suddha dhaivata :—

$$\frac{32}{27} \times \frac{4}{3} = \frac{128}{81}$$

The suddha madhyama of this dhaivata is the eka sruti rishabha of the tāra sthāyi :—

$\frac{128}{81} \times \frac{4}{3} = \frac{512}{243}$ . This note in the madhya sthāyi will have the value  $\frac{512}{243}$ .

If suddha madhyama is taken as shadja its antara gāndhāra will be the note of frequency :  $\frac{4}{3} \times \frac{5}{4} = \frac{5}{3}$ . This note is the Trisruti Dhaivata and is at a trisruti interval from Panchama. The same note a Fifth below gives us the Trisruti Rishabha  $\frac{10}{9}$  (minor tone).

Between the Antara gāndhāra and the Suddha madhyama is a dvistruti interval,  $\frac{16}{9}$ ; thus  $\frac{5}{3} \times \frac{16}{9} = \frac{80}{27}$ . Between the kākali nishāda and tāra shadja is also a dvistruti interval :  $\frac{16}{9} \times \frac{16}{9} = 2$ . The suddha rishabha is a dvistruti interval from shadja and its frequency is  $\frac{16}{9}$ .

The sādharana gāndhāra is a dvistruti interval from chatusruti rishabha and its frequency is :  $\frac{9}{8} \times \frac{16}{9} = \frac{8}{3}$ .

The Prati madhyama is a dvistruti interval from suddha madhyama and its frequency is :  $\frac{4}{3} \times \frac{16}{9} = \frac{64}{27}$ .

The ratio of the frequency of a note to that of a lower note is termed the interval between them. In order to obtain the interval value between any two notes, divide the frequency of the higher note by that of the lower note. Thus the interval between suddha madhyama and Panchama is a chatusruti interval :  $\frac{3}{2} \div \frac{4}{3}$ , i.e.  $\frac{3}{2} \times \frac{3}{4} = \frac{9}{8}$ .

It consequently follows that a lower note multiplied by the interval between it and the next higher note gives the pitch of that higher note. Thus  $\frac{5}{4} \times \frac{16}{15} = \frac{4}{3}$ .

And if  $n$  = the number of vibrations of *sa*, then the frequency of any other note say like chatusruti rishabha =  $\frac{9}{8} n$ ; that of antara gandhara =  $\frac{5}{4} n$  and so on. If the interval is inversed we get the vibrating length of the string.

A careful and analytical study of the Sankarābharana scale reveals to us that almost all the important intervals used in music figure in there.

There is a dvistruti interval between *ga* and *ma*:

$$\frac{5}{4} \times \frac{16}{15} = \frac{4}{3}.$$

There is a tristruti interval between *ri* and *ga*

$$\frac{9}{8} \times \frac{10}{9} = \frac{5}{4}.$$

There is a chatusruti interval between *ma* and *pa*

$$\frac{4}{3} \times \frac{9}{8} = \frac{3}{2}.$$

There is a panchasruti interval between *ri* and *ma*:

$$\frac{9}{8} \times \frac{32}{27} = \frac{4}{3}.$$

There is a shatsruti interval between *ga* and *pa*:

$$\frac{5}{4} \times \frac{6}{5} = \frac{3}{2}.$$

In the sruti scheme, precedence is first given to *sa-pa* values, then to *sa-ma* values and then to *sa-ga* values.

It is not unusual for a raga to change some of its characteristic srutis in particular sanchāras. Occasionally in some ragas, the frequencies of svaras differ in their ārohana and avarohana. Rishabha and Gāndhāra of Todi are instances in point.

The Table on the next page gives the modern names for the 22 srutis, their frequencies as also the rāgas in which they are met with. The four sruti varieties of a note are for the sake of convenience, referred to in the increasing order of pitch as, *ra, ri, ru, re*; *ga, gi, gu, ge* and so on.

Table IV.—Dvavimsati (22) Sruti Chart.

Name of the sruti	How represented	Frequency	Value in vibrations per second with sa = 240	Value in cyclic cents	Ragas in which the srutis are met with
<u>Shadja</u>	sa	1	240	0	All ragas
Ekasruti Rishabha	ra r <sub>1</sub>	$\frac{256}{243}$	252.8	90	Gaula
Dvisruti "	ri r <sub>2</sub>	$\frac{16}{15}$	256	112	Māyāmālavagaula
Trisruti "	ru r <sub>3</sub>	$\frac{10}{9}$	266.6	182	Bhairavi
Chatusruti "	re r <sub>4</sub>	$\frac{9}{8}$	270	204	Sankarābharana
{ Suddha Gāndhāra or Komal { Sādhārana Gāndhāra	ga g <sub>1</sub>	$\frac{32}{31}$	284.4	294	Bhairavi
Sādhārana "	gi g <sub>2</sub>	$\frac{6}{5}$	288	316	Kharaharapriya
Antara "	gu g <sub>3</sub>	$\frac{5}{4}$	300	386	Sankarābharana

Table IV.—Dvavimsati (22) Sruti Chart—(Contd.)

Name of the sruti	How represented	Frequency	Value in vibrations per second with sa = 240	Value in cyclic cents	Ragas in which the srutis are met with
{Chyuta madhyama ga or the Pythagorean major 3rd	ge g <sub>4</sub>	$\frac{81}{64}$	303.75	408	Devagāndhārī
Suddha madhyama	ma m <sub>1</sub>	$\frac{4}{3}$	320	498	Kuntalavarālī
Tivra suddha	mi m <sub>2</sub>	$\frac{27}{20}$	324	520	Begada and Gaulipantu
Prati	mu m <sub>3</sub>	$\frac{45}{32}$	337.5	590	Kalyāṇī
Chyuta panchama	me m <sub>4</sub>	$\{\frac{729}{512}\}$ or $\frac{64}{45}$	(341.7) or 341.3	610	Varālī
Panchama	pa	$\frac{3}{2}$	360	702	All ragas where <i>p</i> is not varja
Ekasruti dhaivata	dha d <sub>1</sub>	$\frac{128}{81}$	379	792	Sāverī

Dvisruti dhaivata	dhi d <sub>2</sub>	$\frac{8}{5}$	384	814	Māyāmālavagaulā
Trisruti „	dhu d <sub>3</sub>	$\frac{5}{3}$	400	884	Kāmbhoji
{ Chatusruti „ or the Pythagorean major 6th	dhe d <sub>4</sub>	$\frac{27}{14}$	405	906	Kalyāni
{ Suddha nishāda or the Komala kaisiki nishāda	na n <sub>1</sub>	$\frac{16}{9}$	426.6	996	Bhairavi
Kaisiki „	ni n <sub>2</sub>	$\frac{9}{5}$	432	1018	Kharaharapriya
Kākali „	nu n <sub>3</sub>	$\frac{15}{8}$	450	1088	Sankarābharana
{ Chyuta shadja „ or the Pythagorean major 7th	ne n <sub>4</sub>	$\frac{243}{128}$	455.6	1110	Kuranji
Tāra shadja	sa		480	1200	All ragas except the Nishādāntya Dhaivatāntya and Panchamāntya ragas

NOTE.—The notes *suddha gāndhāra* and *suddha nishāda* in the above Table are the same as the old shadja grāma gāndhāra and nishāda, and *not* the same as the *suddha gāndhāra* and *suddha nishāda* of the 72 Melakarta scheme. Likewise it should be noted that the mnemonics *ra ri ru re; ga gi gu ge* etc., have not the same values as the *ra ri ru* and *ga gi gu* of the 72 Melakarta scheme. In the above Table only those ragas in which the srutis are characteristically met with are given as examples.

From the above Table it will also be seen that,

(1) there is a pūrṇa sruti interval ( $\frac{25}{24}$ ) between *sa* and *ekasruti rishabha*; between *pa* and *ekasruti dhaivata*; between *chatusruti rishabha* and *komala sādharana gāndhāra*; between *chatusruti dhaivata* and *komala kaisiki nishāda*;

(2) there is a nyūna sruti interval ( $\frac{25}{24}$ ) between *sādharana gāndhāra* and *Antara gāndhāra*; between *kaisiki nishāda* and *kākali nishāda*; between *dvistruti rishabha* and *tristruti rishabha*; between *dvistruti dhaivata* and *tristruti dhaivata*;

(3) there is a pramāṇa sruti interval ( $\frac{81}{80}$ ) between *ekasruti rishabha* and *dvistruti rishabha*; between *tristruti rishabha* and *chatusruti rishabha*; between *komal sādharana gāndhāra* and *sādharana gāndhāra*; between *antara gāndhāra* and *chyuta madhyama gāndhāra*; between *ekasruti dhaivata* and *dvistruti dhaivata*; between *tristruti dhaivata* and *chatusruti dhaivata*; between *komal kaisiki nishāda* and *kaisiki nishāda*; between *kākali nishāda* and *chyuta shadja nishāda*.

An octave consists of 10 pramāṇa srutis (commas) 220 cents, 7 pūrṇa srutis (limmas) 630 cents and 5 nyūna srutis (350 cents); Total 1200 cents.

From Table IV it will be seen that the difference between a *purna sruti* and a *nyuna sruti* is 20 cents. Likewise the difference between a *purna dvisruti* and a *nyuna dvisruti* is 20 cents. This interval which is less than a *pramāna sruti* was too subtle and the ancient scholars therefore ignored it from the point of view of practical music (*Sruti Sādhārana Prakarana*).

Although the frequencies of the *srutis* are not mentioned in terms of vibrations per second or even in fractions in ancient works, still from the methods outlined for their derivation we are able to fix their values and with modern knowledge we are able to prove mathematically the accuracy of the scheme of 22 *srutis*.

The four *srutis* of *ga*, *ma* and *ni* may also be referred to as *ekasruti*, *dvisruti*, *trisruti* and *chatusruti gāndhāra*, *madhyama* and *nishāda* respectively after the manner of *rishabha* and *dhaivata*.

It is also worthy of note that the four *srutis* of each of the notes : *ri ga ma dha ni* progress in a symmetrical order.

The frequencies given for the 22 *srutis* in Table IV are those which have been arrived at after mature deliberations in the conferences held during recent years. When a suitable apparatus is devised which will indicate the frequencies of notes sung or played, then we can experimentally prove the values of these *srutis*.

It is desirable and certainly will be more accurate to describe the *svaras* figuring in *ragas* in terms of their precise *sruti* values. But such a description will be of use only to a limited few and hence the traditional method of describing *ragas* in terms of their *svrasthānas* has been adopted in this book in the hope that the students will



find the correct srutis with their teachers' help. The continuous curve and the constant portamento in Indian classical music is due to the fact that it is more the interval that is *sung* or *played*, rather than the mere note.

The topic of 22 srutis as understood and applied in modern music (*ādhunika sangita*) has been dealt with in detail in this chapter. We shall now see its application in ancient music.

As has already been stated the 22 srutis were primarily derived for the purpose of fixing the suddha svaras of the ancient scale. Since the idea of *sa* and *pa* as avikruta or *achala svaras* had not yet dawned, even *sa* and *pa* were regarded as admitting of varieties, and thus we have the 22 srutis distributed over the sapta svaras in the order 4 3 2 4 4 3 2. Names for the 22 srutis are found in Bharata's *Nāṭya Sāstra* and these names are repeated in the *Sangita Ratnākara*, *Sangita Pārijāta* and *Sangita Darpana*. But Narada's *Sangita Makaranda* and Bhavabatta's *Anupa Sangita Vilāsa* give different sets of names for the 22 srutis. Ugra is a name figuring in the first two nomenclatures. Whereas in Narada's scheme it is the highest rishabha sruti, in the scheme of others it is the first nishāda sruti.

Five Jātis are mentioned for the 22 srutis :—

दीप्ताऽऽयता च करुणा मृदुर्मध्येति जातयः ।

*Diptā, Ayata, Karunā, Mrudu* and *Madhya*.

These terms possibly signified the emotional aspect of the srutis.

Alaku (அலகு) is the name for sruti in ancient Tamil music and the 22 srutis are referred to as 22 alakus (அலகுகள்).

The three sets of sruti nomenclatures are given on pp. 65-67 :—

## Table V

## SRUTI NOMENCLATURE

(Bharata and Sārṅgadeva)

Names of the Srutis.				Sapta svaras.
Tivrā तीव्रा	Kumudvatī कुमुदती	Mandā मन्दा	<i>Chhandovatī</i> छन्दोवती	Shadja
	Dayāvatī दयावती	Ranjanī रञ्जनी	<i>Ratikā</i> रतिका	Rishabha
		Raudrī रौद्री	<i>Krodhā</i> क्रोधा	Gāndhāra
Vajrikā वज्रिका	Prasārini प्रसारिणी	Prīti प्रीतिः	<i>Mārjanī</i> मार्जनी	Madhyama
Kshiti क्षितिः	Raktā रक्ता	Sandīpinī सन्दीपिनी	<i>Ālāpinī</i> आलापिनी	Panchama
	Madantī मदन्ती	Rohinī रोहिणी	<i>Ramyā</i> रम्या	Dhaivata
		Ugrā उग्रा	<i>Kshobhinī</i> क्षोभिणी	Nishāda

The italicised names in the above Table are the *niyata srutis* of the sapta svaras of the ancient scale *i.e.*, they were the srutis on which the suddha svaras of the ancient scale were produced. In other words: sruti Nos. 4, 7, 9, 13,

17, 20 and 22 were the *niyata srutis*. Svaras which took other srutis were called *vikṛta svaras*.

## Table VI

### SRUTI NOMENCLATURE

(Nārada's *Sangita Makaranda*)

Names of the Srutis.				Sapta svaras.
Siddhā सिद्धा	Prabhāvatī प्रभावती	Kāntā कान्ता	Suprabhā सुप्रभा	Shadja
	Sikhā शिखा	Dīptimatī दीप्तिमती	Ugrā उग्रा	Rishabha
		Hlādī ह्लादी	Nirvirī निर्विरी	Gāndhāra
Dirā दिरा	Sarpasahā सर्पसहा	Kshānti क्षान्तिः	Vibhūti विभूतिः	Madhyama
Mālinī मालिनी	Chapalā चपला	Bālā बाला	Sarvaratnā सर्वरत्ना	Panchama
Sāntā शान्ता	Vikalini विकलिनी	Hridayonmalinī हृदयोन्मलिनी		Dhaivata
		Visārini विसारिणी	Prasūnā प्रसूना	Nishāda

## Table VII SRUTI NOMENCLATURE

(Bhāvabhatta's *Anupa Sangita Vilāsa*).

Names of the Srutis.				Sapta svaras
Nandanā नन्दना	Nishkalā निष्कला	Gūdā गूढा	Sakalā सकला	Shadja
	Madhura मधुर	Lalita ललित	Kāksharā काक्षरा	Rishabha
	Bhṛagajāti भ्रगजाति	Hrasvagīti ह्रस्वगीति		Gāndhāra
Ranjikā रंजिका	Chāparā चापरा	Pūrnā पूर्णा	Alankārinī अलंकारिणी	Madhyama
Vainikā वैणिका	Valitā वलिता	Tristhānā त्रिस्थाना	Susvarā सुस्वरा	Panchama
	Saumyā सौम्या	Bhāshāngikā भाषाङ्गिका	Vārtikā वार्तिका	Dhaivata
	Vyāpakā or व्यापका	Prasannā प्रसन्ना	Subhagā सुभगा	Nishāda

With the progress of the art, a few more srutis came into use. Venkatamakhi in his *Gundakriya Lakshana Gita* mentions 24 srutis, saying that the two extra srutis were in vogue.

An interesting 18th cent. manuscript in the Tanjore Sarasvati Mahāl Library by name *Melādhikāra lakshana*

(MS. No. 11604) gives the following new, intelligent and self-explanatory nomenclature for the 24 srutis :—

**Table VIII**

Pūrvāṅga.	Uttarāṅga.
1. Shadja	15. Panchama
2. Prati Suddha Rishabha	16. Prati Suddha Dhaivata
3. Suddha Rishabha	17. Suddha Dhaivata
4. Prati Chatusruti Rishabha (Prati Suddha Gāndhāra)	18. Prati Chatusruti Dhairvata (Prati Suddha nishāda)
5. Chatusruti Rishabha (Suddha Gāndhāra)	19. Chatusruti Dhairvata (Suddha Nishāda)
6. Prati Sādhārana Gāndhāra (Prati Shatsruti Rishabha)	20. Prati Kaisiki Nishāda (Prati Shatsruti Dhairvata)
7. Sādhārana Gāndhāra (Shatsruti Rishabha)	21. Kaisiki Nishāda (Shatsruti Dhairvata)
8. Prati Antara Gāndhāra (Prati Antara Rishabha)	22. Prati Kākali Nishāda (Prati Kākali Dhairvata)
9. Antara Gāndhāra	23. Kākali Nishāda
10. Chyuta Madhyama Gāndhāra	24. Chyuta Shadja Nishāda
11. Suddha Madhyama	
12. Aprati Madhyama	
13. Prati Madhyama	
14. Chyuta Panchama Madhyama	

From this Table it will be seen that the two extra srutis are srutis Nos. 8 and 22. These are the srutis between the Sādhārana and Antara gāndhāras and between the Kaisiki and Kākali nishādas. These two srutis do not figure in the scheme of 22.

This Manuscript is incomplete and its author too is not known. With the 24 srutis as 24 svāra sthānas, the author has propounded an ingenious scheme of 4624 melakartas. There are 136 chakras, each chakra comprising 34 melakartas ( $136 \times 34 = 4624$ ). For each of the four madhyama varieties there are 34 chakras or 1156 melakartas. The scheme though of academic interest is interesting as showing the lofty heights to which the genius of man has flown in the realm of pure musical theory.

(In passing it may be pointed out that the advocates of the theory of 53 srutis assign 9 srutis for a chatursruti interval (major tone), 8 srutis for a trisruti interval (minor tone) and 5 srutis for a pūrṇa dvīsruti interval (diatonic semi-tone). Thus the intervals figuring in Sankarābharana scale will according to them be :—

$$9 \quad 8 \quad 5 \quad 9 \quad 9 \quad 8 \quad 5 = 53$$

### Modal Shift of Tonic.

The scheme of 22 srutis helped the ancient scholars to discover new melas. Thus when a svāra of the suddha scale was made to *lose* one sruti *i.e.*, was flattened by one sruti or was made to *gain* one sruti *i.e.*, was sharpened by one sruti, a new mela resulted. Some interesting melas were thus arrived at by the process of taking away or adding one or two srutis to the notes of the suddha mela.

Another process by which new melas were discovered was the *Modal Shift of Tonic*. The tonic note or the ādhāra shadja was shifted from note to note and when the self same notes of the original suddha scale were played

with the new notes as shadja, different scales resulted. It is common knowledge that when the Rishabha of Sankarābharana is taken as shadja and the same Sankarābharana svaras played, Kharaharapriya results. This happens on account of the re-distribution of the intervals amongst the sapta svaras consequent on the shifting of the shadja. Likewise Sankarābharana's *ga* as shadja gives Todi; its *ma* as shadja gives Kalyāni; its *pa* as shadja gives Harikāmbhoji; and its *dha* as shadja gives Nata bhairavi and so on. The *chaturdasa murchhanas* referred to in Chapter IV were derived by the process of the modal shift of tonic. Modal shift of tonic is referred to variously as the process of *graha bhedom*, *sruti bhedom* and *graha svara bhedom*.

The process of Modal shift of tonic can be applied only to regularly symmetrical ragas like Sankarābharana, Srīranjani and Mohana i.e., ragas whose arohana and avarohana are exactly alike and possess the same svaras. It won't apply to an apparently symmetrical audava raga like Mayūradhvani (*s r m p n ś — s n d m r s*). It is an axiomatic truth that in this process, a sampūrna raga will yield only a sampūrna raga; a shādava raga will yield only a shādava raga, and an audava raga only an audava raga. A few familiar examples are given below :—

Mohana's	<i>Ri</i>	as Shadja	
		results in	Madhyamāvati
,	<i>Ga</i>	,	Mālkaus
,	<i>Pa</i>	,	Suddha Sāveri
			Udayaravi
,	<i>Dha</i>	,	Chandrika
			or
			Suddha dhanyāsi

Hamsadhvani's	<i>Pa</i>	,,	Nāgasvarāvali
Nāgasvarāvali's	<i>Ma</i>	,,	Hamsadhvani
Kiravani's	<i>Ma</i>	,,	Hemavati
,,	<i>Pa</i>	,,	Vakulābharanam

The process of modal shift of tonic when applied to varja ragas will yield many startlingly new ragas hitherto not thought of.

For practically solving problems relating to modal shift of tonic, the student may get hold of a Jalatarangam set and tune the cups correctly to the starting scale for a compass of two octaves. The svarasthānas of the starting scale might also be marked on the Vina finger-board and the instrument utilised for experimentally solving the problems relating to modal shift of tonic.

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### Scales of Equal Temperament and Just Intonation.

Temperament means tuning. In the *scale of equal temperament*, the sthāyi is divided into twelve equal intervals or semi-tones with the necessary consequence that the frequencies of some of the svaras are either slightly below or above their true ratios. In the *scale of just intonation*, the notes are exactly true to their pitch *i.e.*, these notes are the acoustically correct intervals. This latter scale is the ideal scale. It is also referred to as the *scale of correct intonation, pure intonation, true intonation* and *unequal temperament*. In the scale of just intonation all the consonant intervals are perfect. Equal temperament is a compromise between the acoustically correct intervals and those required in practical music (European). The successive notes here form a perfect geometrical progression and are separated



from their neighbours by the same common interval. Of the twelve notes of the sthāyi in this scale, any two adjacent notes bear the ratio 1 : 1.05946. The equi-tempered semi-tone becomes equal to 1.0594. The equi-tempered scale offers an advantage to players of key-board and fixed-toned instruments, since they are able to perform music on any key (sruti). In such instruments, with the exception of the shadja and its octave, the other notes are not truly consonant. In India all music is performed on one key (ādhāra shadja) and hence the scale of just intonation is in vogue here.

In this connection, the unsuitability of harmonium for playing Indian music might perhaps be pointed out. Not only is it *not tuned* to the scale of just intonation, but there is no provision for the playing of gamakas and the subtle srutis.

Western musicians have so long been accustomed to the artificial scale of equal temperament that they cannot easily appreciate the subtle beauty underlying the natural tones used in Indian music.

The following Table will give an idea of the variations in the frequencies of notes in the two scales.

Table IX.  
SANKARABHARANA.

Svaras	s	r	g	m	p	d	n	ś
Just Intonation	1 240	1.125 270	1.250 300	1.333 320	1.500 360	1.687 405	1.875 450	2 480

Svaras	s	r	g	m	p	d	n	ś
Equi-tempered scale	1	1.122	1.260	1.335	1.498	1.682	1.838	2
	240	269.4	302.4	320.4	359.4	403.4	453.4	480

Now that the student has become familiar with the topic of 22 srutis, the significance of Bharata's classification of svaras into: Vādi, Samvādi, Anuvādi and Vivādi will be appreciated. Vādi is the sounding note and samvādi is the note consonant with the vādi. A samvādi svara is separated from the vādi svara by 9 or 13 srutis *i.e.*, it is at a Panchama sthāna or a Suddha Madhyama sthāna from the vādi svara. In other words, if the frequency of the vādi svara = 1, the frequencies of its samvādi svaras are  $\frac{3}{2}$  and  $\frac{4}{3}$ . Thus between the vādi svara and the samvādi svara there are either 8 or 12 srutis. When a vādi svara and its samvādi svara (either its panchama or suddha madhyama) are sounded together, the effect is pleasant and this is a universal truth. Svaras which are related to the vādi svara as antara gāndhāra  $\frac{5}{4}$  or sādharana gāndhāra  $\frac{6}{5}$  are called Anuvādi svaras. These svaras are separated from the vādi svara by 7 or 6 srutis. Svaras at an interval of 2 srutis from the vādi are *vivādi* to one another: these are mutually dissonant notes. The anuvādi svaras are neither so consonant nor so dissonant in relation to the vādi svara.

The vādi svara is the same as the *jīva* svara or the *amsa* svara of a raga and is the most frequently occurring note in a raga. It contributes to the melodic entity of the raga. *Vivādi svaras* should never occur in succession

Such svaras will destroy the melodic beauty of the raga. Therefore chromatic scales are unknown in Indian music. Ragas wherein two semi-tones occur in succession are subject to *vivādi dosha* and lack the requisite quality of *rakti*.

The 40 of the 72 melakartas which take one or two of the following notes—Suddha Gāndhāra, Suddha Nishāda Shatsruti Rishabha, or Shatsruti Dhaivata—are thus \* *vivādi melas*. In those melas, the *vivāditva* is skilfully got over by playing one of the *vivādi* svaras with gamaka. But there is no *vivāditva* in the case of two semi-tones occurring around *shadjā* and *panchama*, since the one is a basic note and the other is a highly concordant note. Thus *n s r* (kākali nishāda, shadjā and suddha rishabha) can occur in succession; likewise *m p d* (prati madhyama, panchama and suddha dhaivata) can occur in succession, either in the ascending or descending order. A phrase like *P m m G* wherein the first *m* is a prati madhyama and the second *m* is a suddha madhyama and *g* is antara gandhara is also a good combination and occurs in some desya ragas.

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\* *Vivadi melas* are the melas of the I and VII chakras, taking the suddha gandhara and the VI and XII chakras, taking the shatsruti rishabha (24 in all); and the first mela (taking the suddha nishada) and the last mela (taking the shatsruti dhaivata) of each of the remaining 8 chakras (16 melas in all) total  $24+16=40$ .

## CHAPTER V

### GAMAKAS

Gamakas or *agremens* are present in some form or other in all systems of music. In a melodic system of music, they assume special importance. The effect achieved by the harmonical accompaniment to a melody in Europe is sought to be achieved here by the addition of appropriate graces to the notes of the melody. Hence every note is embellished here and sung. Plain note singing or the singing of notes unadorned, is a rarity. Even in ragas which are not sarva svara gamaka varika ragas (i.e., *ardha kampita* or *kampa-vihīna* ragas) the so called suddha svaras or non-gamaka svaras are embellished to some extent. This accounts for the continuous curve of Indian music. The student becomes familiar with gamakas even while learning the first lessons in music. In the Māyāmālavagaula scale itself, he is taught to sing *ri* and *dha* with gamaka. Music without gamaka is like a moonless night, a river without water, a creeper without flowers, and a flower without fragrance. The artistic and polished rendering of music consists in the notes of the melody being decorated with appropriate gamakas. The difference in the rendering of a piece by a senior musician and a junior musician lies mainly in the charming, stylish and graceful rendering by the former. Gamakas are a vital part of Indian music and they serve to determine the melodic character of a raga. They are the back-bone of ragas. Two ragas with identical arohana and avarohana and derived from the same janaka mela might yet differ from each other on account of the characteristic gamakas present in one raga and absent in the other. The same variety of

gamaka appears with different degrees of intensity, rapidity and range in different ragas.

Gamaka is a comprehensive term meaning and including not only the shakes but also the manipulation of a note in any manner resulting in a musical effect. In other words when the plain character of a note is altered so as to result in a musical effect it is a gamaka. There are gamakas peculiar to vocal music and some peculiar to instrumental music.

It will be difficult to indicate in notation all the grace notes used in a musical composition. But persons conversant with the *bhāva* and the true melodic picture of ragas will supply the grace notes and shakes instinctively and render the music in an artistic manner.

Pārsvadeva, in his *Sangita Samaya Sāra* defines gamaka in the following terms :—"When a note produces the colour of srutis other than those which are its own, it is known as gamaka."

Gamakas are found in the Vedic chants. Nārada *siksha* refers to the ten excellences of sacred and secular music. Bharata in his *Nāṭya Śāstra* speaks of various graces used in music. Matanga is the earliest to use the term gamaka in his definition of ragas. Since the raga concept crystallised into a definite shape from his time, it is but natural that the topic of gamakas should receive attention from his time onwards.

Nānyadeva, in his commentary on Bharata's *Nāṭya Śāstra*, Pārsvadeva in his *Sangita Samaya Sāra*, and Haripāla in his *Sangita Sudhākara* speak of seven gamakas. According to Pārsvadeva, *Sthāya* is the state of notes when blended with gamaka. Nārada in his *Sangita*

*Makaranda* refers to 19 gamakas. Sārṅgadeva, in his *Saṅgita Ratnākara* enumerates 15 gamakas and gives definitions for them. Govinda Dikshitar, Venkatamakhi and many subsequent writers mention these 15 gamakas. Somanātha in his *Raga vibodha* refers to many gamakas and gives notation for them.

Ahobala in his *Saṅgita Pārijata* mentions 17 gamakas and defines them.

But later, a system of ten gamakas was propounded and this has found wide acceptance. Some of the 15 gamakas which are alike in essentials but differ in minor details like range or extent of shake, magnitude, speed and duration have been amalgamated and incorporated in the system of ten gamakas. The ten gamakas also include some of the important alankāras mentioned in ancient works.

### Panchadasa Gamakas.

The 15 gamakas mentioned by Sārṅgadeva are :—

स्वरस्य कम्पो गमकः श्रोतृचित्त सुखावहः ।  
 तस्य भेदास्तु तिरिपः स्फुरितः कम्पितस्तथा ॥  
 लीन आन्दोलित वलित्रिभिन्न कुरुलहताः ।  
 उल्लासितः प्लावितश्च गुम्फितो मुद्रितस्तथा ॥  
 नामितो मिश्रितः पञ्चदशेति परिकीर्तिताः ।

Brief explanations for these 15 gamakas are given below :—

1. *Tiripa* (திரிபா). Playing one of the notes of a phrase with some stress; as r in n s r s.

2. *Sphurita*. A Janta svara phrase wherein the lower note in between each janta svara group is faintly heard. The second note of each janta svara is stressed.

3. *Kampita*. A large shake. The manipulation of the note is such that there is not even the remotest suggestion of the adjacent notes. (For example the *ga* of Atāna, Anandabhairavi and Dhanyāsi.)

4. *Līna*. Merging of a note softly into another note.

5. *Andolita*. A free swinging; holding on a note for sometime and then pulling the string or gliding on it so as to reveal a higher note.

6. *Vali*. Producing the chāyā of two or three notes from the same svarasthāna by deflecting the string in a circling manner. This gamaka belongs to fretted instruments like the Vina; (Ex. Kānada)

7. *Tribhinna*. This gamaka also belongs to fretted instruments. This is produced by placing the left-hand playing fingers on a svarasthāna in a horizontal manner, so that the fingers are in contact with the three strings, Sārani, Panchama and Mandaram and then by plucking the three strings with the right hand fingers either simultaneously or successively. When the notes in the three sthānas are produced simultaneously, harmony results.

8. *Kurula*. This is the production from a svara sthāna, of the note of another sthāna with force.

9. *Āhata*. Sounding a note and then producing another note without a separate stroke. (This is a Vina gamaka.)

10. *Ullasita*. Jāru or glide. This is of two kinds:—Ekkū Jāru (एकं गच्छ) or upward glide and Digu

Jāru (இறக்க ஜாரு) or downward glide. This is obtained by starting on a note and reaching a higher or a lower note as the case may be, by gliding over the intermediate notes without at the same time giving the impression of the individuality of these intermediate notes.

11. *Plāvita*. This is a variety of *Kampita*.

12. *Gumpita*. Called *Humpita* by Govinda Dikshitar. This gamaka belongs to vocal music. The tone is slender at the start and goes on increasing in both volume and pitch like the notes of the *ekkālam*. The progression may also be the other way. Thus this gamaka is another variety of *Jāru*.

13. *Mudrita*. Produced by closing the mouth and singing.

14. *Nāmīta*. Singing in a slender tone.

15. *Misrita*. A mixture of two or three of the above varieties.

*Līna*, *Andolita* and *Plāvita* are only varieties of *Kampita*.

Although some of these gamakas appear to be similar yet they differ from the point of view of their magnitude, extent of shake, duration and speed.

### Dasavidha Gamakas.

This is a later conception. Though the ten gamakas are not exhaustive, they include within them the more important of the *Pancha dasa gamakas* and a few of the ancient *Alankāras* (see p. 81.)

आरोहमवरोहं च ढालुस्फुरितकम्पिताः ।

आहतप्रत्याहतश्च त्रिपुश्चान्दोलमूर्च्छनाः ॥



1. *Arohana*, a grace embracing notes in the ascending order; e.g., *s r g m p d n ṡ*.

2. *Avarohana*, a grace embracing notes in the descending order; e.g., *ṡ n d p m g r s*.

3. *Dhālu*. Starting on a basic note and producing the higher notes in conformity with the *rāga bhāva*. Thus beginning on Shadja and sounding Panchama, beginning on Shadja and sounding Madhyama, beginning on Shadja and sounding Gāndhāra, beginning on Shadja and sounding Rishabha (*s P s M s G s R*).

4. *Sphurita* and

5. *Kampita* (see above under Panchadasa gamakas.)

6. *Āhata*, a grace inherent in the phrase:—

*s r r g g m m p*

7. *Pratyāhata*, a grace present in the *avarohana krama* of the previous example:—

*ṡ n n d d p p m*.

8. *Tripuccha*. Svaras in triplets:—

*s s s r r r g g g m m m etc.*

9. *Andola*. Playing svaras in the following manner:—

*s r s D d*

*s r s P p*

*s r s M m*

*s r s G g*

*s r s R r* (also see under Panchadasa gamakas).

10. *Murchhana*. Starting on Shadja and proceeding regularly in the *ārohana krama* and finishing on the *dirgha nishāda*; then starting on *rishabha* and proceeding likewise and finishing on the *dirgha shadja* and so on thus:—

*s r g m p d N*

*r g m p d n ṡ*

*g m p d n s R*

*m p d n ṡ r Ḡ*

*p d n ṡ r ḡ M*

All gamakas can be grouped under two heads :—

(a) *Rava* (vibrato) type, like the sphurita and tripuchcha and

(b) *Jāru* (portamento) type, like the Kampita, Līna, Andolita, Vali, Ullasita and Humpita.

Mudrita, Nāmita and Misrita belong to both the above groups.

The famous ata tāla varna “*Viriboni*” in Bhairavi raga contains all the dasa vidha gamakas treated of above. These ten gamakas comprise graces common to both vocal music and instrumental music, but there are many subtle gamakas characteristic of vocal music and instrumental music (vina, violin, flute and nāgasvaram), which are not covered by these ten gamakas.

### Alankaras

*Alankāras* were beautiful groupings of notes or svara-group patterns and they adorned the music of ancient times just as gamakas do in modern music. In ancient works we find great importance attached to the topic of alankāras. The *Vāyu Purāna* mentions several alankāras. Dattila treats of varnas and alankāras in his book. The later works do not treat of alankāras because they were merged into gamakas.

Alankāras are the artistic grouping of svaras according to the *sthāyi*, *ārohi*, *avarohi* and *sanchāri* varnas :—

विशिष्टवर्णसंदर्भमलंकारं प्रवक्षते ।

*Ārohi* varna was a phrase wherein the notes were in the ārohana krama, as *s r g m*

*Avarohi* varna was a phrase wherein the notes were in the avarohana krama, as *m g r s*

*Sthāyi varna* was a phrase wherein the same note was repeated as: *s s s s r r r r* or when a return was made to the original note from which the start was made as: *s r s, r g r* etc.

*Sanchāri varna* was a mixture of all these forms.

Alankāras were idiomatic groupings of varnas. A collection of varnas constituted an alankāra. Alankāras were innumerable and they were given technical names in ancient works. Some of the more important ones are given below:—

Table X

Type of Alankāra	Technical Name	Examples.
Sthāyi Alankāra	Prasannādi	$\dot{S} \dot{S} S$
	Prasannānta	$S \dot{S} \dot{S}$
	Prasannādyanta	$\dot{S} S \dot{S}$
	Prasanna madhya	$S \dot{S} S$
	Bhadra	<i>s r s, r g r, g m g</i>
	Nanda	<i>s s r r s s, r r g g r r</i>
Ārohi Alankāra	Jita	<i>s g r s, r m g r, g p m g</i>
	Bindu	<i>s s s r, r r r g, g g g m m m m p etc.</i>
	Trivarna	<i>s r g g g, r g m m m g m p p p, m p d d d</i>
	Akshipta	<i>s s g g, r r m m, g g p p</i>
	Hasita	<i>s, r r, g g g, m m m m p p p p p etc.</i>

*Ārohi alankāras* when rendered in the avarohara krama will furnish examples for the corresponding *avarohi alankāras*.

Sanchāri Alankāra	Udvāhita	<i>s r g r, r g m g,</i> <i>g m p m, m p d p</i>
	Hlādamāna	<i>s g r s, r m g r,</i> <i>g p m g, m d p m</i>
	Udghātita	<i>s R p m g R,</i> <i>r G d p m G</i>

It will be interesting to note that the sūlādi sapta tāla alankāras had the following names :—

*Indranila, Mahāvajra, Nirdosha, Sira, Kokila, Āvarta, Sadānanda.*

### Tana

A topic that is relevant to the subject of alankāras is tāna. Tāna means the permutation and combination of svaras.

*Suddha tānas* were phrases wherein the svaras ascended and descended in a regular order. These were 84 in number.

*Kāta tānas* were phrases wherein the svaras occurred in an irregular (vakra) order.

*Sampurna tānas* contained all the seven svaras; whereas the *asampūrna tānas* consisted of 6, 5, 4, 3 and 2 svaras.

With two svaras, the possible prastāras are only two; thus with *s* and *r* only *s r* and *r s* are possible.

With three svaras, the possible prastāras are six : thus with *s*, *r* and *g* we can have *s r g*, *r s g*, *s g r*, *g s r*, *r g s* and *g r s*.

With four svaras *s*, *r*, *g* and *m* the possible prastāras are twenty-four ( $6 \times 4$ ) = 24.

With five svaras, *s*, *r*, *g*, *m* and *p* the possible prastāras are ( $24 \times 5$ ) = 120.

With six svaras *s*, *r*, *g*, *m*, *p* and *d*, the possible prastāras are ( $120 \times 6$ ) = 720.

With seven svaras *s*, *r*, *g*, *m*, *p*, *d* and *n* the possible prastāras are ( $720 \times 7$ ) = 5040.

All these svara prastāras which are of academic interest are worked out in full detail and presented to us by Sārṅgadeva in his *Sāṅgita Ratnākara*, Vol. II, Appendix II.

The *sampūrṇa* and *asampūrṇa tānas* total :  $5040 + 720 + 120 + 24 + 6 + 2 = 5912$ .

*Nashta* (lost) was the process by which the form of a given kūta tāna was determined.

*Uddhishta* (desired) was the process by which the serial number of a given kūta tāna was determined.

Somanātha in his *Rāga Vibodha* applied the principles of *Nashta* and *Uddhishta* with reference to his ingenious scheme of 960 melas. The *Nāshta* process helped in the determination of the svaras that figured in a mela. *Uddhishta* helped in the determination of the serial number of a given mela.

The application of the *Katapayādi formula* to the 72 melakarta scheme furnishes an interesting later analogy to the *Nashta* and *Uddhishta* processes.

## CHAPTER VI

### TALA

In the use of innumerable time-measures, Indian music stands without a parallel. The talas used in the music of all the other countries will form but a small fraction of the numerous talas used in India. Tala is to music what metre is to poetry. Tala is a regulating factor in musical compositions. Just as amongst the large variety of metres only a few are used by poets, so also composers use only a few of the innumerable varieties of talas. The other talas belong to the sphere of pure rhythm. Some of them are used in pallavis and in dance music of an advanced nature. Most of the complicated and unwieldy time-measures are of interest as *pure tālas*. There are mnemonics and jati patterns to describe them and emphasise their individual character. The possibilities of the hitherto unexplored region of pure tala are enormous. Even as a musician takes up a raga for exposition and gives a beautiful ālāpana, so also a mridangam player or the player of some other percussion instrument is able to take up a tala for treatment and give a good exposition of the same. In such a tala discourse, one can notice distinct sections like, the *introduction*, *body* and *conclusion* corresponding to the *ākshiptika*, *rāga vardhani* and other stages of a raga ālāpana. The mridangam player has ample opportunities of showing his creative skill in this sphere of the art just as a singer or an instrumentalist, in the sphere of manodharma sangita. His solo display on the chosen tala offers a real intellectual treat and the pleasure that a rasika derives on such occasions can hardly be described.

Rhythmical music is as old as man. It is of wider appeal than non-rhythmical music. When the primitive man danced in ecstasy, rhythm came into existence. Rhythm gives a stability and form to music. It also lends colour and attraction to it. The dullness or briskness of a piece is dependent to some extent upon its laya or tempo. Rhythmical music is capable of being recorded in notation and passed on to the succeeding generations. Tala forms the backbone of the Nāṭya Sāstra. It is common knowledge that in a dance concert, when, after the long drawn-out padam, the tillāna is taken up, the audience sits up with enthusiasm and takes great interest in the rhythmical item.

Many standard Sanskrit works on music have chapters devoted to tala. Such works as *Tāla Lakshana*, *Tāla Vishaya*, *Tāla Vidhāna*, *Tāla Samudra*, *Tāla Dīpika* and *Tāla Lakshana Sangraha* treat of tāla alone. Works like *Suddhānanda Prakāsam*, *Rāga Tāla Prastāra* and *Rāga Tāla Chintāmani* deal with the subject of tāla at length. There are references to tala in non-sangita literature like the *Silappadikāram*, *Pattuppāṭṭu*, *Kallādam* and *Puranānuru*.

The 108 talas are older than the 35 sulādi talas. All the shadangas occur here. The mode of reckoning by angas or mātras is applicable only to the 108 talas. The laghu in the scheme of 108 talas is only of the chaturasra type. The 108 tālas as traditionally handed down include the 5 *mārgi tālas* which appear at the commencement of the series. The laghu, guru and pluta alone occur in these mārgi talas and not the other three angas. The slokas for the 108 talas clearly mention the order of succession of the angas for each tala. Sometimes the angas are referred to by their initial letters and synonyms.

**TABLE XI**  
**Synonyms for the Shadangas**

Name of the Anga.	Synonyms.
Anudruta ...	Ardhachandra, Virāma.
Druta ...	Bindu, Chakra.
Laghu ...	Chodya, Bāna, Sara.
Guru ...	Yamala, Vakra, Kāna.
Pluta ...	Tripura, Dīpta, Vādyā.
Kākapadam ...	Nissabda, Hamsapada.

In the slokas, the constituent angas are given in *ganas* in many places. The 8 *ganas* and their angas are as follows:—

<i>Ma</i> gana means a group of angas like	8 8 8
<i>Bha</i> gana	8 1 1
<i>Ja</i> gana	1 8 1
<i>Sa</i> gana	1 1 8
<i>Na</i> gana	1 1 1
<i>Ya</i> gana	1 8 8
<i>Ra</i> gana	8 1 8
<i>Ta</i> gana	8 8 1

The Laghu, Guru, Pluta and Dhruta are sometimes referred to as *La*, *Ga*, *Pa*, *Dha*. Representing the constituent angas by their initial syllables, synonyms and *ganas* is an intelligent device found also in the *Sangita Ratnākara* and other works.



A few specimen *anushtup* slokas for the 108 talas are given below to illustrate these points. The numbers at the margin of the slokas relate to the serial numbers of the tālas in Table XII.

- 3, 4 पलगा गलपाश्चैव षट्पितापुत्रके तथा ।  
मगणश्च प्लुताद्यन्तः संपकेष्टाक निर्णयः ॥
- 24, 25 गः पदौ गलपाश्चैव राजतालः प्रकीर्तितः ।  
सिंहविक्रीडिते लौ पो रगणः पलपास्तथा ॥
- 26, 27 वेदद्रुता लदौ गश्च वनमाली तथा भवेत् ।  
तगणो दौ गुरुश्चैव चतुरस्त्रेतिवर्णकः ॥
- 28, 29 लघुर्द्रुतयुगं चैव सगण स्र्यस्तवर्णकः ।  
प्रतितुर्यं विरामान्त्यं मिश्रवर्णो रविद्रुतः ॥
- 40, 41 लघुरेको द्रुतद्वन्द्वं प्रतितालेतिकीर्तितः ।  
ताले द्वितीयके चैव द्रुताद्यन्तलघुस्तथा ॥
- 44, 45 गद्वयं रगणश्चैव ताले विजयसंज्ञके ।  
लगपा लगपाश्चैव जयमंगलतालके ॥
- 46, 47 लघुर्वको द्रुतौ ताले राजविद्याधराभिधे ।  
सगणो नगणश्चैव लघुश्च मध्यतालके ॥
- 52, 53 त्रिमञ्जीतालके ज्ञेयः सगणोभगणस्तथा ।  
कोकिलप्रियताले तु गलपाः परिकीर्तिताः ॥

84, 85 चतुर्मुखाभिधे ताले जगणानन्तरं प्लुतः ।

विरामान्त्यं द्रुतद्वन्द्वं लघुरेकस्तु श्लेषके ॥

99, 100 दौ लदौ तनमाश्चैव पार्वतीलोचने तथा ।

ताले श्रीनन्दने तत्र भगणः प्लुत उच्यते ॥

### Tala Prastara krama

Since there ought to be a minimum of two akshara-kālas to constitute a tala, the anudruta by itself cannot form a tala. The anudruta will not occur at the commencement of a tala nor along with the guru, pluta and the kākapaḍa. It will appear only in conjunction with the laghu or the drutam. Kākapaḍam will neither occur at the commencement nor in the middle of a tala; nor will it occur before the guru and pluta. It will occur only after the druta and laghu. The four angas druta, laghu, guru and pluta may occur either at the commencement or the middle or the end of a tala.

In addition to this formidable array of 108 talas, some other complicated talas have been added by later lakshanakāras. *Rāmānanda tāla* of Raghunātha Nāik and *Sarabhanandanam* of Syāma Sastri are instances in point. Sārṅgadeva in his *Sāṅgita Ratnākara* mentions the 5 *Mārgi talas* and 120 *Desi tulas*. Most of his desi talas figure in the scheme of 108 talas. Those of his desi talas which do not find a place in the scheme of 108 talas and other talas mentioned in standard works are given on pages 101 and 102.

TABLE XII

## The Ashtottara Sata (108) Tala Chart

Serial No.	Name of the tala.	Constituent angas.	Duration of an avarta.		Total number of angas.
			in Matras	in Aksharakalas	
1	Chachchatputa ...	8 8   8	}	Mārgi Talas	
2	Chāchaputa ...	8     8			
3	Shatpitaputrika ...	8   8 8   8			
4	Sampadveshtaka ...	8 8 8 8 8			
5	Udghatta ...	8 8 8			
6	Adi ...		1	4	1
7	Darpana ...	0 0 8	3	12	3

8	Charcharī	...	$\left\{ \begin{array}{l} 0\ 0\ \cup \quad   \quad 0\ 0\ \cup \quad   \quad 0\ 0\ \cup \quad   \\ 0\ 0\ \cup \quad   \quad 0\ 0\ \cup \quad   \quad 0\ 0\ \cup \quad   \\ 0\ 0\ \cup \quad   \quad 0\ 0\ \cup \quad   \end{array} \right\}$	18	72	32
9	Simhalīlā	...	0 0 0	3½	14	5
10	Kandarpa	...	0 0   8 8	6	24	5
11	Simhavikrama	...	8 8 8   8'   8 8'	16	64	8
12	Srīranga	...	8   8'	8	32	5
13	Rati līla	...	8 8	6	24	4
14	Ranga tāla	...	0 0 0 0 8	4	16	5
15	Parikrama	...	8 8	7	28	5
16	Pratyanga	...	8 8 8	8	32	5
17	Gaja līlā	...	∪	4¼	17	5
18	Tribhinna	...	8 8'	6	24	3

The Ashtottara Sata (108) Tala Chart—(Cont.)

Serial No.	Name of the tala.	Constituent angas.	Duration of an avarta.		Total number of angas.
			in Matras	in Aksharakalas	
19	Vīravikrama ...	0 0 8	4	16	4
20	Hamsa lila ...	∪	2½	9	3
21	Varnabhinna ...	0 0   8	4	16	4
22	Rangadyotana ...	8 8 8   8	10	40	5
23	Rājachudāmani ...	0 0       0 0   8	8	32	9
24	Rāja tāla ...	8 8 0 0 8   8	12	48	7
25	Simhavikrīdita ...	8 8   8 8   8	17	68	9
26	Vanamālī ...	0 0 0 0   0 0 8	6	24	8
27	Chaturasra varna ...	8 8   0 0 8	8	32	6

28	Trayasra varna	...	0 0     8	6	24	6
29	Misra varna	...	{ 0 0 0 0 ∪ 0 0 0 0 ∪ 0 0 0 0 ∪ }	6 $\frac{3}{4}$	27	15
30	Rangapradīpa	...	8 8   8 8	10	40	5
31	Hamsanāda	...	8 0 0 8	8	32	6
32	Simhanāda	...	8 8   8	8	32	5
33	Mallikāmoda	...	0 0 0 0	4	16	6
34	Sarabha lila	...	0 0 0	5 $\frac{1}{2}$	22	7
35	Rangābharana	...	8 8     8	9	36	5
36	Turanga lila	...	0 0	2	8	3
37	Simhanandana	...	{ $\begin{array}{c} 1 \quad 90 \quad 7 \\ 8 \ 8 \   \ 8 \   \ 8 \ 0 \ 0 \ 8 \end{array}$ 8 } $\begin{array}{c} 53 \   \ 8 \   \ 8 \ 79 \ 8 \   \   \ - \ + \end{array}$	32	128	18
38	Jayasrī	...	8 8     8	8	32	5

**The Ashtottara Sata (108) Tala Chart—(Cont.)**

Serial No.	Name of the tala.	Constituent angas.	Duration of an avarts.		Total number of angas.
			in Matras	in Aksharakalas	
39	Vijayānanda ...	8 8 8	8	32	5
40	Prati tāla ...	0 0	2	8	3 ✓
41	Dvitiya ...	0   0	2	8	3
42	Makaranda ...	0 0       8	6	24	6
43	Kīrti ...	8   8 8   8	12	48	6
44	Vijaya ...	8 8 8   8	9	36	5
45	Jayamangala ...	8 8   8 8	12	48	6
46	Rājavidyādhara ...	8 0 0	4	16	4
47	Mathya ...	8	8	32	7

48	Jaya	...	8     0 0	6	24	6
49	Kudukka	...	0 0	3	12	4
50	Nissāruka	...	8 8	5	20	3
51	Kṛida	...	0 0 ∪	1½	5	3
52	Tribhangī	...	8 8	8	32	6
53	Kokilapriya	...	8   8'	6	24	3
54	Srikīrti	...	8 8	6	24	4
55	Bindumālī	...	8 0 0 0 0 8	6	24	6
56	Sama tāla	...	0 0 ∪	3½	13	5
57	Nandana	...	0 0 8'	5	20	4
58	Udikshana	...	8	4	16	3
59	Mattika	..	8 0 8'	5½	22	3
60	Dhenkika	...	8   8	5	20	3



The Ashtottara Sata (108) Tala Chart—(Cont.)

Serial No.	Name of the tala.	Constituent angas.	Duration of an avarts.		Total number of angas.
			in Matras	in Akshara-kalas	
61	Varnamattika	... 0 0   0 0	3	12	5
62	Abhinandana	...     0 0 8	5	20	5
63	Antarakrida	... 0 0 0 ∪	1 $\frac{3}{4}$	7	4
64	Malla tāla	...         0 0 ∪	5 $\frac{1}{4}$	21	7
65	Dipaka	... 0 0     8 8	7	28	6
66	Ananga	...   8     8	8	32	5
67	Vishama	... 0 0 0 0 ∪ 0 0 0 0 ∪	4 $\frac{1}{2}$	18	10
68	Nandī	...   0 0     8	6	24	6
69	Mukunda	...   0 0   8	5	20	5

70	Kanduka	...	8	6	24	5
71	Eka tāla	...	0	$\frac{1}{2}$	2	1
72	Ata tāla	...	0 0	3	12	4
73	Pūrṇa kankāla	...	0 0 0 0 8	5	20	6
74	Khanda kankāla	...	0 0 8 8	5	20	4
75	Sama kankāla	...	8 8	5	20	3
76	Vishama kankāla	...	8 8	5	20	3
77	Chatus tāla	...	8 0 0 0	$3\frac{1}{2}$	14	4
78	Dombulī	...	∪	$2\frac{1}{4}$	9	3
79	Abhanga	...	ṣ	4	16	2
80	Rāya vankola	...	8   8 0 0	6	24	5
81	Laghusekhara	...	∪	$1\frac{1}{4}$	5	2
82	Pratāpa sekḥara	...	ṣ 0 0 ∪	$4\frac{1}{4}$	17	4

# The Ashtottara Sata (108) Tala Chart—(Contd.)

Serial No.	Name of the tala.	Constituent angas.	Duration of an āvarta.		Total number of angas.
			in Mātras	in Akshara-kālas	
83	Jagajjhampa ...	8 0 0 0 ∪	3 $\frac{3}{4}$	15	5
84	Chaturmukha ...	8   8	7	28	4
85	Jhampa ...	0 0 ∪	2 $\frac{1}{4}$	9	4
86	Pratimatya ...	8 8	8	32	6
87	Gārugi ...	0 0 0 0 0 ∪	2 $\frac{3}{4}$	11	6
88	Vasanta ...	8 8 8	9	36	6
89	Lalita ...	0 0   8	4	16	4
90	Rati talā ...	8	3	12	2
91	Karana yati ...	0 0 0 0	2	8	4

92	Yati	...	8	5	20	4
93	Shat tāla	...	0 0 0 0 0 0	3	12	6
94	Vardhana	...	0 0   8	5	20	4
95	Varna yati	...	8 8	8	32	4
96	Rājanārāyana	...	0 0   8   8	7	28	6
97	Madana	...	0 0 8	4	16	3
98	Kārika	...	0 0 0 0 ∪	2½	9	5
99	Pārvati lochana	...	0 0   0 8 8       8	15	60	14
100	Srinandana	...	8     8	7	28	4
101	Līlā	...	0   8	4½	18	3
102	Vilokita	...	8 0 0 8	7	28	5
103	Lalitapriya	...	8	6	24	5
104	Jhallaka	..	8	4	16	3

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## The Ashtottara Sata (108) Tala Chart--(Contd.)

Serial No.	Name of the tala.	Constituent angas.	Duration of an āvarta.		Total number of angas.
			in Mātras	in Akshara-kālas	
105	Janaka ...	8 8     8	12	48	9
106	Lakshmiṣa ...	0 0     8'	6	24	5
107	Rāgavardhana ...	0 0 ∪ 0 8'	4½	19	5
108	Utsava ...	8'	4	16	2

Note.—The first five tālas in the above Table are referred to as *Pancha tālas* :—

चच्चतुष्टुश्चाचतुष्टुः षट्षट्षितापुत्रकस्तथा । सम्पद्वेष्टाक उद्धृतालाः पञ्च प्रकीर्तिताः ॥

The *Sangita Samaya Sāra* of Pārsvadeva and the *Sangita Makaranda* of Nārada give a list of 101 talas. The two works were written prior to the *Sangita Ratnākara*. The above *Pancha tālas* figure at the commencement of the series in both the works and the tāla names and lakshanas are given in anushtup slokas.

The author of *Sangita Chandrika* has made the ingenious statement that the 108 tālas can still further be expanded into 540 tālas by introducing the laghu jāti bheda. This statement will not bear a moment's examination. In the first place, there are many tālas amongst the 108-group, which do not possess the laghu at all; Ex. *Ranga*, *Krida*, *Bindumāli*, *Pratāpa sekharā*, *Karanayati*, *Shat tāla* and *Madana*. Secondly the fiction of the laghu jāti bheda was introduced in order to expand the later simpler system of Sūlādi sapta talas into 35 talas. So it is historically untrue to say that the laghu in the 108 tālas admits of jāti bheda. It is however possible to expand the 108 talas into 540, by introducing the *gati bheda*.

A few tālas are known by dual names :—

Makaranda	is also known as	Mahānanda
Gaja lila	„	Jaga lila
Matya	„	Vīra matya
Vardhana tala	„	Ratna tala
Rāja nārāyana	„	Nārāyani
Madana tala	„	Matanga tala
Vilokita	„	Vilopa

### Other talas

Vakra tala (also called mati guru), Gaja jhampa (also called Sekhara jhampa), Nissabda tala, Divya tala, Anya mukundam, Druta sekharā, Jaganmohana, Sabhā lila, and Trimūrtika are some of the other talas mentioned in later works.

The Tamil work, *Bharata Sāstiram*, makes mention of the following nine talas or *Nava tālas* :—

1. Ari tālam—அரிதாளம்.
2. Aruma tālam—அருமதாளம்.
3. Sama tālam—ஸமதாளம்.
4. Jaya tālam—ஜயதாளம்.

5. Chittira tālam—சித்திரதாளம்.
6. Duruva tālam—துருவதாளம்.
7. Nivirtta tālam—நிவிர்த்ததாளம்.
8. Padima tālam—படிமதாளம்.
9. Vida tālam—விடதாளம்.

The *Pingala Nigandu* mentions the following nine talas :—Sama tālam, Aruma tālam, Ata tālam, Padima tālam, Jaya tālam, Mattiya tālam, Vida tālam, Nivirtta tālam and Duruva tālam.

The Tamil MS \* *Tāla Samuttiram* of Vanapāda Chūdāmani mentions the following talas :—

- Varma tālam—(வரமதாளம்)  
 Vasava sankāna vāzh—(வசவ சங்கான வாழ்)  
 Sannivāsanni chakram—(சன்னிவாசன்னி சக்கரம்)  
 Lakshmi talam—(லக்ஷ்மீதாளம்)  
 Siruchchi—(சிறுச்சி)  
 Peria siruchchi—(பெரிய சிறுச்சி)  
 Ārodi mattam—(ஆரோதிமட்டம்)  
 Netta mattam—(நெத்தமட்டம்)  
 Prakāsa mattam—(பிரகாசமட்டம்)  
 Anya tala—(அன்னியதாளம்)  
 Peddābharanam—(பெத்தாபரணம்)  
 Virpuram—(விற்புரம்)  
 Vanama tālam—(வனமதாளம்)  
 Kumba talam—(கும்பதாளம்)  
 Pūrna kumba tālam—(பூர்ண கும்பதாளம்)  
 Anuma kumba tālam—(அனும கும்ப தாளம்)  
 Vana kumba tālam—(வனகும்பதாளம்)  
 Vainava tālam—(வைணவதாளம்)  
 Jayarāma tālam—(ஜயராம தாளம்)  
 Ravi mattaiyam—(ரவிமட்டையம்) etc.

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\*This is only a 17th cent. work, since the author refers to the suladi sapta talas and also mentions the work *Sangita Sudhanidhi*.

Hamsa lila, Hamsa nāda, Simha nāda and Simha nandana are respectively known in Tamil works as, Anna lila, Anna nāda, Singa nāda and Singa nandana.

*The Navasandhi talas are* :—Sobrama, Sama, Mattāvana, Pirangani, Manana, Nava, Boli, Kottari, and Dengi.

The *Sangita Ratnākara* mentions the following talas in his list of 120 Desi talas :—

Tritiya tala	Simha tāla
Chaturtha tala	Prati Manthaka
Panchama tala	Karuna tala
Nissanka lila tala	Sarasa tala
Yati lagna tala	Chanda tala
Varna tala	Chandra kala
Trayasravarna Rāja tala	Laya tala
Misravarna Rāja tala	Skanda tala
Chaturasravarna Rāja tala	Dhattā tāla
Mantha tala	Dvandva tala
Mudrita Mantha tāla	Kuvindaka
Krīda Talaschanda	Kaladhvani
Nissāruka tala	
Manthika tala	Gauri tala
Varnamantika tala	Sarasvati kanthābharana tala
Kankāla	Bhagna tala
Pūrna tāla	Rāja mrugānka tala
Khanda pūrna	Rāja Martanda tala
Sama pūrna	Nissanka tala
Vishama pūrna	Sārngadeva tala
Kumuda tala	
Gaja tala	

The Telugu MS *Rāga Tāla Chintāmani* (17th cent.) mentions 124 talas. This list contains the following talas not mentioned by others :—Navamāli, Kundara, Jhanjhata talam, Jayamukham, Marmaka, Bhadra bānam,



Ghana matyam, Jaya sri bhakāra matyam, Prakīrti, Madhyaka, Digvijayam, Khanda varnam, Bhinna Chaturmukham, Trimātra and Navābharanam.

Kurucha Jhampe, Erukala Jhampe, and Vināyaka tala figure in Yakshagānas.

The *Vināyaka tala* has the following angas :—

गगगालपश्चैव गललपसमन्वितम् ।

सर्वविघ्नोपशान्त्यर्थं भवेत्तालविनायकम् ॥

8 8 8 | | 8 8 | | 8

The *Netta mattam*—(நெத்த மட்டம்) had the following angas :—

8 | | 8 8 +

*Jhompata tala* is the name by which the ādi tala is referred to in the works of the medieval period. In the Kathakali literature, this tala is known as *cempata*. Atanta, Muriatanta and Pāñchāri are respectively the names for the Ata tala, Triputa tala and Rūpaka tala in the Kathakali literature.

Thus it will be seen that in addition to the 175 talas and the 108 classical talas, there are more than a hundred talas mentioned in earlier works, with their constituent angas and lakshanas.

In addition to these, Tachur Singarāchārlu in his *Gāyaka Lochanam*, mentions another set of 108 talas and also a set of 54 talas.

The Tiruppugazh songs of Arunagirināthar stand as authoritative lakshyas for most of these talas. But for his songs, these talas will remain as mere names to us.

In recent times, an ingenious attempt has been made to give a new set of 72 talas based on the nomenclature of

the 72 melakartas i.e., *Kanakāngi tala*, *Ratnāngi tala*, *Gānamurti tala*, *Vanaspati tala* etc., The values of the component syllables of the tala names, on the basis of the *katapayādi formula* were taken into account and constituent angas given accordingly.

### Classification of Talas.

मार्गदेशी गतत्वेन तालोऽसौ द्विविधो मतः ।

शुद्धसालगसंकीर्णास्तालभेदाः क्रमात् मताः ॥

Talas are classified into *Mārgi talas* and *Desi talas*. These again admit of the divisions: *Suddha*, *Châyâлага* and *Sankirna*. The significance of these terms in the sphere of raga classification has already been referred to. In the sphere of talas also, they convey the same meanings. Thus *Simhanandana* is an instance of a *sankirna tala*, comprising as it does of the following six talas:—*Chachchatputa*, *Rati tala*, *Darpana*, *Kokilapriya*, *Abhanga* and *Mudrika*, (*Mudrika* = 8 | | +).

चच्चत्पुट रतीतालो दर्पणः कोकिलप्रिया ।

अभङ्ग मुद्रिका तालो षडेते सिंहनन्दनम् ॥

The *Simhanandana* is the longest of the 108 talas. Patnam Subrahmanya Iyer is reputed to have composed and performed a pallavi in this highly complicated tala. Maha Vaidyanatha Iyer has composed a tillāna in this tala. There is also a gita in this time-measure.

### Tala Dasa Pranas.

हस्तद्वयस्य संयोगे वियोगेचापि वर्तते ।

व्याप्तिमान् यो दशप्राणैः स कालस्तालसंज्ञकः ॥

The process of the union and separation of the two hands and in accordance with the ten elements of musical time (*tāla dasa prānas*), is known as *tāla*.

The more important of the *dasa prānas* have been dealt with in Chapter IV of Book III. The other *prānas* will now be treated of.

1. *KALA*. The first *prāna Kāla*, helps us to have an idea of the duration of the *shadangas* in absolute time. The minute divisions of time suggested by the units: *Kshana*, *Lava*, *Kāshṭa*, and *Nimīsha*, are too subtle and are only of academic interest. The other 8 units come within the pale of practical music.

Drive a needle through a layer of 100 lotus petals; the time taken by the needle to pierce one of the petals is called *Kshana*. (*Kshanam* is referred to as *kanam* in some vernacular works). Some works mention 108 lotus petals in the place of 100.

8 such kshanas make	1 <i>lava</i>
8 lavas	1 <i>Kāshṭa</i>
8 <i>Kāshṭas</i>	1 <i>Nimīsha</i>
8 <i>Nimīshas</i>	1 <i>Kala</i>
2 <i>Kalas</i>	1 <i>Chaturbhāga</i>
2 <i>Chaturbhāgas</i>	1 <i>Anudrutam</i>
2 <i>Anudrutams</i>	1 <i>Drutam</i>
2 <i>Drutams</i>	1 <i>Laghu</i>
2 <i>Laghus</i>	1 <i>Guru</i>
3 <i>Laghus</i>	1 <i>Plutam</i>
4 <i>LAGHUS</i>	1 <i>Kākapādam</i>

Of these twelve units, the first six are referred to as *Sukshma Kālas* and the rest as *Sthula Kālas*.

2. *MARGA*. This element relates to the rhythmical construction of a musical composition and helps a person

to reckon the tala accurately. It also helps in the writing of pieces in correct notation.

There are the *Shanmārgas*: *Dakshina*, *Vārtika*, *Chitra*, *Chitratarā*, *Chitratama* and *Ati Chitratama*. Of these six marga, the first three are useful in the sphere of Pallavi. The other three occur in kritis and other musical forms.

*Dakshina Mārga* is a case wherein there are 8 mātra kālas for a talākshara or count.

<i>Vartika</i>	„	4	„
<i>Chitra</i>	„	2	„
<i>Chitratarā</i>	„	1	„
<i>Chitratama</i>	„	$\frac{1}{2}$	„
<i>Ati Chitratama</i>	„	$\frac{1}{4}$	„

Examples of kritis in the *Chitratarā mārga* are:—

*Evarani* (Devāmrutavarshini) Tyagaraja.

*Darini telusu* (Suddha Sāveri) „

*O Rangasāyi* (Kāmbhoji) „

*Saroja dala* (Sankarābharana) Syāma Sāstri

*Emani ne* (Mukhāri) Subbarāya Sāstri

*Epudu krupa* (Mukhāri) Patnam Subrahmanya Iyer.

Examples of kritis in the *Chitratama mārga* are:—

*I vasudha ni vanti* (Sahāna) Tyagaraja

*Raghu nāyaka* (Hamsadhvani) „

*Ninu vinā gati* (Balahamsa) Mysore Sadasiva Rao.

*Mari vere* (Shanmukhapriya) Patnam Subrahmanya Iyer.

*Sankalpamettdio* (Kharaharapriya) „

Examples of kritis in *Ati Chitratama mārga* are:—

*Manasā etu* (Malayamārutam) Tyagaraja

*Oka mātā* (Harikāmbhoji) „

*Sri Maha Ganapati* (Gaula) Muthuswami Dikshitar

*Rāmāyika* (Sahāna) Patnam Subrahmanya Iyer .

When a piece like *Korina vara mosagu* of Patnam Subrahmanya Iyer in Ramapriya raga, is counted in the Trisra jati Eka tala, instead of in the Chaturasra jati Rūpaka tala, it becomes a case of Chitratama marga.

3. *KRIYA*. *Sasabda kriyas* and *Nissabda kriyas* have already been referred to in Book III.

There are the *Mārga kriyas* and *Desya kriyas*, each of which admit of the Nissabda and Sasabda varieties :—

**Marga Kriyashtakas :—**

*Nissabda group* (four) :—

*Avāpa* : lifting up the hand and folding the fingers as in counting.

*Vikshepa* : Unfolding these fingers.

*Nishkrāma* : Moving the arm towards the right.

*Pravesa* : Bringing the arm down, making an anti-clockwise movement.

*Sasabda group* (four) :—

*Dhruva* : Snapping the fingers ; cauterization.

*Samya* : Striking on the right-hand palm with the left hand.

*Tāla* : Striking on the left-hand palm with the right hand,

*Sannipāta* : Bringing the two hands right in front of the face and clapping simultaneously.

**Desya Kriyashtakas :—**

*Dhruvaka* : Cauterization without producing sound.

*Sarpini* : Moving the arm to the left.

*Krushya* : Moving the arm from left to right.

*Padmini* : Moving the hand downwards with the palm turned downwards.

*Visarjita* : Stretching the hand outwards.

- Vikshipta* : Closing in of the fingers.  
*Patāka* : Moving the hand upwards.  
*Patita* : Bringing the hand (that has thus been moved upwards), downwards.

Dhruvaka according to some scholars is a sasabda-kriya, but this view has not got much support.

#### 4. *ANGA, Shadangas* and *Shodasāngas*-See Bk. III.

The shadangas are expanded into *saptāngas* by the inclusion of druta sekham (3 aksharakālas). Thus the akshara units of anudrutam (1), drutam (2), druta sekham (3), and laghu (4) have their counter-parts in the mātra units of: Laghu (1), Guru (2), Plutam (3), and Kākapādam (4).

#### 5. *GRAHA*. See Book III, Chapter IV.

6. *JĀTI*. The five jātis of the laghu, viz: Chaturasra, Trisra, Misra, Khanda and Sankīrna have already been referred to. Let it be noted that the Chaturasra plus Trisra ( $4+3$ ) gives the Misra (7) jāti; Misra plus trisra divided by two  $(7+3) \div 2$  gives Khanda (5); in other words half of the sum of misra and trisra is Khanda; Khanda plus Chaturasra yields Sankīrna  $5+4=9$ .

These five kinds of laghus are also known as: *Manushya laghu* (Chaturasra); *Svarga laghu* (Trisra); *Hamsa laghu* (Misra); *Desya laghu* (Khanda); *Chitra laghu* (sankīrna).

*N.B.*—The mention of the jātis in the above order not only suggest the relative importance of the five laghus in musical compositions but also indicate their distribution in musical compositions and the probable order of their evolution.

Five other advanced jātis associated with the laghu are given in the following Table:—

Table XV

Name of the laghu.	Duration in		Mode of reckoning.
	Mātras	Akshara kālas.	
Divya sankīrna laghu	1½	6	Beat + 5 finger counts ( <i>i.e.</i> counting from the little finger onwards in the direction of the thumb).
Misra sankīrna laghu	2	8	Beat + 7 finger-counts.
Desya sankīrna laghu	2½	10	Beat + 9 finger-counts.
Misra desya sankīrna laghu	3	12	Beat + 11 finger-counts.
Desya suddha sankīrna laghu	4	16	Beat + 15 finger-counts.

*Note.*—The above 5 laghus are also known as : *Divya laghu* (6), *Simha laghu* (8) *Varna laghu* (10), *Vadya laghu* (12) and *Karnataka laghu* (16).

Thus the ten jātis or varieties of the laghu have ten distinctive names.

7. *KALA* (कल) This term signifies the minor unit or the fractional unit of a tala akshara.

*Eka kala* is a case where there is only one kala or minor unit for each tāla akshara ; in other words, there is only one svara for each kriya of the tāla.

*Dvikala*, is a case where there are two aksharas for each kriya.

*Chatushkala*, is a case where there are four aksharas for each Kriya.

A Chaturasra laghu in the Chatushkala style will have 16 kalas. But the same Chaturasra laghu when sung in Trisra jāti will have only 12 kalas. Thus the duration value of a kala is variable.

*Therefore, kala is a variable unit of time-measure, whereas the mātra or the akshara is a fixed unit of time-measure.*

8. *LAYA* (See Chapter IV, Book III).

9. *YATI*. This prāna relates to the disposition of the several angas in a tala. The rhythmical design or pattern of a tala as evidenced by the sequence of its constituent angas is yati. If the magnitude in duration of the constituent angas is taken into consideration and viewed graphically, Yati patterns will be self-evident.

Yatis are of six kinds :—

*Sama, Gopuchcha, Srotovaha, Damaru, Mridanga and Vishama*. Of these, the first three alone are mentioned in the *Sangīta Ratnākara*, *Srotogata* is the term occurring in this work for *srotovaha*.



1. *Sama yati*. This is a case wherein the angas that occur are of the same character. For ex.

○ ○ ○ ○ or | | | |

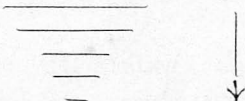
On account of this homogeneous character, this is referred to also as *Pipilika yati*. (i.e., like the ant row)

2. *Gopuchcha yati* (cow's tail). This is a case wherein angas of diminishing magnitude occur. Thus the figure is broad at the commencement and gradually narrows down towards the close ; Examples :—

*Note.*—The svaras given as examples below should be sung in Sankarābharana. When the ends of the lines in illustration (c) are connected, the completed figures will give visual pictures of the respective Yatis.

(a) Ṣ Ṣ | O ○

(b) Ṣ ; , N ; D , P m

(c) 

A parallel instance in sāhitya is furnished by Muthuswami Dikshitar's Kṛiti in Ananda bhairavi raga ; *Tyāga-rāja yoga vaibhavam*, wherein the subsequent treatment is as follows :

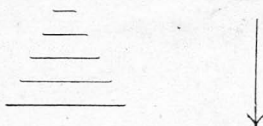
*Tyāga Rāja yoga vaibhavam*  
*Aga Rāja yoga vaibhavam*  
*Rāja yoga vaibhavam*  
*Yoga vaibhavam*  
*Vaibhavam*  
*Bhavam*  
*Vam*

3. *Srotovaha yati* (river). This is the converse of the above. The figure is narrow at the commencement and gradually widens out towards the end like a river. Examples:—

(a) ∪ O | 8 8

(b) m [P D, N ; Š ; ,

(c)



A parallel instance in *sāhitya* is furnished by the same kriti of Muthuswami Dikshitar wherein towards the close we have the following sequence:—

*Sam*

*Prakāsam*

*Svarupa prakāsam*

*Tatva svarupa prakāsam*

*Sakala tatva svarupa prakāsam*

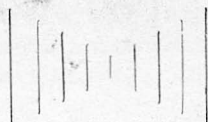
*Siva saktyādi sakala tatva svarupa prakāsam*

4. *Damaru yati*. Here, the disposition of the angas is such that it is narrow at the centre and widens out towards the two ends, as the drum, damaru or udukkai (உடுக்கை). Examples:—

(a) Š 8 | O ∪ O | 8 Š

(b) S ; , N ; D, P m P D, N ; S ; ,

(c)



This yati is also referred to as the *Veda madhyama yati*.

5. *Mridanga yati*. This is the converse of the above. Here, the centre is broadest and narrows out towards the two ends like a mridangam. Hence the name of the yati. Examples:—

(a)  $\cup$  O | 8  $\acute{S}$  8 | O  $\cup$

(b) m P D, N;  $\dot{S}$ ; , N; D, P m

(c)

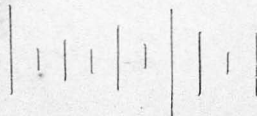


6. *Vishama yati*. Angas occur here without any definite order. This is the opposite of sama yati. Examples:—

(a) | O 8 |  $\cup$  O  $\acute{S}$  | 8 |

(b)  $\dot{S}$ ; , n  $\dot{R}$   $\dot{s}$   $\dot{G}$ ;  $\dot{M}$   $\dot{g}$   $\dot{R}$   $\dot{g}$   $\dot{S}$

(c)



The *shad yatis* treated of above are simple yatis. By doubling, tripling or quadrupling the angas and by permuting and combining phrases containing these angas fresh rhythmical patterns are possible. Thus *Sama vishama* will be a case wherein each constituent phrase exhibits the character of a sama yati but the whole pattern gives the picture of a vishama yati. Thus:—

U	U	U				O	O	O
1	1	1	4	4	4	2	2	2

Like this, it is possible to conceive of *Sama mridanga*, *Sama veda madhyama*, *Sama gopuchcha*, *Sama srotovaha*, *Vishama mridanga*, *Vishama veda madhyama*, *Vishama gopuchcha*, *Vishama srotovaha*, *Mridanga veda madhyama*, *Mridanga gopuchcha*, *Mridanga srotovaha*, *Veda madhyama gopuchcha*, *Vedamadhyama srotovaha*, *Gopuchcha srotovaha* etc.

10. *PRASTĀRA*. This prāna is of only academic interest and shows the heights to which the genius of man has flown in the sphere of calculation in pure rhythm. *Prastāra* is literally spreading out. *Prastāra* of a tala anga means splitting up the anga into its possible component angas and presenting them with all possible varieties in a tabular manner. If a chaturasra laghu is taken as an example, the possible component angas that we can think of are: the Druta sekham  $\cup$  Drutam O and

Anudrutam  $\cup$ . The 8 possible Prastāras in this case are:—

- |                  |                    |                 |                       |
|------------------|--------------------|-----------------|-----------------------|
| 1.               | 2. $\cup$          | 3. OO           | 4. O $\cup\cup$       |
| 5. $\cup$ $\cup$ | 6. $\cup$ O $\cup$ | 7. $\cup\cup$ O | 8. $\cup\cup\cup\cup$ |

Likewise only 4 prastāras are possible with the Druta sekhamam :—

1.  $\cup$  2.  $\cup \cup$  3.  $\cup \cup \cup$  4.  $\cup \cup \cup \cup$

Prastāras should conform to the rules laid down. For instance, the component angas should be taken in the decreasing order of magnitude. The last prastāra must comprise of the angas of the least magnitude.

*Nashta, Uddhista, Pātāla. Mahā pātāla, Anudruta meru, Druta meru, Druta sekhamam meru, Laghu meru, Guru meru, Pluta meru, Kakapada meru, Samyoga meru, Khanda prastara and Yati prastara* are the fourteen varieties.

Syāma Sāstri (1762—1827) is the one lakshanakāra in Indian Music who is known to have worked out the various tāla prastāras in elaborate detail. Three of his prastāras have been photographed and published in the author's: *Syama Sastri and other Famous Figures of South Indian Music*.

Combinations of the six angas are made in three ways :—

(a) *Chaturanga Prastāra* which employs the four angas :—

| 8 8 +

(b) *Shadanga Prastāra* which employs the six angas :—

$\cup$  0 | 8 8 +

(c) *Shodasānga Prastāra* which employs all the sixteen angas from the Anudrutam to the Kākapadam.

## Historical

As already mentioned on P. 100, the *Sangita Samaya Sara* and the *Sangita Makaranda* are the earliest works to give a list of 101 talas, beginning with the celebrated *Pancha tālas*. The *Sangita Ratnākara* mentions 120 *Deśi* talas and its author refers to many more talas as being in vogue in his time. The *Sangita Sudhā* and the *Chaturdandi Prakāsika* evidently had tala chapters but in the available works, these chapters are missing. The Telugu MS *Raga Tala Chintāmani* mentions 124 talas. The Tamil work *Bharata Nāttiya Sāstiram* after referring to the 101 talas, 108 talas, the nava talas and the sūladi sapta talas, mentions the following six talas : Anga talam, Upānga talam, Banga talam, Vibānga talam, Suddha talam and Anu talam. It also mentions that the *Adi*, *Pārvati lochanam*, *Kudukka*, *Singanandana* and *Tirimāttirai* are the *upa talas* for the traditional *Pancha talas*.

In some minor works, the constituent angas as well as the order of sequence differ for some of the 108 talas.

The *suladi sapta talas* represent a convenient and a workable selection from out of the numerous talas mentioned in ancient works. Compositions in sama graha are earlier than those in anāgata and atita graha.

The existence of compositions like *Tālārnavam*, *Pancha talesvaram* and *Sapta talesvaram* is proof of the fact that the subject of tala received as much attention as raga, at the hands of music scholars.

The genius of India has found full expression in her magnificent tāla system. In this sphere, Indian music is bound to hold an exalted place in world music for many centuries to come.

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## CHAPTER VII

### MUSICAL FORM

#### Sacred Music

Next to art music, sacred music claims the largest number of musical compositions. Even countries which cannot claim to have a highly developed system of music possess devotional songs in profusion. The human longing for God being universal, it is natural that songs of a religious nature should be found in the music of every country. In Art music, music is enjoyed for its own sake. Art music, which is also referred to as *pure music* has both an emotional and an intellectual appeal. Rāga ālāpana and the other types of manodharma sangita (creative music), constitute the finest examples of *pure music*. The chief concern of a composer or a musician while attempting art music, is the portrayal of the rāga bhāva in all its rich and colourful aspects. The sāhityas of art musical forms only help us to present and interpret the music better. Sacred music is a species of *applied music*. Applied music embraces all compositions wherein the sāhitya is an important factor and the music which clothes the sāhitya is merely a vehicle for the better expression of the ideas enshrined in the sāhitya (libretto). In other words, music ceases to be an end by itself and is used or *applied* for a specific purpose. Sacred music, Dance music, Kālakshepam music, Opera music and the music of the Yakshagānas are the important branches of *applied music*. In all these cases, music serves only as a means to an end. The music of these songs is simple and there are neither terse sanchāras nor sangatis. The range of the pieces rarely exceeds  $1\frac{1}{2}$  octaves. These do not

have sections like the *chittasvara*, *svara sāhitya*, and *solkattu svara* which adorn *kritis*. Sacred music is *vaidika gānam* and secular music is *laukika gānam*. The hymn, anthem, mass, oratorium, passion music and the psalm are instances of sacred forms in European music. Sacred music is earlier than secular music.

In India perhaps more than in any other country in the world, religion and music are intimately connected with each other. The \*Trimūrtis are associated with music. God is said to reside in the hearts of devotees that sing His praise. Says Appar,

“நினைப்பவர் மனங்கோயிலாக் கொண்டவன்”

Also the saying of the Lord to Nārada:—

नाहं वसामि वैकुण्ठे न योगिहृदये रवौ ।

मद्भक्ता यत्र गायन्ति तत्र तिष्ठामि नारद ॥

Many celestials and Purānic figures like Anjaneya, Nārada, Tumburu, Rāvana and Arjuna are mentioned as adepts in music. Musical instruments are named after them. Music was styled the *Gandharva veda*. Times without number, the great Āchāryas emphasised that music was to be used only to sing the glories of God. The idea: “What is the use of the tongue that is not able to sing the praise of God? What is the use of the hand that is not

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\*Mahesvara is represented with the *damaru* (a small drum) in His hand; Vishnu with the *sankha* (conch)—(Krishna, an avatar of Vishnu, with the *flute*), and Brahma—His consort Sarasvati with the *vina* in Her hand. There is an instrument known as Brahma vina. It is interesting to note that Siva, Vishnu and Brahma are respectively associated with the percussion, wind and stringed instruments, possibly suggesting that Siva worship is the earliest and that the Vishnu and Brahma cults came later.



able to perform puja to God?" etc. has been echoed and re-echoed by many poets and seers. The conception of God as *Nāda Brahma*—Embodiment of music—is unique. All these circumstances have been responsible for the large output of devotional songs in the different languages of India.

### *Sacred Music in Sanskrit.*

The Vedic Hymns are the earliest examples of sacred music in India. The *Sāma veda* is the oldest musical composition that we possess. It is recited even now in the same manner as was done three thousand years ago. The scale

of *Sāma gāna* was a downward scale—g r s n d p. The first three notes belonged to the *tāra sthāna* (higher octave) and the remaining three notes to the *madhya sthāna* (middle octave). These six notes were referred to as: *Prathama*, *Dvitiya*, *Tritiya*, *Chaturtha*, *Mandra* and *Atisvārya*. When the highest note *ga* was sounded, sometimes the next higher note, the *suddha madhyama* occurred in it as a latent gamaka. This note was known to the *Sāma* vedins as *Krshta* or *Utkrshta*. The notes figuring in the *Sāma* chant are referred to as the *sāma śaṭtaka*.

Important works like the *Saṅgīta Ratnākara* and *Saṅgīta Makaranda* mention that Brahma derived music from the *Sāma veda* :—

सामवेदादिदं गीतं सञ्जग्राह पितामहः ।

When Rāvana was pressed under Mount Kailasa, he sang the *Sāma veda*. This pleased Lord Siva and he was forthwith released.

The Rāmāyana was chanted by Lava and Kusa in the court of Sri Rama in melodious \**jātis* (corresponding to modern ragas). The Ramayana abounds with references to music and dancing. It contains many musical similes.

The *Gīta Govinda* of Jayadeva (12th century) is an important piece of sacred music and is sung throughout India, though not in the original ragas and talas. It is a sringara mahā kāvya in 12 sargas and consists of 24 songs. Each song contains eight charanas and hence the name *Ashtapadi*. They are the earliest examples of *regular musical compositions*, each piece being set in a specific raga and tala. For, the Tevāra hymns, which are earlier than the Ashtapadis, only the *pans* (ragas) are given and not the talas, though the metre of the songs suggests to us their possible time-measures. Many later writers in South India wrote works on the model of the *Gīta Govinda*, on parallel themes; the *Tyagaraja Ashtapadi* of Venkātamakhi (17th cent), the *Sivāshtapadi* of Sri Chandrasekharendra Sarasvati (18th cent.) and the *Rāmāshtapadi* of Rāma Kavi (early 19th cent.) may be mentioned in this connection.

The *Krishna Lila Tarangini* of Tirtha Narayana-swami (16th century) ranks next in importance. The author is believed to be an incarnation of Jayadeva and his work is the finest opera in the Sanskrit language. It consists of twelve cantos (tarangas) and the work is worth study even as a piece of literature. From the musical point of view it is an authoritative lakshya grantha for the topic of raga and rasa. The songs in the opera are in the

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\*The seven *suddha jatis* have already been referred to (see P. 46). There were in addition a number of *vikṛta jātis*. *Shadja Kaisiki*, *Shadjodichyava*, *Shadja madhyama*, *Gandharodichyava*, *Rakta gandhari*, *Kaisiki*, *Madhyamodichyava*, *Karmaravi*, *Gandhara Panchami*, *Andhri*, and *Nandayanti* are the eleven *vikṛta jatis* mentioned in the *Sangita Ratnakara*.

kīrtana form and are clothed with music appropriate to the occasion. Each song is preceded by a *sloka* and *vākya*. The *slokas*, *chūrnika*s, crisp musical dialogues, *darus*, *dvipadas*, *chatushpadis* and the *kīrtanas* interspersed with *jatis* or *tala* mnemonics add interest to the work. Some of the *darus* and *kīrtanas* in this work contain *Pātam* or *jatis*.

Besides the *Ashtapadis* and the *Tarangas*, the other musical forms figuring in sacred music are :—

1. The *kīrtana* (For its *lakshana* see Book. III Chapter V of this Series).

There are many composers who wrote *kīrtanas* in Sanskrit : Mārgadarsi Seshayyāgar (early 17th century), Ayyāval, Sadasiva Brahmendra, Vijaya Gopāla of the 17th century, Paidāla Gurumūrti Sastri, Tyagaraja (1767–1847), Muthuswami Dikshitar, (1776–1835), Syama Sastri (1762–1827) H. H. Swāti Tirunāl (1813–1847) Vithala Pant, Ramachandra Yatindra, Kāmakoti Sastri, Walajapet Venkataramana Bhāgavathar, Linga Rāj Urs, Mahā Vaidyanātha Iyer, Tachūr Singarāchārlu and Mysore Sadasiva Rao.

2. *Divyanāma Kīrtana*. This is a special type of simple *kīrtana* with many *charanas* and is intended for congregational singing. The song consists of a *pallavi* and many *charanas*, the *charanas* being sung to the same *dhātu*. Sometimes the *pallavi* and the *charanas* have the same music. The *charanas* in some songs are sung continuously without reverting to the *pallavi* at the conclusion of each *charana*. For the purpose of his daily worship, Tyagaraja wrote his own *Divyanāma Kīrtanas* in Sanskrit and Telugu and they reveal his powers of *sāhitya* and command over the two languages. Vijaya Gopāla has written a number of *Divyanāma Kīrtanas* in Sanskrit.

3. *Utsava Sampradāya Kirtanas* of Tyagaraja and the *Vasantotsava Sampradāya Kirtanas* of the Bhajana paddhati are compositions in the style of the Divyanāma Sankīrtanas. Some of them are also in the regular Kīrtana style.

4. *Nāmavāli*. Nāmāvali is the simplest of the sacred forms and is intended for congregational singing. Within the space of one, two or four āvartas, not only is the raga svarūpa carefully portrayed but a complete devotional idea is expressed. It is recited a number of times by the congregation and is concluded with a *Pundarikam* by the leader, the congregation responding to the same. Antiphonal singing is also seen in the recital of nāmāvalis. There are many nāmāvalis in Sanskrit. Most of the nāmāvalis are in the Adi tala. On account of the strength and grandeur of the collective music and the resulting massiveness of tone, a fine effect is produced when nāmāvalis are sung by congregations.

The *sloka*, *churnika*, *dandakam*, *stotram* and *ashtakam* are other instances of sacred forms in Sanskrit. Of these, the first has no rhythm; the second and the third are sung to a loose rhythm; the fourth and the fifth have tala. The *Bhaja Govinda Stotram* of Ādi Sankarāchārya is a well-known piece of sacred music.

At a time when people did not take the trouble to record music in notation, tunes were given special names and remembered. Sāhityas bearing these names were sung to the same specified tune everywhere. *Pancha chāmaram* and *Mattakokilam* in Sanskrit and *Ananda kalippu* in Tamil are instances.

*Mangalam* is a song of salutation and every concert, opera, bhajana or kālakshepam in South India is concluded with it. It is a song in the kīrtana form with a

pallavi and many charanas, the charanas being sung to the same dhātu. Sometimes, the anupallavi also is present. These songs are in auspicious ragas. There are mangalams in Sanskrit and other South Indian languages.

### *In Telugu*

Telugu Kīrtanas form the bulk of the sacred forms in South India. Even composers whose mother-tongue happened to be either Tamil, Kannada or Mahratti, wrote in Telugu. The earliest Telugu Kīrtanas are by the Tāllapākam composers who belong to the 15th century. For the first time in the history of South Indian music we come across in their works, the divisions of a song into Pallavi, Anupallavi and Charana. Tāllapākam Chinnayya is regarded as the *Mūla Purusha* of the modern Bhajana paddhati. His *Todaya Mangalam* pieces are even now sung at the commencement of every Bhajana in South India. Tyagaraja, who wrote his own Divyanāma and Utsava Sampradāya Kīrtanas for the purpose of his daily worship, out of deference to Chinnayya, did not displace his Todaya Mangalam pieces, by any of his own. There is a composition of Chinnayya in Sankarābharana raga Ata tala "*Sri Hari pāda tirthame*." This leads us to conclude that the sūlādi sapta talas which attained prominence during the time of Purandara Das, were already in vogue. The compositions of the Tāllapākam composers are also seen in such rare ragas as Nārani, Hejjajji, Konda malahari, Mukhāri pantu, Pādi etc.

The next Telugu composer of eminence is Bhadrāchala Rāmadās (17th century). He was a prolific composer of kīrtanas. Tyagaraja pays his homage to him in two kritis of his and also in an invocatory kanda padya figuring at the commencement of his Telugu opera: *Prahlāda Bhakti Vijayam*. Amongst the composers of

Telugu kīrtanas in the 18th and 19th centuries may be mentioned: Girirāja Kavi, Virabhadrayya, Mātrubhūṭayya, Ramaswamy Dikshitar, Tyagaraja, Śyāma Sāstri, Vina Kuppier, Cheyyur Chengalvarāya Sastri, Subrahmanya Kavi, Tiruvottiyur Tyagayyar, Allūri Venkatādri Swamy, Venkata Vittala Dāsa, Tumu Narasimha Dāsa, Parāṅkusa Dāsa, Rāmānuja Dāsa and Kāmakoti Sastri.

The *Utsava Sampradāya Kīrtanas* and the *Divya-nāma Kīrtanas* of Tyagaraja in Telugu are soul-stirring compositions and are sung in every Bhajana party. His *Nindāstuti Kīrtanas* and *Samkshepa Ramayana Kīrtanas* are very popular. He has also left behind him a few dvaidbātu kīrtanas. i.e., kīrtanas wherein each section is sung to two different dbātus in succession (*Raghu-nandana* in Kedāragaula). Vina Kuppier has composed a beautiful *Mānasa puja kīrtana*. Occasionally we come across *Vedānta kīrtanas* which contain philosophical conundrums. There are many beautiful nāmāvalis in Telugu.

In Tamil.

The *Muvar* (Tirugnānasambandar, Tirunāvukkarasu Swami (Appar) and Sundaramūrthi Swami), *Tevāram*, the *Tiruvāchakam* of Mānikka Vāchagar, the *Nālāyira divya prabandham* (நாலாயிர திவ்ய பிரபந்தம்) of the Vaishnava samayācharyas, Pattinattār *padal*, the *Tiruppugazh* of Arunagirināthar, the *hymns* of Tāyumānavar and the 18 Siddhars, and the *Arutpa* of Rāmalingaswamy constitute the cream of Tamil sacred music. These songs are even now sung in the temples of the Tamil land. The *Tevāra* hymns are in couplets or quatrains. The songs of Arunagirinathar are of special interest, in as much as they stand as lakshyas for the many talas, named and un-named. Their rhetorical finish is amazing and marvellous. He is the originator of this type of composition. “வாக்கிற்கருணகிரி”

said Tāyumānavar. Arunagirināthar was a contemporary of the Tamil poet Villiputtūrār, and has been rightly called the சந்தபாவலப் பெருமான். Composers like Muthu Tāndavar, Mārimuthā Pillay, Pāpavināsa Mudaliar, Arunāchala Kavirāyar, Gopalakrishna Bhārathi, Kavikunjara Bhārati, Achuta Dāsar, Ānayya, Ramaswamy Sivan, Ghanam Krishnier, Ananta Bhārati, Chinnaśāmi Dāsar, Muthu Rāma Kavirāyar, Madhura Kavi, Subramanya Bhārati and others have left behind them beautiful and charming Tamil Kirtanas. There are many nāmāvalis in Tamil.

### *In Kannada.*

There is a profusion of devotional songs in Kannada composed by Purandara Das (1484-1564) and other Dāsas. The songs are referred to as *Devara nāmas* and *Dāsara padagalu*. These songs, saturated with spiritual fervour have inspired many later composers. Sripādaraja, Vyāsarāya Swami, Vadirāja, Kanaka Dāsa, Jagannatha Dāsa and many others have enriched devotional music in Kannada by their soul-stirring compositions. *Gitas* and *Sulādis* are other sacred forms in Kannada.

Devotional songs in Malayalam exist in plenty and are widely sung.

The *Spiritual Renaissance* of the 14th, 15th and 16th centuries gave an impetus to the Bhajana form of worship. The different provinces of India produced during this period eminent bhaktas, who have enriched Indian sacred music with compositions in their respective provincial languages. Their compositions are of outstanding merit. One can hear even now in a South Indian Bhajana, not only devotional songs in the South Indian languages, but also *Abhangas*, *Doharas* and *Ovis* of the Maharashtra composers and the songs of Mira Bai (15th cent.), Tulsi Das (16th cent.) and Kabir Das.

## Kalakshepam music

In addition to kīrtanas in Sanskrit and other languages, one can hear in this religious discourse to the accompaniment of music, certain distinctive musical forms. The most important of them is the *nirūpanam*. This is a short song, set in a crisp, attractive tune. The *sāhitya* is in a simple style and relates to a specific theme or episode in the story taken up for discourse. There are many delightful *nirūpanams* in Telugu which deserve to be widely known and learnt. Merattur Venkatarama Sastri and Muvvalur Sabhāpati Iyer (the author of Telugu padas), have composed a number of beautiful *nirūpanams* for many charitrams (stories). The latter's talents were of a high order and earned for him the title of *Chinna Tyāgarāja*.

*Panchapadi* is the collective name given to the invocatory songs sung at the commencement of a Kālakshepam. In addition to *Aryas*, *Slokas*, *Padyas*, *Viruttams*, *Abhangas*, *Doharas*, *Ovis* and *Nāmāvalis*, the following also figure in this type of concert: *Khadgā*, *Lāvani*, *Sāki*, and *Dindi*.

## Forms in Dance music

Dance is a dignified art in India. Eminent men and women have practised it. Gods and Goddesses are represented in dancing poses. Works like Bharata's *Nāṭya Sāstra* and Sarngadeva's *Sangita Ratnākara* deal with this subject at length. That the practice of dance conduced to the graceful development of the human personality was recognised even in early times. Dance was regarded as a good accomplishment in both men and women.

Just as *sacred music* is earlier than *secular music* *sacred dance* is earlier than *secular dance*. Dances to



please the Deities are described in Bharata's *Nāṭya Sāstra*. Anything like a *pure dance* concert, with an emphasis on the art side is a thing of later development.

*Tāṇḍava* was the masculine dance and *Lāsya* the feminine dance. The initial syllables of these two terms gave the word *Tāla*. *Nrīta* was dance proper. *Nrītya* was *abhinaya*.

Different parts of India have developed different types and styles of dances. The Tamil epic *Silappadigāram* gives a vivid description of the dance of those days, the instruments used as accompaniments, the qualifications of the performers and details relating to the art dance, folk dance, individual dance and group dance. Many Rajahs and Zamindars maintained in their samasthānas regular dance parties and thus encouraged the art. During the last two centuries, South India witnessed a number of dance experts who not only systematised the art of dance but also composed many compositions for use in dance concerts. Suryanarayana Sastri, Krishna Sastri, the Tanjore Quartette, Mahadeva Annāvi, Merattur Venkatarama Sastri, Nidāṁangalam Sarasvati Tiruvenkatachari and Muvvalur Sabhapati Iyer are some of the prominent names.

We shall take up the musical forms in dance music in the order in which they figure in a modern dance recital:—

1. *Alārīppu*. This invocatory exercise is an epitome of all the important poses and movements. The rhythmical aspect predominates. The *mātu* of the composition consists of *jatis* or *tala* mnemonics. The piece is in *madhyamakāla*. This item serves the same purpose as the *varna* at the commencement of a concert and brings the dancer into form. The dance executed for this item is an example of pure *nrīta* and constitutes a good prelude.

2. *Jatisvaram*. This composition has no *sāhitya* and the *dhātu* is sung to the solfa syllables. In a few instances, *jati* passages figure at the end of the composition. The rhythmical aspect is predominant in the dance for this item also.

3. *Sabdam*. This is a composition with regular *sāhitya*. The ideas in the *sāhitya* are conveyed to the audience by the dancer through appropriate gestures. Thus in this item we have both *nritta* and *abhinaya*. Since an appropriate *jati* passage, sung to the same *dhātu* as the *sāhitya*: *sarasijākshulu* was sung as a prelude to this composition, the type came to be called *sabdam*.

4. *Paḍa varna*. For the *lakshana* of this composition see Book III Chap. V. Many varieties of *abhinaya* are introduced here.

5. *Paḍam*. See Book III Chap. V for its *lakshana*. *Abhinaya* predominates in the dance for this item. Standard *bhāvas* for many of the *paḍas* have been handed down. But there is plenty of scope for the dancer to introduce *bhāvas* of her own creation.

6. *Jāvali*. See Book III Chap V for its *lakshana*.

7. *Tillāna*. Rhythm predominates here. For those portions of the composition wherein *sāhitya* comes, *abhinaya* is performed and for the rest of the piece *nritta* is performed.

8. *Sloka, viruttam, paḍyam*. These are instances of non-rhythmical music, and *abhinaya* without rhythm is performed. The verses are sung to a single *raga*, or to a string of *ragas* in the style of a *rāgamālīka*. It is the time-honoured custom to sing select *Krishna karnāmrita slokas* and perform *abhinaya*.

Dances are also performed to *Ashtapadis*, *Tarangas*, *Darus*, *Devar nāmas* and *Kirtanas*. To rouse popular interest, dances for *national songs* and dances on common themes and themes of topical interest are performed towards the close of a concert. The kite dance and snake dance are instances.

### Forms in Operas.

In the opera or the *geya nātakam* we come across the largest number and variety of musical forms. All grades of compositions from the *kriti* down to the simplest folk melody find a place. There is fast music, slow music, music in medium tempo, music suggestive of different *rasas* or emotions, individual music, group music and absolute music; and these along with the scenic settings and dramatic presentation have made the opera the most favourite entertainment in all civilised countries.

For the lakshana of the opera, the reader is referred to the author's Introduction to Tyagaraja's *Nowkā Charitram*.

The *Vidhi Nātakam* (street drama) and the *Yaksha gānam* paved the way for the development of the later dignified opera. There are many yakshagānas in Telugu and Tamil. Girirājakavi the grandfather of Tyagaraja has written some good yaksha gānas. Uttukkādu, Merattur, Nallūr, Sāliamangalam, Sūlamangalam and Devapperumal-nallūr in Tanjore District are noted for the performance of *vidhi nātakam* for many decades. Some of the yaksha-gānas and *vidhi nātakas* do not rise to dignified heights. They were sometimes used as media for carrying on propaganda. There are yaksha gānas written by Saivites wherein references to Vaishnavism are in indecorous language. Yakshagānas had more songs than verses, and they had not the division into Acts. They were pure

*dance-dramas* and even the older characters in the play had to dance. They were intended to please the masses rather than the classes. There was crude humour and meaningless alliteration in some cases.

But the *geya nātakam* was a superior type of composition. It was characterised by high class music and good poetry. It was intended for being acted. It was written from the stand-point of pure art. Arunāchala Kavirāyar's *Rāmanātakam* is the first Tamil opera in South India. Attempts have, in recent times been made to enrich the opera by introducing leit-motifs and overtures.

*Sloka, gadya* (prose passages explaining the sequence of events in the story), *churnika, dandakam, kirtana*, songs in couplets and quatrains, *daru, musical dialogue, dvipada* and various kinds of *padyas* are the forms figuring in Sanskrit and Telugu operas. *Kirtana, daru, dipadai*, (*dvipada*), songs in quatrains, *dandakam, khatgā, chindu, nondichindu, irusollalankāram* (musical dialogue in the *andādi* style), *ānanda kalippu, nāmāvali, kanni* (couplets), *kummi, savāyi, lāvani* and varieties of *viruttam* are the forms met with in Tamil operas.

*Oradi kirtana* (ஓரடிக்கீர்த்தனை), *oradi daru* (ஓரடி தரு) and *oradi padam* (ஓரடிப்பதம்) are compositions figuring in sacred music and operas. They have the divisions: *pallavi, anupallavi* and *charana*. The *charanas* are very long and the *dhātu* repeats itself a number of times.

*Kuravanji nātakas* are popular compositions. Kavi-kunjara Bharati's *Azhagar Kuravanji* (அழகர் குறவஞ்சி) is a wellknown example.

Operas on secular themes have not so far been attempted. This is a direction along which future South Indian music has to develop.

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## CHAPTER VIII

### OBSOLETE FORMS

Many musical forms are mentioned in ancient works on music. Most of them became obsolete long ago. A few of them have undergone changes and are now known by other names. A study of these ancient forms helps us to trace the history and development of the modern forms.

Bharata's *Nāṭya Sāstra* mentions a number of compositions used in dance. *Dhruvas* and *Gitis* were the two main types of compositions in vogue in his time. The four *gitis*: *Māgadhi* मागधि, *Ardha māgadhi* अर्ध मागधि, *Sambhāvita* संभावित and *Pruthula* पृथुल are mentioned by Bharata. Matanga mentions 49 *Desi prabandhas* and *Sārṅgadeva* speaks of 75 different *prabandhas*.

A *prabandha* had *six angas* and *four dhātus*.

प्रबन्धोऽङ्गानि षट् तस्य स्वरश्च बिरुदं पदम् ।

तेनकः पाटतालौ च प्रबन्धपुरुषस्य ते ॥

The six *angas* were:—

- (1) *Svara*, or the solfa passage.
- (2) *Biruda*, exclamation or words of praise, addressed to the *prabandha nāyaka* expatiating on his valour, courage etc.
- (3) *Pada*, or words.
- (4) *Tenaka* or auspicious phrases like *tena, tena* (तेन तेन) of the *bhāndīra bhāsha*, corresponding to *om tat sat* and *tatvamasi*.

(5) *Pātam*, पाटम् the rhythmical sounds (சொல்  
கட்டுகள்) associated with the Rudra vīṇa,  
the Conch and certain drums.

(6) *Tāla*.

According to the number of angas present, prabandhas  
were classified into :—

*Medini jāti* prabandha which had all the above  
six angas.

*Ānandini jāti* prabandha which had five of the  
above angas.

*Dīpini jāti* prabandha which had four of the above  
angas.

*Bhāvinī jāti* prabandha which had three of the  
above angas.

*Tārāvali jāti* prabandha which had two of the  
above angas.

Ramaswamy Dikshitar's prabandha in Hamsadhvani  
raga, Matya tala, beginning with the words: *Chanda sela*  
is a good example of the *Medini jāti prabandha*.

Pallavi Seshayyar's tillāna in Dhanyāsi raga, Aditala  
affords a modern parallel for an *Ānandini jāti prabandha*  
in that it consists of all the prabandha angas except the  
tenaka.

The *Viriboni varna* in Bhairavi furnishes a good  
parallel instance of a *Dīpini jāti prabandha*, since it has  
four of these angas, the pātam and tenaka being absent.

A kriti like *Nīmadi challaga* in Ānandabhairavi  
furnishes a good modern example of a *Bhāvinī jāti*  
*prabandha* in as much as it has the angas: pada, tala  
and svara, the other three angas being absent.

A composition like the *jatisvaram* furnishes a parallel example in modern music of a *Tārāvali jāti prabandha*, since it has only two of the six angas; viz., *svara* and *tala*.

The four *dhātus* or the constituent limbs of a *prabandha* were :—

प्रबन्धावयवो धातुः स चतुर्धा निरूपितः ।

उद्ग्राहः प्रथमस्तत्र ततो मेलापकध्रुवौ ।

आभोगश्चेति तेषां च क्रमालक्ष्माभिदध्महे ॥

- (a) *Udgrāha*, the introductory section (corresponding to *pallavi*).
- (b) *Dhruva*, the essential or the constant section (corresponding to the *charana*).
- (c) *Melāpaka*, the section that links up the above two (corresponding to the *anupallavi*).
- (d) *Ābhoga*, the concluding section (corresponding to the *madhyama kāla sāhitya* or the *chittasvara* of a *kriti*).

The *Ābhoga* corresponds to the *coda* (tail) of a European musical composition. It gives an impressive conclusion.

Of these four sections, the *Melāpaka* and *Ābhoga* were dispensable angas. The *Udgrāha* and *Dhruva* were indispensable angas. The essential and non-essential angas of a *kriti* furnish a good parallel in modern music.

*Dvidhātu prabandhas* had *Udgrāha* and *Dhruva*.

*Tridhātu prabandhas* had *Udgrāha*, *Dhruva* and *Ābhoga*.

*Chaturdhātu prabandhas* had *Udgrāha*, *Melāpaka* *Dhruva* and *Ābhoga*.

There ought to be a minimum of two dhātus to constitute a *prabandha*.

Parallel examples in modern music for these types will be :—

Divyanāma kirtanas of Tyagaraja like *Pāhi Rāma-chandra* and *Sri Raghuvara Dāsarathe* in *Sankarā-bharana* which have only a *pallavi* and *charanas*. These are analogous to the *dvidhātu prabandhas*.

A *kriti* like *Sarasa sāma dāna* in *Kāpinārāyani* raga having a *pallavi*, *anupallavi* and *charana* furnishes a parallel for a *tridhātu prabandha*.

A *kriti* like *Ambā ni saranamu* in *Ānandabhairavi* raga having a *pallavi*, *anupallavi*, *charana* and *chitta svara* furnishes an example of a *chaturdhātu prabandha*.

*Prabandhas* were also classified into :—

1. *Niryukta prabandhas*, i.e., those which conformed to rules ; and
2. *Aniryukta prabandhas*, i.e., those which did not conform to rules.

The raga, tala and metre were specified for the former types and in the latter, this was not done.

*Bhūlokamalla* has composed many *prabandhas*. *Gopala Naik* has composed a *graha svara prabandha*, a *tālārnavam* and a *rāga kadambakam*.

*Matanga* in his *Brihaddesi*, mentions all the compositions under the heading of *Desi prabandhas*. But *Sārngadeva* and others classify *prabandhas* under *Sūda prabandhas*, *Alikrama prabandhas* and *Viprakīrṇa pra-*



*bandhas*. The *sāhityas* of the latter two were in Prakrit and in South Indian languages and also in other local dialects. The *Sūda* *prabandha* admitted of the divisions: *Suddha suda* and *Sālaga suda* or *Chāyālaga suda*. *Sālaga* is a corrupt form (apabhramsa) of *chāyālaga*. The *prabandhas* paved the way for the development of the later musical compositions. There are many types of *prabandhas* bearing the names of the 108 *talas*; Ex. *Chachcharī*, *Hamsa līla*, *Turaga līla* (*Haya līla*) and *Gaja līla*.

In addition to *gitis*, *Sārngadeva* mentions other types of compositions like *Akshiptikas*, *Kapālas* and *Kambalas*.

*Varna* in medieval works means a composition in the *varna tāla*.

*Pancha tālesvaram* was a *tāla mālika* in five *talas*. The five sections of this *prabandha* were in five *mārgi talas*.

*Srivilāsa* was a *rāga tāla mālika* in five *ragas* and five *talas*.

*Srīranga prabandham* was a *rāga tāla mālika* in 4 *ragas* and 4 *talas*.

*Umātilaka prabandham* was a *rāga tāla mālika* in 3 *ragas* and 3 *talas*.

*Pancha bhangi* and *Panchānana* had two *ragas* and two *talas*.

*Sarabha līla* was in eight *ragas* and eight *talas*.

*Rāga kadambakam* and *Tālārnavam* stand respectively for the modern *rāga mālika* and *tāla mālika*.

*Svarārtha* स्वार्थ was a composition containing *svarāksharas*. When the whole composition was a string of *svarāksharas* it was called *suddha*. When *sahitya*

letters occurred here and there, the composition was styled *misra*.

In the *Kaivāra prabandham*, the major part of the *mātu* consisted of jatis and mnemonics associated with instruments.

*Vichitra* was a *prabandha*, wherein words from different provincial languages figured in the *sāhitya*. The composition was enriched by *pāta* and *tenaka* and was set to many *talas*. This composition paved the way for the development of *Manipravāla kirtanas*.

*Thāyam* ठायम् is a composition resembling the *gita* in its general structure. Its distinctive feature is the presence of *pāta* पाट or *solkattu*. This composition belongs to the sphere of *abhyāsa gāna* and helps the *vina* students to develop the plectral technique. Purandara Das and Venkatamakhi have composed a number of *thāyams*. It will be useful at this stage to remember that the term *Chaturdandi* means, the four types:—*Gita*, *ālāpa*, *thāya* and *prabandha*.

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## CHAPTER IX

### STYLE IN MUSICAL COMPOSITIONS

By style in musical composition is meant the type of musical writing or the characteristic manner or mode of musical presentation. It is the peculiar characteristics of the composition due either to authorship or period. Just as in literature we have distinctive styles, we find styles in the musical writings of great composers as well. The man of letters uses the spoken word as the medium for the expression of his thoughts; the composer instead, uses musical phrases, to express his thoughts in the language of pure music.

It is only in art musical forms that we can come across anything like a distinctive style. In forms belonging to the spheres of sacred music, opera and dance music it is not possible to develop a special style, since the music in such cases serves only as a vehicle for the singing of the devotional, dramatic, or dance *sāhitya*. Thus in the compositions belonging to the sphere of *applied music*, anything like a distinctive style will not be perceivable.

In the composition of the *kṛiti*, composers enjoyed the maximum freedom. They had to observe only a few rules. The *kṛiti* is the most highly evolved amongst art musical forms and we enjoy these compositions because of their musical value. The *sāhitya* in the *kṛitis* merely helps the vocalist to *sing* the music and nothing more. Even without the *sāhitya* they will be sung, and played for all times to come. The presence of fine poetic ideas in some *kṛitis*, as in the brilliant compositions of Tyagaraja only add lustre to the compositions. From the beginning

of the eighteenth century, all the great composers of South India directed their attention to the composition of kritis.

Tyāgarāja, Muthuswamy Dikshitar and Syāma Sastri exhibit distinctive styles in their kritis.

Tyāgarāja's style is simple, homely, beautiful and charming. Like Vālmiki, he has adopted a style which at once appeals to the scholar and to the lay person. His style does not captivate merely the upper ten thousand but the ordinary hearer also. A person who is inclined or is in a mood to sing, will burst forth into a song of Tyāgarāja, although he might have known compositions of many other composers. That is the proof of the great composer's attractive and captivating style. Tyāgarāja adopted this style because he wanted to speak to humanity at large. The raga bhāva floats on the surface of his melodies like cream. In his compositions he speaks the language of music in its purest form. The haunting beauty of his melodies is to no small extent due to their refreshing and flowing style. In a few pieces like "*O Ranga sāyi*" he works up a grand, majestic and learned style. From the point of view of rasa, Tyāgarāja's compositions are compared to the *Drāksha rasa* (the grapes taste sweet the moment they are put in the mouth). Many composers of the post-Tyāgarāja period drew inspiration from his compositions and adopted his style.

Muthuswamy Dikshitar on the other hand tries to work out carefully a learned and majestic style. The laboured and polished style of his compositions appeals only to the initiated few. His kritis have to be studied and heard over and over again before their intrinsic merits can be fully appreciated. His compositions are for the leisured and initiated few. The vainika's style is reflected in

every one of his scholarly pieces. From the point of view of *rasa bhava*, his compositions are compared to the *Nālikera rasa*; (be it noted that in order to eat the coconut, one has to remove the fibrous rind, crack the shell, and then remove the pulp with a knife).

Syāma Sastri's style has a peculiarity and charm all its own. It is neither as simple as Tyāgarāja's, nor as laboured as Dikshitar's. In his compositions he reveals the melodic possibilities of even intricate *talas* and *grahas*. Pieces like *Mīna lochana brova* in *Dhanyāsi*, definitely prove that rhythmical complexities can be introduced in *kritis* without offence to melodic beauty. From the point of view of *rasa bhāva*, his compositions are compared to the *Kadali* or the plantain fruit, to eat which, one has only to peel off the rind.

In the compositions of Ghanam Krishnayyar and Pallavi Gopālayyar also we see a characteristic style.

Sometimes a group of composers belonging to a particular period exhibit a distinctive style in their compositions. The style of the *padams* of Kshetrajna and his contemporaries is a good instance in point.

In addition to styles in musical compositions there are styles in singing, styles in the playing of instruments, styles in the development of *ālāpana*, styles in playing the *tāna* on the violin, styles in singing *kalpana svaras* and styles associated with particular masters or schools of music.

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## CHAPTER X

### CONTEMPORARY MUSIC

Contemporary music or the music of our times has both its *good* features and *regrettable* features. In one sense, music has been *democratised*. What was the privileged possession of a few is now the proud possession of many. The musical associations and sangita sabbhās at various centres give opportunities to people to listen to good music and thereby improve their musical knowledge. The printed musical programmes help the audience to follow intelligently the items given in concerts. The Radio and the Gramophone are playing a good part in the spread of musical culture. They have roused the enthusiasm of the public for music and have made them music-minded. Music is now taught in a larger number of institutions than before. More Universities in India have introduced music in their curricula of studies. This has made possible the systematic study of music both as an art and as a science. There are some brilliant contemporary composers whose compositions will be remembered by posterity. New ragas are being created and new types of compositions are being attempted. Instrumental forms like *overtures*, *leit-motifs* and *marches* and *pieces* for the orchestra are being composed. Interesting compositions like Rāgamālīka varnas and Mani-pravāla kritis continue to be written. Compositions of minor composers are receiving greater attention. Rare works on music like the *Sangita Sudhā*, *Chaturdandī prakāśika*, *Sangita Sārāmṛta*, *Sangita Sāra Sangraha* and *Sangraha Chudāmani* have been published. Devices for enriching the tonal volume of the vīna are being evolved. New instruments like the *Subra vīna*, *Bālakokil* and

*Jalestromonium* have sprung into existence. Choirs and orchestras are being organised everywhere. More and more books on the theory and practice of music are being published. Contemporary composers are coming out with publications of their compositions in notation. Classical operas are being edited and published with the songs in notation. Research in music is being actively carried on. Festivals in honour of great composers are being celebrated in many places. The Annual Music Conferences in Madras and other parts of India draw large crowds. Dance concerts have become popular. The danger that threatened this art thirty years ago (the *anti-nautch movement*) has happily disappeared. Agencies for the spread of musical knowledge are fast multiplying. National songs are being composed in profusion, a reflection of the spirit of the times.

But after all this has been said, one finds that the regrettable features of the present day music are many and any one interested in this great heritage of ours cannot sit idly by. There is the appalling deterioration in public taste. The average concert-goer has not the inclination to take pains to understand and appreciate high class music. He goes into raptures over tunes of a lighter nature and there his enjoyment stops. Appreciation for creative music is gradually diminishing. In the absence of a cultured audience the musician rarely exerts himself in this branch of the art. He does not even care to present difficult and rare pieces in his concerts. One can no more hear in modern concerts, those grand and majestic Pallavis which are the pride of South Indian Music. Nor can one hear in such concerts, *ālāpanas* of rare ragas, compositions bristling with technical beauties and

longer compositions characterised by complicated rhythms. The deterioration in public taste has its unfortunate reaction on the performer. During the period of royal patronage, there was the urge within each musician and composer to give his best and this resulted in the production of compositions of outstanding merit like the 72 *Mela Rāgamālika* of Mahā Vaidyanatha Iyer, the 108 *Rāga Tāla Mālika* of Ramaswamy Dikshitar, the *Sapta Tālesvaram* of Vina Krishnayya and so on. It may incidentally be mentioned that the first two compositions are longer than the longest symphonies of Beethoven.

The Musical Associations should have it as their policy to provide their members with good and pleasing music and at the same time music which is really high class. This policy, if pursued, will be doubly advantageous. Instead of being bored with the same set of songs each time, the listener will be assured of a varied treat. The performer also will derive infinite pleasure at the prospect of his *real skill* in music being recognised and appreciated.

The lack of encouragement to Kālakshepam and to instrumental concerts in general is another deplorable feature of contemporary music. The services of performers of secondary tala instruments are rarely requisitioned at the present day. If this apathy continues, the art of playing the Kanjīra, Ghatam, Moursing, Dolak, Gettuvādyam etc. will soon become a thing of the past. It should be remembered that players of these instruments acquire a high technique only after years of practice and any art is bound to languish if it is not properly patronised.



The possibilities of the Radio as a powerful factor in the spread of musical culture and in the moulding of a correct standard of taste have not yet been fully explored in India. The art of musical criticism is still in its infancy and most newspapers do not have on their regular establishments, *music critics*, who by their criticisms of concerts and periodical writings, can play a great part in moulding public taste along correct lines.

Every citizen of India must feel it his duty to learn and understand something of the great legacy that has been bequeathed to us by our musical ancestors. Instead of being satisfied with listening to good music, every person must learn to perform music himself. There is an infinitely greater joy in doing so. Educational authorities must take steps to introduce the compulsory teaching of music in both boys' schools and girls' schools at least up to the III Form standard. Music is a thing which enables a person to shed lustre around him wherever he goes. Music is not only a powerful factor in the moulding of one's character but it also develops the sense of beauty in him and makes him a truly refined person and a perfect gentleman. Every temple should have on its permanent establishment a musician, who besides giving recitals of sacred music on the occasion of temple rituals, can teach music to the people in the neighbourhood and also help in the organisation of sacred choirs. He can hold classes in secular music for adults and thereby help them to spend their leisure in a most profitable manner.

Musicians and music lovers of the North, should evince greater interest in Karnatic music; and likewise South Indian musicians and music lovers should evince greater interest in Hindusthāni music.

For a country of India's size, the number of music journals published is ridiculously low. But it must be said that the few journals that function produce matter of good quality.

Every important town in South India should have a concert hall and an opera house. Municipalities should provide periodical concerts for the entertainment of the people within their jurisdiction. Military bands and Police bands should also perform Indian music. Comic operas like *Die Fledermaus* of Johann Strauss should be written and produced.

South Indian music has been enriched by the compositions of some brilliant **contemporary composers**. It is a pity that there are no societies like the ones in Europe and America to safe-guard their interests. Their songs are frequently performed on the platform, on the stage and over the Radio, without a single rupee ever going to them as royalty. Composers are a rare class of persons and it is the duty of the society to look to their comforts and safe-guard their rights and privileges. Gifted composers should not be left to the precarious subsistence of writing music for films. Such contributions on *ad hoc* themes are not of permanent value.

Of the contemporary composers, who have either notable compositions to their credit or who have composed a large number of songs might be mentioned:—  
1. Kotisvara Iyer (1869–1938), 2. C. S. Krishnaswami Iyer, 3. T. Lakshmana Pillay of Trivandrum, 4. Mysore Vasudevachariar, 5. Harikesanallur Muthia Bhagavathar, 6. Kallidaikurichi Vedanta Bhagavathar, 7. Vina Krishnamachariar, 8. M. S. Ramaswami Iyer, 9. Papanasam Sivan, 10. Sankaranarayana Iyer of Tirunelveli, 11. Mayavaram T. R. Viswanatha Sastri and 12. Nerur Srinivasachari.

Bhāskara Dās is a successful composer of popular songs and national songs.

## CHAPTER XI

### THE INFLUENCES OF EXOTIC MUSIC ON THE DEVELOPMENT OF SOUTH INDIAN MUSIC

The liberal attitude of music scholars in South India has been responsible for the steady growth of the art from early times. Whenever there was the impact of a foreign musical culture, the indigenous art slowly and tacitly imbibed such of the features of the alien system as conduced to its own progress. Only those traits which did not come into conflict with the essential features and ideals of the indigenous system were adopted. It is a fact in the history of all arts, that such occasional borrowing always resulted in their healthy progress. The musical conscience of the community gradually acquiesced in the adoption of such alien traits since it contributed to the enrichment of the art and helped to reveal better its greatness. We have been in contact with European music for over two centuries now, but European harmony has not made any headway in Indian music, for the simple reason, that its introduction would have spoiled the beauties inherent in the Indian Raga system. Indian music has developed along *pure melodic lines* all these two thousand years. Likewise, the harmonium with its tempered scale was never used for the purpose of playing genuine high-class South Indian music. Even after a good deal of practice, one cannot produce all the gamakas (graces) on the harmonium; again it is impossible to play the quarter-tones on this instrument. If in spite of these inherent defects in the instrument, the harmonium is still used in some parts of South India, it is due to the fact that compared with the vīna, it is a cheaper instrument, and it readily produces

some kind of music without much effort on the part of the player. All the strength, virility, and appeal of South Indian music to-day, is due to the progressive attitude of the builders of the system in the past. If the student of history wants to have an instance in support of the *Doctrine of Eclecticism*, he has only to turn to the history of South Indian music. Those countries which did not possess a scientific system of music, adopted the European system, when they came into contact with it.

Karnātic music has also, in its turn influenced other musical systems. The scheme of 72 melakartas sponsored by Venkatamakhi in the 17th century is a contribution of the South to the music of North India. This scheme served to regularise the Janaka-Janya system of Raga classification. The Janaka-Janya system being more logical and scientific, was preferred to the fanciful Raga-Ragini system. The system of singing extempore svaras (kalpana svaras), a distinctive feature of South Indian creative music for some centuries, has recently been adopted by musicians of the North. Many South Indian musicians adorned the Courts of North India. Pundarika Vittala, who was commissioned to systematise Hindusthani Music, was a southerner. Gopal Naik also was a southerner.

Indian Music has influenced foreign music from very early times. Strabo in Bk. X iii says that the Greeks attributed to India nearly all their science of music. Alexander the Great took with him to Greece a South Indian Musician. The term *sa grāma* gave rise to the word *gamut*, as already explained on P. 40.

Centuries before Guido d'Arezzo, India had developed an excellent solfa system. The European tonic solfa notation owes its origin to the Indian system. Music in

5 time and 7 time and music employing quarter-tones are now composed in some European countries. Pianos with 24 keys to an octave have been constructed. These, as well as the method of representing the varieties of a note, (*Des*, *D*, *Dis*; *Ges*, *G*, *Gis* etc.) by resorting to vowel changes in the name of the note are all to be traced to the Indian source. Important Sanskrit works on music have been translated into French and German.

In the countries of Eastern Europe one can hear melodies in such ragas as *Māyāmālavagaula* and *Simhendradra madhyama* (Gipsy music).

It may perhaps be not out of place to mention here a few compositions of European composers on oriental themes :—

1. Goldmark's overture to *Sakuntala*.
2. Weber's               ,,       *Abu Hassan*.
3. Gustav Holst's opera   *Sāvitrī*.

### Musical Instruments

The one gift of Europe to the music of South India is the violin. It was in the latter part of the 18th century that the first European violinist came to South India. The local musicians studied the instrument with great care and immediately saw its tremendous possibilities. They lost no time in adapting it for the purposes of South Indian music. The *jāru style* of playing the violin, lends a charm to it. Bowed instruments have been in use in South India from ancient times, but the Violin had certain commendable features about it. Its sweet and loud tone, its handiness, its plain finger-board enabling the performer to produce all the delicate gamakas (graces) and subtle srutis (quarter-tones) with ease and accuracy, its

long bow helping the performer to play tānas with artistic finish, its wide compass of four sthāyis and the ease with which the instrument could be used to accompany voices of different pitch—from the high-pitched voice of the lady singer to the deep voice of the male singer appealed to the imagination of the South Indian musician. The vīna was too majestic and dignified to be used as an accompaniment in a vocal concert. The need for a good stringed instrument, which could be used as an effective accompaniment in vocal concerts, was felt for a long time. The violin came just at the right time to fill the gap.

The system of tuning the violin in South India is different from that of Europe. It is tuned here according to the needs of Karnātic music. In European music, the violin is tuned in fifths, but here it is tuned in fifths and fourths as in the vīna, tambura and other stringed instruments. Again in European music the violin is tuned to notes of absolute pitch G D A E, but here, the 2nd string (A) is tuned to the tonic-note of the principal performer. The 1st string is tuned to the fifth (Panchama) above. The Third and the Fourth are tuned to the mandra panchama and mandra shadja *i.e.*, the corresponding lower octave notes of the 1st and the 2nd strings respectively. Thus in the place of G D A E, we have the strings of the violin in South India tuned to G D G D or similar notes. This system of tuning is the one widely in vogue and is referred to as *Panchama sruti* (Sa Pa Sa Pa). Occasionally we come across another system of tuning known as the *Madhyama sruti*. Here the 3rd string is tuned to the key-note of the singer and the 4th to a fourth below; the second to the fifth above the third, and the 1st string to the octave of the 3rd string—thus giving the series Pa Sa Pa Sa, instead of Sa Pa Sa Pa as before. The

violin is principally used as an accompaniment, but there have been eminent violinists in the past, who delighted their audiences with solo performances. The violin now enjoys a status equivalent to that of the vina and the flute, and the number of people learning the violin in South India is greater than the number learning any other instrument.

One of the earliest seriously to practise the instrument for the purpose of playing high class Karnātic music was Balaswamy Dikshitar (1786—1858). It was his proficiency in violin playing that later on (at a critical moment of his life) secured for him an appointment as Samasthāna Vidvan in the Ettiyapuram Zamin. Since his time, a distinguished band of violinists like Vadivelu, Ponnuswamy, Subbarayar, Narayanaswamy Pillai of Shiyali, Mahadeva Bhagavathar of Malabar, Narayanaswamy Iyer of Pudukottah, Tirukkodikaval Krishna Iyer and Govindaswamy Pillai have, by their scholarly performances on the violin greatly raised the prestige of the instrument. In South India to-day the violin has become the indispensable accompaniment in every concert.

Another European instrument that has come to stay in South India now is the *clarinet*. This instrument is used to accompany dance concerts, displacing the old flute and the mukhavina. The popularity of the clarinet is due to the fact that it has a compass of three octaves—the compass of the flute being only  $2\frac{1}{2}$  octaves. Its keys help the performer to play on any sruti, a mechanical device not possible on the key-less Indian flute. The audience relished the tone-colour of the instrument and silently acquiesced in its introduction in the dance bands. Mahadeva Nattuvanār was the first to practise the instrument and introduce

it in *chinna melam*. It is worth while to remember that, although the clarinet is graduated to the European tempered scale, yet when an Indian musician plays it, he intuitively produces the notes of the scale of just intonation by regulated blowing.

The development of Bands and Orchestras is another noteworthy feature of the impact of European music on the music of South India. It was in the Tanjore Samasthanam in the last century that the first regular band of wood and brass instruments was constituted and Indian music played. Rajah\*Serfojee learnt European Music under one Schwartz, a German missionary and with his help organised the now wellknown *Tanjore Band*. These bands are now popular and are engaged to give concerts at temples and wedding processions. Orchestras employing a definite number of stringed and wind instruments and giving a consolidated and pleasing tonal volume are a still later development. There are Indian orchestras regularly giving concerts in Madras. There are also orchestral parties in the services of the Maharajas.

North Indian instruments like the Sitār, Dilruba, Tāus (Balasarasvati) and Sārinda are now in use in South India.

### Musical forms

In the sphere of musical forms, the contact of Hindusthāni and European musical systems has been productive of wholesome results. Jayadeva's Gita Govinda had a powerful appeal and South Indian composers like Venkata-makhi, Sri Chandrasekharendra Sarasvati and Rāmākavi wrote the *Tyagarāja Ashtapadi*, *Sivāshtapadi* and *Rāmāshtapadi* respectively, on parallel themes. The South Indian Tillāna is an adaptation of the Tiri



Tillāna. The Jāvalis developed from the Persian Ghazals. *Abhangas*, *Doharas* and *Ovis* of the Mahārāshtra composers are also sung in South India. Some of the North Indian musical forms like *Savāyi*, *Ghatkā* etc., have been introduced in Tamil operas.

Melodies without sāhityas *i.e.*, pure solfa pieces, came to be written in South India after the model of European melodies by eminent composers like Muthuswami Dikshitar. This composer was so enamoured of the tune of the English National Anthem, that he wrote a Sanskrit sāhitya for it (*Santatam Pāhi mām*) appending his signature also.

**Pallavi :**

सन्ततं पाहि मां सङ्गीतश्यामले सर्वाधारे—जननि ।

**Anupallavi :**

चिन्तितार्थप्रदे चिद्रूपिणी शिवे

श्रीगुरुगुह सेविते शिवमोहाकारे ॥

Other Sanskrit sāhityas that he wrote to the tunes of English songs are given in the Manuscript D No. 2536 preserved in the Government Oriental Manuscripts Library, Madras. The Table on the next page gives the beginning words of eight of these sāhityas and the corresponding English songs. Some of these sāhityas are included in Vol. I, (Primer), *Sangita Sampradāya Pradarsini* of Subbarama Dikshitar. All these songs bear the signature “*Guruguha.*”

Table XVI.

No.	Beginning words.	Corresponding English song.
1	रामचन्द्रं राजीवाक्षं	Let us lead a life of pleasure.
2	सकलसुरविनुतं	Quick March.
3	सुब्रह्मण्यं	British Grenadiers.
4	शक्तिसहितगणपतिं	Very good song.
5	वरशिव बालम्	Castilian Maid (Moore).
6	शौरि विधिनुते	O whistle and I will come to you my lad.
7	जगदीश गुरुगुह	Lord Macdonald's reel.
8	पीतवर्णं	Taza-ba-Taza.

In some of the compositions of Tyagaraja (Ex. *Vara lila gāna lola*, *Raminchuvā revarurā*), Vīna Kuppier and Karur Dakshināmurti Sastri, we see the influences of European music in a marked manner. The melody: *S G P p m g m R N R M g m r g S*, is a composition of the late Tiruppāyanam Panchapakesa Sastriar. The composition of *marches* in Indian ragas is one of the latest attempts. Marches are pure instrumental forms and are now performed by many Indian orchestras. To European ears, these Marches seem to be typical European pieces. *Variations on a Theme* as a form has also been attempted.

## Notation

Some of the important signs that we use in modern South Indian notation are to be traced to European music. Notation is the medium through which musical ideas are communicated to the eye. At a time when music was considered a luxury and the privileged possession of a few and when the art was learnt principally from the mouth of the Guru, the need for recording, on paper or on palm leaves, the compositions of the great composers in correct notation was not felt. The *sāhityas* (libretto) of the songs were written down and the music was committed to memory. This circumstance is responsible for the loss of the original music of such priceless gems as the *Ashtapadis* of Jayadeva and the *Tevāram* and *Tiruvāchakam* of the Tamil Saivite Saints. The solfa system of notation in its rudimentary form was in existence more than 2000 years ago but attempts were not made to devise suitable signs and symbols to represent musical ideas on paper until recent times. With the increasing desire on the part of the people to learn scientific music, the necessity for recording the classical compositions in accurate notation arose. Tachūr Singarāchārlu in the early seventies of the last century began to publish his graded books on music. The notation that he adopted was however far from perfect. The western staff notation was then studied by a band of scholars like A. M. Chinnaswami Mudaliar (author of *Oriental Music in European Notation*) and others. Useful signs and symbols from staff notation were borrowed. Fractional duration of notes came to be represented by lines above the svaras as in European music. Some of the earliest books to publish South Indian pieces with the symbols borrowed from European music were the *Sangita Svayambodhini*

of T. M. Venkatesa Sastri and the *Sangita Sampradāya Pradarsini* of Subbarama Dikshitar. The former book has published a few English songs in Indian notation.

Deriving inspiration from the work of Chinnaswami Mudaliar some Indian musicians have published Indian melodies in staff notation. This has enabled the outside world to understand something of Indian music.

The contact with European music or more correctly, contact with western science has enabled Indian musicians to talk of the *srutis* (quarter-tones) used in Indian music in terms of vibrations per second and cyclic cents. One of the distinctive features of Indian music is the use of 22 notes in the octave. The builders of the Indian system of music knew the laws of harmony well and could have, if they wanted, anticipated European harmony in India. *Samvādītva* is consonance. The consonant and dissonant intervals are the same here as in European music. But the lure of the *raga* system was too powerful for them and the idea of developing Indian music along harmonic lines was abandoned long ago. They began to explore all the possibilities of Indian Music along *pure melodic lines*. This landed them in the field of the *raga* system which is at once the pride and glory of Indian music. Values of *svaras* (notes) in terms of their speaking lengths on the wire were given by Ahobala, three centuries ago, but it is definitely an advantage to talk of the frequencies of notes in terms of vibrations per second. We are now in a position accurately and scientifically to define the ancient *Sāman scale* and the fundamental scale of the Ancient Tamils and the scales that resulted from them by the process of modal shift of tonic. Thus western science has enabled us to appreciate better our own music.

## Ragas

Rāgas like Māṇḍ, Behag, Kāphi, and Jinjhooti, now common in South Indian Music are of Hindusthāni origin. These ragas have become so naturalised here that even eminent minor composers have attempted pieces in them. Whenever the foreign raga nearly approximated to a South Indian raga, the latter was given the prefix 'Karnataka' in order to distinguish it from the former. Thus we have Karnāṭaka Kāpi to distinguish it from the corresponding Hindusthāni variety. Some ragas which were formerly upāṅga have become bhāshāṅga on account of the influence of Hindusthāni music—ex. Khamās. Ragas with provincial names current in different parts of India show their history.

Gopala Krishna Bhārati came under the influence of Rāmdas, an eminent Hindusthāni musician in the Court of Pratāpa Simha of Tiruvadamarudur. Bhārati successfully composed many songs in Hindusthāni ragas.

*Kālakshepam* (religious discourse to the accompaniment of music) is now popular in South India, and there are eminent professional performers of *Kālakshepam*. For this art we are indebted to the Mahrattas who came to Tanjore.

Technical terms which correctly conveyed certain musical concepts were also borrowed from other systems. The words *komal* and *tivra* and the practice of referring the pitch of the tonic-note of performers in terms of the keys of the harmonium are instances.

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## CHAPTER XII

### PROSODY

A musical composition is a piece of music set to time. It may have sāhitya or may not have sāhitya. In the latter case the piece is sung to solfa letters as in the jatisvaram. In this chapter we are concerned with compositions having sāhitya.

Poetic metres are not so well suited to musical compositions. Dignified prose suits them better. The occurrence of yati and prāsa in musical compositions is regulated by musical rhythm.

#### Technical Terms

**Pada** (பாடம், పాదము) means a verse or line of poetry. It is a quarter of a stanza. In a musical composition it represents one full āvarta or a complete line of music.

In an ādi tāla piece, a pāda may be equal to one āvarta or two āvartas of music. In Rūpaka, Triputa and Chāpu tala compositions, a pāda consists of four avartas and rarely of two āvartas.

The following examples from Tyagaraja's compositions illustrate these points:—Examples 1 and 2 are instances of Adi tāla kritis wherein a pāda consists of one āvarta and two āvartas respectively. Examples 3, 4 and 5 are respectively instances of Rūpaka, Triputa and Chāpu tala compositions wherein a pāda consists of 4 āvartas. In Adi tāla kritis, the charana gives us the clue to determine whether a pāda consists of one āvarta or two āvartas.

Ex. 1. మరి యాదగాదురా (Sankarābharana)

Ex. 2. మా బానకి చెట్టబట్టగ మహరాజువైతివి  
(Kāmbhoji)

Ex. 3. நீத்கீ భాగ్యసుధా నిధి నీడే దేజస్మయ ॥

(Jayamanohari)

Ex. 4. ఎందుకు దయరాదు రా. శ్రీ రామా నీ ॥

(Todi)

Ex. 5. भजरे भजमा नस रा मम् ॥

(Kannada)

There are instances of Rūpaka tala kritis wherein a pāda consists of 3 avartas. For ex.

Ex. 6. मानस गुरुगुह रूपं भजरे रे

मायामय हृत्तापं त्यज रे रे

(Anandabhairavi)

Also *Chintaya mā* (Bhairavi) of the same composer.

In such cases, the apparent defect of the odd number of āvartas is rectified by the presence of an even number of pādas in the sections of the song.

Kritis in Jhampa tala and Ata tala have two āvartas for a pāda; Ex. *Munnu Rāvana* (Todi) and *Sri Hari Pāda tirthame* (Sankarābharana). In the case of varnas in Adi tala, Ata tala, Jhampa tala and Khandajāti Triputa tala, a pāda is equal to one complete āvarta.

**Prasa.** The second syllable of a pāda is known as the prāsa letter. The letter *o* in the following *Tevāram* hymn of Tirugnānasambandar is the prāsa letter:—

தோடுடைய செவியன்விடை யேறியோர் தூவெண்மதிசூழிக்  
காடுடைய சுடலைப்பொடி பூசியென் னுள்ளங்கவர்கள்வ  
னேடுடைய மலரான்முன நான்பணிந் தேத்தவருள் செய்த  
பிடுடைய பிரமாபுரமேவிய பெம்மா னிவனன்றே ॥

*Prāsa* means the correspondence of the second letter of a pāda of poetry or a musical composition.

This dvitiyākshara prāsa is known as *edukai* (எதுகை) in Tamil.

*Antya prāsa*, means the rhyme of the ending syllābles of a line or pāda. The following example from the *Sivāshtapadi* illustrates the point :—

Ex. 7. कल्यति कल्यति मनसि चरन्तं

कुचकलशस्पृशमयति भवन्तम् ।

(12th hymn.)

Jayadeva's *Gita Govinda* and the *Kirtanas* of Sada-siva Brahmendra contain beautiful antya prāsas. Antya prāsa is common in English poetry.

*Anuprāsa* is the repetition of similar letters, syllables and words. The charana of Subbarāya Sastri's *Vanajāsana* furnishes a good example :—

Ex. 8. కళాభరణ కళాదరిస కలాగమ సన్నత (Sriraga)

The recurring jingle of the anuprāsa letters heightens the charm of such pieces.

**Yati.** The letter that occurs after a caesura or pause in a pāda is the yati. This pause may be actual or imaginary. There is the correspondence of the yati syllables at the commencement of āvartas. Yati is known as *monai-மொனை* in Tamil. The alliterating initial syllables of āvartas are known as yatis. In the following vivardhani piece, వి and వి are the yati letters :—

Ex. 9. విననే ఓ, మనసా వివరంబుగ నే చెల్వెద॥

In the Hamsadhvani piece :—

Ex. 10. రఘునాయకా నీ పాదయుగ రాజీవములనే నిడబాల ప్రీ



*ra* (ర) is the yati letter and occurs at the commencement of each āvarta. It is the yati that divides music into āvartas or half āvartas according as the tāla of the piece is short or long.

*Prāsa yati* is a variety of yati. It occurs in musical compositions and in sīsa pādyas. *Prāsa yati* is a case wherein the second letter after the pause or the yati sthāna is identical with the second letter of the pāda itself. In such a case the two halves of the pāda appear like two independent pādas.

Thus in the Phalamanjari piece :--

Ex. 11. సనాతన పరమపావన

ఘనా ఘనవర్ణ కమలానన

there is the *prāsa* letter *nā* (న) in the 2nd āvarta, and this is a case of *prāsa yati*. In such cases, there is no necessity for the presence of the yati.

Songs like

Ex. 12. ఎందుకు పెద్దల వలె బుద్ధియ్యవు

ఎందు బోదునయ్య రామయ్య

furnish instances of coincidence of both yati and *prāsa*.

Rhyme is the recurrence of similar final sounds. The rhyming syllables must be the same in antya *prāsa*.

The yati letters may be the same or may be corresponding assonant vowels or consonants or may be other letters recognised as in correspondence for the purpose of yati; Ex. *jna* and *na*; *va* and *ma*; and *cha* and *ta*.

A *prāsa* letter must be a consonant or a conjunct consonant. The yati may be a vowel or a consonant.

*Gana* is a prosodial foot. There are the eight main *ganas* and some *upa ganas*.

### Size of the angas

In a kriti or kirtana the *anupallavi* may be of the same length as the *pallavi*, or may be twice its size. *Ninnu vināga mari* (Pūrva kalyāni) is an instance of the former type and *Nenendu vetakudura* of the latter type. Very rarely it is half the length of the *pallavi* as in *Heccharikaga rāra* (Yadukula kāmboji).

The *charana* may be of the same length as the *anupallavi* (Ex. *Saroja dala netri*) or may be twice its length (Ex. *Sitāpate*).

*Note.*—*Sarojadalānetri* of Syama Sastri and *Entarāni tana* of Tyagaraja stand as examples of kritis wherein the *pallavi*, *anupallavi* and *charanas* are of equal length.

In a few instances the *charana* is four times the length of the *anupallavi* (Ex. *Kshira sāgara sayana* (Deva gāndhārī) and *Mohana Rāma* (Mohana)).

Madhyamakāla sāhityas present in the *anupallavi*, or *charana*, or both result in additional pādas to the respective angas. In simple kirtanas like *Syāmale Minākshi*, the *anupallavi*, inclusive of the madhyamakāla sāhitya, constitutes one pāda. There are also instances wherein the *anupallavi*, inclusive of the madhyamakāla sāhitya, may result in two or three pādas (*Sri Rāmam ravigulābdi somam* (Nārāyanagaula)). In the latter case, the odd number of the āvartas becomes even, if the madhyamakāla sāhitya is presumed to be sung in the prathama kāla.

There are instances of kritis like *Akshaya lingavibho* (Sankarābharana), wherein the *anupallavi* with the madhyamakāla sāhitya consists of four pādas.

Madhyamakāla sāhityas of two pādas exist in the *charanas* of kritis like *Sri Rāja Gopāla* (Saveri) and *Koniyādina nāpai* (Kāmboji).

Rarely, madhyamakāla sāhityas are present in the pallavi; ex. *Sri Sarasvati namostute* (Arabhi).

In some darus, the charanas are very long and quite out of proportion to the size of the anupallavi.

In a varna however, the charana consists of only one pāda. Since the charana is in the position of a pallavi, (the ethugada svaras being concluded with it), it is but right that it should be so. The two halves of the varna however retain their just proportion, if it is remembered that the latter half consists of the charana and the ethugada svaras.

### Rules

It has already been pointed out that tāla is to musical composition what metre is to poetry. The tāla therefore regulates the occurrence of yati and prāsa in musical compositions.

1. All the pādas in a musical composition should be of the same length.
2. There should be the correspondence of the yati syllables at the commencement of the āvartas; and in half-āvartas, where the āvartas are long; and at the commencement of alternate āvartas where the āvartas are short.
3. In all musical compositions having the divisions of pallavi, anupallavi and charana, there should be the correspondence of prāsa between the pallavi and the anupallavi.
4. When the pallavi consists of two āvartas the yati should occur at the commencement of each āvarta as in the following examples :—

Ex. 13. మనసా శ్రీ రామచంద్రుని

మరవకే ఏమరకే ॥

(Isamanohari)

Ex. 14. वातापि गणपतिं भजेहं  
वारणास्यं वरप्रदं श्री ॥ (Hamsadhvani)

Ex. 15. கனகஸபாபதி தரிசனம் ஒருநாள்  
கண்டால் கலி தீரும் ॥ (Dhanyāsi)

or, the *prāsa yati* may occur in the second *āvarta*, as in the following examples:—

Ex. 16. రామ భక్తి సామ్రాజ్య  
మే మానవుల క బైబో మనసా ॥  
(Suddha bangāla)

Ex. 17. ఎంత వేడుకొందు రాఘవ  
పంత మేలరా (Sarasvati manohari)

The same rules apply to *anupallavis* of two *āvartas*  
Examples:—

Ex. 18. వెలవేసి తీయగవచ్చునా  
వెత దీరునా మనసారగ  
(*Tolinenu*—Kokiladhvani)

Ex. 19. నగరాజ ధర నీదు పరివారులెల్ల  
ఒగిబోధన జేసే వారలు గారే అటులుండదురా నీ  
(*Nagumomu*—Ābheri)

5. In a *charana*, all the *pādas* should have the *prāsa*. Where a *pāda* consists of two *āvartas*, the second *āvarta* may have the *yati* correspondence, (Ex. *Nāda tanu manisam*) or the *prāsa yati*; (Ex. *Enta vedukondu*.)

If a *charana* consists of eight *pādas* or of even more *pādas* as in *darus*, the same rules will apply.

6. A madhyamakāla sāhitya present at the end of the anupallavi should have the anupallavi prāsa ; that at the end of the charana, the charana prāsa. On account of the quicker tempo of this section of the song, the yatis or prāsa yatis must occur at every half āvarta or half pāda as the case may be. [See *Tyāgarājāya namaste* (Begada), *Bālagopāla* (Bhairavi) and *Cheta[sri]* (Dvijāvanti)].

### 7. Svvara sāhitya.

The kritis of Syama Sastri, Subbaraya Sastri and Mysore Sadasiva Rao contain beautiful *svara sāhityas*. These technical appendages are on a special footing. They have an independent prāsa, in as much as they are intended for being sung at the end of the anupallavi and also at the end of every charana. The appropriateness in the singing of the dhātu or the solfa part of the svvara sāhitya at the end of the anupallavi and the mātu, or the sāhitya part at the end of the charana will now be apparent. If the sāhitya was straightway sung at the end of the anupallavi, the madhyamakāla tempo of this passage may give the impression of a madhyamakāla sāhitya to a listener who is not familiar with the piece. Finding the lack of prāsa correspondence with the anupallavi, he may even suddenly jump to the conclusion that it is a faulty composition. If the svvara part is sung at the end of the anupallavi, followed by the sāhitya part at the end of the charana, the listener will get the impression that this sāhitya, sung to the dhātu already made familiar to him at the end of the anupallavi, is *svara sāhitya*. Hence the wisdom of this procedure. Even in instrumental music, a player can, by judicious rendering, give the audience

this impression, if he is playing the *dhātu* part or the *mātu* part of the *svara sâhitya*.

8. The *pādas* of songs in *Rūpaka*, *Chāpu*, *Triputa*, *Jhampa* and *Ata talas* conform to the *yati prāsa* rules already mentioned. But since each *pāda* consists of a plural number of *āvartas*, the individual *āvartas* or more usually the alternate *āvartas* of a *pāda* should have either the *yati* or the *prāsa yati*; very rarely these may be absent.

The following examples illustrate these points:—

Ex. 20. ప్రజనజీవ న. రామ మృగుణధూప గ. రామ ||  
(Khamās)

Ex. 21. ఎంతని నే . . వర్ణింతునుశబ రీ భాగ్య ||  
(Mukhāri)

Ex. 22. వరములొసగి బ్రోచుటనీ కరుదాజగ దాధార ||  
(Kīravāni)

Ex. 23, కాలహరణ మేలరాహ రే . . సీతారామ ||  
(Suddha sāveri)

Thus in a sense it is somewhat difficult to compose songs in shorter *talas*. This accounts for the large number of songs in *Adi tala*.

9. If in a *charana*, the letter preceding the *prāsa* in the first *pāda* is long (*dīrgha*) then the letters preceding the *prāsa* in all the subsequent *pādas* should also be long. Likewise if in a *charana*, the letter preceding the *prāsa* in the first *pāda* is short (*hrasva*), then the letters preceding the *prāsa* in all the subsequent *pādas* should be short. This rule applies to the *pallavi* and *anupallavi* as well.

An exception to this rule is recognised in *Telugu* songs but not in *Tamil* songs. In cases where a *prāsa*

letter happens to be a conjunct consonant, a short letter preceding it may be presumed to be long if necessary. Thus the opening words of the pallavi and anupallavi: ூௌ and ூௌ of the Mukhāri piece: *Entani ne* are justifiable and perfectly correct. See also *Intanuchu* (*Gundakriya*), *Inta saukhya* (Kāpi) and *Pedda Devudani* (Mohana).

10. Where a song consists of only stanzas, as the *Levāram*, *Tiruvāchakam*, *Tiruppugazh* etc., the rules mentioned above for charanas hold good.

The yati and prāsa contribute a certain life, charm, regularity, symmetry and beauty to musical compositions. In Tyagaraja's compositions, we come across almost all the infinite varieties of yati and prāsa (Gaja prāsa, Simha prāsa etc.) that human genius can possibly conceive of.

Mere knowledge of the rules of prosody will never help a person to write good compositions unless he also possesses the *ear* and *feeling* for good music along with the composer's art and technique.

There are many instances of songs wherein words and even proper names have been literally dissected in order to conform to the rules of prosody. The word or name is so split up, that the second part is sung at the commencement of one pāda or āvarta and the first part at the end of the prior pāda or āvarta. This is a license that has been enjoyed by composers from ancient times. Such splitting up, in order to suit the exigencies of music, is found in the Sāma gāna also wherein words are permitted to be detached and grouped to suit the music.

Examples of songs wherein the prāsā rules necessitate the splitting up of words and names are given in the Table on the next page :—

Table XVII

Name of the song.	Raga.	Word or Name.	How split up.
Chakkani rāja	Kharaharapriya	Tyāgarājintane	Tyāgarā   jintane
Evarani	Devāmrita varshini	Mādhava	Mā   dhava
Guruleka	Gaurimanohari	Tatva bodhana	Tatva bo   dhana
Sringarinchukoni	Surati	Gopānganāmanulu	Go   pānganāmanulu
Nanupālampa	Mohana	Jivanamani	Ji   vanamani
Evaru manaku	Deva gāndhāri	Gokulamuna	Go   kulamuna
Sambho Mahādeva	Pantumarāli	Gopuravāsa	Go   puravāsa
Nivāda negāna	Sāranga	Rājivāksha	Rā   jivāksha
Chintaya mā	Bhairavi	Uttunga	U   ttunga
Pārvati ninu	Kalagada	Mārtānda	Mār   tānda



The Samkshepa Rāmāyana kirtana of Tyagaraja: *Vinayamunanu* (Saurāshtra) furnishes many other interesting examples.

Atīta graha becomes a necessity in cases of superfluity of sāhitya syllables. The surplus syllables are attached to the prior āvarta in order to conform to prāsa lakshana. The anupallavis of *Kshinamai tiruga* (Mukhāri), *Venu-gāna loluni* (Kedāragaula) and *Jutāmu rāre* (Kāpi) furnish good examples of atīta eduppus.

In a composition, the prāsa helps one to determine whether the section that follows the pallavi is an anupallavi or a charana. Thus in the piece: *Sri Sarasvati namostute*, the second section is only an anupallavi and not a charana. The Divyanāma kirtanas of Tyagaraja consist of only pallavi and charanas.

It will be of interest to note that in some *Divya nāma kirtanas* like *Sri Rāma Jayarāma* (Yadukulakāmbhoji), *Tavadāsoham* (Punnāga varāli), *Pāhi Rāma chandra Rāghava* (Yadukulakāmbhoji) and *Rāma Kodanda Rāma* (Bhairavi), the pallavi is not repeated at the conclusion of the charana; because, the music of each charana is complete by itself and the sāhitya of each charana again conveys a complete sense. But there are other *Divya nāma kirtanas* like *Sri Rāma Sri Rāma* (Sahāna), *Sri Raghuvara Dāsarathe* (Sankarābharana), *Vara lila gāna lola* (Sankarābharana) and *Pāhi Rāma chandra* (Sankarābharana) wherein a feeling of completeness arises only when the pallavi is sung at the end of each charana. The dhātu of the charana naturally leads on to the pallavi.

The rules of prosody again are of help in determining the correct readings in musical compositions. Thus in the charana of the Hamsadhvani piece: *Sri Raghukula*, the

opening phrase should be *vara ratna* which alone will agree with the later *parama bhaktulanu* and not *nava-ratna*. Likewise, at the end of the charana of the Hamsadhvani piece: *Vātāpi Ganapatim bhajeham, Harādi Guruguha* is the correct reading and not *anādi Guruguha*.

The yati and prāsa are guiding factors in dividing a composition into its component āvartas and also in determining its tala. Given the bare sāhitya of a musical composition, it is possible to divide it into its constituent angas, pādas and āvartas.

It may be useful to note that in pieces like: *Kalinarulaku* (Kuntalavarāli), *Dinamani vamsa* (Hrikāmbhoji) and *Nanu pālimpa* (Mohana) the composer left the latter half of the second avarta of the pallavis free for the singer to fill the gap with appropriate music of his own creation.

### Historical

The dvitīyākshara prāsa is a distinctive feature of the poetry and musical compositions in South Indian languages. It is definitely a South Indian concept. The *Tevāram* and the *Tiruvāchagam* are the earliest musical compositions wherein we come across this type of prāsa. We do not come across this variety of prāsa in the *Ashtapadis* of Jayadeva, although they contain antya prāsas. South Indian Sanskrit composers like Tirtha Narayanaswamy, Mārgadarsi Seshayyengar and Muthuswamy Dikshitar have introduced the dvitīyākshara prāsa in their compositions. But the authors of the *Sivāshtapadi* and *Rāmāshtapadi*, faithfully followed Jayadeva by avoiding the dvitīyākshara prāsa and introducing only the antya prāsa.

## CHAPTER XIII

### KACHCHERI DHARMA

Professional musicians in all countries follow a certain code of ethics. They have a two-fold responsibility. First, they owe a duty to the great art which they practise and second, to the society which constitutes their audience. They are the custodians of the art and hold aloft the banner of music. They will not do anything which will tend to lower the prestige of the divine art. Every performer strives to give his best to the audience. He follows implicitly the directions of the conductor. In this chapter, we shall see the duties, responsibilities and obligations of performers of Indian music.

A performer must be deeply conscious of his strength as well as his weakness. His performance must be such that the audience should leave the concert hall with the best of impressions. The memory of the concert should linger long in their minds. The concert should be finished just at the moment when the audience would have preferred to stay on for some longer and listen. He should not give the audience an opportunity to know his weak parts, like lack of *manodharma jñāna*, and weakness in *laya*.

A performer's motto ought to be "*maximum music with minimum effort and maximum musical effect with minimum strain.*" He should not feel exhausted or fatigued at the end of a concert. He must put on a smile and acknowledge in a graceful manner the encomiums showered upon him by the admiring crowd. Singing or playing ought to be free and effortless. Gestures which result

in physical strain should be scrupulously avoided. That does not mean that the performer should sing in a light hearted and easy-going manner. He should put on a pleasant appearance and never look serious. He should concentrate on the sruti and sing with earnestness and attention. He should sing in a calm and sustained manner and not hurry through the programme. He should please the listeners to the best of his ability.

A successful performer is one who goes to the concert well prepared with a definite plan of what he is going to sing or perform. He sings with attention and easily creates interest in his music. His first concern ought to be to create the requisite *musical atmosphere* (மேளம் கட்டுப்படி செய்தல்) and establish contact with the audience, without which any amount of music from him is bound to fall flat on the ears of the audience. Once the musical atmosphere is created and the contact established, he can sing with a more confident tone. Later he can make a survey of the audience and note in his mind those who genuinely appreciate and those who are left untouched by his music. An appreciative audience is like a catalytic agent and draws the best out of the musician. The sequence of the items, as also their varied and representative character, are important factors in contributing to the success of a concert.

Only pieces which one has thoroughly mastered and which one can render in an accurate, polished and artistic manner should be presented in a concert. Insufficiently practised pieces and half-learnt pieces should never be given. Nor should one give in a concert pieces which will not come off well through his voice. This principle adhered to is good both for the listener and the performer. The former

has the satisfaction of knowing that he gets the best for his money, and the latter that he will not risk his reputation unnecessarily. If a musician is asked to render pieces which he does not know, he must diplomatically evade attempting such pieces. Likewise he must attempt only ālāpanas of ragas with which he is thoroughly familiar. Kalpana svaras should likewise be attempted to familiar eduppus and pieces. Wherever possible and desirable, kalpana svaras should be preceded by a short niraval.

Not more than one piece in a raga should figure in a concert programme; provided however that the main raga for the day can be in the raga of the varna sung at the very commencement of the programme; provided also that the ragas already covered, can repeat in the ragamalika and the lighter pieces sung towards the latter part of the concert.

Ālāpanas preceding kritis should not be unduly long. They should be short, crisp and relevant and not extend beyond a duration of five minutes. The performer should reserve his talents for the main raga. Each and every kriti need not be preceded by an ālāpana of its raga. This will result in monotony. The performer can profitably preface pieces in rare and difficult ragas with short ālāpanas revealing the melodic beauty of the ragas. If printed programmes are not given to the audience beforehand, they struggle hard to identify such ragas and this guessing gives them a certain amount of intellectual pleasure.

One need not sing kalpana svaras for each and every piece. There are places in some kritis which definitely invite performers to sing kalpana svaras. Attempting kalpana svaras for two places in the same song in a concert should be avoided. Kalpana svaras attempted for rare

and difficult ragas and for intricate eduppus in kritis add liveliness to a concert. Such attempts reveal the musician's scholarship and his powers of technique and skill. As a rule, niraval and kalpana svaras should be avoided for longer pieces and chowka kāla kritis. Kalpana svaras in madhyamakāla are more pleasing than those in chowka kāla. A few one-āvarta or half-āvarta chowka kāla kalpana svaras can be sung only as a prelude to the subsequent madhyamakāla svaras. Kalpana svaras involving gati bhedas should be attempted *only once* during a concert and that too preferably in the domain of pallavi. If the chosen pallavi is in an intricate time-measure, it may be difficult to attempt gati bhedas therein. In such cases, if necessary, this type of music should be attempted for some convenient ādi tala piece earlier in the concert.

It is highly desirable that the items rendered by a musician in a concert should include selections from Telugu, Sanskrit, Tamil and Kannada composers. The pieces chosen should reflect as many styles as possible. Pieces in different tālas should also figure in the programme. It will be a dreadful monotony if all the pieces sung in the first half of a concert were in the ādi tala. *What change of raga is to the violinist, the change of tāla is to the drummer.* Pieces which are noted for their high musical value and pieces bristling with technical beauties should be preferred to other pieces. After the pallavi, it is desirable that a rāgamālika, padam, jāvali, tillāna, Ashtapadi, Tarangam, pieces of a lighter nature, a few national songs and songs of contemporary interest are sung. A couple of pieces in the madhyama sruti towards the close will provide a welcome variety.

It is essential that the principal performer should know the meanings of all the songs sung by him. It is only

then that he will be able to pronounce the s̄ahitya syllables correctly and sing with expression on his face.

In a concert, the principal performer has both his privileges and his responsibilities. He has the right to initiate the programme of his choice, but at the same time he is bound to guard the prestige of his accompanists. He must encourage them and make them look well in the eyes of the audience. He must not recall past grudges and take them unawares by inflicting difficult musical problems. Such things only serve to mar the beauty of a concert. If he sings rare ragas or attempts kalpana svaras for intricate eduppus, he must give reasonable opportunities to his accompanists to identify the raga or the eduppu as the case may be; otherwise he will be *abusing* his position as the principal performer. He must count the tala with an open hand and not in a half-concealed or misleading manner. If by his skilful performance, the violinist gets the approbation of the audience, the principal performer should not become jealous of him.

The principal performer should give at least two solo chances (தனி ஆவர்த்தம்) to the mridangam player during a concert. These solos should be given in different talas and in convenient tempos so that the drummer may exhibit *his* best. If there are secondary tala accompanists, they must be given at least one solo chance each during the first half of the concert. At the conclusion of the pal-lavi, these secondary tala accompanists may perform in conjunction with the mridangam player.

The accompanists must in their turn co-operate wholeheartedly with the principal performer and make the concert a thorough success. They should not lord over him

nor do anything which will affect his prestige. They should know his psychology and play accordingly. They should not unduly assert themselves.

The violinist must accompany the principal performer in the *real sense* of the term. He must not grumble at the low pitch of the singer's voice. On such occasions he would do well to put thicker guts and play. It is his duty to figure the music of the principal performer. While accompanying songs, he should emphasise the beauties of the dhātu by stylish and artistic play and by judicious emphasis on gamakas. He can play the music in the higher positions wherever possible and desirable. Unless absolutely confident, he should not risk playing in the higher positions. He should be familiar with his chief's repertoire and his style of rendering. He should not be hasty in deciphering ragas and eduppus. He should remember that rare ragas and intricate eduppus are traps set for him by his, (not very friendly) chief to catch him unawares and make him look small in the eyes of the critical audience. His responses to his chief's ālāpana and kalpana svaras should be such that they do not run counter to the train of musical thoughts of his chief. If one of his strings goes out of tune, he should tune it during the next moment of pause or at the conclusion of the item. If necessary, he can accompany the rest of the music on the other strings. A clever violinist is one who is able to draw the best from his chief and who gives his best in turn.

The mridangam player must bring to the concert an instrument whose pitch agrees with the voice of the singer or one which can easily be tuned to that pitch. He must faithfully stick to the tempo (kāla pramāna) of the music



and not stealthily accelerate or retard the speed and confound the principal performer. By intelligent play, he can emphasise the beauties underlying the rhythmical construction of the pieces rendered. The 'rhythmical harmony' provided by the tala instruments in an Indian concert is a thing wholly unknown in European music.

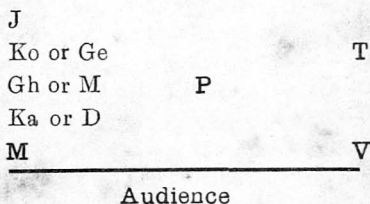
In instrumental concerts, the performers should strive to exhibit all their skill and attainments on their instruments and show also the possibilities of their instruments. The violinist in addition to playing in the higher positions on all the four strings, can play flageolot notes and double stops and also exhibit his mastery of bow technique. A vainika can exhibit his plectral technique, play double stops and triple stops and produce flageolot notes with effect. Simultaneous playing in two octaves is a possibility on stringed instruments like the vina, gotuvādyam and violin, and performers can practise at least portions of some pieces in this manner and render them to the delight of the audience.

### Concert Party

A South Indian Concert Party usually consists of a vocalist or the performer of a primary instrument like the vina, gotuvādyam or the flute, and a violinist and a drummer. In addition there is the person providing the drone accompaniment—Tambura sruti. Vainikas and gotuvādyam players dispense with the Tambura, since there is the provision for the drone accompaniment on their own instruments. The Tambura player sits at the back of the performer, towards his left. The violinist and the drummer sit in front towards the left and right of the performer respectively. If the mridangam player happens to be a left-handed person, then he exchanges his place with that of the violinist. Additional tala accompanists, if any are seated,

to the right of the principal performer. The mridangam player is always given the front position. But if one of the colleagues in rhythmical accompaniment happens to be a senior person, he is allowed to occupy the seat of the mridangam player, at the option of the chief. The principal performer, called the *Nāyaka* or the Leader, has the responsibility of getting through the concert to the satisfaction of the audience and his accompanists. The latter have a moral claim to be allowed reasonable opportunities to exhibit their talents.

The following diagram gives the seating plan of the members of a South Indian Concert Party. The essential members are shown in thick types.



*Reference :—*

P = Principal performer

V = Violinist

Gh = Ghatam player

M = Mridangam player

M = Moursing „

T = Tambura „

Ko = Reciter of jatis

Ka = Kanjira „

Ge = Gettuvādyam player

D = Dolak „

J = Jāla „

## CHAPTER XIV

### COMPARATIVE MUSIC

*Comparative Musicology* or *Vergleichende Musikwissenschaft* is that subject which examines and compares the different musical systems of the world, with a view to discover their points of resemblance and unlikeness and find connections, if any such exist. It enables us to understand the why and wherefore of facts relating to music and enlarges our musical conceptions. It helps us to visualise the different musical systems, their principles and styles and to contrast the beauties of one with those of the other. It enables us to see how the great composers have expressed their thoughts through the language of music. This is a new subject and its study is of great cultural and pedagogical value. A knowledge of this subject widens the musical outlook of the ordinary musician and makes him better appreciate and understand the ideals which form the basis of musical systems other than his own. To acquire a systematic knowledge of this fascinating subject one must study the musical material, past and present, of all the peoples of the world. There are the phonographic records of the music of most peoples and also books written by eminent scholars on the music of the different countries. The musical soul of each nation is revealed to us by a study of this subject.

There are two ways of studying this subject. One is to take the various musical systems and study each system analytically. The other method is to take specific topics like notation, tone-system, form, time, instruments, dance, graces, orchestration, literature on music, the place given to

music in the life of the nation and so on, etc. and study them as they obtain in the different countries. This latter method has been followed here. Within the available space of a chapter only the fringe of the subject can be touched.

### Harmony, Melody and Polyphony

Of the possible systems of music, harmony and melody are the ones extensively in vogue. European music since 1600 A. D. is built on harmony. Harmonical and melodic systems of music are constructed on entirely different principles and as such cannot be fused into one, without seriously compromising the individuality and dignity of each. In fact it is non-European music that has made humanity remember what *pure melody* is. It is a mistake on the part of the occidental to think that all music not based on harmony must be primitive and must be of interest only from the viewpoint of folklore. Likewise it is a mistake on the part of the oriental, to think that all European music is a medley of sounds, bordering upon noise. Harmony and Melody are both musical languages loved and jealously guarded by millions of people in their respective countries. Both have a scientific basis and have developed on sound principles. Harmony and Melody are two aspects of the world's great system of musical thought. They are two streams flowing into the river of music. They are two distinct forms of musical expression. The ragas have as much charm as harmony. The refinements of oriental music are in the melodic line; while those of occidental music are in harmony. In Europe, a melody is conceived harmonically; in other words, melodic ideas are pivoted there on relationships of harmony. But in oriental

countries, a melody is conceived with a melodic conscience independent of any thought of harmony. An Indian composer, while conceiving a melody, has the one object of presenting the *raga bhāva* in all its richness. If even the remotest idea of harmony was there, the progression of the *dhātu* would have been entirely different. Hence it is a hopeless task to harmonise Indian classical melodies like *Chetulāra* and *Bavanuta*. There is a belief amongst European musicians that any melody under the sun can be harmonised and performed to advantage. This is an erroneous notion. Such attempts result only in caricatures of the original melodies.

Harmonising varja raga pieces must result in the introduction of the varja svaras in the course of harmonisation and the result will be incongruous. Such lamentable harmonization has led to the disfiguration of melodies. The delicate shades and gamakas and the subtle quarter-tones become obliterated in the mass of harmony. In Indian music with its well-developed raga system, there is no place for homophony, polyphony or counterpoint.

Eschewing harmony, the builders of the Indian system of music have explored all the possibilities of a pure melodic system. Every phase of melody including rhythm has been developed here. There are things in Indian music which have never occurred to the Western mind. *The raga system is the gift of Indian music to the world's sangita.* It is so comprehensive and all-embracing that it is impossible for human genius in any part of the world to conceive of a scale which will not come within its ambit. For instance, the whole-tone scale brought to prominence by Debussy is the same as the janya raga: Gopriya (*s r g m d n ṣ̣ - ṣ̣ n d m g r s*) derived from the

62nd melakarta Rishabhapriya. Likewise the scale of Scriabine's *Prometheus* is the 64th mela raga Vāchaspati.

In *Polyphony* or the *Contrapuntal* style of music there is a melody called the *theme* or *subject* and to each note of this melody another note is added. The newly added notes constitute a distinct melody by themselves. Polyphonic music is thus a case of plural melodies, all performed simultaneously. The several melodies or *parts* are of equal importance. In *homophonic* music there is a principal melody with an accompaniment of chords. These accompanying parts may be many or few and are subordinate to the chief melody. Thus the enchanting principal melody sustains the melodic interest and the other parts form only an accompaniment as opposed to the polyphonic style, wherein all the parts are of equal importance. In the history of European music, homophony comes after polyphony. *Melody*, *Polyphony*, and *Harmony* are three types of music and in their fully developed forms show to us the heights to which the genius of man has soared in his quest for new forms of musical expression. There is no doubt that if Palestrina and Beethoven had been born in South India, they would have composed beautiful kritis. Likewise if Tyagaraja had been born in Europe, he would have composed symphonies and sonatas.

Melody in combination with harmony is the feature of homophonic music. Pure melody without any such combination is the feature of the monodic style of music. In the latter style of music, the accompanists follow the singer literally. But in homophonic music, the accompaniment is mostly perpendicular or vertical, although a few instruments strengthen the basic melody. Harmony is to a certain extent a restrictive factor in the free movement of melody.

It is the lot of few countries to claim to possess a scientific system of music. Most countries possess only folk music or at best music that has been only traditionally or instinctively developed.

Antiphony (alternate singing of solo and chorus) is found in India amongst palanquin-bearers and the Dholi carriers. There are many folk songs and religious songs rendered in the antiphonal style. Antiphony is found in the music of the African Negroes, the New Zealanders, the North American Indians, and the Egyptian boatmen on the Nile. Part-singing is found in the music of the South Sea tribes and Negroes.

European musicians brought up in the tradition of harmony feel that something is lacking, even when they hear the best oriental music. Likewise, the oriental, accustomed to melodic music feels the too-muchness in western harmony. To him, occidental music appears literally as a mass of sounds. However short a melody, the western ear is not satisfied unless somewhere about the middle of the piece, a modulation into another key is effected. But this is not permissible in Indian music as it will cut at the root of raga bhāva. The raga is a picture painted on the background of the sruti (drone) and any change of sruti during the course of the ālāpāna or composition will alter the tone-relationships and result in the destruction of the raga's melodic individuality. Hence the importance of the drone in Indian music and the significance of the statement that '*all music in India is performed to one key*'. The sruti is the centre of gravity in Indian music. There is no presumption in India that the ending note of a melody gives the clue to its key.

The phenomenon of brilliant compositions being the products of inspiration is a possibility only in a melodic system of music. Harmony and Polyphony imply conscious effort on the part of the composer and are more intellectual in character. In a melodic system of music, it is possible for an individual to sing or perform a piece of music which is complete in itself. But in harmony and polyphony, this can be done only by a group.

European musicians maintain that when they hear a melody played *pure, i.e.,* without any harmonical accompaniment, they automatically *hear* the underlying harmony. This is only a matter of training. When Indian musicians listen to beautiful European melodies, which were definitely intended for being harmonised, they do not get any such impression. They enjoy them only as simple melodies.

An oriental musician enjoys the music he performs and frequently is *lost* in it. But in Europe, with the exception of the solo performers, this enjoyment is denied to some extent, to the performer in an orchestra. He listens for the most time, only to the music of his neighbouring instruments and not the orchestral music as a whole. It is the conductor and the audience that enjoy the full music. This however cannot be helped.

The three unities of *sruti*, *laya* and *raga* are rigidly observed in Indian music. Therefore modulation into parallel or related keys, slackening or quickening of speed in the course of a composition and introduction of notes other than those admissible in the raga are not possible here. Accidentals come only in *bhāshāṅga* ragas and there, too, only in well recognised *sanchāras*. In the absence of part-singing, there was not the need for the classification



of voices into bass, tenor, alto and soprano. *Vocalises* and *Etudes* to suit the needs of Indian music have been composed by many scholars.

In an Indian concert, the drum is tuned to the tonic-note of the performer and is played in that pitch right through the concert. In modern European music, the pitch of the drum is allowed to be changed in the course of a movement and for this purpose, a few bars of rest is given to allow the player time to alter his screws. Occasionally for special effects, the drum is played muffled.

A close study of the history of world music reveals the fact that Indians are one of the earliest musical peoples on this globe. When the music of the other nations was just in the stage of a folk art, India had developed a high degree of musical culture. Even before the music of the ancient Assyrians, Egyptians and Hebrews had reached a high degree of perfection, India had evolved a magnificent system built on a firm scientific basis. That system exerted its influence on the music of Greater India, China, Japan, Persia, Arabia and Greece. India may be said to be the mother of music. Strabo says that Pythagoras derived his knowledge of music from India. Pythagoras travelled in India about 500 B C.

Music in India was a great art, worthy of pursuit by the greatest men and women. It was an object of reverential study and was never thought of as an amusement, nor even as a source of mere pleasure or a healthy pastime. It was one of the means for attaining salvation and an easy path for the realisation of God. It helped one to reach the blissful state of *samādhi*. Music was therefore given an honoured place in the scheme of life of the nation.

## Musicography

The two systems of musical writing in vogue in the world today are the staff notation and the tonic solfa notation. Both are used in European music. Indian music employs a notation based on the solfa letters; *sa ri ga ma pa dha ni*. This notation is more than two thousand years old and is seen in *Nāradi Siksha*, a work written before Bharata's *Nāṭya Sāstra*. The beginnings of notation in India can be traced to the vedic chants wherein the *udātta* and the *anudātta* svaras were represented by symbols. The European solfa system, dates from the time of Guido d' Arezzo (995—1050 A.D.) The varieties of a note in India were denoted by vowel changes in the name of the note. Thus the suddha rishabha, chatusruti rishabha and shatsruti rishabha were denoted as *ra*, *ri* and *ru*. This device is as old as the Kudimiyamalai Inscription (7th Cent. A.D.) in the Pudukottab State. The vowel change device was later adopted in Europe. Thus *Des*, *D* and *Dis* stand respectively for D flat, D and D sharp. The suffixes *is* and *isis* added to a note correspond to the terms: *tīvra tara* and *tīvra tama* of Indian music.

From the fifth to the twelfth centuries, the *neume notation*, consisting of dots, dashes and accent marks, was in vogue in Europe. This was followed by the *mensural notation* wherein the time-values of the notes were shown.

The ancient Tamils, used the vowels as solfa letters. Modern Arabic music has no solfa system. While solfaing the Rishabha svara, Hindusthani musicians sing *re*, instead of *ri*. This can be traced to foreign influence.

In the place of the key-signature of European music, we have in Indian musicography, the name of the raga

and tala given at the top of a composition. The mention of the raga name is sufficient to give the musician a flood of ideas relating to the nature and the manner of rendering the notes figuring in the composition. It tells him, which specific srutis are used, and which gamakas, including their range and extent, which notes are subject to *varek* and which not, and various other facts. This dispenses with the necessity of introducing a multitude of symbols in Indian notation.

The time-length of the laghu, drutam, anudrutam, and chaturbhāga correspond to the semi-breve, minim, crotchet, and quaver of European music. The speed of the composition and also the value of a unit-note are mentioned at the top of the piece.

Pitch in India is relative. When we talk of a madhya sthāyi shadja, it might mean a note of any frequency within certain limits. But in European music, the middle *C* means a note of a specific pitch. Thus when Indian melodies are written in staff notation, it does not mean that they should be sung or performed in the key in which they are written. They might be transposed and performed in any other convenient key. The Indian singer enjoys the freedom to select a pitch suited to his voice. He is *not obliged* to sing at a particular pitch as is the case in Europe. A European singer has to fit his voice to the music. The strained and screechy singing on the part of some sopranos is only due to this cause. The range in absolute pitch of the human voice differs in some countries on account of climatic conditions. It is doubtful, if even with adequate training, Indian women could reach the high notes negotiated by sopranos in Europe.

Ideas of absolute pitch and absolute time are not foreign to Indian music. Absolute pitch is as old as the *Silappadikāram* (2nd cent A. D.) The *tala dasa prānas* not only prove that the concept of absolute time has been in existence from ancient times, but also that the Indian scholars explored all the phases of the domain of rhythm.

### Scale

Indian music is based on a scale of 22 srutis *i.e.*, ten notes in addition to the universal 12 divisions of the octave. The frequencies of these notes are given in Chapter IV. Sometimes, a few notes, other than the 22 are also used. A nation which uses in its art music 22 demi-semi-tones in an octave can certainly lay claim to the highest degree of musical culture.

The artificial scale of equal temperament became a necessity in Europe on account of the fact that music was written for being played from any of the twelve keys. Indian music is played in one key and therefore uses only the scale of just intonation.

European music centres round the major scale, the harmonic minor scale and the melodic minor scale. Other countries use a few scales. But Indian music uses hundreds of hepta-tonic, hexa-tonic and penta tonic scales. More than three thousand ragas with distinct lakshanas and names exist. Chromatic scales are not recognised in Indian music. Augmented intervals are considered difficult to sing in Europe; but in South India, the very first scale (*Māyāmā'avagaula*) taught to beginners in music has two augmented intervals: the first between *ri* and *ga*; and the second between *dha* and *ni*. Modern European music cannot conceive of a scale without a leading

note. This is not the case in Indian music. *Māyāmāla-vagaula* is seen in Rumanian music, *Kalyāni* is seen in Hungarian music and *Simhendramadhyama* in the music of the Gipsies. Neither in the music of Cambodia nor in the music of the other Asiatic countries do we come across quarter-tones. Recently attempts have been made to write quarter-tone music in Europe. In the year 1932, I saw in Prague, a specially constructed piano with provision for playing quarter-tones. It had 24 keys to an octave and it was a pleasant experience for an Indian musician to hear in far-off Europe such delicate notes as the *Kuranji nishāda* and the *Gaula rishabha*.

The pentatonic scale *Mohana* is found in China, Japan, Java, and the Pacific Islands; in Scotch music, Celtic folk music, African music and in the music of the American Indians. The universal occurrence of this scale is to be traced to the fact that the notes figuring in it are the earliest notes to figure in the *Cycle of Fifths* (*shadja-panchama bhāva*): *s*, *p*, *r* (*panchama's panchama*), *d* (*rishabha's panchama*), *g* (*dhaivata's panchama*). In some countries the pentatonic scale *suddha sāveri* is found. This is easily accounted for, if we remember that the *suddha sāveri* is the scale arrived at by taking the *panchama* of *Mohana* as the tonic note.

Derivation of scales by the process of modal shift of tonic was known to Indians more than two thousand years ago. The *murchhanās* as well as the *pālai-s* (பாலிசு) were derived by this process. The ancient Greeks derived their modes by the process of modal shift of tonic. Approximate equivalents to the ancient Greek and Ecclesiastical modes are given in the Table on the next page:—

Table XVIII

Greek	Ecclesiastical (Authentic)	European	Arabic	Indian
Lydic	Ionian	Mode from C	Meia mode	Dhira Sankarābharana (செம்பாலை)
Phrygian	Dorian	Mode from D	Irak mode	Kharaharapriya (படுமலைப்பாலை)
Doric	Phrygian	Mode from E	Mezmoum mode	Hanumatodi (செவ்வழிப்பாலை)
Hypo-lydic	Lydian	Mode from F	Edzeil       ,,	Mecha kalyāni (அரும்பாலை)
Hypo-Phrygian	Mixo-lydian	Mode from G	Djorka       ,,	Harikāmbhoji (கோடிப்பாலை)
Hypo-doric	Aeolian	Mode from A	L'Sain       ,,	Natabhairavi (விளரிப்பாலை)
(Mixolydic)	(Locrian)	Mode from B	Saika       ,,	மேற்செம்பாலை

The Cycle of fifths and fourths (*samvāda dvaya*) helped the ancient scholars of India to get a knowledge of the 22 srutis. This knowledge helped them to derive new scales by the re-allocation or distribution of the srutis of one note to another.

### Form

Folk music is found in all countries. Primitive music is met with amongst aborigines, savages and hill tribes. Their songs are confined to three notes and in a few instances extends over a compass of four notes. It is only civilised nations that possess some kind of art music. Even amongst them it is only nations with an advanced degree of musical culture that possess forms belonging to the realms of art music, sacred music, dance music and operas. In Europe and India we have every form of music represented. There are the vocal forms, instrumental forms and dance forms in profusion. Since polyphony did not develop in India, there are no forms here corresponding to the canons and fugues. Something analogous to double counterpoint exists in the *viloma krama chitta svaras* which adorn kritis like *Kamalāmbām bhajare* (Kalyāṇi). The *Sangatis* or variations appear like embroidery work around the themes.

The glory of European music is its highly developed instrumental music. Musical intelligence, inventive genius and creative talent collaborated together during the last three centuries and has given to the world, not only the most brilliant musical instruments, which for their compass and tone-colour are the pride of humanity, but have also given instrumental forms, characterised by beauty and variety. European Instrumental music extends over a compass of  $7\frac{1}{2}$  octaves. The bulk of the world's absolute music is the contribution of European composers. The excessive

importance attached to the dictum—‘that music was to be used only to *sing* the glories of God’ has prevented to some extent the development of pure instrumental forms in India. A composer who writes for a particular instrument or for an orchestra in Europe must possess a sound knowledge of the compass, technique and possibilities of that instrument or the instruments used in the orchestra. But in India, since the same piece that is written for the voice is reproduced on instruments, the composer need not possess such a qualification. All that is required is, that the piece must have raga bhāva. The instrumentalist however studies the piece well and reproduces the same in a highly embellished manner. The conductor of an Indian orchestra likewise studies the piece, gives his own interpretation to it and makes the orchestra perform the piece.

The world’s longest musical compositions are found in South India. The sixth symphony (Pastoral symphony) of Beethoven takes about 40 minutes to perform ; the third symphony (Eroica symphony), takes about 52 minutes and the ninth symphony (the great Choral symphony) about an hour and twenty minutes to perform. But the 72 Melaragamalika of Maha Vaidyanatha Iyer and the \*108 Raga Tala Malika of Ramaswamy Dikshitar take more than two hours to perform. Thus these compositions are longer than the longest symphonies of Beethoven.

In India also we have long operas like Wagner’s *Meister singer*. Arunachala Kavirayar’s *Rāma nāṭakam* and Tyagaraja’s *Prahlāda Bhakti Vijayam* are instances.

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\* In this composition, the first seven sections are in the suladi sapta talas and the remaining sections are in the 108 talas. New talas like *Lali*, *Lakshana*, *Srimatkirti*, *Akshara*, *Kala* and *Sri* figure here. This is the only composition of its kind.



Gopāla Krishna Bhārati wrote many songs (விருதி கீர்த்தனைகள்) in praise of Natarāja. Later when he sketched his opera: *Nandanār Charitram*, he introduced some of these songs at appropriate places. These songs could easily be distinguished from the songs pertaining to the opera proper, since the latter do not bear the composer's signature. There is a parallel instance in the overture adorning Beethoven's brilliant opera *Fidelio*.

The world's most prolific composers lived in India. If we imagine a non-stop performance of all the compositions of a composer like Beethoven, all of them will be finished within some days. But such a continuous performance of the entire works of prolific composers like Purandara Das, Kshetragna or Tyagaraja will occupy some months. In this connection it may be useful to remember that the *Mahā Bhārata* is the world's longest epic poem.

### Manodharma Sangita

Compared with polyphony and harmony, a system of music based upon pure melody affords greater scope for extemporization. The raga system of Indian music affords full scope for free, spontaneous improvisation. It enables a musician to display his creative talents. There is a plan and method in extemporization in India. It is not aimless and vague. When an ālāpana or a svara improvisation is made, even the average listener is able to recognise the raga. Extemporization is not the exclusive privilege of the vocalist, flutist, vainika and the violinist. The system is so well developed in India that even a mridangam player has an opportunity of displaying his creative talents. The dancer also is able to extemporise within the limits of her art. In no other

system of music has such an extensive field for extemporization been developed. Improvisation exists in the music of Persia and Arabia. The Gipsy musicians in Europe do a lot of improvisation. It is not unusual for a senior violinist in a Gipsy orchestra to embark upon improvisation for about 15 or 20 minutes in the midst of a piece and then revert back to the original theme, when he would again be joined by the orchestra. It is *manodharma sangita* that has kept *alive* Indian music all these centuries. In *manodharma sangita* India has reached the ideal of absolute or abstract music.

### Gamakas

*Gamakas* in some form or other are present in all systems of music. But the more advanced systems, like those of India and Europe, possess *gamakas* in profusion. These *gamakas* reveal the genius of the two systems. *Vibrato* which gives life and warmth to European music is taken by *varek* in India. *Meend* is largely used in Hindusthāni music. The scheme of harmony prevents the use of *janta svaras*, *dātu svaras* and *pratyāhata gamakas* to any large extent in Western music.

### Dance

Every country in the world possesses some kind of dance or other. In some countries the art has been well developed. In others it remains only in the stage of a folk art and pastime.

The art of dance has been developed to a high degree of perfection in India. It is one of the brightest gems adorning the Crown of Indian culture. There is a profusion of literature on the subject dating back to two thousand years. There are sacred dances and secular dances. Dances to please the Deities are mentioned by

Bharata in his *Nāṭya sāstra*. The distinctive feature of South Indian dance is *Abhinaya*. There is plenty of scope for creative dance here. Individual dances and group dances also exist. Pleasure dances, ball-room dances, cafe dances and cabaret dances, which are common in Europe, are practically unknown in India. Dance was never regarded in India as an amusement. It was recognised as one of the means for attaining salvation.

Dance dramas (*Nāṭya nāṭakas*) traditionally performed for more than a century in places like Merattur, Sūlamangalam and Uttukkādu in Tanjore District were staged as an offering to the Deity. These dance-dramas were enacted in front of the Deity and the whole function, which lasted for some days, had the dignity and character of a religious festival. The audience, too, witnessed the series of dramas with great devotion and fervour.

Dance paved the way for the development of the art of drumming in India. Drumming is an art peculiar to this country and is not found in other countries in a similar form. In an Indian concert, except for the duration of the non-rhythmical music like raga ālāpāna, the mridangam player provides an appropriate cross-rhythmical accompaniment for the whole music. Solo displays on the mridangam and other percussion instruments are interesting.

Dance-dramas on secular themes corresponding to the *Puppenfee* and *Russknacker* of European music also exist in India. Just as in Kathakali, the dancers in Japan and Tibet wear masks.

Instances of concert pieces adapted for the purpose of dance are found in both European and Indian Music.

## Music and Astronomy

The ancient and mediaeval authors connected music with astronomy. We find this in the *Silappadikāram* and in the music of China. *Al-Kindi* has done so in his cosmological treatise (MS. Berlin Ahlwardt 5503).

## Time

Measure was introduced in European music only about the year 1150. But compositions set to regular time-measures have been in vogue in India for more than two thousand years. In the place of the few time-measures used in modern European music, more than three hundred tālas exist in Indian music. Russian folk songs have the 5 and 7 time rhythms *i.e.*, *Khanda chāpu* and *Misra chāpu* talas. Complex time-measures are absent in the music of Cambodia and other countries. The existence of accented and unaccented syllables gave rise to the division of music into bars in Europe. There is no accent in the Indian languages. The āvartas are long or short according to the tāla of the piece. The padagarbhas indicate points of stress in musical compositions. The raga system and the tala system of India are perfect and finished systems in the sense that no future genius can possibly conceive of a raga or a tala which will not come within the ambit of the existing systems. The rhythmic wealth of Indian music is a thing unknown in other countries.

## Musical Instruments

Percussion instruments, wind instruments of the simpler type and crude stringed instruments are seen in all countries. Improved and complex types of these instruments are seen only in musically advanced countries. The large ivory trumpets of the Negroes of West Africa are

simply the hollowed tusks of elephants. European musical instruments of the wind-group are complex in character. They are provided with keys and are tuned to notes of fixed pitch. These facilitate modulation into different keys. The ring key-system and the mechanical production of the semi-tones on the Boehm flute serve the purpose very well. The adoption of fixed pitch in tuning stringed instruments in Europe became a necessity on account of orchestration.

Indian musical instruments are comparatively less complex in character. The wind instruments are not provided with keys. The fingers are in direct contact with the finger-holes and this enables the production of gamakas and quarter-tones with accuracy. Instruments are not tuned to notes of absolute pitch. Stringed instruments are tuned to fifths and fourths and not to fifths only as in European music. With the exception of the key-board type, all other types of instruments have developed in India. Since it was not possible to play the gamakas and the delicate srutis accurately on a key-board instrument, this type did not evolve in India. In some stringed instruments of the bowed class like the Sārangi, the strings are stopped on the sides by the finger-nails, of the left-hand and not by the finger-tips as in the violin.

The harp has been used in all the countries of the Orient from remote times. It is the *Jyā* ज्या of the Vedas, the *Yāzh* (יאזח) of the ancient Tamils, the *Chang* of the Persians, the *Junk* of the Arabs and the *Saun* of the Burmese. It is possible that the word *Jyā* gave rise to these other names. In all these harps, as also in the Assyrian harp, the front pillar was absent. It is this aspect of the instrument that distinguishes it from the modern

European harp. The *Jyā* later on developed into the *Vāna* and the *Svaramandala*. It is possible that the Indian *svaramandala* or the *satatantri vīna* paved the way for the development of the *Spinnet*, *Harpsichord*, and the *Piano* of Europe.

There is a belief that the *Kurma vīna* of ancient tradition is the modern violin. It may be noticed, that when the violin is placed upside down, it resembles roughly a tortoise with the head projecting forwards.

Luxuriously made instruments and lavishly decorated instruments have been in use in many countries. The Bible (Numbers, Chap. X) tells us that Moses used trumpets of solid silver. The Burmese saun was set with costly gems. The *yāzh* was inlaid with precious stones. Silver horns and drums of bell metal are even now used by Indian Rajahs. Silver plated and gilded *nāgasvarams*, and *vinas* lavishly decorated with ivory work are used in South India. The gourds of Indian *tamburas* are lacquered and richly ornamented. Musical instruments are painted with beautiful colours, without affecting their tone. Concert instruments of India have a fine appearance.

The Tibetan Lhamas use ten-foot bronze and copper trumpets. They are carried horizontally, a small boy bearing the large head in front. Gongs are used in China, Japan and Java. Nose-flutes are used in India, Africa and the Pacific Islands.

Musical instruments have figured in coins from early times. Such coins are of importance in constructing the musical history of a nation. Hebrew coins with the lyre on them belonging to the 2nd century, B.C. are preserved

in the British Museum. There are coins of the Emperor Samudragupta wherein he is shown as playing the harp.

The heads of a few musical instruments in India are carved into the shape of some animals and birds. For instance, the vina's head-piece is carved into the face of a yāli (a weird animal); the kinnari's head-piece is carved into a kite; and the svaragat's head-piece into a parrot. The taus's body resembles that of a peacock. Snake-shaped horns with a serpent's or tiger's head as an orifice are used in Nepal.

In the history of world music, we find musical concepts, terms and instruments of one country being adopted by another. The adopting country introduces a slight change or modification with the result that the thing adopted acquires a local colour in course of time. *Tabl*, the ordinary drum of the Arabs was borrowed by Europe and became known as *Tabel*, *Taber* and *Tabor*. The *Kinnari* of India is the *Kinnor* referred to in the Bible. The *Satatantri* (vāna) of India became the *Santerin* of Persia and the *Psaltery* of the Bible. The *Naqqāra* of the Persians has become the *nagāra* of South India. The *Atambar* (Arab drum) can be traced to the *Adambara* of the Vedas. The *Tambura* of India has its parallel in the *Tambura* of the Arabs. The Egyptian Tamburas are provided with frets. The xylophone, an instrument of South-east Asia, was borrowed by the African natives. They enriched the dry sound of the wooden pieces by the addition of gourds. The *Bhumi Dundubhi* (earthen drum) is used by the African Negroes on festive occasions.

The idea behind the terms *dur* and *mol* (sharps and flats) may be traced to the *Komal* and *Tivra* of Indian music. The words *Talaus* (Latin = counting) and *Tallis*

(Greek = reckoning) may be traced to the word *tāla*. Muqams, Shobashs and Goshahs of Persian music owe their origin to the Rāga-Rāgini-Putra system of North India. The 84 Modes of the Persians can be traced to the 84 Jātis of Bharata.

### Classification.

The genius of India had a passion for classification. Classification was pursued to include even minute details. The reader is already familiar with the detailed classification of svaras, srutis, ragas, talas and musical forms. In the sphere of musical instruments, India was the first to propound the scientific system of classification into: (1) *Tata तत* (Chordophones); (2) *Sushira सुषिर* (Aerophones); (3) *Avanaddha अवनद्ध* (Membranophones) and (4) *Ghana घन* (Autophones). Tones emanating from the human voice, plectral instruments, wind instruments, drums and cymbals have been respectively called *Sārīraja शरीरज*, *Nakhaja नखज*, *Vāyuja वायुज*, *Charmaja चर्मज* and *Lohaja लोहज*. According to their utility, musical instruments were classified into: (1) *Sushkam शुष्कं* when played solo; (2) *Gītānugam गीतानुगम* (accompaniment to vocal music); (3) *Nrittānugam नृत्तानुगम* (accompaniment to dance) and (4) *Dvayānugam द्वयानुगम* (accompaniment to both).

### Literature on Music

Regular works on music in Tamil and Sanskrit have existed in India centuries before the Christian Era. The *Vedas*, *Upanishads*, *Rāmāyana*, *Mahā Bhārata*, *Tolkāppiam* and the *Silappadikāram* are instances of non-sangita literature which contain references to music. There is a profusion of musical works written in Sanskrit during the last two thousand years. All these works and references



help us to trace the evolution of the art in India from early times. Few nations in the world can claim to possess such a rich storehouse of literature on the science and art of music during the Ancient period.

The philosopher Al-Kindī (790-874 A.D.) was one of the earliest writers to write on music in Arabic.

The Amarāvati and Sānchi sculptures, sculptures in old cave temples and ancient Buddhist topes and stupas in India, the bas-reliefs and the sculptured monuments of S. W. Asia and the Egyptian hieroglyphics reveal to us the musical instruments and also the performers that constituted the dance and concert parties of those times. India has the unique honour of possessing the earliest example of *noted music* on rock—the Kudimiyāmalai Inscription in the Pudukottah State. (7th cent A.D.)

The Raga paintings and Ragini pictures have immortalised the moods (emotions or *rasas*) of the ragas.

### Effect of Climate on Music

A comparative study of the musical maps of different countries reveals interesting details. Places noted for the manufacture of musical instruments were those wherein the required materials were easily available. Places which were centrally situated and which had a favourable climate became seats of music. If Tanjore has become the brightest spot on the map of South Indian Music, it is not to a small extent due to its central situation, the ever flowing Cauvery, the healthy climate, the bounteous rainfall, wealth of agricultural produce, facilities for leading a care-free life and the opportunities that existed for quiet thinking and for the best musical minds to come into contact with each other and exchange thoughts. In Europe too, it is only the towns in Central Europe that became impor-

tant seats of music. Desert regions, mountainous tracts and barren places subject to extremes of heat and cold and places situated in corners or extremities of a country never became seats of music. The climatic conditions also influence the character of a country's music to some extent. The flute made of bamboo was the earliest musical instrument to be used in India. The bamboo grows only in tropical countries. The flute helped the ancient musicians to discover the analytical nature of janta svaras and gamakas. It also helped them to find out that new scales could be arrived at by the process of modal shift of tonic. The flute is a *monophonous* instrument and akin to the human voice in many respects.

It is not possible for women in tropical countries to reach the high notes of the sopranos of Europe. Such notes will be equal to the tāra sthāyi kākali nishāda and the ati tāra sthāyi shadja of the normal women's voices in India. In tropical countries, the voice breaks sooner and the adult voice sets in earlier than in colder countries.

People in colder climates are fond of listening to orchestral music of a heavy character. In Malabar, people are fond of listening to the chenda (drum). In the Tamil land people prefer to listen to the nāgasvaram and tavil only from a distance. The shrines in South India which proudly claim to have musical stone-pillars are those in whose neighbouring regions resonant stones occur in plenty.

### Honouring Musicians

Patronage for music and musicians has existed in an abundant measure in all civilised countries. Kings and Emperors had in their courts eminent musicians and composers. Tan Sen was the *Musician Royal* to Em-

peror Akbar. Shah Jehan rewarded a musician with a fee of the musician's weight in gold. Illustrious composers were honoured with *Kanakābhishekam* in South India. Inams of land were granted to musicians. Some were honoured with the present of palanquins, umbrellas, silken clothes and bracelets set with costly gems. Many States in India had (and some of them still continue to have) illustrious musicians as Samasthāna vidvāns and they were paid decent salaries.

Titles suggestive of their proficiency in music or in particular branches of sangita were either bestowed on musicians or were enjoyed by them. For instance,

Sārngadeva	had the title	<i>Nissanka.</i>
Yoga Narendra	„	<i>Sangitārnavā</i>
Malla		<i>Pāraga.</i>
Tāllapakam	„	{ <i>Sankirtanāchārya</i> & <i>Drāvīda gāna</i> <i>sārva bhauma.</i>
Annayārya		
Purandara Das	„	{ <i>Karnāṭaka Sangita</i> <i>Pitā Mahā.</i>
Pachimirian Adiyappiah.	„	
		<i>Tana varna Mārga</i> <i>darsi.</i>
Kallinātha, King	{	„
Kumbhakarna		
& Rāmāmātya.		
Virabhadrayya & Seshayyengar.	}	<i>Abhinava</i> <i>Bharatāchārya.</i>
	„	<i>Mārgadarsi.</i>
Vina Kuppayyar	„	<i>Gāna Chakravarti.</i>
Meruswamy	„	<i>Kokila Kanta</i> (Cukcoo-voiced).
<i>M a h ā</i> Vaidyanātha Iyer.	„	<i>Mahā</i> (Great).

*Shatkāla* Narasayya and *Shatkāla* Govinda Mārār were musicians who could sing in six degrees of speed. *Ghanam* Krishnayyar and *Ghanam* Sinayya were skilled in the *Ghanam* style of singing. *Pallavi* Gopalayyar, *Pallavi* Seshayyar and others, whose names had the prefix *Pallavi*, were skilled in singing *Pallavis*. *Rattai Pallavi* Sivarāmayyar was an adept in singing *Rattai Pallavis*.

Europe has honoured her musicians in a manner worthy of emulation by other countries. Vienna, like Tanjore, had a great attraction for musicians and many of them, including Mozart, Gluck, Beethoven and Brahms, lived there. Vienna has monuments for Mozart, Beethoven, Brahms and Strauss. It has a park named after Haydn. It has statues of Brahms and Haydn. Bauernfeld House, where Beethoven wrote his famous *Eroica* Symphony, dedicated to Napoleon is still preserved. Streets are named after composers (Wagner Strasse in Cologne). Medallions in memory of master composers were minted and sold at fancy prices. Instruments used by composers and notebooks containing their music are carefully preserved in museums. Wagner's manuscripts are kept in the Bavarian National Museum. There is the Franz Liszt and Goldmark Museum attached to the Musical Conservatory in Budapest. The houses in which the great composers lived are preserved as national monuments. Colleges of music have been established to perpetuate their memory (Mozarteum in Salzburg). Visitors to Budapest are shown the room in which Johann Strauss wrote his famous *Danubian Walzes*.

England and other western countries have conferred knighthoods and other noble titles on their musicians.

Professors of music there are given salaries equal to those given to professors of science and literature, and performers earn princely incomes through concerts, the top men getting £ 1000 for a concert.

### Musical Stamps

Many countries in the west have shown their love and regard for their leading composers by commemorating them on postage stamps. Germany, Austria, Hungary, Poland, Czecho-Slovakia, Italy, France, Holland, Belgium and Finland have honoured thus their outstanding composers. Musical instruments and scenes from classical operas have also been depicted on stamps. Brazil has issued a stamp, containing actual music.

Each country has its own method of expressing approbation of the performances of musicians. In England, Germany, and many other countries the audience clap their hands vehemently and the conductor on behalf of the orchestra gracefully acknowledges the approbation. In Holland, people raise their right-hand and express appreciation in silence. In Northern India, people exclaim, Acha! Bahut Acha!! and Wah-Wah! In South India people exclaim Besh பேஷ்! sabāsh சபாஷ்! nalladu நல்லது! and so on. Egyptians applaud with frequent exclamations of 'Allah!' and 'God approve thee!' 'God preserve thy voice!' and similar expressions.

Europe has some magnificent musical institutions and achievements to her credit. *Gewandhaus* in Leipzig is a world-famous concert hall. The special construction of this rectangular hall is responsible for its acoustic richness. It is a pleasure for any musician to perform there. With the inspiring statue of Mendelssohn in front, the hall has 1600 seats, besides an extensive platform to

accommodate an orchestra of 80 to 100 performers. The magnificent organ in Passau in Bavaria has 16,000 tubes and is the biggest organ in the world. The luxuriously built, lavishly furnished and artistically decorated opera houses and concert halls are a standing monument to the æsthetic sense of the occidentals. The huge revolving stages with concentric rings are marvels of engineering skill. The grandeur of European orchestras and the capacity of the performers to perform, if necessary, (on account of sore-throat or indisposition of the sopranos) the entire music before them a semitone lower, are something astounding. The Musical Conservatories and Royal Academies of music are housed in colossal buildings with sound-proof chambers. Many conservatories and opera houses have dance schools attached to them. Every conservatory has its proud tradition and eminent composers have served on the staff of those institutions. Mendelssohn founded the Leipzig conservatory and Schumann was on its staff. Festivals in honour of composers are celebrated on magnificent scales. Clock-tower music and Military music are provided freely to the people periodically in some towns. There are special colleges for training people in histrionics. The *Phonogramm Archivs* in Berlin is a marvellous institution, wherein cylinders containing the music of almost all the countries in the world are kept. New music is enthusiastically received and rising composers are duly encouraged. In bigger towns, concerts and operas are performed every day. All these testify to the high level of musical culture amongst the occidentals.

Full use has been made of the orchestra in Europe. Latterly composers have resorted to the orchestra as the medium for the expression of their musical thoughts.

Johann Strauss (1825-1899) is rightly called the *master of orchestral colour*.

Of the Asiatic countries, Japan is foremost in adopting European music. Traditional Japanese music has no harmony. But at present, one can hear in Japan symphony orchestras composed of Japanese artists, which play classics, romantics and moderns. There are choral societies which perform the cantatas of Bach and the oratorios of Handel. Theatres with revolving stages have been built in Japan.

### Music of Greater India

The music of Greater India is an interesting branch of study. As yet no serious research has been carried on in this subject. Evidences are not wanting to show that during the mediaeval period, the music of the countries to the east of India had been influenced by Indian Music. There is no modulation in Javanese Music. Their music is pentatonic and there are no ragas. The yāzh and the rabob are found in modified forms there. There are many sculptures in Borabudur and other places containing images playing the yāzh. The shadow plays (Wyang) of Java performed to the accompaniment of the Gamelin orchestra are very interesting.

### Utility of Music

Music has been utilised for purposes other than entertainment from early times. The spirited music of the military band roused the martial fervour of the armies on the battle-field and encouraged them to heroic acts. The band's rhythmical music helped the soldiers on their march. The flute music of the shepherd helped him to gather the grazing flock during the twilight time. The snake-charmer with his magudi music tempted the snakes to come

out of their holes in the ground. The curative value of music was known and practised in India from early times. There was a manuscript called *Rāga chikitsa* which dealt with this subject. It is wellknown how the ailment of one of Emperor Akbar's queens was diagnosed and cured by Haridas Swamy (Guru of Tan Sen) by playing a particular raga on his vina. Ibn Sina, the Arabic writer, has dealt with the question of the effect of music on disease. Healing by the power of music was a science in the Orphic school.

In the mediaeval period, the *Naubat* was performed during stated hours of the day and night to enable the people to know the time. During the time of the marauding plunderers, huge conical drums (bheri) were mounted on village look-outs. At the sight of the robbers at a distance, the man keeping watch from the look-out beat the drum violently. The slumbering people of the village were roused and they got ready to attack the robbers with their sticks, knives and other implements. The Africans have a drum language, through which they are able to send messages to people miles away. Horns are used for signals in India. Even now it is the custom for Indian villagers to welcome officials by blowing their horns. People were informed before-hand of the approach of the temple procession by a person who went round the māda streets beating the drum (ஒத்தைக் கொட்டு). It was the custom of Tirumalai Nāik, the famous ruler of Madura, to take food only after the worship of the Goddess at Srivilliputtur was over. Since telephone and telegraph facilities did not exist in those days, he established a number of *Nagāra Manta-pas* (drum stations), between Srivilliputtur and Madura, a distance of about fifty miles by the shortest route. As soon as the pūja was over, the drum nearest the temple



was beaten; the sound of this was caught by the man at the next drum-station and he beat his drum and the process was repeated at every subsequent drum-station. Tirumalai Nāik got the information in his palace at Madura in about 5 minutes.

National songs and anthems serve to rouse the patriotic fervour of the people. Enterprising candidates get hold of famous musicians to sing national songs during election meetings. Ingenious advertisers get hold of sweet-voiced hawkers to sing songs commending their wares.

### Composers

Music is a holy thing in India. Her composers and master musicians have been saints and poets. They were *mātu-dhātu kāras*. i.e., who wrote the music and the libretto. Cases of one person supplying the music and the other the libretto are rare here. Worldliness and eccentricity are conspicuous by their absence amongst Indian composers. The poetic conception of love and the ideal of spiritualised love have been immortalised by many Indian composers who wrote on the Nāyaka-Nāyaki theme.

### General

Long before acoustics came to be studied in Europe, many of its laws and phenomena were known to Indian musicians. Harmonics or upper partials were known as *svayambhu* (self-produced) *svaras*. The fractional lengths at which the musical notes were produced on a stretched string are mentioned by Ahobala in his *Sangita Pārijāta*. The fifth harmonic was appropriately called the *Antara gāndhāra*. That the octaves progress in the ratio of 1, 2, 4, 8 etc. was known to the ancient scholars. Notes which harmonised with each other when sounded simultaneously

were known as samvādi svaras. Notes which produced a discordant effect when sounded together were known as vivādi svaras; these notes were mutually vivādi to one another. Notes which produced an effect which was neither concordant nor discordant were known as anuvādi svaras. These musical facts are mentioned in some of the oldest works on music in India. The terms இணை, கிணை, பகை, நட்பு, in early Tamil musical literature are also worthy of note in this connection.

The downward mūrchanās of ancient music have their parallel in the descending Greek modes and the pālai-s given in the avarohana krama in ancient Tamil music.

On account of the fewness of performers figuring in concerts in countries wherein the melodic system of music prevails, the problem of creating the musical atmosphere (மேளம் கட்டுதல்) at the very commencement of the concert assumes special importance. For this purpose, varnas and pieces in ragas of tivra svaras (Nāta, Kedāram, Hamsadhvani and Kalyāni) are sung. In Nātakas it is customary to recite the invocatory slokas in Nāta. In religious discourses, bhajanas and Kālakshepams Nāta is sung at the commencement. The Nāgasvaram player in a temple procession starts with Nāta. In dance dramas, the Konangi (divine clown) makes his appearance on the stage to the accompaniment of high-pitched music in tivra svaras.

The construction of *nritha mantapas* (dance halls) and the *sangita mahāls* (music halls) in ancient temples and palaces prove beyond doubt that the ancient architects had a correct knowledge of the acoustic requirements of such halls. These halls provided an adequate seating accom-

modation. The music was heard perfectly in every portion of the hall, and defects like echoes and excessive reverberation were absent. Musicians felt a pleasure in performing in such halls. They did not experience any strain.

Stories of the marvellous effects of the music of Divine minstrels are current in the mythological traditions of all countries. India is also full of them. Stories of Orpheus in Greek legends and of Wainamoinen in Finnish legends are well known.

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## CHAPTER XV

### RAGA LAKSHANA SANGRAHA

#### 1. Gaula गौळ

Janya raga, derived from the 15th melakarta:  
Māyāmālavagaula.

Arohana :— s r m p n ṣ

Avarohana :— ṣ n p m r g m r s

Besides Shadja and Panchama, the notes taken are :—  
Suddha Rishabha, Antara Gāndhāra, Suddha Madhyama  
and Kākali Nishāda.

Audava—Vakra shādava raga. Avarohana alone vakra;  
dhaivata varja raga. Upānga raga ; *ri*, *ma* and *ni* are the  
raga chhāyā svaras. Eka sruti rishabha ( $\frac{2}{3}\frac{5}{4}\frac{6}{3}$ ) is very  
characteristic of this raga ; this note is referred to as *Gaula*  
*Rishabha*. The second of the traditional ghana panchaka  
ragas. The melodic picture of the raga is seen at its best  
in tāna or madhyamakāla ālāpana. Can be sung at all  
times. An ancient raga and is mentioned in the *Sangita*  
*Ratnākara*, *Sangita Makaranda* and *Sangita Samaya*  
*Sāra*. A raga with a limited scope, i.e. it will not lend  
itself for elaborate ālāpana.

*Sanchāra* :—

S S ṣ n ṣ r r S — ṣ n ṣ r r S ṣ n P — ṃ ṃ P  
ṃ ṃ P — ṃ ṃ p̣ p̣ Ṇ ṇ p̣ — ṃ p̣ ṇ ṣ r r S — ṣ r M, m —  
R g m r r S — ṣ r m P p — m p n P p — m p ṇ ṣ r r S —

$\dot{s} n P n s \ddot{r} \dot{s} - \dot{R} \dot{R} \dot{R} - s \ddot{r} \dot{M} , \dot{m} - \dot{R} \dot{g} \dot{m} \ddot{r} \dot{S} -$   
 $\ddot{s} n P , p - N , p - N , s \ddot{r} \dot{S} - \dot{s} n P m g m - R g m r S s$   
 $- \dot{R} \dot{s} n P m g m - r g m R S s n P - m p n s$   
 $r S \parallel$

### Some prominent compositions

Gita	<i>Sakala sura</i>	Rūpaka	—
Varna	<i>Chelimi kori</i>	Adi	Vina Kuppayyar.
„	<i>Palumāru nāto</i>	Ata	„
<i>Pancha- ratnam</i>	<i>Dudukugala</i>	Adi	Tyāgarāja.
Kriti	<i>Sri Mahā Ganapati</i>	Tripata	Muthuswamy Dikshitar.
„	<i>Tyāgarāja</i>	Adi	„
„	<i>Ela ni daya</i>	„	Tiruvottiyur Tyagayyar.

### 2. Gaulipantu गौलिपन्तु

Janya raga; derived from the 15th melakarta :  
Māyāmālava gaula.

Arohana :—  $s r m p n s$

Avarohana :—  $s n d p m p d m g r s$

Besides Shadja and Panchama the notes taken are :—  
Suddha Rishabha, Antara Gāndhāra, Suddha Madhyama,  
Suddha Dhaivata and Kākali Nishāda.

Audava-Vakra sampūrna raga; avarohana alone  
vakra; *ga* and *dha* are varja in the arohana. Upānga  
raga; *ri*, *ma* and *ni* are the raga chhāyā svaras; *ga* and

*dha* are not *nyāsa svaras*. The slightly sharpened *Suddha Madhyama* ( $\frac{27}{16}$ ) is very characteristic of this raga; but nowhere is the *Prati Madhyama* used. *Gamaka varika rakti raga*. *Karunā rasa*; can be sung at all times.

*Pallavi Seshayyar* is reputed to have sung this raga for three hours.

This raga is referred to as *Gaudipantu* in earlier works.

*Sanchāra* :—

˘ s r M̃ — p Ñ ṣ ṛ Ṣ — ṣ n P ṇ ṣ ṛ Ṣ — Ṣ n d P —  
m p d m g r — m p ṇ ṣ ṛ Ṣ — ṣ n d P — p d n d p m g r  
g r ṣ ṇ — P̣ ṇ ṣ Ṛ — s r M̃ P — m d m g r S ||

### Some prominent compositions

Kriti	<i>Tera tiyaga</i>	Adi	Tyāgarāja.
„	<i>Mosaboku</i>	„	„
<i>Prahlāda</i>	<i>Enta pāpi</i>	Chāpu	„
<i>Bhakti</i>			
<i>Vijayam</i>			
Kriti	<i>Krishnānanda</i>	Misra Eka	Muthuswamy Dikshitar.
„	<i>Tarunamidamma</i>	Chāpu	Syama Sastri.
<i>Rāma</i>	<i>Parabrahma</i>	„	Arunāchala
<i>Nātakam</i>			Kavirāyar.
Padam	<i>E riti vegintune</i>	Tripata	Kshetragna.

### 3, Sriranjani श्रीरञ्जनि

*Janya raga*; derived from the 22nd *melakarta*:  
*Kharaharapriya*.

Arohana :— s r g m d n s

Avarohana :— ṡ n d m g r s

The notes taken by this raga are :—Shadja, Chatusruti Rishabha, Sādhārana Gāndhāra, Suddha Madhyama, Chatrusruti Dhaivata and Kaisiki Nishāda.

Shādava—Shādava raga. Panchama varja raga; symmetrical raga. Upānga raga; *ri*, *ga*, *dha* and *ni* are the rāga chhāyā svaras; *r g m r g s*, *m r g r s* and *m n d n ṡ* are visesha sanchāras; gamaka varika rakti raga. Pratyāhata gamaka lends colour to this raga. Can be sung at all times. Corresponds to the *Bāgesri* of Hindusthāni music.

*Sanchāra* :—

S , r g M , m—M m g r g M , m — g m d n d m g r  
— g m d n Ṡ , ṡ — n ṡ ġ ṙ Ṡ — n ṡ ġ ṙ ġ ṁ ġ ṙ Ṡ —  
Ṡ ṡ n d m g r—g m d n Ṡ , n d m g r—g m n n d m g r—  
n d d m m g g r r Ṡ — n n d m d n Ṡ ||

### Some prominent compositions

Kriti	Mārubalka	Adi	Tyāgarāja.
„	<i>Bhuvini dāsudane</i>	„	„
„	<i>Brochevārevare</i>	„	„
„	<i>Sariyevvare</i>	„	„
„	<i>Sogasuga mridanga</i>	Rūpaka	„
„	<i>Sridundurge</i>	Eka tala	Muthuswamy
		(Khanda jāti)	Dikshitar.

Kṛiti *Brochutaku*

Adi

Karur

Dakshina-  
murti Sastri.

## 4. Ritigaula रीतिगौळ

Janya raga; derived from the 22nd melakarta: Kharaharapriya.

Arohana :— s g r g m n d m n n ṣ

Avarohana :— ṣ n d m g m p m g r s

Besides Shadja and Panchama, the notes taken are :— Chatusruti Rishabha, Sādhārana Gāndhāra, Suddha Madhama, Chatusruti Dhaivata, and Kaisiki Nishāda. Suddha Dhaivata comes rarely.

Ubhaya-vakra, Shādava-sampūrṇa raga. Ghana raga; belongs to the dvitiya ghana panchaka group; *ga*, *ma* and *ni* are the jiva svaras; *n p n n S* is more appropriate

than *n p n n Ṣ*; *m n n Ṣ* is a rakti prayoga. *P d p m g r s* is a viśeṣha prayoga. Bhāshāṅga raga, the only foreign note being the Suddha Dhaivata, which comes in the phrases *S d d m* and *P d d m*. There are many classical compositions which do not use the Suddha Dhaivata. Gamaka varika raga. Can be sung at all times. The notes of the ancient shadja grāma figure in this raga.

*History.* In the older nomenclature for the 72 melas this raga figures as the 20th mela under the name: *Nāri ritigaula*. This unfortunately led some scholars to assert that suddha dhaivata should come in this raga. But the Chatusruti Dhaivata (correctly speaking, Trisruti Dhaivata ( $\frac{5}{8}$ )) is used extensively in this raga in all the authoritative lakshyas that we possess.



*Sanchāra :—*

s g r g m — n n d m g r — g m p P m g r S — s n n

P n n S — n s g r g m — n n d m g r — g m n n Ṣ, ṣ — n ṣ

g̣ ṛ Ṣ — n ṣ g̣ ṛ g̣ ṃ g̣ ṛ Ṣ — Ṣ n d m g r — g m n n Ṣ —  
n d m g r — g m P n d m g r — g m p P m g r S — g g  
r S — s n n P n n S — n s g r g m n n d m g r S ||

### Some prominent compositions

Varna	<i>Vanajāksha</i>	Ata	Vina Kuppayyar
Kriti	<i>Rāga ratna</i>	Rūpaka	Tyāgarāja.
„	<i>Dvaitamu</i>	Adi	„
„	<i>Badalika dira</i>	„	„
„	<i>Chera rāva</i>	„	„
„	<i>Bāle bārendu</i>	„	„
<i>Prahlāda</i>	} <i>Nannu vidichi</i>	Chāpu	„
<i>Bhakti</i>			
<i>Vijayam</i>			
Kriti	<i>Sri Nilotpala</i>	Rūpaka	Muthuswami Dikshitar.
„	<i>Janani ninu vina</i>	Chāpu	Subbarāya Sāstri.
„	<i>Parākela bāla</i>	Rūpaka	Anayya.
„	<i>Sadguru Swāmi</i>	Adi	Ramnad Srinivasa Iyengar.

### 5. Darbar दर्बार

Janya raga ; derived from the 22nd melakarta :  
Kharaharapriya.

Arohana :— s r m p ḍ ṇ s

Avarohana :— ṣ Ṇ ḍ p m r G̣ G̣ r s

Besides Shadja and Panchama, the notes taken by this raga are :—Chatusruti Rishabha, Sādhārana Gāndhāra, Suddha Madhyama, Chatusruti Dhaivata and Kaisiki Nishāda.

Shādava--Vakra sampūrna raga. Varjā raga; Gāndhāra is absent in the ārohana. In the avarohana, the dirgha nishāda and the dirgha gāndhāra bring out the raga svarūpa well. Upānga raga; *ga* and *ni* are the raga chhāyā svaras. Scholarly raga. A raga closely allied to this is Nāyaki. Gamaka varika rakti raga. Can be sung at all times.

Darbār Sitaramayya was a specialist in this raga.

*Sanchāra* :—

s r m p Ḍ ṇ ṇ ḍ p — m p ḍ ṇ ḍ p — m p ḍ p m r  
 g̣ g̣ R s — r p m r g̣ g̣ r s — r m p Ḍ , — ṛ ṣ ṇ ṣ ḍ p —  
 m p ḍ ṇ ṣ — m p Ḍ ṇ ṇ ḍ p — m p ḍ p m r g̣ g̣ r s —  
 P m p ḍ ṇ ṣ , ṣ — p ḍ ṇ ṣ Ṛ , ṛ — p̣ ṃ ṛ g̣ ṛ ṣ — ṇ ṣ ṛ ṣ  
 ṇ ṇ ḍ p — m p ḍ ṇ ṣ — m p Ḍ ṇ ṇ ḍ p — m p ḍ p  
 m r g̣ g̣ R S ||

### Some prominent compositions

Varna	<i>Chala mela</i>	Adi	Tiruvottiyur Tyāgayyar.
Kriti	<i>Yochana</i>	„	Tyāgarāja.
„	<i>Mundu venaka</i>	„	„
„	<i>Nārada guru</i>	„	„

Kriti	<i>Endundi</i>	Chāpu	Tyāgarājā
Divya	<i>Rāmābhi Rāma</i>	Chāpu	„
	<i>nāma kirtana</i>		
Kriti	<i>Mina nayana</i>	Rūpaka	Subbarāya Sastri.
„	<i>Enta vedina</i>	Chāpu	Chengalvarāya Sāstri.
„	<i>Inimelāyilum</i>	Tripata	Ramaswāmy Sivan.

### 6. Kanada कानड

Janya raga; derived from the 22nd melakarta :  
Kharaharapriya.

Arohana :— s r g m p m D n ṣ

Avarohana :— ṣ n ṣ D p m p  $\widetilde{G}$  m r s

Besides Shadja and Panchama, the notes taken are :—  
Chatusruti Rishabha, Sādhārana Gāndhāra, Suddha  
Madhyama, Chatusruti Dhaivata and Kaisiki Nishāda.

Ubhaya-vakra sampūrna raga. Kampita Gāndhāra  
in the avarohana; *ga*, *dha* and *ni* are the raga chhāyā  
svaras. The dirgha *dha* in the ārohana and the dirgha  
*ga* in the avarohana reveal the melodic beauty of the raga.  
Gamaka varika raga. Desya raga. The peculiar manipu-  
lation of the gāndhāra in the phrase *m p  $\widetilde{G}$*  and the  
dhaivata in the phrase *n ṣ D* is very characteristic of this  
raga.

*ṣ n P* and *d n P* are visesha sanchāras; Karunā rasa.  
Can be sung at all times.

*Sanchara*:—

n s R R — s R p  $\widetilde{G}$ , m r s — n s  $\widetilde{G}$ , r s — n s r s n s

$\dot{D} \dot{n} s - \dot{n} s R R - s R p \widetilde{G} - g m D D - m d n \dot{s} \dot{r} \dot{S}$   
 $\dot{s} n P - m p d N P m p \widetilde{G} - g m D D - m D n \dot{s} \dot{R} \dot{R} -$   
 $\dot{s} \dot{R} p \widetilde{G} - g m \dot{R} \dot{S} - n \dot{s} \dot{G} \dot{r} \dot{s} - n \dot{s} \dot{r} \dot{s} n \dot{s} D d n P -$   
 $m p d N P - m p m p \widetilde{G} m r s - n \dot{s} \widetilde{G} r s - n \dot{s} r s n \dot{s}$   
 $D n S \parallel$

### Some prominent compositions

Varna	<i>Ninne kori</i>	Adi	Tiruvottiyur Tyāgayyar,
„	<i>Nera nammiti</i>	Ata	Ramnad Srinivasa Iyengar.
Kriti	<i>Sri Nārada</i>	Rūpaka	Tyāgarāja
„	<i>Sukhiyevaro</i>	Adi	„
„	<i>Jagadabhi Rāma</i>	„	Vina Kuppier.
„	<i>Kamalāmba nā</i>	„	Karur Dakshi- namurti Sāstri.
Tillāna	<i>Gauri nāyaka</i>	Simha- nandana	Mahā Vaidya- natha Iyer.

### 7. Begada बेगडा

Janya raga; derived from the 29th melakarta :  
Dhira Sankarābharana.

Arohana :—  $s g r g m p d p s$

Avarohana :—  $s \widetilde{N} d p \widetilde{M} g r s$

Besides Shadja and Panchama, the notes taken are :—  
Chatusruti Rishabha, Antara Gāndhāra, Suddha Madh-  
yama, Chatusruti Dhaivata and Kākali Nishāda.

Vākra-shādava Sampūrṇa raga. Arohana alone vakra. Upāṅga raga. In such combinations as  $\dot{d} p \bar{M}$  the madhyama svara is slightly sharpened ( $\frac{27}{20}$ ) and sung. Likewise in combinations like  $P, \dot{d} N \dot{d} p$  &  $\dot{r} \bar{N} \dot{d} p$  the Nishāda is slightly flattened and sung. These two notes which establish the melodic individuality of the raga have been aptly termed the *Begada Madhyama* and *Begada Nishāda* respectively. The correct Suddha Madhyama ( $\frac{4}{3}$ ) and the correct Kākali Nishāda ( $\frac{15}{8}$ ) are also used in many places. Gamaka varika rakṭi raga; *ma*, *dha* and *ni* are the rāga chhāya svaras. Can be sung at all times; but afternoon is an appropriate time for singing this raga. The phrase  $\dot{s} n \dot{d} n \dot{S}$  comes in as a rare ranjaka prayoga; *ri* and *dha* are not nyāsa svaras.

This is not an ancient raga. This raga is also called *Byāgadai*. Some Tamil works call this *Vegadai* வேகடை.

Patnam Subrahmanya Ayyar was an adept in singing this raga; for this reason he was called Begada Subrahmanya Ayyar.

*Sanchāra*:—

$g m p \dot{d} P - \bar{N} \dot{d} P - m \dot{d} p m g g m r - g m$   
 $\dot{d} p m p R S - g m p \dot{d} p \dot{S} \dot{s} - \dot{S} n \dot{d} p - \dot{s} n r \dot{S} -$   
 $\dot{g} r \dot{G} m \dot{R} \dot{s} - \bar{N} \dot{d} p - m p \dot{d} p \dot{S} - p \dot{d} p r \bar{N} \dot{d} p -$   
 $g m p \dot{d} P, \dot{d} \bar{N} \dot{d} p - m \dot{d} p m g g m r - g m \dot{d} p$   
 $m p R S - \bar{n} n \dot{d} p m p g r S - S n \dot{d} P - s n g r G -$   
 $g m p \dot{d} p r \bar{N} \dot{d} p - m p R S \parallel$

## Some prominent compositions

Varna	<i>Inta chalamu</i>	Adi	Vina Kuppayyar.
Kriti	<i>Nāadopāsana</i>	,,	Tyāgārāja.
,,	<i>Ni padapankaja</i>	,,	,,
,,	<i>Lokāvanachatura</i>	,,	,,
,,	<i>Tanavāri tanamu</i>	,,	,,
,,	<i>Sundari</i>	Rūpaka	,,
,,	<i>Tyāgarājāya</i>	,,	Muthuswāmy Dikshitar.
,,	<i>Sankari nivani</i>	,,	Subbarāya Sāstri.
,,	<i>Inta parākela</i>	,,	Vina Kuppayyar.
,,	<i>Abhimāna</i>	Adi	Patnam Subrah- manya Iyer.
,,	<i>Manasuna nera</i>	Rūpaka	,,
,,	<i>Anudinamunu</i>	,,	Ramnad Sriniva- sa Iyengar.
Jāvali	<i>Idi niku</i>	Chāpu	Dharmapuri Subbarāyar.

## 8. Nilambari नीलाम्बरी

Janya raga ; derived from the 29th melakarta :  
Dhira Sankarābharana.

Arohana :— s r g m p d p n ṣ̣

Avarohana :— ṣ̣ n p m g r g s

Besides Shadja and Panchama, the svaras taken are:—  
Chatusruti Rishabha, Antara Gāndhāra, Suddha Madh-  
yama, Chatusruti Dhaivata, Kākali Nishāda and Kaisiki  
Nishāda.

Sampūrṇa-Shāḍava raga; Ubhaya vakra raga. Bhāshāṅga raga; the only foreign note is the Kaisiki Nishāda occurring in the combinations:  $p n d n$  and  $P d n d n P$ . Gamaka varika rakṭi raga;  $ri$ ,  $ma$  and  $ni$  are the raga chhāyā svaras;  $ma$  and  $pa$  are good nyāsa svaras; but  $ri$  and  $dha$  are not nyāsas. In the standard lakshyas, there is no sanchāra below the mandra sthāyi nishāda. The characteristic shake of the madhyama in this raga is noteworthy. Lullabies are sung in this raga. Lalis (marriage songs) are sung in this raga.

Karunā rasa. A raga which shines more by chowka kāla prayogas. A raga with a limited scope for ālāpana. Night time is the most appropriate for singing this raga. Capable of inducing sleep in persons suffering from sleeplessness.

An old raga and is mentioned by Nārada in his *Sangita Makaranda*.

*Sanchāra* :—

$s \dot{n} s m m g g r - G, m p m \tilde{M} - g m P P - p n n$

$\dot{S} \dot{s} n - p n \dot{s} n P p \tilde{m} - g m P - \overline{P d n d n \dot{S}} - \dot{s} n P$   
 $p \tilde{M} - g m P d n d n P m g - g m p m m g - g m g r$   
 $\ddot{r} r P - \overline{P d p m g - r g m p d p m g} - \overline{r g m p m g r g}$   
 $S; - s n N S; \parallel$

### Some Prominent Compositions

Kṛiti	Mātāḍavemi	Adi	Tyāgaraja.
„	Nike daya rāka	Chapu	„
Prahlāda	} <i>Ennaga mana-</i> <i>suku</i>	Adi	„
Bhakti			
Vijayam			

Utsava	}	<i>Uyyāla luka</i>	Jhampa	Tyāgarāja.
Sampra-dayam				
Kriti		<i>Amba Nilāya-dākshi</i>	Adi	Muthuswami Dikshitar.
„		<i>Sringāra lahari</i>	„	Lingaraj Urs.
„		<i>Amba nilām-bari</i>	„	Ponnayya.
„		<i>Kāna kannāyiram</i>	„	Anayya.

### 9. Simhendramadhyamam सिंहेन्द्रमध्यमम्

57th melakarta raga; 3rd mela in the 10th (*Disi*) chakra. The second syllable in the raga name is a conjunct consonant; herein the letter *m* has to be taken for the purpose of the *katapayādi* formula. This is the prati madhyama raga of Kiravāni.

Arohana :— s r g m p ḍ ṇ s

Avarohana :— ṣ ṇ ḍ p m g r s

Besides Shadja and Panchama the notes taken are :— Chatusruti Rishabha, Sādhārana Gāndhāra, Prati Madhyama, Suddha Dhaivata and Kākali Nishāda.

Sampūrna raga. Sarva svara gamaka varika rakti raga; *ga*, *ma* and *ni* are the jiva svaras. The pratyāhata gamaka lends colour to this raga. Can be sung at all times. One of the prominent prati madhyama ragas. Affords scope for elaborate ālāpana.

This raga is found in the music of the Hungarians and the Gypsies.

In the older nomenclature for the 72 melas, the 57th mela is known as *Sumadyuti*. This raga is only a janya



raga belonging to this mela and has the following ārohana and avarohana :—

$s\ r\ g\ m\ p\ \dot{d}\ n\ \dot{d}\ s - s\ n\ d\ p\ m\ g\ r\ s.$

*Sanchāra* —

$n\ \dot{s}\ n\ d\ p\ m - p\ d\ n\ d\ n\ n\ \dot{S}, \dot{s} - p\ d\ n\ \dot{s}\ \dot{R}\ \dot{R} -$   
 $\dot{s}\ r\ g\ r\ \dot{S}\ s\ n - \dot{s}\ r\ g\ r\ \dot{P}\ p\ m\ g\ g\ r\ r\ \dot{S}\ s\ n - \dot{S}, \dot{s}\ n\ d$   
 $p\ m - p\ d\ n\ \dot{s}\ \dot{R}\ s\ n\ d\ p\ m - P, m\ p\ d\ p\ m - p\ m\ p\ d$   
 $p\ m\ g\ g\ r\ r - P\ p\ m\ g\ g\ r\ r\ S - s\ n\ s\ r\ g\ r\ S - s\ n\ d$   
 $p\ m - p\ d\ n\ d\ n\ n\ S \parallel$

### Some prominent compositions

Kriti	<i>Nidu charanamule</i>	Chāpu	—
„	<i>Natajana</i>	Rūpaka	—
„	<i>Mammu brochū</i>	Adi	Vina Kuppayyar.
„	<i>Ihaparam</i>	Adi	Pāpanāsam Sivan-

## QUESTIONS

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**Raga :—**

1. Write a short essay on Rāga ālāpana paddhati. Give in notation a brief ālāpana of any one of the prasiddha ragas.

2. Mention in detail the procedure for developing a Pallavi.

3. Give in notation an Adi tala pallavi with the sangatis, if any. Write kalpana svaras of duration of half, one, two, four and eight āvartas for this pallavi.

4. Describe the procedure that you will adopt for developing *Niraval* and *Kalpana svaras*. Illustrate with examples.

5. Mention the systems of raga classification that were in vogue prior to the advent of the Janaka-Janya system.

6. Mention some ragas whose names suggest a provincial origin.

7. Give the lakshana in detail of the two following ragas :—

Sriranjani, Simhendramadhyama.

8. Comment on the nature of the following svaras :—

(i) *Ri* in Gaula      (ii) *Ma* in Gaulipantu

(iii) *Ma* and *Ni* in Begada.

9. Give two examples for each of the following :—

- (i) Ubhaya vakra raga
- (ii) Kampita gāndhāra raga
- (iii) Uttara mela raga met with in the music of Eastern Europe
- (iv) Shādava raga that cannot repeat in another melakarta
- (v) A raga wherein the dhaivata, though present, is not a nyāsa svāra.
- (vi) A raga with a dirgha svāra in its ārohana or avarohana.

**Srutis :—**

10. What are the several views regarding the number of srutis used in Indian music? Is a scale based on 22 srutis sufficient for playing all the ragas of South Indian music?

11. Mention the various nomenclatures for the 22 srutis.

12. (a) Give the commonly accepted values for the 22 srutis.

(b) Assuming  $sa = 240$  vibrations per second, give the frequencies of the following notes :—

*Ri* of Sriraga                      *Dha* of Kāmbhoji

*Ga* of Devagāndhāri      *Ni* of Kuranji.

*Ma* of Gaulipantu

13. Give the frequencies of the notes figuring in the following scales :—

- (i) Sa-grama                      (ii) Pythagorean scale
- (iii) Suddha mela of Ancient Tamil music

14. State at what fractional lengths of a stretched string, the following notes are heard :—

- i. Tāra Shadja, ii. Panchama, iii. Suddha Madhyama  
iv. Antara Gāndhāra v. Chatusruti Rishabha

15. Explain the following :—

Modal shift of tonic, Equal temperament,  
Alankāra, Kūta tāna, Uddhishta.

16. What ragas will result if :—

- (i) Kiravāni's *Pa* is taken as the key-note.  
(ii) Mohana's *Ri* „  
(iii) Suddha Sāveri's *Dha* „  
(iv) Nāgasvarāvali's *Ma* „

17. Point out some technical terms which have a dual meaning.

**Tala :—**

18. Enumerate the *dasa prānas* and explain in detail any five of them.

19. (a) What is the longest tāla in the 108-Group?

(b) Point out the names of those tālas of the 108-Group, which also happen to be names of well-known ragas.

20. Give an example each for the following :—

- (a) Sankīrna tala, (b) Navasandhi tala  
(c) Mārga tala.

**Musical form :—**

21. Enumerate the forms figuring in Sacred music, Dance music and Operas. Write short notes on any five of them.

22. Mention some long compositions in South Indian music.

23. By what names are the following compositions known in ancient works :—

(i) Rāga mālīka                      (ii) Tāla mālīka

(iii) Rāga tāla mālīka.

24. Mention some obsolete forms.

25. Define the terms :—

Prāsa yati, Padagarbham

Aruprāsa, Antya prāsa, Pāda.

26. Explain the statement that in a musical composition, it is the tāla that regulates the occurrence of yati and prāsa.

27. Give in notation some tunes that have specific names.

28. How will you determine, whether the section that follows the Pallavi in a composition, is Anupallavi or Charana.

29. Given the bare sāhitya of a musical composition, is it possible to mark it off into its constituent angas and āvartas ?

30. Compare and contrast the styles of Tyāgarāja, Muthuswāmy Dikshitar and Syāma Sāstri.

**General :—**

31. Write a short essay on contemporary music pointing out :—

(a) the aspects in which it is an improvement over the past,

(b) the aspects in which it is a decline from the past.

32. What are the lines along which future South Indian music can develop?

33. Discuss how far European music and Hindusthāni music have influenced the growth and development of South Indian music.

34. Write a short essay on Kachcheri Dharma.

35. Give a model programme for a concert of four hours duration.

36. Write an essay on the advisability or otherwise of having extra tala accompanists in a concert.

37. Draw a diagram giving the seating plan of the members of a South Indian Concert Party.

38. Mention the titles associated with prominent musicians and lakshanakāras of the past.

39. What are the advantages of the study of Comparative Music?

40. Give instances of Indian musical concepts, terms and instruments that have been adopted by other countries.

41. Write an essay on the various uses to which music has been put to, from early times.

42. Why is harmonium unsuitable for playing high class Karnātic music?

43. Suppose you are given a piece of printed music, without any indication as to its raga; will it be possible for you to establish its raga? If so, how?

# 44. SING THE FOLLOWING PASSAGE:

Ritigaula raga—Adi tala

4	○	○
P , n d m g r — g m p n d m g r	g m p P m g r	S n p n n S
P , n d m g r — g m n n d m g r	g m p N n d m	n n s n S ;
S , g r s — n s g g r s — n s g r	g g m G g r s	g r s n — s g r g
M , g r s — S , n d m — g r g m	P , n d m g r	S n n S ;

# 45. GUESS THE RAGA OF THE FOLLOWING PASSAGE:

S , s n d p m — g m g n D p m	p d n D P m	p d n s r r S
d n s r g r g m — g g r r S s n	d n r n d m g r	n D r S ;

# APPENDIX

## STANDARD PALLAVIS

### 1. Dhanyasi—Tripura వరద శ్రీ వేంకటేశ

3	○	○	3	○	○
, , , g̃ M	P , ñ ñ d P		p ñ Ṣ Ṣ	p n Ṣ ṣ n d p	
va ra	da . . . sri		ven . . ka	te . . . . .	
m p m					
sa . .					

### 2. Bhairavi—Tripura నటరాజ దయానిధి

, , , ñ S	R ;	r s R	g̃ g̃ R S	ñ s r s	p m m g
. . . Na ta	ra .	. . ja	da . . ya	ni . . .	dhe . . .
g r s					
. . .					

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### 3. Surati—Tripura చెలియ పెట్టిన మందు నీకు

3	○	○	3	○	○
, , , n D	P ;	; m p	N ; S	s n r s	n d P
. . . che li	ya .	. pe .	tti .	na man . . .	du . .
r m p					
ni . ku					

### 4. Kambhoji—Tripura సరస కోకిల వాణి

, , , p D	S ;	; s r	G ;	G	r r m g	r r g r
. . . sa ra	sa .	. ko .	ki .	la va . . .	. . . .	
S n						
. ni						

### 5. Mandari—Tripura నవనీతచోర కృష్ణ

, , , s R	G ;	g r G	P ;	M	m g G	m g g r
. . . Na va	ni .	. . ta	cho . .	ra . .	Kri	
S n						

## 6. Bhairavi—Jhampa (Chaturasra Jati)

வள்ளிக்கு வாய்த்த மனோஹரனே குகனே வுண்முகனே

1 4	U	O
<p>;; P R Ṣ ; - ṣ n n d P ; - p d p m - p n d G ṛ Ṣ ; ; - d n Ṣ ; ; ṣ n - d n ṣ r g g r ṣ</p> <p>... vallikku . va . . ytta . ma . . . no . . hara ne . . Guha ne . . shanmu ... kha ...</p> <p>ṣ n d p d m   </p> <p>ne . . . .   </p>		

## 7. Todi—Rupaka

சாசுசேயு மெரகாதுரா ஸ்ரீ கృஷ்ணய்ய

<p>; P D N ; Ṣ</p> <p>. Ja guse . ya</p> <p>p m   </p> <p>. .   </p>	<p>; ṣ n ṛ ṣ ṣ n D N</p> <p>. me . ra . ga . . du</p>	<p>Ṣ ; ; ; Ṣ</p> <p>ra . . . . sri</p>	<p>p d n ṣ ṛ ṣ - n ṣ n d n d</p> <p>Kri . . . . sh na . . . yya.</p>

8. Saveri—Adi గ్రక్కున కాగిట జేర్చి

4	O	O
; : P d p $\bar{D}$ ; ; p m . . grakku . na . . kau . d p d m    chi . . .	p d $\bar{S}$ , n $\bar{D}$ ; gi . . . . ta .	p d $\bar{S}$ $\dot{s}$ n D je . . . . r

9. Khamas—Adi రవికుల సార్వభౌమ రాజా రామచంద్ర

, , , $\dot{s}$ n d P - p m p $\bar{d}$ p m G . . . Ravi kula sa r va . . bhau . p d n    dra . .	$\bar{M}$ ; ; $\bar{S}$ , n ma . . Ra . .	n d d p p m - g m ja . Ra . ma . chan .
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10. Kalyani—Adi

తెనంపఱి వడివేలనే కరుణాకారణే

, $\bar{G}$ P p m G gr r r S g m P M . Ten pa zha . . ni . Va . di ve . . la r	P ; ; m p ne . . ka .	$\bar{d}$ n $\bar{S}$ - n d m g ru . na ka . ra .
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