

SOUTH INDIAN MUSIC
BOOK I
FOURTH EDITION

D. SAMBAMOORTHY

SOUT

OUTH INDIAN MUSIC

BOOK I. - 3

P. SAMBAMOORTHY.

1948.

312UM NAIDNI HTU02
BOOK 1

copy

Note to the Fourth Edition.

The section relating to Theory has been further expanded. The topic of "Concert Programme—some underlying Principles" dealt with in Appendix II is an addition to this edition. A few more Svarajnanam exercises and passages for sight singing and musical dictation have been added.

12th December 1948.

THE AUTHOR.

32926 - *sent*
30K

20
2/9/5

CONTENTS

	Page No.
CHAPTER I—Introduction ..	1
CHAPTER II—Musicography ..	15
CHAPTER III—Technical Terms ..	31
CHAPTER IV—Vocalises ..	40
CHAPTER V—Sapta tala Alankaras ..	54
CHAPTER VI—Acoustics ..	60
APPENDIX I Svarajnanam Exercises..	63
APPENDIX II Concert Programme ; Some underlying Principles ..	66
Questions ..	71

CONTENTS

[4TH EDITION]

Copies can be had of:—

The Indian Music Publishing House,

4, BUNDER STREET,

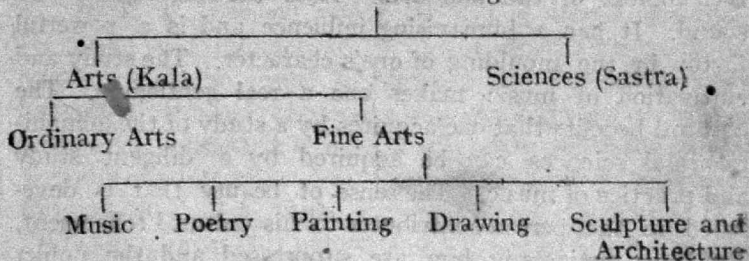
G. T. MADRAS.

Price Re. 1/-

CHAPTER I

INTRODUCTION

Branches of Knowledge.



(The Chatushshashti kalas (64 Arts) include ordinary arts and Fine Arts).

Music is the language of emotion. It is one of the fine arts and is the finest of the fine arts. It is concerned with sounds which are calculated to excite pleasant feelings in us. In the case of fine arts like Painting, Sculpture and Architecture, Nature provided man with plentiful ideas. The profuse variety of colours in the plant, animal and mineral kingdom, the rising sun and the setting sun, the azure sky, the inspiring colours of the rainbow and the natural formations and numerous landscapes of architectural beauty on the hill-sides gave him the necessary materials to develop and work upon. But the system of music was developed by the genius of man himself. And for this reason amongst others, music is entitled to be ranked as the greatest of the fine arts.

Music is of universal appeal influencing alike the scholar and the lay person, the old and the young, the man

and the beast. The infant, the cow and the serpent feel the charm of music as per the sloka:—

శిశుర్వేత్తి పశుర్వేత్తి వేత్తి గావరవం పశే.

Music is one of the God-given gifts to humanity. It has been cultivated from the dawn of human history. It is the noblest of the fine arts. It is the language of pure sound. It has a humanising influence and is a powerful factor in the moulding of one's character. The study and cultivation of music makes one a real gentleman. The cultural benefits that one acquires by a study of the humanities and sciences can be acquired by a diligent study and practice of music. The sense of beauty that is developed in the person contributes to his cultural refinement. The baser instincts in him are suppressed and the nobler instincts developed. Music is the proud and privileged accomplishment of a refined person. It elevates the soul. It is one of the greatest joys of humanity and is the most harmless of pleasures. It is a rich heritage that has come to us from the hoary past.

Music is a language by itself and is capable of expressing subtle thoughts and refined ideas. Just as a poet expresses his thoughts through the medium of words, a composer expresses his thoughts through the medium of musical phrases. Subtler ideas and delicate shades of feeling can be effectively portrayed through the medium of music.

Music is international and knows no barriers of religion, race, caste, creed or dogma. It is the international road to world harmony. Musicians are citizens of the world in the real sense of the term. They contribute to human happiness in a large measure. They are members of a world brotherhood. They shed lustre around them wherever they

go. They are able to please all types of people—from the prince to the peasant. They belong to the world and not to any particular country limited by geographical barriers. When music comes to be universally studied and practised, there will be far less crime in this world and the earth will be a happier place to live in.

Music is both an art (kala) and a science (sastra). Its study and practice result in the development of the intellect and the soul. It removes the coarseness from human thought and expression and gives grace and refinement. In addition, it is a *vidya* and helps one to realise the Supreme within him. Perfect mental peace is attainable through music. A piece of music finely rendered makes the listener forget this mundane existence and lifts him up to a higher plane. He tastes something of the sweet nectar of heavenly bliss—the *Divine Ananda*. Music is thus a priceless treasure.

Music can cheer the moody and soothe the weary. It affords good relaxation to the mind. Its capacity to cure certain ailments has been known from early times. At the conclusion of a concert or bhajana, the participants feel as if they have gone through a process of purification. Nature intended man to cultivate music and attain æsthetic bliss. For this purpose She has bestowed upon him a singing voice—not merely a speaking voice. It is the fundamental right of every child to be taught singing. Music develops the creative and constructive abilities in children. Physiological benefits like the development of healthy lungs accrue by the cultivation of vocal music.

Just as physical exercise serves to keep active every nook and corner of the body, the cultivation and

hearing of good music serves to nourish the nervous system. The delicate fibrils of the inner ear are touched only when the highest type of classical music is heard. Otherwise they tend to become idle structures and lose their responsive nature ere long.

The study and cultivation of music fosters a certain discipline which will help one to lead an orderly and principled life. Such people will not be victims of outbursts of emotional excitement or violent thoughts. Mental and emotional equipoise are attained through the cultivation of music. Music is above all an important factor in removing the feeling of strain from life.

(For further details relating to the greatness of music see the Author's "Teaching of Music" Chapter I.)

Music is an integral part of India's culture. It is styled the *Gandharva Veda*. It is one of the four upa vedas (secondary vedas). God is conceived of as *Nāḍabrahma*—Embodiment of (musical) Sound. (This concept of God is India's contribution to world's thought). Through *Nāḍopāśana* or musical meditation many have attained celestial bliss.

There can possibly be only two systems of music—one, in which the music progresses by successions of single notes and the other in which the music progresses by successions of groups of notes, called chords. The individual notes constituting a chord are related to each other according to the laws of consonance. The two systems of music are respectively known as the *melodical* and the *harmonical* systems. The former prevails in the countries of the Orient and the latter in Europe and countries where European civilisation has penetrated. Harmony, which is the *simultaneous* combination of consonant or relative sounds is the dominant feature of Western music. It is a recent deve-

lopment there and is about three centuries old. The builders of the Indian system of music *knew* the principles of harmony. Samvaditva (సంవాదిత్య) is consonance. The series of consonant intervals are common to both the systems, the order of precedence alone differing in one or two cases. The idea of developing the system along the lines of melody appealed to the Indian musicians more and we are richer to-day on that account. The extensive raga system which is a unique feature of Indian music could not have been evolved, if they had also chosen to develop their music along the lines of harmony. The ideal of *absolute music* has been reached here in the very conception of the raga system. The concept of raga is India's contribution to world's musicology.

The music of the west exhibits the combined strength and wealth derived from union and co-operation, while that of the east displays the exquisite workmanship which can be produced by individual effort. The gamakas (graces) in Oriental Music serve to strengthen, beautify and embellish the notes of a melody and give a peculiar charm and colour to it in much the same way as the harmony accompaniment to the basic melody in Europe. All the possibilities of the melodic system have been fully explored here. To understand what pure melody is, one must listen to non-European music. For, in Europe, a melody is always conceived harmonically. Melodic ideas there, are pivoted on relationships of harmony. But in the east, melodies are conceived with a melodic conscience independent of any harmonic ideas. There is a character of universality about Indian music since the language of melody is universal and is intelligible to one and all.

The music of the world started as a melodic stream. After a course, it gave birth to a branch, the harmoni-

stream. The parent stream as well as the branch stream flowed over rich fields and yielded fruitful results. The concept of raga took shape in the regions watered by the melodic stream while the concepts of polyphony, counterpoint and harmony took shape in the regions watered by the branch stream. Adopting the medium of musical expression native to their soil, the composers in the two regions have bequeathed to humanity their invaluable compositions.

From the one-line nature of its music, melodic music is figuratively referred to as one-dimensional music and horizontal music. From the multi-line nature of its music, harmonical music is figuratively referred to as two-dimensional music and vertical music.

Indian music may be styled the *Rāga sangīta* and European music the *Samvāda sangīta*.

The raga system paved the way for the development of Manodharma sangita along systematic lines. In India, every musician is a creative artist. He delights his listeners not only by his scholarly and polished renderings of musical compositions but also by his own improvised music. Thus in an Indian concert, we *not only listen to the music but also to the musician*.

Gamaka is the essence of a melodic system of music. It is the graceful turn or curve given to a note or to a group of notes that emphasises the melodic individuality of a raga.

Indian music and European music are two great musical systems. They stand as the embodiment of two distinct branches of musical thought and expression. They are respectively the perfection of the melodic and harmonical systems of music. Both are great systems and

show the heights to which the genius of man has soared in his anxious search for new forms of musical expression. The composers in both the systems had before them the same ideals, but the methods of approach became different. The raga system, which is the life and soul of Indian music, served the same purpose to the Indian composer as harmony, to the composer in Europe. European music is a single musical system with but minor differentiations here and there due to national temperament. Oriental music comprises a few sub-systems underlying all of which is a basic unity. Indian music is the finest representative and the most highly developed amongst the Oriental systems.

Polyphony did not develop in India ; but *antiphony* has existed here from ancient times. One can hear examples of antiphonal music even now in the Vedic chants of Pandits, in the Bhajanas of Haridasas and in the folk songs sung by women in rural parts.

Vocal music played a dominant part in the development of Indian music from early times. All singing was unisonal. When men and women sang together they sang either in unison or in octaves. In the absence of part-singing, the classification of voices into bass, tenor, alto and soprano, according to the range in absolute pitch was not attempted. Since Indian music is not written in any particular key, the singer here enjoys the freedom to choose any convenient pitch for his key-note (*ādharā shadja*), a privilege denied to the European singer. The full possibilities of instrumental music, whether solo or orchestral, have not yet been fully explored in India.

Indian music is based on the scale of just intonation. Since European harmony did not develop here, the necessity

for evolving the scale of equal temperament did not arise. Chromatic scales too are not used in Indian Music.

The raga sangita that is in vogue in India is catering to the æsthetic needs of 400 million people-roughly 1/5 of the human race. That system of music deserves to be widely known and studied even by people of other countries.

India is a marvellous country. Her hoary civilization and culture and her numerous languages and dialects have earned for her a unique place in world culture. The snow-clad Himalayas, the mighty Rivers, the holy Prayag, the inspiring Taj, the majestic Gopurams of the South Indian temples and the colossal statue of Gomatesvara at Sravana-belagola (Mysore) are a perennial source of inspiration to those who have the good fortune to claim India as their motherland. Besides being the home of three great religions, She has produced some of the greatest thinkers, poets, seers, religious leaders, jurists, bhaktas, scholars, composers and musicians. India is the home of the Raga system. Her music is the finest example of a true melodic system of music. It is in-keeping with her genius that she should have given birth to two sub-systems of music (Hindusthani and Karnatic).

Her hoary musical culture, the richness, variety and prolific character of her musical literature and repertoire, the amazing number and variety of her musical instruments belonging to the chordophonic, aerophonic, membranophonic and autophonic groups and the fine galaxy of musicians and composers produced by her have all earned for her a dignified place in world music.

Indian music is very old. Its literature dates from the beginning of the Christian Era. There was a time

when a single system of music prevailed throughout the length and breadth of India. The division into North Indian (Hindusthani) and the South Indian (Karnatic) system came later on and became more pronounced during the reign of the Moghul Emperors in Delhi. We come across the terms: *Karnatic music* and *Hindusthani music* in the work: *Sangita Sudhakara* of Haripala written between 1309-1312 A. D :—

తదపి ద్వివిధం జ్ఞేయం దక్షిణోత్తర భేదతః

కర్ణాటకం దక్షిణే న్యాదిందుస్థాని తతోత్తరే ॥

Fundamentally the two systems are similar—the same svaras and srutis being used. It is the peculiar style of singing and the treatment of ragas, based on the very same svaras and srutis, that gives the distinctive colour to the two systems. The modern music of India represents the accumulated musical wisdom of centuries.

Sangita.

Sangita is the Indian term connoting music. *Ganāharva tatva* is the science of music. Ancient writers held the view that Vocal music, Instrumental music and Dance, together constituted sangita :—

గీతం వాద్యం చ నృత్యం చ క్రయం సంగీత ముచ్యతే ।

But with the rapid advance made in the realm of pure music, the art of dance was separated and the first two alone were held to constitute sangita by later writers :—

గీత వాద్యోభయం యత్ర సంగీతమితి కేవలం ।

NADA

Nāda is musical sound. The whole subject of music relates to nada. Nada gives rise to srutis, and these give rise to svaras and these again to ragas.

Nada admits of the divisions: *Ahata* and *Anahata*. The nada that is heard without the conscious effort of man (or other beings) is anahata. The Nada produced by the conscious effort of man is Ahata.

Anāhata nada is the music of the spheres, the music of Nature and includes the nada emanating from the Muladhara of the human body. All these are audible only to Yogis. Tyagaraja, the great nāda yogi of recent times refers to the greatness of the mūlādhārāja nāda in the first charana of his song "Svara rāga sudhārāsa" (Sankarābharana). The perceiving of anahata nada is the object of Yogopāsana. The anahata nada being devoid of æsthetic beauty does not afford pleasure to the mind. Hence ahata nada which gives pleasure to the mind is studied. The science and art of music as practised in the world and as cultivated in Heaven relates to ahata nada. This admits of the threefold division: Gita, Vadya and Nritya.

CAUSATION OF NADA

According to Sarngadeva and other writers, the nada is caused thus: The Atma desiring to speak or sing, stirs the mind; the mind strikes the fire abiding in the body; the fire strikes the wind; the wind abiding in the brahmagranthi rising along the upward paths, manifests the sound successively on the navel, the heart, the throat, the head and the mouth. The nada is thus produced by the conjunction of prana and anala and this is referred to by Tyagaraja in the Charana of his Kriti, *Mokshamu galada* (Saramati). In the word nada, *na* denotes prana and *da* denotes fire.

Ahata nāda is classified into:—

- (1) *Sariraja*—emanating from the human voice.
- (2) *Nakhaja*—emanating from Plucked instruments.

- (3) Dhanvija—emanating from bowed instruments.
- (4) Vāyuja—emanating from wind instruments.
- (5) Charmaja—emanating from skin-covered instruments.
- (6) Lohaja—emanating from metallic instruments: cymbals.

S V A R A

The basis of all systems of music is the seven notes or svaras. The names of these seven notes and the syllables used for solfa-ing them in Indian and European music are given in the following Table :—

Table I.

No.	Svara Name.	Solfa letters.	
		Indian.	European.
1.	Shadja ..	sa	doh
2.	Rishabha ..	ri	ray
3.	Gandhara ..	ga	me
4.	Madhyama ..	ma	fa
5.	Panchama ..	pa	soh
6.	Dhaivata ..	dha	lah
7.	Nishada ..	ni	si or te

It will be noticed that the syllables, *sa ri ga ma pa dha ni*, are only the initial syllables of the full names of the seven svaras, with the exception only of the first note, where *sa* and not *sha* is used. Of the seven svaras, the notes *sa* and *pa* (the tonic and the fifth) do not admit of varieties. The remaining five svaras : *ri ga ma dha ni* admit of two varieties each. The terms *Komal* and *Tivra* are used to describe these

two varieties. Komal svara is the lower note and the tivra svara the higher note. The technical names of these 12 notes, together with their corresponding equivalents in European music are given in Table II below:—

Table II.
SVARA NOMENCLATURE.

No.	Svara Names.		Equivalents in European Music.
1.	Shadja	Sa	C
2.	Suddha Rishabha	Komal Ri	D flat
3.	Chatussruti „	Tivra Ri	D
4.	Sadharana Gandhara	Komal Ga	E flat
5.	Antara „	Tivra Ga	E
6.	Suddha Madhyama	Komal Ma	F
7.	Prati „	Tivra Ma	F sharp
8.	Panchama	Pa	G
9.	Suddha Dhaivata	Komal Dha	A flat
10.	Chatussruti „	Tivra Dha	A
11.	Kaisiki Nishada	Komal Ni	B flat
12.	Kakali „	Tivra Ni	B

Note—On the Vina finger-board, the first svarsthana gives, Suddha rishabha, second chatussruti rishabha and so on, in as much as the open sūrani string gives the shadja.

It is enough that for the present, the student is familiar with the names of these 12 svaras. Shatsruti Rishabha, Suddha Gandhara, Shatsruti Dhaivata and Suddha Nishada are additional names given respectively to the four notes: Sadharana Gandhara, Chatussruti Rishabha, Kaisiki Nishada and Chatussruti Dhaivata and the 12 notes of the gamut are thus expanded to 16. The reason for this as also its utility will appear* later. Calling the same note by two names is nothing peculiar to Indian music. There are instances in European music as well.

Suddha svaras and Vikṛta svaras

The notes *sa* and *pa* which do not admit of varieties are called *achala* svaras or fixed notes. They are also referred to as *avikṛta* (changeless) svaras. Suddha svaras, also referred to as *Prakṛti* svaras, have the prefix *suddha*. The vikṛta svaras have prefixes like chatussruti, shatsruti, sadharana, antara etc. The term *suddha svara* in modern South Indian music refers to the earliest variety of each note in the ascending scale. Thus of the three varieties of rishabha: *suddha*, *chatussruti* and *shatsruti*, *suddha rishabha* is the lowest in pitch; likewise, of the three varieties of *gandhara*: *suddha*, *sadharana* and *antara*, *suddha gandhara* is the lowest in pitch and so on.

In North Indian Music however, the term *suddha svara* now refers to the notes of the Sankarabharana scale. In ancient Indian music, *suddha svara* signified the notes of the shadja grama (roughly the modern Kharaharapriya or the Kāfi thāt of Hindusthani music). Thus whereas the notes: (*suddha*) shadja, *suddha madhyama* and (*suddha*) *panchama* have retained their values from ancient times, the

* Also see the Author's "*Melakarta Janya raga Scheme*".

notes suddha rishabha, suddha gandhara, suddha dhaivata and suddha nishada have acquired different values at present.

Suddha scale means a scale of all suddha svaras. In South Indian Music it will be the *Kanakangi*, the first melakarta in the scheme of 72 melas.

CHAPTER II.

MUSICOGRAPHY

Notation is the mode of representing music to the eye. It is the method of representing the various notes that we employ in music by a system of letters, signs and symbols. It is intended to play the same part as the letters and characters of a language. Notation is to music what alphabet is to language.

Notation is a powerful aid to memory. One can easily recall to his mind and sing a song learnt and recorded in notation many years back. Practice in singing from sight, passages given in notation develops Svarajnanam.

There are two principal systems of musical notation. One is the staff notation used for writing European music and the other the script (*sa ri ga ma*) notation used for writing Indian music. In the former, music is written on five parallel lines and the position of the note on the line or the space between the lines indicates its pitch. This system has the unique advantage of showing in a graphical manner the rise and fall of pitch. In the latter system, music is written with the solfa letters. Although these letters are written in a straight line and the notes are thus on a dead level, yet solid musical facts are presented to the eye by each solfa letter. The notes start into their places in the musical scale the moment the eyes look at them. The mention of the raga and tala at the top of a melody serves the same purpose as the key-signature at the commencement of a bar in European music. The 'tonic solfa notation' used

in Europe resembles the Indian system in its use of the solfa letters.

Besides these two systems, there is also a third system of notation styled the 'Numerical notation.' This makes use of the first seven numbers,

1 2 3 4 5 6 7

to represent the seven notes and has other suitable symbols to denote the varieties of a note. But this system is limited in its use.

Sa ri ga ma (sargam) Notation

The several signs and symbols used in this notation may be classified into those used to indicate the nature of :—

- (1) The musical note
- (2) musical time and
- (3) other factors.

For the purpose of notation, the four important factors that matter regarding a musical note are :—

1. Its duration.
2. The sthayi to which it belongs.
3. Its variety.
4. Whether played pure or with gamaka.

1. Duration :—

The seven svaras are written as: **s r g m p d n** dropping the vowels in their solfa names. These small letters correspond to the short or hrasva svaras of the Indian scripts: ஸ ரி க ம ப த நி; ஸ ரி க ம ப த நி and represent by themselves notes of duration of unit time. Unit-time in Indian music is called an *aksharakala*. The dirgha or long svara letters of the Indian scripts: ஸா ரீ கா மா பா தா நீ ஸா ரீ க மா பா தா நீ represent notes of duration of two units time. Capital letters **S R G M P D N** take the place of these dirgha svaras of the Indian

scripts and represent notes of duration of two aksharakalas. Thus the duration of a short svara letter is one aksharakala; and that of a dirgha or capital svara letter is two aksharakalas.

$$\begin{array}{ll} s & = 1 \text{ aksharakala} \\ S & = 2 \text{ aksharakalas} \end{array}$$

A comma placed after a note increases its duration by unit time; and a semicolon placed likewise increases its duration by two units time. Further increase in duration is represented by the addition of requisite commas and semicolons as follows :—

$$\begin{array}{llll} S, & \text{or } s, & & = 3 \text{ aksharakalas} \\ S; & \text{or } S, & & = 4 \text{ „} \\ S; , & \text{or } S, , & & = 5 \text{ „} \\ S; ; & \text{or } S, , , & & = 6 \text{ „} \end{array}$$

and so on.

A horizontal line placed over a note or a group of notes halves the duration of the note or the group. Two such lines reduce the duration to one-fourth; three such lines to one-eighth and so on. Thus in point of duration

$$\begin{array}{ccccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ s = ss = ssss = ssssssss = 1 \text{ akshara-} \\ & & & & & & \text{kala.} \end{array}$$

$$1 \quad \frac{1}{2} \quad \frac{1}{4} \quad \frac{1}{8} \quad \frac{1}{16} \quad \frac{1}{32} \quad \frac{1}{64} \quad \frac{1}{128} \quad \frac{1}{256} \quad 1 \text{ „}$$

The terms Prathama ప్రథమ (first), Dvitiya ద్వితీయ (second), Tritiya తృతీయ (third), and Chaturtha చతుర్థ (fourth) kala, simply indicate the relative degrees of speed of a musical composition or passage. In the Prathama kala, one note is sung to unit time; in the Dvitiya kala, two notes are sung to unit time; in the Tritiya kala, four notes are sung to unit time; in the Chaturtha kala, eight notes are sung to unit time and so on. But if in the Prathama kala, two notes are sung to unit time, the number of notes

sung to unit in the other degrees of speed, will increase in the same proportion.

The madhyamakāṭa and trikāṭa lines should as a rule be placed only above the svara line and not below it, in order to maintain the uniformity of space between the svara line and the corresponding sahitya line.

2. Sthayi :—

A dot placed above a note indicates that it belongs to the higher octave, and a dot placed below a note indicates that it belongs to the lower octave. Thus **ṡ ṙ ġ ṁ** are higher octave or tara sthayi notes; **ṅ ḋ ṗ ṁ** are lower octave or mandra sthayi notes; **ṡ ṙ ġ ṁ ṗ ḋ ṅ** are middle octave or madhya sthayi notes.

Ati tara sthayi (the octave above the tara sthayi) and Anumandra sthayi (the octave below the mandra sthayi) notes are written with two dots above and below the notes respectively as follows :—

Ati tara sthayi :—

ṡ̇ ṙ̇ ġ̇ ṁ̇

Anu mandra sthayi :—

ṡ̇ ṙ̇ ġ̇ ṁ̇

Thus the compass of the Vina = $3\frac{1}{2}$ octaves

from **ṗ** to **ṡ̇̇**

3. Note Variety

The mention of the name of the *raga at the top of a melody indicates what kinds of notes (komal or tivra) are used in that piece. Hence there is no necessity for using

*Even in the case of bhashanga ragas wherein both the varieties of a note occur, it is well known, in which combinations alone the foreign note or the accidental note comes in. (See Book II of this series)

separate symbols to distinguish the note varieties. But in practice, sometimes for the sake of convenience the numerals 1 and 2 are used to denote the komal and tivra varieties respectively. Thus the 12 notes of a sthayi are written as :—

s		p	
r_1	Komal ri	d_1	Komal dha
r_2	Tivra „	d_2	Tivra „
g_1	Komal ga	n_1	Komal ni
g_2	Tivra „	n_2	Tivra „
m_1	Komal ma		
m_2	Tivra „		

And the notes of the following melakartas are written as follows :—

TABLE III

Melakarta or Scale No.	Name.	Notes.
8	Hanumatodi	s r_1 g_1 m_1 p d_1 n_1 s
15	Mayamalavagaula	s r_1 g_2 m_1 p d_1 n_2 s
22	Kharaharapriya	s r_2 g_1 m_1 p d_2 n_1 s
28	Harikambhoji	s r_2 g_2 m_1 p d_2 n_1 s
29	Dhira Sankara bharana	s r_2 g_2 m_1 p d_2 n_2 s
65	Mechakalyani	s r_2 g_2 m_2 p d_2 n_2 s

Vowel Changes. The varieties of a *svara* are also represented by resorting to the *vowel change* in the name of the note. The three varieties of *rishabha*: *suddha rishabha*, *chatussruti rishabha* and *shatsruti rishabha* are represented as *ra*, *ri* and *ru* respectively; and the three *gāndhāra* varieties: *suddhagāndhāra*, *sādhārana gāndhāra* and *antara gāndhāra* as *ga*, *gi* and *gu*. Likewise the corresponding varieties of the *dhaivata* and *nishāda* are represented as:—*dha* (*suddha dha*), *dhi* (*chatussruti dha*), *dhu* (*shatsruti dha*) and *na* (*suddha ni*), *ni* (*kaisiki ni*) and *nu* (*kākali ni*) respectively. The two *madhyama* varieties are represented as *ma* and *mi*. This is in a sense *absolute notation* for, the *svara* letters by themselves indicate their pitch-values without any reference to the *ragas* in which they figure. For example.

sa ra gu ma pa dha nu sa

sa nu dha pa ma gu ra sa,

by itself indicates that it is the *Mayamalavagaula* scale; and

sa ri gu pa dhi sa

sa dhi pa gu ri sa

by itself indicates that it is the *Mohana* scale and so on.

This device of representing the note varieties by resorting to the vowel change in the name of the note began in India centuries ago. It is found in the *Kudimiyāmalai* Inscription (7th cent. A. D.) in the *Pudukottai* State. This device is also resorted to in European music in another form. Thus *Des*, *D* and *Dis* denote respectively, *suddha rishabha*, *chatussruti rishabha* and *shatsruti rishabha*.

Tala: Musical time.

Unlike European music, there exists in Indian music, a great number and variety of time-measures or *talas*. In order

to facilitate easy and accurate method of reckoning musical time, six angas have been devised. These are known as the *shadangas* or *six angas* and they are: 1. laghu, 2. drutam, 3. anudrutam, 4. guru, 5. plutam, and 6. kakapadam. Of these, the first three angas alone enter in the formation of the seven principal talas. The time-values of the anudrutam and the drutam are fixed and are unit-time and two units time respectively. While the anudrutam is represented by a crescent thus  the drutam is represented by a circle (full moon) thus . The anudrutam is counted by a beat of the hand; the drutam is reckoned by a beat of the hand and a waving of the hand. The waving of the hand is called *visarjitam*.

The laghu is represented by a short vertical line thus |. Its kriya consists of two parts: (1) the beat of the hand and (2) finger-counts. The beat is performed either by the clapping of hands or by mildly striking on the right thigh with the right-hand. The latter method, is of course possible, only when one sits and sings. The right-hand fingers are used for counting time. In finger-counts, one should start with the little finger and proceed counting in the direction of the thumb. In cases of six and eight finger-counts, the five fingers are counted first; the remaining finger-counts are completed by starting again from the little finger and counting in the direction of the thumb.

Unlike the drutam and the anudrutam, the time-value of the laghu varies with the change of its jāti. Its time-value can be 3, 4, 5, 7 or 9 units of time. In consequence, these five kinds of laghus are respectively called the Trisra laghu, Chaturasra laghu, Khanda laghu, Misra laghu and Sankirna laghu. These different laghus are represented by

adding to the laghu sign, the numerals, indicative of their total time-value thus:—

| 3 | 4 | 5 | 7 | 9

The following Table illustrates these points:—

TABLE IV.

Kind of laghu.	Symbol.	Total time-value.	How reckoned.
Trisra laghu	3	3 units of time	1 beat + 2 finger-counts
Chaturasra „	4	4 „	1 beat + 3 „
Khanda „	5	5 „	1 beat + 4 „
Misra „	7	7 „	1 beat + 6 „
Sankirna „	9	9 „	1 beat + 8 „

The laghu is a constant factor in all the sapta talas. The drutam is absent in the Eka tala. The anudrutam is present only in the Jhampa tāla.

The other three angas: Guru, Plutam and Kākapādam figure in the scheme of the classical 108 talas. These classical time-measures figure in dance music, advanced pallavis and in the Tiruppugazh hymns of Arunagirinathar. Whereas all the six angas figure in the scheme of the 108 talas, the anudrutam, drutam and laghu alone are present in the sapta talas. Historically, the scheme of 108 talas is older. Table V gives the signs and the modes of reckoning these six angas:—

TABLE V.

No.	Name of the anga.	Symbol.	Duration in aksharakalas.	Kriya or mode of counting.
1	Anudrutam	☾	1	One beat.
2	Drutam	○	2	One beat and a waving of the hand or visarjitam.
3	Laghu		*4	A beat and three finger-counts.
4	Guru	8	8	A sasabda laghu and a nisabda laghu (also see. P. 23).
	Plutam	8	12	{ A beat, krushya and sarpini, each consisting of 4 aksharakalas ; or a beat for the first matra and a circling movement of the hand for the remaining two matras.
6	Kakapadam	+	16	{ A beat, patakam, krushya and sarpini each consisting of 4 aksharakalas.

* This is the chaturasra laghu. There are four other kinds of laghu. See Table IV. on P. 22.

Krushya = Waving the hand to the left.
 Sarpini = Waving the hand to the right.
 Patakam = Lifting up the hand.

Other Signs

Double bars || asterisks * and wavy lines are other signs used in this notation. Double bars are used to indicate the conclusion of the whole song or a section of a song. Asterisks are used to denote the foreign notes (anya svaras or accidentals) occurring in bhashanga ragas. Wavy lines are placed over notes to indicate that those notes are to be shaken and sung or played. An ascending

glide (etra jāru) is represented with the sign $\underline{\quad}$ and a descending glide (irakka jāru) with the sign $\underline{\quad}$.

The letter **r** occurring within brackets thus : (**r**) after an avarta or phrase indicates that the concerned avarta, avartas or phrases, as the case may be, have to be repeated.

Whenever, it is desired that a group of svaras should be played as a single continuous phrase, a sign called a slur $\frown$ is placed over that group of svaras. That sign is an indication to the violinist that those svaras should be played in one stroke of the bow and to the flutist, that they should be played in one breath and so on. Sometimes hyphens are used instead of these curved lines. A group of notes between two hyphens, should be played as a single continuous phrase. Phrasings are indicated thus in Indian music. A phrase may consist of three or more notes. One part of a phrase may be in Prathama kālā and another part in madhyamakālā.

In a kriti with sangatis, the constant or the repeating part of the fundamental theme is represented by „ (ditto) and the altered portion of the theme alone is written in svaras.

Visrānti or Rest. Periods of silence or rest in music are indicated by placing the requisite number of commas and semi-colons within brackets. Thus (,) = a period of rest of one unit duration and (;) = a period of rest of two units duration and so on.

Numerals. The Roman numerals I II III IV V VI VII are used to denote the sapta tālas and the Arabic numerals 3 4 5 7 9 are used to denote the laghu jāti. Thus IV₇ denotes the Misra jāti Jhampa tala and II₃, the Tisra jāti Matya tāla and so on.

In the Scheme of 72 Melakartas, the Roman numerals, I II III IV V VI VII VIII IX X XI XII are used to denote the twelve chakras and the Arabic numerals 1 2 3 4 5 6 placed next to the Roman numerals indicate the serial number of the melakarta within the chakra. Thus III, refers to the third mela in the third chakra which is *Māyāmālavagaula*, the 15th mela in the scheme of 72. Again V, refers to the fourth mela in the fifth chakra, which is *Harikāmbhoji*, the 28th mela in the scheme of 72 and so on.

In violin playing, the numerals 1 2 3 4 are used to denote respectively the forefinger, middle finger, ringfinger and little finger of the left-hand. The numerals, when placed over notes indicate that the particular fingers signified by them should be used for playing those notes. When the note *sa* is to be played on open string, the figure 0 is placed above it. Thus in a violin tuned to Panchama sruti:

0	1	2	3
s	r	g	m

0	1	2	3
p	d	n	s

will signify that *sa* is to be played on the open 2nd string and the forefinger, middle finger and the ring-finger should be used for playing the notes: *ri ga* and *ma*; and also that *pa* is to be played on the open first string and the remaining three notes, *dha ni sa* to be played similarly. But if the same phrase is noted as:

3	1	2	3
s	r	g	m

4	1	2	3
p	d	n	s

it will mean that *sa* should be played on the third string with the ring finger and *pa* should be played on the second string with the little finger, and the remaining notes played as before. Similarly a phrase noted like this:—

1	2	3	4
s	r	g	m

will mean that the above four notes should be played on the first string by the forefinger, middle finger, ringfinger and the little finger respectively.

It is however not necessary to place these numerals over every note of a passage. In a composition they are placed over only certain notes and the performers can easily infer the fingers for the other notes.

The upward stroke of the bow and the downward stroke of the bow are respectively denoted by the signs: V and □.

Plus and Minus signs. The Atita and the Anāgata eduppus or grahas are denoted by the + and - signs. A piece in anāgata eduppu starting after $\frac{3}{4}$ aksharakāla is denoted as - $\frac{3}{4}$; Ex. *Koluvamaregada* in Todi. It means the piece starts after the lapse of $\frac{3}{4}$ aksharakāla from the commencement of the āvarta. Likewise, the atita eduppu of the anupallavi of *Kshinamai tiruga* in Mukhāri will be represented as + $\frac{1}{2}$ which means that the anupallavi starts at half aksharakāla before the commencement of the āvarta.

A song is named after its commencing words or phrases.

Vowel Extensions. In every musical composition intended for singing, there is usually, for every svara letter of the dhātu, a corresponding syllable in the sāhitya. For example, in the 3rd āvarta of the Vignesvara gita of Purandara Dāsa in Malāhari rāga, we find that for the musical phrase of six notes there are the six syllables in the Sāhitya :—

r	m	p	d	m	p
ka	ru	nā	sā	ga	ra

But frequently cases, wherein there are fewer syllables in the *sāhitya* compared to the number of *svaras* in the *dhātu*, arise. In such cases, *vowel extensions* of one or more syllables in the *sāhitya* are resorted to. For instance, in the second *āvarta* of the above-mentioned *gita*, it will be seen that for the six *svaras*, there are only five syllables in the *sāhitya*. This *sāhitya* of five syllables (*sin dhu ra var na*) is sung to the music of six notes by introducing the vowel *u* contained in the second syllable. The music with the *sāhitya* in this extended form will be written as :—

r	s	d	p	m	p
sin	dhu	ū	ra	var	na

In practice however, instead of actually writing the vowel letter, it is usual to put a dot in its place. The above passage is written as follows :—

r	s	d	p	m	p
sin	dhū	.	ra	var	na

The dot, in the midst of the *sāhitya* syllables, indicates therefore that the vowel contained in the syllable preceding it should be sung once. More dots indicate that as many vowels should be introduced and sung.

A dot or dots placed after the syllables, ending with the vowels: *ā* (far) *ee* (thee) *oo* (mood) *a* (may) and *o* (mode), indicate that the corresponding vowels should be sung as many times. In the case of words containing syllables ending with *m* as in *amba*, or diphthongs as *ai* in *kaisiki* and *au* in *gaula*, the corresponding vowel extensions will be *m*, *e* and *u* respectively. In the case of diphthongs, it is the second of the two component vowels that has to be extended. The following examples will make these points clear :

Examples :

(From Purandara Dāsa's Malahari raga gitas)

Written as:—

Should be sung as:—

- | | |
|---------------------|---------------------|
| 1. d p m g r s | d p m g r s |
| chan da mā . . ma | chan da mā ā ā ma |
| சந் த மா . . ம | சந் த மா ஆ ஆ ம |
| 2. d s s d p m p | d s s d p m p |
| ke ra ya ni . ra nu | ke ra ya ni i ra nu |
| கெ ர ய னி . ர னு | கெ ர ய னீ இ ர னு |
| 3. d p m g r s | d p m g r s |
| he ma kū . . ta | he ma kū ū ū ta |
| ஹே ம கூ . . ட | ஹே ம கூ ஊ ஊ ட |
| 4. r s d p m p | r s d p m p |
| ga na se . vi ta | ga na se e vi ta |
| க ண ஸே . வி த | க ண ஸே ஏ வி த |
| 5. S r m g r | S r m g r |
| Lam bo . da ra | Lam bo o da ra |
| லம் போ . த ர | லம் போ ஓ த ர |
| 6. r m p d m p | r m p d m p. |
| Am . ba . su ta | Am m bā ā su ta |
| அம் . பா . ஸு த | அம் ம் பா ஆ ஸு த |
| 7. d p m g r s | d p m g r s |
| kun da gau . . ra | kun da gau ū ū ra |
| கூந் த கௌ . . ர | கூந் த கௌ உ உ ர |

8. (The Pallavi of Navaraga malika varna.)

m m g g r r s n	m m g g r r s n
na . . . pai . . .	nā ā ā ā pai e e e
நா . . . பை . . .	நா ஆ ஆ ஆ பை இ இ இ

This device of spreading words of fewer syllables over long musical phrases by the introduction of *akāram*, *ikāram*, *ukāram* etc. really gives charm to vocal music.

Usually for long svaras in the dhatu, there are long syllables in the sahitya and likewise for short notes, short syllables. For example:—

Mohana:—

Isa manohari:—

g	g	P	P		S	r	g	R		R	g	m	P
va	ra	vi	nā	&	Srī	ga	na	na		tham	bha	ja	re
வ	ர	வி	னா		ஸ்ரீ	க	நா	நா		தம்	ப	ஜ	ரே

But exigencies of music may necessitate a short letter of the sahitya to be sung for a long note of the music and vice versa.

While writing the sahitya, the letters should be written in their correct and natural form and not in their extended or contracted form.

Although many of the signs used in modern Indian notation are found in the earlier works on music, yet no systematic attempts were made to write down melodies in notation until recent times. This accounts for the loss of the original music of Jayadeva's Ashtapadi Hymns, the Tevara Hymns of the Tamil Saivite Saints and other examples of ancient music.

In printed or written music, the following data are furnished. The name of the raga and tala of the piece are given at the top. At the top left-hand corner are given the tempo and marga of the piece and the serial number of the melakarta from which the raga is derived, if the raga happens to be a janya raga. At the top right-hand corner is given the arohana and avarohana of the raga. In order to facilitate the easy reading of the svara and the sahitya (music and the words) it is usual to print the svaras in types slightly bigger than those used for the sahitya. Usually, all the Indian melodies are in the chaturasra gati. Deviations into other gatis like trisra gati, khanda gati, misra gati and

sankirna gati are specially indicated. The grace notes are not printed in every case. They are readily understood and supplied instinctively by a musician, who is conversant with the raga.

In a highly developed melodic system of music, it will not be possible to represent in notation every refinement in rendering. Rendering is an art dependant upon the artistry, power of interpretation and musical intelligence of the performer,

CHAPTER III

TECHNICAL TERMS

Adi tala, a variety of tripura tala, consisting of a chaturasra laghu and two drutams: | . ○ ○
 $4 + 2 + 2 = 8$ aksharakalas.

Ahata nada, music made by the effort of man.

Aksharakala, unit time in music.

Alankara, beauty, ornament, embellishment, grace; svara-group pattern. Also the svara exercises illustrating the seven principal talas and their varieties.

Alapana, Alapa, Alapti, development of a raga.

Anahata nada, music of Nature.

Anga, one of the tala dasa pranas; also section of a musical composition.

Antara gandhara, the tivra variety of gandhara (E); frequency $5/4$

Anudrutam, one of the six angas used in reckoning musical time; consists of a beat; duration one aksharakala; symbol ○.

Anumandra sthayi, the octave below the mandra sthayi.

Anusvaram, a secondary note played along with the note of a melody for decorative effect. Anusvaras are used in raga alapana as well.

Arohana, a series of notes in the ascending order of pitch: $s\ r\ g\ m\ p\ d\ n\ s$

Arohana and Avarohana of a raga, the recognised order or *krama* in which the notes ascend and descend in a raga. It defines the contour of the raga.

Ata tala, the sixth of the seven principal talas; consists of two laghus and two drutams: | | ○ ○

Ati tara sthayi, the octave above the *tāra sthāyī*.

Avarohana, a series of notes in the descending order of pitch * *s n d p m g r s*.

Avarta a complete *tala* or time-measure.

Bheda variety, difference.

Chaturasra laghu, a variety of *laghu* consisting of a beat and three finger-counts: | 4

Chaturtha kala, fourth degree of speed.

Chatusruti dhaivata the *tivra* variety of *dhaivata* frequency 27/16.

Chatusruti rishabha, the *tivra* variety of *rishabha* (D); frequency 9/8.

Datu varisno, *svara* exercises containing *dātu svara* combinations like *s g r m g p, n p d m p g* etc.

Dha, the solfa name of *dhaivata*; also the sixth note of the scale.

Dhaivata, the sixth note of the scale.

Dhruva tala, the first of the seven principal *talas*: consists of a *laghu*, *drutam* and two *laghus* | O | |

Dirgha, long; the time-value of a *dirgha svara* is two *aksharakālas*.

Dravidian Music, the system of music that was in vogue amongst the Ancient Tamils. *Kural குரல்*, *Tuttam துத்தம்*, *Kaikkilai கைக்கிலை*, *Ulai உழை*, *Ili இளி*, *Vilari விலாரி*, and *Taram தாரம்*, were the names given to the seven notes of the scale in that system.

Drutam, one of the six *angas* used in reckoning musical time; consists of a beat and waving of the hand; duration two *aksharakālas*; symbol O

* **Druta kala**, fast or quick tempo.

* **Druta laya**, quick speed.

* **Dvitiya kala**, second degree of speed.

* **Eka tala**, the last of the seven principal talas ; consists of a laghu only ; symbol |

Ga, the solfa name of gandhara; also the third note of the scale.

Gamaka, the collective term given to the various shakes, graces, ornaments and embellishments used in Indian music. Gamakas are produced by the shake or quiver of the notes in a peculiar way and they please the listener :—

వ్యవస్థ కంపా గమకః శ్రోతృచిత్త మభివహః.

Gamaka is inseparable from even the simplest phrase. It is not a mere accidental ornament but is an essential part of the melodic structure. Gamaka is an integral part of the music and the note with its grace makes one utterance. Gamakas lend colour to Indian music in much the same way as harmony to European music.

Gandhara, the third note of the scale.

Gandharvam, music.

Gandharva tatva, science of music.

Gandharva veda, sangita ; one of the four upa vedas.

Ghata, beat or clapping of the hands ; one of the modes, of reckoning musical time.

Guru, one of the six angas used in reckoning musical time ; consists of a beat and a circling movement of the hand with closed fist ; also reckoned as a sasabda laghu and a nissasabda laghu. Duration eight aksharakalas ; Symbol 8

Hechchusthayi, higher octave.

Hechchusthayi varisas, svara exercises using the higher octave notes.

Hrasva, short; the duration of a hrasva svara is one aksharakāla.

Jati ஜதி, one of the tala dasa pranas; refers to the variety of laghu.

Janta varisas, svara exercises in double notes :

s s r r g g m m etc.

Jhampa tala, the fourth of the seven principal talas; consists of a laghu, anudrutam and drutam; symbol | ○ ○

Kaisiki nishada, the komal variety of nishada (B flat); frequency 9/5

Kakali nishada, the tivra variety of nishada (B); frequency 15/8

Kakapadam, one of the six angas used in reckoning musical time; consists of a beat, patakam, krushya and sarpini, the duration of each of these four kriyas being four aksharakālas or one matra. Symbol +

Kala கலை, one of the tala dasa pranas; minute division of an aksharakāla.

Kalam காலம், one of the tala dasa pranas; signifying absolute measure of time; musical speed; tempo; the degree of movement or pace of a musical composition.

Khanda laghu, a variety of laghu consisting of a beat and four finger-counts: | 5

Kriya, one of the tala dasa pranas; mode of reckoning musical time.

Krushya, waving the hand to the left.

Laghu, one of the six angas used in reckoning musical time; consists of a beat and a variable number of finger-counts according as its jati is trisra, chaturasra, khandi, misra or sankirna; symbol |

Laya, one of the tala dasa pranas; musical time; tempo; rhythm; speed.

• **Layajnanam**, an accurate sense of rhythm.

Ma, the solfa name of madhyama; also the fourth note of the scale.

Madhyama, the fourth note of the scale.

Madhyama kala, moderate speed, or tempo.

• **Madhya laya**, medium speed.

• **Madhya saptaka**, middle octave.

• **Madhya sthayi**, middle octave.

• **Mandra saptaka**, lower octave.

• **Mandra sthayi**, lower octave.

• **Matra**, unit of time-measure in the scheme of 108 talas. A matra = 4 aksharakalas.

• **Matya tala**, the second of the seven principal talas; consists of a laghu, drutam and laghu. | O |

• **Misra laghu**, a variety of laghu consisting of a beat and six finger-counts: | 7 |

Musical alphabets, sa ri ga ma pa dha ni.

Musicography, the science of writing music in correct notation.

Musicology, the science of music; sangita sastra.

• **Nada**. (1) music, musical sound; admits of the varieties, ahata and anahata; (2) the tone of a musical instrument. e.g., we say the nada of one vina is superior to that of another vina.

Ni, the solfa name of nishada ; also the seventh note of the scale.

• **Nicha sthayi**, lower octave.

Nishada, the seventh note of the scale.

• **Nissabda kriya**, a kriya without sound ; ex, visarjitam.

Pa, the solfa name of Panchama; also the fifth note of the scale.

• **Panchama**, the fifth note of the scale ; frequency $3/2$

• **Patakam**, lifting up the hand.

• **Plutam**, one of the six angas used in reckoning musical time; consists of a beat, krushya and sarpini; the duration of each of these three kriyas being four aksharakālas or one matra ; symbol $\dot{g}$

• **Prakruti svara**, natural note.

• **Prathama kala**, first degree of speed.

• **Prati madhyama**, the tivra variety of madhyama (F sharp) ; frequency $45/32$.

Purvanga, (1) the lower tetrachord *s r g m*. (2) Also the first half of a varna comprising the pallavi, anupallavi and muktayi svara.

Raga, literally that which creates passion; melody-mould or melody-type.

Ri, the solfa name of Rishabha ; also the second note of the scale.

Rishabha, the second note of the scale.

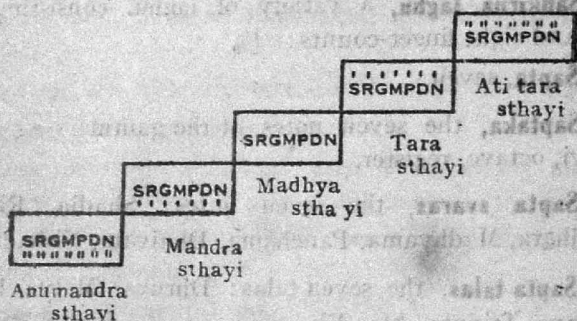
• **Rupaka tala**, the third of the seven principal talas; consists of a drutam and a laghu ○ |

Sa, the solfa name of shadja; also the first note of the scale.

• **Sadharana gandhara**, the komal variety of gandhara (E flat) ; frequency $6/5$

- **Sahitya**, words of a musical composition ; libretto.
- **Sangita**, music.
- **Sangati**, variation on a musical theme.
- **Sankirna laghu**, a variety of laghu, consisting of a beat and eight finger-counts : | 9
- **Sapta**, seven.
- **Saptaka**, the seven notes of the gamut : *s r g m p d n* .
sthayi, octave, register.
- **Sapta svaras**, the seven notes : Shadja, Rishabha, Gandhāra, Madhyama, Panchama, Dhaivata, Nishada.
- **Sapta talas**, the seven talas : Dhruva, Matya, Rupaka, Jhampa, Triputa, Ata, Eka.
- **Sarali**, shortened form of svaravali.
- **Sarpini**, waving the hand to the right.
- **Sasabda kriya**, a kriya accompanied by sound ; ex., beat or ghṛta ; cauterization.
- **Shadangas**, the six angas or modes of reckoning musical time : Anudrutam, Drutam, Laghu, Guru, Plutam and Kṛkapādam.
- **Shadja**, the first note of the scale.
- **Shatsruti dhaivata**, the variety of *dha* above the chatuśsruti dhaivata and theoretically the same as the note kaisiki nishada.
- **Shatsruti rishabha**, the variety of *ri* above the chatuśsruti rishabha and theoretically the same as the note, sadharana-gandhara.
- **Sruti**, (1) the (smallest) audible sound ; the sound which can be distinctly heard ; quarter-tone ; microtone, enharmonic note or interval. (2) key note or adhara shadja.
- **Sthana**, the term for sthayi in ancient music.

Sthayi, sthana; saptaka; voice register; octave; a series of seven svaras beginning from *sa* and ending with *ni*. The five sthayis used in Indian music are as follows:—



Suddha dhaivata, the komal variety of dhaivata (A flat) frequency $8/5$.

Suddha gandhara, the variety of *ga* below the sadharana gandhara and theoretically the same as the note chatussruti rishabha. Also the first gandhara note (frequency $32/27$) in the scale of 22 srutis.

Suddha madhyama, the komal variety of madhyama; (F); frequency $4/3$.

Suddha nishada, the variety of *ni* below the kaisik nishada and theoretically the same as the note chatussruti dhaivata. Also the first nishada note (frequency $16/9$) in the scale of 22 srutis.

Suddha rishabha, the komal variety of rishabha (D flat); frequency $16/15$.

Svara, literally that which pleases of its own accord musical note or interval.

Svarajnana, A person is said to have svarajnana, when (1) he is able to distinguish, recognise and write down the notes of a musical passage or phrase sung, played or heard; and (2) he is able to sing correctly a given passage in notation.

Svaravali, the preliminary svara exercises; vocalises.

• **Tala**, musical time or measure.

• **Tara Saptaka**, higher octave.

• **Tara Sthayi**, higher octave.

• **Tattu தட்டு**, ghata; beat; one of the modes of reckoning musical time.

• **Triputa tala**, the fifth of the seven principal talas; consists of a laghu and two drutams | ○ ○

• **Trisra laghu**, a variety of laghu consisting of a beat and two finger-counts: | 3

• **Tritiya kala**, third degree of speed,

Uchcha sthayi உச்ச ஸ்தாயி, higher octave.

Uttaranga, (1) the higher tetrachord *p d n s*; (2) also the second half of a varna comprising the charana and the ettugada svaras.

Vichchu விச்சு, waving of the hand; visarjitam; one of the modes of reckoning musical time.

Vikrta svara, a svara other than a suddha svara.

• **Vilambita kala**, slow speed or tempo.

• **Vilambita laya**, slow speed.

• **Visarjitam**, waving of the hand; one of the modes of reckoning musical time.

Vocalises, vocal exercise or study sung either to vowels or solmisation syllables.

• **Vusi**, visarjitam.

CHAPTER IV

VOCALISES

The svara exercises given in this book should first be practiced in the Mayamalavagaula scale. This raga, it will be remembered takes the svaras: Shadja, Suddha Rishabha Antara Gandhara, Suddha Madhyama, Panchama, Suddha Dhaivata and Kakali Nishada. When the students become thoroughly familiar with this scale, these svara exercises may be practised in the Sankarabharana, Harikambhoji, Kharaharapriya, Kalyani and Hanumatodi scales at the option of the teacher.

Since the days of Purandara Das, South India has profited by adopting the Mayamalavagaula as the starting scale for beginners in music. In Northern India, music students begin with the Bilaval (Sankarabharana) and in European music also they begin with the Major scale (Sankarabharana). Hence South India is unique in this respect. Ramamatya in his *Svaramela-kalanidhi* calls Mayamalavagaula as the best of all ragas:

రాగో మోక్షదాయకః రాగాజ్ఞానులై మోక్షమః.

By practising svara exercises first in this raga, students become early acquainted with semi-tonal intervals. Further this raga takes svaras about whose nature there is no controversy. Svaras with dual names do not come here. This raga is also an auspicious raga. This is the only sampurna raga that contains 4 pairs of notes separated by an interval of a semi-tone. The notes of each pair

belong to contiguous svarasthanas on the vina. The purvanga and uttaranga of this raga are symmetrical.

Further through Mayamalavagaula, the student becomes familiar with three types of intervals figuring in the 72 Melakartas :—

- (a) Dvisruti interval (semitone) between *g* and *m*; and between *n* and *s*
- (b) Chatussruti interval (Major tone) between *m* and *p*
- (c) Shatsruti interval (augmented interval) between *r* and *g*; and between *d* and *n*

ABHYASA GANA

SRUTI SVARA EXERCISES

Lesson 1.

- | | | |
|---------------|---------|---------|
| 1. S S | P P | Ś Ś |
| Ś Ś | P P | S S |
| 2. s s s s | p p p p | ś ś ś ś |
| | p p p p | s s s s |
| s s s s | P p p | Ś ś ś |
| 3. S s s | P p p | Ś ś ś |
| Ś s s | P p p | S s s |
| 4. S s s | s s P | s s Ṗ |
| Ś s s | s s P | s p Ṡ |
| | s s P | s p Ṡ |

Lesson 2.

- | | | | | |
|----|---------|---------|---------|---------|
| 1. | s r g m | p d n s | S ; | S ; |
| | s n d p | m g r s | Š ; | Š ; |
| 2. | s r g m | p d n s | Š ; | P ; |
| | s n d p | m g r s | S ; | P ; |
| 3. | s r g m | p d n s | Š Š | P P |
| | s n d p | m g r s | Š Š | P P |
| 4. | s r g m | p d n s | Š P | Š P |
| | s n d p | m g r s | S P | S P |
| 5. | s r g m | p d n s | š š š š | p p p p |
| | s n d p | m g r s | š š š š | p p p p |
| 6. | s r g m | p d n s | š s p p | š s p p |
| | s n d p | m g r s | š s p p | š s p p |

Lesson 3 TABLE VI

Showing the method of singing each of the following
Sarali exercises in the Prathama, Dvitiya, Tritiya and Chaturtha kalas

15th Melakarta

Mayamalavagaula—Adi

{ s r g m p d n s
s n d p m g r s

Kala									
Prathama or the 1st kala	s	r	g	m	p	d	n	s	
	s	n	d	p	m	g	r	s	
Dvitiya or the 2nd kala	s	r	g	m	p	d	n	s	
	s	n	d	p	m	g	r	s	
Tritiya or the 3rd kala	s	r	g	m	p	d	n	s	
	s	n	d	p	m	g	r	s	
Chaturtha or the 4th kala	s	r	g	m	p	d	n	s	
	s	n	d	p	m	g	r	s	
	s	r	g	m	p	d	n	s	
	s	n	d	p	m	g	r	s	
	s	r	g	m	p	d	n	s	
	s	n	d	p	m	g	r	s	

TABLE VII.

Showing the method of singing **s r g m p d n s s n d p m g r s**
in the Prathama, Dvitiya and Tritiya kalas (and vice versa) at a
stretch, within the space of one Aditala avarta

A

4	○	○
s r g m Prathama kala	p d n s Dvitiya kala	s n d p m g r s Tritiya kala

B

s r g m p n d s Tritiya kala	s n d p Dvitiya kala	m g Prathama	r s kala
--	--	------------------------------------	--------------------------------

SVARAVALI

Lesson 4.

1.	s r g m	p d n s	s n d p	m g r s
2.	s r g m	s r g m	s r g m	p d n s
	s n d p	s n d p	s n d p	m g r s
3.	s r g m	s r s r	s r g m	p d n s
	s n d p	s n s n	s n d p	m g r s
4.	s r g m	P P	s r g m	p d n s
	s n d p	M M	s n d p	m g r s
5.	s r g m	P - s r	s r g m	p d n s
	s n d p	M - s n	s n d p	m g r s
6.	s r g m	p m g r	s r g m	p d n s
	s n d p	m p d n	s n d p	m g r s
7.	s r g m	p m d p	s r g m	p d n s
	s n d p	m p g m	s n d p	m g r s
8.	s r g m	r g m p	s r g m	p d n s
	s n d p	n d p m	s n d p	m g r s
9.	s r g m	P - g m	P ;	P ;
	g m p d	n d p m	g m p - g	m g r s
10.	S n d	N d p	D p m	P P
	g m p d	n d p m	g m p - g	m g r s
11.	s r g r	G - g m	p m P	d p D
	m p d p	d n d p	m p d p	m g r s
12.	s r g m	P P	d d P	m m P
	d n s	s n d p	s n d p	m g r s

Lesson 5.

1. srsr srgm srgm pdns
sn sn sndp sndp mgrs
2. srg-s rg-sr srgm pdns
snd-s nd-sn sndp mgrs
3. srgm smgr srgm pdns
sndp spdn sndp mgrs
4. srgm pd-sr srgm pdns
sndp mg-sn sndp mgrs
5. srgm pdN srgm pdns
sndp mgR sndp mgrs
6. ssnd nndp ddpm PP
gmpd ndpm gmp-g mgrs

HECHCHUSTHAYI VARISAS

Lesson 6.

1. srgm pdns S ; S ;
dnsr sndp sndp mgrs
2. srgm pdns S ; S ;
dnsr ssrs sr sn dpmp
- dnsr sndp sndp mgrs

3. srgm p d n s S ; S ;
 d n s r g r s r s r n d p m p
 d n s r s s r s s r s n d p m p
 d n s r s n d p s n d p m g r s
4. srgm p d n s S ; S ;
 d n s r g m g r s r s n d p m p
 d n s r g r s r s r s n d p m p
 d n s r s s r s s r s n d p m p
 d n s r s n d p s n d p m g r s
-

*Lesson 7.

1. srgm p d n s S ; S ;
 s r g - r r s - n s r - s s n d n s - n
 n d - p d n - d d p m p d - p p m - g m
 p - m m g m p d n s n d p m g r s
2. srgm p d n s S ; S ;
 s r G r s - n s R s n d n S
 n d - p d N d p m p D p m - g m
 P m g m p d n s n d p m g r s
-

MANDRA STHAYI VARĪSAS

Lesson 8.

1. s n d p m g r s S ; S ;
 g r s n s r g m s r g m p d n s
 2. s n d p m g r s S ; S ;
 g r s n s s n s s n s r g m p m
 g r s n s r g m s r g m p d n s
 3. s n d p m g r s S ; S ;
 g r s n d n s n s n s r g m p m
 g r s n s s n s s n s r g m p m
 g r s n s r g m s r g m p d n s
 4. s n d p m g r s S ; S ;
 g r s n d p d n s n s r g m p m
 g r s n d n s n s n s r g m p m
 g r s n s s n s s n s r g m p m
 g r s n s r g m s r g m p d n s
 s n d p m g r s S ; S ;
-

JANTA VARISAS

Lessoa 9.

- | | | | | |
|----|------|------|------|------|
| 1. | ssrr | ggmm | ppdd | nnss |
| | ssnn | ddpp | mmgg | rrss |
| 2. | ssrr | ggmm | rrgg | mmp |
| | ggmm | ppdd | mmp | ddnn |
| | ppdd | nnss | ssnn | ddpp |
| | nndd | ppmm | ddpp | mmgg |
| | ppmm | ggrr | mmgg | rrss |
| 3. | ssrr | ggrr | ssrr | ggmm |
| | rrgg | mmgg | rrgg | mmp |
| | ggmm | ppmm | ggmm | ppdd |
| | mmp | ddpp | mmp | ddnn |
| | ppdd | nndd | ppdd | nnss |
| | ssnn | ddnn | ssnn | ddpp |
| | nndd | ppdd | nndd | ppmm |
| | ddpp | mmp | ddpp | mmgg |
| | ppmm | ggmm | ppmm | ggrr |
| | mmgg | rrgg | mmgg | rrss |
| 4. | Ss | Rr | gg | ssrr |
| | Rr | Gg | mm | rrgg |
| | Gg | Mm | pp | ggmm |
| | Mm | Pp | dd | mmp |
| | Pp | Dd | nn | ppdd |
| | Ss | Nn | dd | ssnn |
| | Nn | Dd | pp | nndd |
| | Dd | Pp | mm | ddpp |
| | Pp | Mm | gg | ppmm |
| | Mm | Gg | rr | mmgg |

5.	sS	rR	gg	ssrr	ggmm
	rR	gG	mm	rrgg	mmpp
	gG	mM	pp	ggmm	ppdd
	mM	pP	dd	mmpp	ddnn
	pP	dD	nn	ppdd	nnss
	sS	nN	dd	ssnn	ddpp
	nN	dD	pp	nndd	ppmm
	dD	pP	mm	ddpp	mmgg
	pP	mM	gg	ppmm	ggrr
	mM	gG	rr	mmgg	rrss

6.	sss	rrr	gg	ssrr	ggmm
	rrr	ggg	mm	rrgg	mmpp
	ggg	mmm	pp	ggmm	ppdd
	mmm	ppp	dd	mmpp	ddnn
	ppp	ddd	nn	ppdd	nnss
	sss	nnn	dd	ssnn	ddpp
	nnn	ddd	pp	nndd	ppmm
	ddd	ppp	mm	ddpp	mmgg
	ppp	mmm	gg	ppmm	ggrr
	mmm	ggg	rr	mmgg	rrss

7.	ssr	ssr	sr	ssrr	ggmm
	rrg	rrg	rg	rrgg	mmpp
	ggm	ggm	gm	ggmm	ppdd
	mm p	mm p	mp	mmpp	ddnn
	ppd	ppd	pd	ppdd	nnss
	ssn	ssn	sn	ssnn	ddpp
	nm d	nm d	nd	nn dd	ppmm
	ddp	ddp	dp	ddpp	mmgg

ppm ppm pm ppmm ggrr
mmg mmg mg mmgg rrss

8. ssrrg srg ssrr ggmm
rrggm rgm rrgg mmpp
ggmmp gmp ggmm ppdd.
mmppd mpd mmpp ddnn
ppddn pdn ppdd nnss
ssnnd snd ssnn ddpp
nnddp ndp nndd ppmm
ddppm dpm ddpp mmgg
ppmmg pmg ppmm ggrr
mmggr mgr mmgg rrss

9. Sss Rrr Ggg Mmm
Ppp Ddd Nnn Sss
Sss Nnn Ddd Ppp
Mmm Ggg Rrr Sss

10. Sss Rrr Ggg Mmm
Rrr Ggg Mmm Ppp
Ggg Mmm Ppp Ddd
Mmm Ppp Ddd Nnn
Ppp Ddd Nnn Sss
Sss Nnn Ddd Ppp
Nnn Ddd Ppp Mmm
Ddd Ppp Mmm Ggg
Ppp Mmm Ggg Rrr
Mmm Ggg Rrr Sss

II.	ssss	rrrr	gggg	mmmm
	pppp	dddd	nnnn	ssss
	ssss	nnnn	dddd	pppp
	mmmm	gggg	rrrr	ssss
12.	ssss	rrrr	gggg	mmmm
	rrrr	gggg	mmmm	pppp
	gggg	mmmm	pppp	dddd
	mmmm	pppp	dddd	nnnn
	pppp	dddd	nnnn	ssss
	ssss	nnnn	dddd	pppp
	nnnn	dddd	pppp	mmmm
	dddd	pppp	mmmm	gggg
	pppp	mmmm	gggg	rrrr
	mmmm	gggg	rrrr	ssss

Lesson 10.

1.	smgm	rgsr	ssrr	ggmm
	rpm p	gmrg	rrgg	mmpp
	gd p d	mpgm	ggmm	ppdd
	mndn	pdmp	mmpp	ddnn
	psns	dn p d	ppdd	nnss
	spdp	nds n	ssnn	ddpp
	nmpm	dpnd	nndd	ppmm
	dgm g	pm d p	ddpp	mmgg
	prgr	mgpm	ppmm	ggrr
	msrs	grmg	mmgg	rrss
2.	srsg	smgr	ssrr	ggmm
	rgrm	rpm g	rrgg	mmpp
	gm g p	gd p m	ggmm	ppdd
	mpm d	mndp	mmpp	ddnn

p d p n	p s n d	p p d d	n u s s
s n s d	s p d n	s s n n	d d p p
n d n p	n m p d	n n d d	p p m m
d p d m	d g m p	d d p p	m m g g
p m p g	p r g m	p p m m	g g r r
m g m r	m s r g	m m g g	r r s s

Lesson 11.

DATU VARISAS

1.	s r s g	r g m g	s g r g	s r g m
	r g r m	g m p m	r m g m	r g m p
	g m g p	m p d p	g p m p	g m p d
	m p m d	p d n d	m d p d	m p d n
	p d p n	d n s n	p n d n	p d n s
	s n s d	n d p d	s d n d	s n d p
	n d n p	d p m p	n p d p	n d p m
	d p d m	p m g m	d m p m	d p m g
	p m p g	m g r g	p g m g	p m g r
	m g m r	g r s r	m r g r	m g r s
2.	s g s r	g r m g	s m r g	s r g m
	r m r g	m g p m	r p g m	r g m p
	g p g m	p m d p	g d m p	g m p d
	m d m p	d p n d	m n p d	m p d n
	p n p d	n d s n	p s d n	p d n s
	s d s n	d n p d	s p n d	s n d p
	n p n d	p d m p	n m d p	n d p m
	d m d p	m p g m	d g p m	d p m g
	p g p m	g m r g	p r m g	p m g r
	m r m g	r g s r	m s g r	m g r s

CHAPTER V

Sapta Tala Alankaras

The names of the seven principal talas and their constituent angas are given in the following Table. Each of these seven talas admits of five varieties on account of the laghu jati bheda. The 35 Alankaras illustrative of these (7×5) 35 talas are given in Book II.

TABLE VIII

No.	Names of the Tala	Constituent Angas
I	Dhruva	O
II	Matya	O
III	Roopaka	o
IV	Jhampa	o o
V	Triputa	o o
VI	Ata	o o
VII	Eka	

ALANKARAS

Lesson.12

I. Dhruva tala—Chaturasra jati (Sreekara tala))

| 4 ○ | 4 | 4

Total Aksharakala ; 4+2+4+4=14.

4	○	4	4
s r g m	g r	s r g r	s r g m
r g m p	m g	r g m g	r g m p
g m p d	p m	g m p m	g m p d
m p d n	d p	m p d p	m p d n
p d n s	n d	p d n d	p d n s
s n d p	d n	s n d n	s n d p
n d p m	p d	n d p d	n d p m
d p m g	m p	d p m p	d p m g
p m g	g m	p m g m	p m g r
m g r s	r g	m g r g	m g r s

II. Matya tala—Chaturasra jati (Sama tala)

| 4 ○ | 4
Total Aksharakala : 4+2+4=10.

4	○	4
srgr	sr	sr gm
rgmg	rg	rg mp
gm pm	gm	gm pd
mp dp	mp	mp dn
pd nd	pd	pd ns
sn dn	sn	sn dp
nd pd	nd	nd pm
dp mp	dp	dp mg
pm gm	pm	pm gr
mg rg	mg	mg rs

III. Roopaka tala—Chaturasra jati (Patti tala)

Total Aksharakala : ○ | 4 2+4=6.

○	4
sr	sr gm
rg	rg mp
gm	gm pd
mp	mp dn
pd	pd ns
sn	sn dp
nd	nd pm
dp	dp mg
pm	pm gr
mg	mg rs

IV. Jhampa tala—Misra jati (Sura tala)

Total Aksharakala : | 7 0 7+1+2=10.

7	0	0.
s r g s r s r	g	M.
r g m r g r g	m	P
g m p g m g m	p	D
m p d m p m p	d	N
p d n p d p d	n	S
s n d s n s n	d	P
n d p n d n d	p	M
d p m d p d p	m	G
p m g p m p m	g	R
m g r m g m g	r	S

V. Tripura tala—Trisra jati (Sankha tala)

Total Aksharakala : | 3 0 0 3+2+2=7.

3	0	0
s r g	s r	g m
r g m	r g	m p
g m p	g m	p d
m p d	m p	d n
p d n	p d	n s
s n d	s n	d p
n d p	n d	p m
d p m	d p	m g
p m g	p m	g r
m g r	m g	r s

VI. Ata tala—Khanda jati (Vidala tala)

Total Aksharakala : | 5 | 5 O O 5+5+2+2=14.

5	5	O	O
sRG	SrG	M	M
iGM	RgM	P	P
gMP	GmP	D	D
mPD	MpD	N	N
pDN	PdN	S	S
sND	SnD	P	P
nDP	NdP	M	M
dPM	DpM	G	G
pMG	PmG	R	R
mGR	MgR	S	S

VII. Eka tala—Chaturasra jati (Mana tala)

Total Aksharakala : | 4 = 4.

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

Additional Examples.

Eka tala — Chaturasra Jāti

4	4	4.
s r G	s R g	S r g
r g M	r G m	R g m
g m P	g M p	G m p
m p D	m P d	M p d
p d N	p D n	P d n
d n S	d N s	D n s
s n D	s N d	S n d
n d P	n D p	N d p
d p M	d P m	D p m
p m G	p M g	P m g
m g R	m G r	M g r
g r S	g R s	G r s

CHAPTER VI

ACOUSTICS

Acoustics is that branch of physics, which deals with the study of sounds, their cause and nature. While music is concerned with sounds, which are calculated to excite pleasant feelings in us, acoustics is concerned with the problems of the production, transmission, comparison and perception of sounds in general.

Sound is produced by motion of some kind. In many cases the motion can be perceived by the eye. For example when the string of a Tambura or Vina is plucked, it gives out a sound and at the same time the string swings from side to side. The moment the string is touched by the finger, the motion ceases, and with it, the sound. Thus sound is caused by the vibratory motion of some sounding body.

Musical sounds and noises.—A musical sound produces a continuous pleasing sensation. It is produced by regular and periodic vibrations. But a noise is a confused mixture of many discordant sounds, like the noise of the waves. Noise is the result of non-periodic and irregular vibrations—irregular both in point of time and strength.

It is however difficult sometimes to draw a sharp distinction between a musical sound and a noise. The sound of the ghatam and the kanjira for instance cannot strictly be called musical, but they are some times delightful accompaniments in a music concert.

Musical sounds : their characteristics.

Musical sounds may differ in respect of :—

1. Pitch or frequency (சீருதி)
2. Intensity or loudness (அழுத்தம்)
3. Quality or timbre (தன்மை, நிறம்)
4. Duration or length (கால அளவு)
5. Plain or Graced utterance (கமகம்)

Pitch is the height or depth of sounds. It is that which distinguishes a note of a higher sruti from a note of a lower sruti. We say that of the two notes **g** and **m**, the pitch of **m** is higher than that of **g**. Since the pitch of a note depends upon the rate of vibration, the pitch or frequency of a note is expressed in terms of vibrations per second.

Pitch is expressed *relatively*, when we say that one note is the panchama or the madhyama of another note. It is expressed *absolutely* when its vibration number or frequency is mentioned.

Intensity.—The intensity or loudness of a sound depends upon the amplitude of vibration of the sounding body. Suppose the sārani string of a Tambura or a Vina is plucked (1) lightly and (2) with some force, as by drawing the string a little further from its position of rest; one is able to distinguish the notes in the two cases easily, for the intensity of one is greater than that of the other. In both the cases, however, since the same string is plucked and all other factors are constant, the pitch remains the same.

There are five causes which affect the intensity of a note when heard at a distance from its source :—

1. Distance of the ear from the sounding body.
2. The amplitude of the vibrations.
3. The density of the air at the place where the sound is produced.
4. The direction of the currents of air.
5. The presence of other sounding bodies in the neighbourhood.

Quality or Timbre.—Suppose the same note is produced on different musical instruments like the flute, vina, violin and the human voice. Even though the sounds are exactly of the same pitch and loudness, yet one can easily say which note is the flute-note and which the vina-note and so on. That characteristic of the musical sound which enables one to recognise the voices of different persons and the notes of various musical instruments is known as *timbre*. Thus the quality or timbre is that which distinguishes a note or sound of one instrument or voice, from the same note or sound of another instrument or voice.

Musical notes may also differ in respect of their length and style of rendering. When we speak of long and short notes, what we mean is, that the duration of the former is longer than that of the latter. A musical note may be rendered in a plain or graced manner according to the raga in which it occurs.

APPENDIX I

Svarajnanam Exercises

The following exercises should be practised by the students under the guidance of the teacher. They should be practised first in the Mayamalavagaula scale and afterwards in the Sankarabharana, Harikambhoji, Kharaharapriya, Kalyani and Todi scales at the option of the teacher. The svaras should be sung slowly, distinctly and correctly.

1. s R s r G s r g M s r g m P
 s r g m p D s r g m p d N s r g m p d n Ś
 ś N ś n D ś n d P ś n d p M
 ś n d p m G ś n d p m g R ś n d p m g r S
2. S
 s r S
 s r g S
 s r g m S
 s r g m p S
 s r g m p d S
 s r g m p d n S
 s r g m p d n Ś Ś
 ś n Ś
 ś n d Ś
 ś n d p Ś
 ś n d p m Ś
 ś n d p m g S
 ś n d p m g r Ś
 ś n d p m g r S

3.	s R	s G	s M	s P	s D	s N	s S
	s N	s D	s P	s M	s G	s R	s S
4.	s R	r G	g M	m P	p D	d N	n S
	s N	n D	d P	p M	m G	g R	r S
5.	s r g r	r g m g	g m p m			m p d p	
	p d n d	d n s n	n s r s			S ;	
	s n d n	n d p d	d p m p			p m g m	
	m g r g	g r s r	r s n s			S ;	
6.	s s r r	s s g g	s s m m			s s p p	
	s s d d	s s n n	s s s s			S ;	
	s s n n	s s d d	s s p p			s s m m	
	s s g g	s s r r	s s s s			S ;	
7.	s s r s	s s g r	s s m g			s s p m	
	s s d p	s s n d	s s s n			S ;	
	s s n s	s s d n	s s p d			s s m p	
	s s g m	s s r g	s s s r			S ;	
8.	s g r s	r m g r	g p m g			m d p m	
	p n d p	d s n d	n r s n			S ;	
	s d n s	n p d n	d m p d			p g m p	
	m r g m	g s r g	r n s r			S ;	
9.	s r S	r g R	g m G			m p M	
	p d P	d n D	n s N			s r S	
	s n S	n d N	d p D			p m P	
	m g M	g r G	r s R			s n S	

10. s n s r S r s r g R g r g m G m g m p M
 p m p d P d p d n D n d n s N s n s r S
 s r s n S n s n d N d n d p D p d p m P
 m p m g M g m g r G r g r s R s r s n S

11. s r g r S r g m g R g m p m G m p d p M
 p d n d P d n s n D n s r s N s r g r S
 s n d n S n d p d N d p m p D p m g m P
 m g r g M g r s r G r s n s R s n d n S

12. s n d p d n S r s n d n s R g r s n s r G
 m g r s r g M p m g r g m P d p m g m p D
 n d p m p d N s n d p d n S S ; ; ;
 s r g m g r S n s r g r s N d n s r s n D
 p d n s n d P m p d n d p M g m p d p m G
 r g m p m g R s r g m g r S S ; ; ;

13. s s S , s r r R , r g g G , g m m M , m
 p p P , p d d D , d n n N , n s s S , s
 s s S , s n n N , n d d D , d p p P , p
 m m M , m g g G , g r r R , r s s S , s

14. S s s S ; R r r R ; G g g G ; M ; ; ;
 R r r R ; G g g G ; M m m M ; P ; ; ;
 G g g G ; M m m M ; P p p P ; D ; ; ;
 M m m M ; P p p P ; D d d D ; N ; ; ;

P p p P ; D d d D ; N n n N ; S ; ; ;
 S s s S ; N n n N ; D d d D ; P ; ; ;
 N n n N ; D d d D ; P p p P ; M ; ; ;
 D d d D ; P p p P ; M m m M ; G ; ; ;
 P p p P ; M m m M ; G g g G ; R ; ; ;
 M m m M ; G g g G ; R r r R ; S ; ;

APPENDIX II

Concert Programme : Some underlying Principles

Sangita lakshana or the science of music is a thing of gradual growth. The lakshana lives through the lakshya and the latter in its turn looks to the former for guidance and strength. The lakshana of modern Indian music represents the accumulated wisdom of the musical thinkers of the past. Whereas the lakshana of a musical system can be preserved through books, the same is not true of lakshya. The lakshya can be preserved and handed on to future generations only by a number of people cultivating the art and learning the compositions. For those people who have neither the time nor the inclination to learn the higher types of musical compositions, concerts of eminent performers are a real boon, for they give them a valuable opportunity to become familiar with them.

With the development of the raga concept, a new chapter begins in the history of art music in India. The desire arose in the minds of rasikas to listen to creative music and the way was gradually paved for the development

of the modern Kachcheri. Concerts of the earlier period consisted mostly of recitals of sacred songs and hymns. There were also the dance dramas, dance concerts and folk plays.

Sangita sabhas have been functioning in South India from the nineties of the last century. These sabhas are perhaps the one place where one can go and listen to the highest type of art music at present. The vidvans who formerly gave concerts in the courts of Rulers were later on, obliged to exhibit their talents in sabhas due to changed circumstances. The Kachcheri paddhati, carefully evolved in the samasthanas was later transplanted to the sangita sabhas. The vidvan who formerly delighted in expounding a raga for hours together and earned the encomiums of even his jealous colleagues had to remodel his programme to suit the new type of audience. The modern kachcheri continues the tradition of art music but with this difference that more time is devoted to the rendering of compositions than to creative music.

The modern sangita sabha is not a mere place of entertainment; it is a place where one gets food for musical thought and especially so, when eminent musicians perform. It is also a place where the practising musicians get some intellectual nourishment as well. The sangita sabha is the one place now where the performer can hope to get an enlightened and cultured audience. Naturally he desires to exhibit his musical skill and scholarship there. The concert in a sangita sabha may be styled as a *practical discourse on absolute music*. Full scope is afforded there to the members of the music party to exhibit their collective skill and individual skill.

It is the duty of the audience in a concert hall to give a patient hearing to the musicians. The audience will in

return be amply rewarded with delightful music from them. The performers come there with the avowed object of pleasing the audience and nothing will cheer them more than the fact that the audience enjoyed their performance. An appreciative audience is like a catalytic agent and draws the best from the performer. Members of the audience should particularly take care to see that they do not talk with each other or become restless, when the tambura or some other instrument is being tuned. Nor should they make an entry or exit in the middle of an item.

The modern concert programme is based on certain aesthetic principles. The sequence of the items in a concert has much to do with its sum-total effect. The performers as well as the listening rasikas have had their share in the past in moulding the concert Programme (கச்சேரி பத்ததி). The sequence of *ghana-naya-desya* has been the guiding principle in the chalking out of concert programmes. The musician in former times began with ghana ragas, followed it up with compositions and Pallavi in naya or rakti ragas and concluded the concert with lighter compositions in desya ragas. *Concert-worthy* pieces alone were presented in Kachcheris. These pieces in course of time gained added lustre by being handled by illustrious musicians. Classical compositions representative of different styles and composers and pieces which contained intelligent themes for developing niraval and kalpana svaras were sung in concerts. The embroidery of yati patterns and passages containing rhythmical sequences of variegated beauty were noticed in the kalpana svaras. The longer passages of kalpana svaras were finished with fascinating and impressive makutams (crownlike endings.)

One of the first things that a musician should do in a concert is to concentrate on creating the requisite musical

atmosphere. If the musician is not able to create this atmosphere and establish contact with the audience within the first half an hour of his concert, his subsequent performance is bound to fall flat on the ears of the audience. The object in singing ragas like Nata, Kedaram, Kalyani and Hamsadhvani at the commencement of a concert is to create this musical atmosphere. These ragas with tivra svaras are helpful in creating this desired atmosphere. If *Vatapigana-patim* was sung at the commencement of concerts by Maha Vaidyanatha Iyer and other great musicians in the past, it was not only due to the fact that it was a piece in praise of Vigneswara but also because it was in Hamsadhvani. If the same sahitya in praise of Ganapati was set in Punnagavarali or Ahiri, nobody would have bothered to sing it as the first item. Bikshandarkovil Subbarayer, one of the outstanding singers of the last century used to send his tambura players to the concert hall, 15 minutes in advance with instructions to be playing the same till he came. The late Mridangam Narayanasamiappa used to have two tamburas tuned an octave apart in his bhajanas. In contrast to the dormant or almost silent tamburas of some of the performers in South India, one happily finds two resounding tamburas used by most Hindusthani musicians.

Secondly, the performer has to get into form as quickly as possible. For this purpose the performers in the past used to sing or play tanas in ghana ragas before taking up compositions. Tanas in ghana ragas later gave place to tana varnas. The tana varnas are admirably suited to get the singers and performers into form. Since the mridangam player is also familiar with the varnas, he is able to provide an impressive rhythmical accompaniment and the collective effect is good both from the point of view of the listener and the performer. Illustrious singers like the late Ramnad

Srinivasa Iyengar, Ananta Rama Bhagavater and Bidaram Krishnappa began their concerts with tana varnas. The more important of the ancient alankaras are melodiously weaved into the fabric of tana varnas. It is a pity that the practice of singing tana varnas at the commencement of concerts is slowly getting out of vogue.

Once the musician gets into form and the requisite musical atmosphere has been created, he can proceed with his programme. It is the practice to follow the tana varna with a few madhyama lala kritis preferably in ragas with antara gāndhāra and then sing pieces in slower tempo. After this, two pieces in madhyamakala may be sung and the detailed alapana of the main raga for the day taken up and followed by the pallavi. The raga and pallavi constitute the heaviest item in a concert and appropriately occupy the central position. The Pallavi is followed by the singing of a padam, javali, ragamalika (composition, or slokas in different ragas), tillana and pieces of a lighter nature. The concert is concluded with a Mangalam and a brief alapana of Madhyamavati. The notes figuring in the Madhyamavati raga are those which occur earliest in the Cycles of Fifths and Fourths and as such have a high degree of concordance. The Madhyamavati alapana at the end when heard will result in a feeling of tranquility. Listeners who choose to stay till the end will realise the importance of listening to the mangalam and the brief alapana of Madhyamavati at the close.

Just as the various devatas in a shrine have their allotted places, so also in a kachcheri the several forms have their allotted places in the programme. Compositions which are hearable and presentable alone should be given in a concert. Concert-worthy compositions are a class by themselves. Concerts should be begun with auspicious ragas.

It is the duty of the sabhas to continue the noble traditions of the Kachcheri paddhati and not allow it to change or even allow the programme to get diluted with many items of a lighter nature.

QUESTIONS

1. Name the seven svaras. Point out which of them admit of varieties and which of them do not.

2. Distinguish between Komal svara and Tivra svara. Are they the same as the flats and sharps of European music? Explain.

3. Give the names of the 12 notes of a sthayi.

4. Point out the kinds of *r, g, d, n*, that occur in the scales: Hanumatodi, Kharaharapriya, Harikāmbhoji and Mechakalyani?

5. (a) Name the raga which takes the following svaras in its arohana and avarohana:—

Shadja, Suddha Rishabha, Antara Gandhara,
Suddha Madhyama, Panchama, Suddha
Dhaivata and Kakali Nishada.

(b) Name the raga that would result when the Suddha Rishabha and the Suddha Dhaivata in the above raga are substituted by the Chatussruti Rishabha and Chatussruti Dhaivata.

(c) If in this new raga, the *Suddha madhyama* is replaced by the *Prati madhyama*, which raga would result?

6. Explain the use of the dot, comma, semi-colon, line, numerals, wavy line, asterisk and double bar in the *sa ri ga ma* notation.

7. Point out the symbols used to denote the following :—

- (a) *Anyā svara* (b) *Anumandra sthayi svara*
(c) *Kampita svara* (d) *Madhyamakāla svara*.

8. Distinguish between :—

- (a) *Hrasra svara* and *Dirgha svara*.
(b) *Prakṛuti svara* and *Vikṛuti svara*.
(c) *Komal svara* and *Tivra svara*.

9. Explain the following terms :—

Aksharakāla ; *Arohana* ; *Avarta* ; *Saptaka* ; *Purvanga* ;
Laya ; *Gamaka* ; *Achala svara*.

10. Explain the following terms and give their opposites :—

- (a) *Anahata nada* (b) *Avārohana* (c) *Uttaranga*
(d) *Komal svara* (e) *Dirgha svara*.

11. (a) What are the *shadangas*? How are they symbolically represented?

(b) Which of the *shadangas* admits of *jāti bhedas*?

12. Name the *sapta talas* and give their constituent *angas*.

13. Name the tala that would result if the second laghu of the Matya tala is replaced by a drutam.

14. Give an example for each of the following:—

- (a) A tala having three laghus.
- (b) A tala having only one drutam
- (c) A tala having the anudrutam
- (d) A tala which has not got the drutam.

15. Give the constituent angas of the following talas.—

- (a) Matya (b) Jhampa (c) Triputa (d) Ata.

16. Give two examples for each of the following:—

(a) A tala whose avarta is equal to fourteen aksharakalas.

(b) A tala whose avarta is equal to ten aksharakalas.

17. Write in notation the Jhampa tala Alankara and the Ata tala Alankara.

18. How are the drutam and the anudrutam reckoned?

19. What are the five kinds of laghus and how are they symbolically represented?

20. Name three talas which have more than one laghu.

21. Write the second half of the alankara in Ata tala and mention the total number of dirgha svaras figuring therein.

22. Explain what you mean by the terms - Prathama, Dvitiya and Tritiya kalas. If a musician chooses to sing two notes for unit-time in the Prathama kala, how many notes should he sing for a unit-time in the Dvitiya kala and Tritiya kala ?

23. What is the total time -value of a tala which consists of :—

- (1) 2 Trisra laghus + 2 drutams.
- (2) 3 Khanda laghus and a drutam.
- (3) 1 Chaturasra laghū + anudrutam + 1 drutam.
- (4) 1 Misra laghu + 2 drutams.

24. Distinguish between :—

- (a) musical sound and noise ;
- (b) āhata nada and anāhata nada ;
- (c) svāra and sruti ;
- (d) arohana and avarohana ;
- (e) purvanga and uttaranga,

25. (a) Give some instances of svāra-groups in :—

- i. Arohana-krama. ii. Avarohana-krama.

(b) Say whether the following svāra-groups are in the arohana-krama or avarohana-krama with reasons :

- | | | |
|---------------|----------------|---------------|
| (i) g m P | (ii) m p D | (iii) p g r s |
| (iv) n d p m | (v) m g R | (vi) n p M |
| (vii) m d r s | (viii) g p d s | |

26. What is a sthāyi ? Name the three principal sthāyis.

27. Give a few phrases of your own in the Mayamala vagaula raga.

28. Give reasons for the fact that Mayamalavagaula is best suited for practising the preliminary svara exercises.

29. Explain the terms pitch, intensity and timbre.

30. It is common experience that in a music concert, the music becomes effective, only some time after its commencement. The effect is greater, if the audience is large and the atmosphere somewhat moist. How do you account for this?

31. Write a short essay on the greatness of music.

32. Set suitable words to the following phrases in Mayamalavagaula and sing them:—

- | | | |
|-----------------|---------------|---------------|
| 1. g r G | 2. g m P | 3. d n S |
| 4. n s n d P | 5. p d P m g | 6. P m g r s |
| 7. N d p m g | 8. g m p d P | 9. G m g r s |
| 10. g m p d n s | 11. d n s r S | 12. s n d n S |

33. Sing the following phrases in Mayamalavagaula:—

- | | |
|------------------------|------------------------|
| 1. n s n d P m g | 2. g m p d n s r S |
| 3. s n d n s r G | 4. M g r s n d p d n S |
| 5. S n d p d n d p m G | 6. D p m g m p d n d P |
| 7. P m g r s n d n n S | 8. g m p d p m g r S |

34. Passage for musical dictation:—

Mayamalavagaula - Adi.

P, m g r s n	s r g m.	P d n
S, n d p m g	m p d n	S ;

Ṣ , mgrsn dpdn snsr

Ṣ , ndp P , mgr S ; ॥

35. Passage for sight singing :—

Mayamalavagaula — Adi.

G , mgrsn srgm pdpm

P , ddpmg mpmpD P ;

P , dndpm gmpd ndpm

G , mgrsn dnsr S ;

Ṣ , ṣndpm gmpd nṣrṣ

N , ṣrṣsn srgr G ;

M , grs-Ṣ , ndp mgmp

gmpdnṣrṣ ndP , mgr S ; ॥

36. The following are half-avarta passages in the ragas mentioned. Complete the passages by supplying another half avarta music of your own in the respective ragas :—

(a) Mayamalavagaula— Adi tala

G , mgrsn srgm pdpm

(b) Kambhoji - Adi tala

D , ndpmg mpdp dndp

(c) Sankarabharana - Adi tala

P , mgrsn srgm grsn

(d) Kalyani - Adi Tala

Ṣ , ṣndpm G - ndpmgr

OTHER MUSIC BOOKS OF THE AUTHOR IN ENGLISH

The Teaching of Music	...	5	0	0
South Indian Music : Book 1 (Fourth edition)	...	1	0	0
Do Book 2 (Fourth edition)	...	1	8	0
Do Book 3 (Third edition)	...	2	8	0
Do Book 4 (Second edition)	...	2	8	0
The Melakarta Janya Raga Scheme with Chart	...	0	12	0
The 72 Melakarta Chart (separately)	...	0	4	0
Syama Sastri & other famous composers	...	1	0	0
The Flute with Instructions for Practice (Second edition)	...	1	0	0
Indian Melodies in Staff notation: Book 1	...	1	0	0
Madras as a seat of musical learning	...	0	2	0
South Indian Musical Instruments (Madras Govt. Museum Bulletin)	...	2	8	0
Mode-shift-ton or Graha bheda Pradarsini : Instrument	...	40	0	0
Do Explanatory Pamphlet	...	0	4	0

IN TAMIL

Kirtana Sagaram: Books: 1, 2, 3 & 4 (Price of each Volume)	...	1	0	0
Practical course in Karnatic music				
Book 1 (Sixth edition)	...	1	0	0
Do Book 2 (Fifth edition)	...	1	8	0
Do Book 3 (Fourth edition)	...	2	8	0
Sri Tyagaraja's Telugu opera: Nowka charitram, with the songs in notation	...	1	4	0
Indian Songs: Part 1 to 5: Each Part	...	0	8	0
New Musical Compositions: Book 1	...	0	4	0
Vachaspati Kriti & 2 Marches	...	0	2	0
Selections from Tamil Composers: Book 1 (Third edition)	...	1	0	0
Namavali Satakam	...	0	3	0

SOUTH INDIAN MUSIC

BOOK II

FOURTH EDITION



P. SAMBAMOORTHY.

SOUTH INDIAN MUSIC

BOOK II

FOURTH EDITION

(Revised and Enlarged)

P. SAMBAMOORTHY, B.A., B.L.

*Head of the Department of Indian Music,
University of Madras.*



THE INDIAN MUSIC PUBLISHING HOUSE,
G. T., MADRAS.

1949

All Rights Reserved.

Rs. 1-8-0

Knowledge of the Science of Music
Conduces to Heavenly Bliss.

—Tyagaraja

CONTENTS

			PAGE
CHAPTER	I	Raga	1
„	II	Tala	13
„	III	Musical form	23
„	IV	35 Alankaras	34
„	V	Gitas	49
„	VI	Acoustics	72
„	VII	Technical Terms	77
QUESTIONS			93-100

Note to the Fourth Edition

The theoretical portion has been enlarged. Supplementary alankaras have been added. More technical terms have been defined in Chapter VII. Passages suitable for Sight singing and Musical dictation have been added. The book has been carefully revised and brought up to date.

CHAPTER I

RAGA

Music is an integral part of India's culture. It is the one art that is in evidence in all the strata of society. Indian music is one of the living systems of music in the world.

Rāga is the *pivotal concept* of Indian music. This concept is India's proud contribution to world music. This concept is of interest to scholars of comparative musicology all the world over. The ideal of absolute music is reached in the concept of rāga. The attainment of rāgajnāna is the ultimate aim of all musical studies. The whole structure of Indian music is built around the concept of rāga. Indian melodies of the classical type are based on rāgas. As for folk melodies, a good number of them will be found to be in some recognisable rāga or other. The origin of rāgas like Kuranji and Nādanāmakriya can be traced to folk melodies.

Rāgas are aesthetic facts and can be perceived by trained ears. Rāgas derive their individuality through notes of defined frequencies entering into their formation. It is the horizontal arrangement of particular tones and semitones in conformity to recognised aesthetic laws that establishes the rūpa or form of a rāga. Rāgas reveal themselves through the twin channels of Kalpita sangita and Manodharma sangita. Kalpita sangita means music already made. This music includes the musical compositions already composed. Both rhythmical music and compositions like the Chitta tānas which are not strictly rhythmical will

come under its scope. Manodharma sangita is music improvised on the spot and admits of the divisions; Alapana inclusive of Tana or Madhyamakala, Pallavi exposition, Niraval and Svara Kalpana. Musical compositions and alapanas are concrete manifestations of the abstract raga.

Manodharma sangita or creative music is the distinctive feature of Indian music. It is this that imparts a dynamic character to Indian music. In a concert we hear not only the compositions of great composers but also the performer's creative music - music improvised by him and presented on the spot. Thus we enjoy in a concert not only the creative talents of the musician but also his powers of interpreting the compositions of great composers. Performers are the links between the audience and the composers. Alapana is unmeasured music. Alapana had its origin when slokas came to be sung in a raga.

Raga sphutam is the process of discovering the individuality of a raga i. e., its jiva svaras, nyāsa svaras, rakti prayogas or pakads, resting notes, vakra prayogas etc. A raga once conceived attains its full stature usually at the hands of a subsequent composer or composers.

The rich treasure-house of rāgas is the glory of Indian music. The rāgas form the basis of all melody in India. They live through the compositions of great composers and the ālāpanas of master musicians. Raga is the quintessence of Indian music. In the formation of rāgas all possible combinations of notes for creating emotional effects have been utilised. Ability on the part of a person to recognise, distinguish and sing or play rāgas indicates a high degree of musical culture. Rāgas are based on *ranjakatva*.

A rāga might be defined as a melody-mould or melody-type. It consists of a series of notes, which bear a definite relationship to the ādhāra shadja and which occur in a particular sequence. The introduction of notes eschewed in a raga will prove fatal to its melodic individuality. Rāgas give pleasure to the listener and are beautified by svara varnas. '*Rāga ālāpana*' is the permutation and combination of notes admissible in the rāga in such a manner as to bring out its distinctive characteristics.

The various factors that go to build the melodic individuality of a raga are described in detail in Book III. The first detail that a student should become familiar with, concerning a raga is its ārohana and avarohana and the melakarta to which it belongs. If the rāga in question is a janaka rāga, its ārohana and avarohana will, as already mentioned, be sampūrṇa.

The ārohana and avarohana constitutes the briefest description of a raga and is like a theorem in geometry. It gives in a concise form the outline or framework of the raga. It defines the contour of the rāga. The normal sanchāras that the rāga admits of are directly revealed by the ārohana and avarohana. Sometimes a rare prayoga is incorporated in the ārohana and avarohana (Ex. Nāta) and in a few instances, the ārohana and avarohana instead of being in a concise form is slightly expanded and presented. Janta svaras, dirgha svaras and kampita svaras figure in the ārohana and avarohana of some rāgas. All these features serve only to reveal better the melodic individuality of those rāgas. Instances of such rāgas are however not many.

Raga Classification

Rāgas are classified into Janaka rāgas and Janya rāgas. This is a highly scientific system of classification and is based on the genus-specie system. The terms janaka rāga, melakarta raga, mela rāga, kartā rāga, sampūrna rāga, parent rāga, fundamental rāga, root rāga and primary rāga are all synonymous and mean the same thing. Likewise janya rāgas are known by other names as derivative rāgas and secondary rāgās. Janaka rāgas possess the full complement of the sapta svaras in both the ārohana and avarohana and the notes ascend and descend in a regular order. In addition, the svaras are of the same kind in both the ārohona and avarohana. These are the three characteristic features of janaka rāgas. There are 72 such janaka rāgas arranged in a definite serial order.

① A janya rāga is a rāga, which is said to be *born* or *derived* from a melakarta rāga. Every janya rāga has its parent scale or janaka rāga. A janya rāga takes the same svaras as the svaras taken by its parent rāga. The mention of the name (or serial number) of the janaka rāga therefore gives the clue to the svaras taken by the janya rāga. Thus when it is said that Māyāmālavagaula is the janaka rāga of Malahari, it means that the svaras taken by the Malahari rāga are the same as the svaras taken by Māyāmālavagaula. Occasionally janya rāgas take one or two *foreign notes* (notes foreign to their parent rāgas) for the sake of enriching their beauty (see post).

The student will do well at this stage to become familiar with the following janaka rāgas:—

TABLE I

Giving the svaras taken by some prominent melakarta rāgas together with their serial numbers:—

Melakarta No.	Name.	*Svaras.
8	Hanumatodi	s r ₁ g ₁ m ₁ p d ₁ n ₁ ś
15	Māyāmālavagaula	s r ₁ g ₂ m ₁ p d ₁ n ₂ ś
16	Chakravākam	s r ₁ g ₂ m ₁ p d ₂ n ₁ ś
17	Sūryakāntam	s r ₁ g ₂ m ₁ p d ₂ n ₂ ś
20	Nata Bhairavi	s r ₂ g ₁ m ₁ p d ₁ n ₁ ś
22	Kharaharapriya	s r ₂ g ₁ m ₁ p d ₂ n ₁ ś
28	Harikāmbhoji	s r ₂ g ₂ m ₁ p d ₂ n ₁ ś
29	Dhira Sankarābharana	s r ₂ g ₂ m ₁ p d ₂ n ₂ ś
51	Kāmavardhani	s r ₁ g ₂ m ₂ p d ₁ n ₂ ś
65	Mechakalyāni	s r ₂ g ₂ m ₂ p d ₂ n ₂ ś

* Numeral 1 denotes the Komala svara and Numeral 2 the Tivra svara.

Classification of Janya Ragas

1. **Varja ragas.** Varja rāgas are those janya rāgas wherein one, two or three notes are deleted either in the ārohana or avarohana or both. From the number of svaras present in the ārohana and avarohana, janya rāgas are classified under eight heads. The terms, *sampurna* (all the *sapta* svaras being represented), *shāḍava* (six svaras only being represented i.e., one note being *varja*) and *audava* (five svaras only being represented i.e.,

two notes being varja) are used to describe the ārohana and avarohana in this connection. The tāra sthāyi shadja is excluded in calculating the number of svaras present in the ārohana and avarohana of rāgas.

Audava is the earlier form of *Audava*.

The*eight kinds of varja ragas are :—

1. Shādava - sampūrna
2. Audava - sampūrna
3. Sampūrna - shādava
4. Sampūrna - audava
5. Shādava - shādava
6. Shādava - audava
7. Audava - shādava
8. Audava - audava

Every one of the 72 melakarta rāgas admits of all these eight varieties of transilient rāgas. The possible number of audava-shādava-sampurna combinations is 483 and this multiplied by 72, gives the colossal figure † 34, 776, which is the possible number of varja rāgas of this class, derivable from all the 72 melakarta rāgas.

*Varja ragas of the *svarantara* type i.e., with only four notes are explained later.

† For full details regarding this calculation, the reader is referred to the author's *Melakarta Janya raga scheme*.

TABLE II

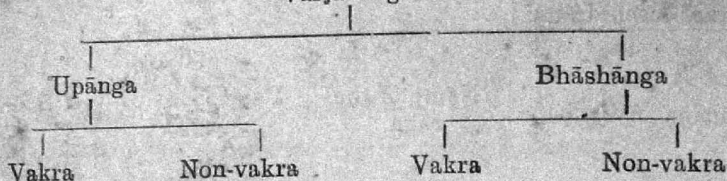
The eight kinds of varja ragas with examples.

No.	Kind of janya-rāga and the number of svaras present in its:		Examples.		
	Ārohana	Avarohana	Name of the rāga.	Its ārohana & avarohana	Serial no. of its mēla-karta rāga.
1	Shādava-Sampūrṇa		Kāmbhoji	{ s r g m p d s { ś n d p m g r s	28
2	Audava-Sampūrṇa	5 7	{ Bilahari	{ s r g p d s { ś n d p m g r s	29
			{ Ārabhi	{ s r m p d s { ś n d p m g r s	29
3	Sampūrṇa-Shādava	7 6	Bhairavam	{ s r g m p d n s { ś d p m g r s	17
4	Sampūrṇa-Audava	7 5	{ Garuda-	{ s r g m p s n s { ś d p g r s	29
			{ dhvani	{ s r g m p d n s { ś n d m g s	20
5	Shādava-Shādava	6 6	Sriranjani	{ s r g m d n s { ś n d m g r s	22
6	Shādava-Audava	6 5	Nātakuranji	{ s r g m d n s { ś n d m g s	28
7	Audava-Shādava	5 6	{ Malahari	{ s r m p d s { ś d p m g r s	15
			{ Sarasvati	{ s r m p d s { ś n d p m r s	64
8	Audava-Audava	5 5	{ Mohana	{ s r g p d s { ś d p g r s	28
			{ Suddha-sāveri	{ s r m p d s { ś d p m r s	29

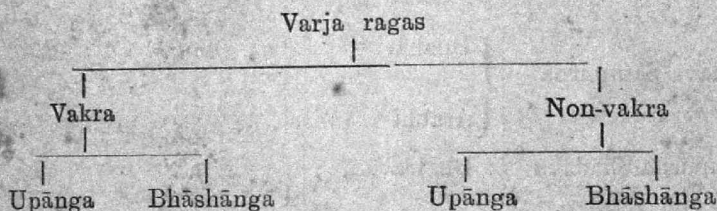
Varja ragas may again be classified into *upāṅga ragas* and *bhāṣhāṅga ragas* and these again into *vakra* or *non-vakra*:—

TABLE III

Varja rāgas



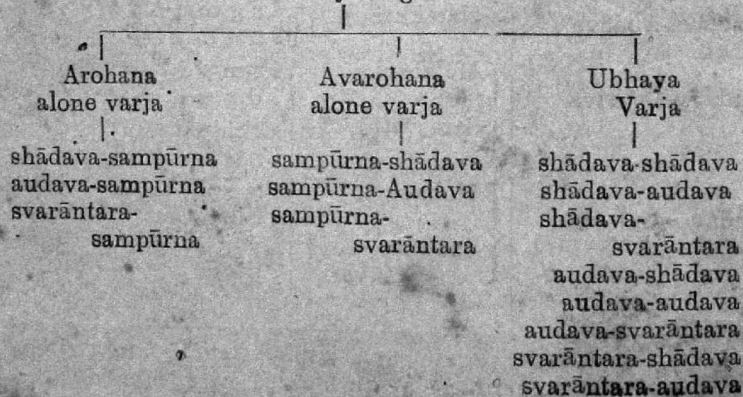
Or,



*Varja rāgas may be further classified into :—

1. Arohana (alone) varja rāgas ; 2. Avarohana (alone) varja rāgas and 3. Ubhaya (both) varja rāgas.

Varja rāgas



Note.—Even as a minimum of three straight lines is required to enclose a space, a minimum of five notes is required to give an individuality to a rāga. Thus a svarāntara-svarāntara raga, though a theoretical possibility must be ruled out from the pale of practical music.

In the ārohana and avarohana of the audava or svarāntara type, contiguous notes will not usually occur as varja svaras. The distribution of *varja svaras* has much to do with the melodical richness of a raga. The extent and nature of *varjatva* in varja ragas are clearly revealed by the graphs of those ragas.

⊗ **II. Vakra ragas.** Janya rāgas whose ārohana or avarohana or both take a *crooked* or *zig-zag* course are called vakra rāgas. Graphically represented, the ārohana and avarohana of *non-vakra* rāgas will be found to be regularly ascending and descending straight lines or curves; but the graphs of vakra rāgas will present many indentations and reveal their tortuous character.

In vakra rāgas, during the course of the ārohana or avarohana or both, a prior note will be found to repeat itself. Instances of vakra rāgas without the repetition of a prior note are rare. *Katanakutuhalam* is an example of this latter type, wherein the ārohana is: *s r m D. n g p s*.

Vakra svara is that svara in the ārohana or avarohana at which a change in the course takes place. It is the svara at which there is the interruption in the regular course of the ārohana or the avarohana as the case may be.

Vakrāntya svara is the svara at which the *vakratva* or the change in the course ends and the original course is resumed. Thus in the ārohana of *Katanakutuhalam* (see

above) the *ni* is the *vakra svara* and *ga* is the *vakrāntya svara*. Sometimes the *vakrāntya svara* may be the note next to the *vakra svara*; for ex. *dha* in the ārohana of *Kuntalavarāli*: *s m p d n d ś* (*ni* is the *vakra svara* and the *dha* following it is the *vakrāntya svara*). Thus the range of *vakratva* may be one note as in *Kuntalavarāli* or four notes as in *Katanakutuhalam*.

TABLE IV
Examples of *vakra ragas*

Name of the rāga.	The no. of its janaka raga	— Arohana and avarohana	Remarks.
— Ananda-bhairavi	20	$\left\{ \begin{array}{l} s \ g \ r \ g \ m \ p \ d \ p \ ś \\ ś \ n \ d \ p \ m \ g \ r \ s \end{array} \right.$	— Arohana alone <i>vakra</i>
Sriraga	22	$\left\{ \begin{array}{l} s \ r \ m \ p \ n \ ś \\ ś \ n \ p \ d \ n \ p \ m \ r \ g \ r \ s \end{array} \right.$	Avarohana alone <i>vakra</i>
Sahāna	28	$\left\{ \begin{array}{l} s \ r \ g \ m \ p \ m \ D \ n \ ś \\ ś \ n \ d \ p \ m \ G \ m \ R \ g \ r \ s \end{array} \right.$	Both <i>vakra</i>

Note that in *Srirāga*, the *vakra svaras* are *pa* and *ri* and the *vakrāntya svaras* are *ni* and *ga* respectively. *Sāranga* is an instance of a *vakra raga* wherein the *vakrāntya svara* is the *anya svara* itself.

Vakra ragas may be *varja* or *non-varja*.

From the number of vakra svaras present, vakra rāgas may be classified into:—

1. *Ekasvara vakra rāga i.e.,* with one vakra svara in the ārohana and one vakra svara in the avarohana.
Ex. Nilambari (*s r g m p d p n ś - ś n p m g r g s*)
2. *Dvisvara vakra rāga i.e.,* with two vakra svaras in the ārohana and two vakra svaras in the avarohana.
Ex. Suposhini (*s r s m p n d ś - ś d n p m r m s*)
3. *Trisvara vakra rāga i.e.,* with three vakra svaras in the arohana and three vakra svaras in the avarohana.
4. *Chatusvara vakra rāga i.e.,* with four vakra svaras in the arohana and four vakra svaras in the avarohana.

There are vakra rāgas with an *eka svara vakra ārohana* alone (Kuntala varāli: *s m p d n d ś - ś n d p m s*) or an *eka svara vakra avarohana* alone (Suddha bangāla *s r m p d ś - ś d p m r g r s*) or a *dvisvara vakra ārohana* alone:—

Ex. Anandabhairavi (*s g r g m p d p ś - ś n d p m g r s*)

or a *dvisvara vakra avarohana* alone:—

Ex. Srirāga (*s r m p n ś - ś n p d n p m r g r s*)

In the case of those ubhaya vakra rāgas wherein the number of vakra svaras in the ārohana and avarohana differs, the ārohana and avarohana are described separately. Thus

Sahānā furnishes an instance of an ubhaya vakra rāga with an *eka svāra vakra ārohana* and a *dvi svāra vakra ārohana*: *s r g m p m D n ś - ś n d p m G m R g r s*. The same rule applies to *Dvi svāra*, *Trisvāra* and *Chatu svāra vakra ragās*.

III. Upanga ragas are those janya ragas, which take only notes, present in their respective parent ragas. Malahari, Suddhasāveri, Ārabhi, and Mohana are examples.

Bhāshānga ragas are those janya rāgas which in addition to the notes pertaining to their parent rāgas, take one or two *foreign* notes as visitors. These visiting notes come only in particular sanchāras and serve to increase the beauty of the rāga. The svarūpa of the rāga is revealed better by these foreign notes. Thus in a bhāshānga raga, both the varieties of a svāra occur, the variety pertaining to the melakarta being called the *svakiya svāra* and the visiting note the *anya svāra*. In Bilahari and Bhairavi, the kaisiki nishāda and chatus-sruti dhaivata are the respective *anya svaras*; the *svakiya svaras* for the two ragas being kākali nishāda and suddha dhaivata respectively.

Barring a few instances like Bhairavi, the *anya svāra* as a rule is not a nyāsa svāra in bhāshānga rāgas.

CHAPTER II

TALA

The tāla system is perhaps the most difficult and complicated branch of South Indian music. There is no comparison to it in the other musical systems of the world. The time-measures used by all the nations put together will form but a small fraction of the innumerable varieties of rhythm used in South Indian music. A Tamil writer emphasizes the intricate nature of the tāla-system in the following stanza :

“தென்றல் வடிவுஞ் சிவனார் திருவடிவு
மன்றல் வடிவு மதன்வடிவு—குன்றாத
வேயினிசை வடிவும் வேதவடிவுக் காணில்
ஆயதாளக் காணலாம்”

The development of the tāla mnemonics and the art of drumming have contributed to the high development of the tāla system. It should be remembered, that when a mridangam player accompanies a musician (vocalist or instrumentalist) in India, he does not merely beat the sarva laghu, but provides a cross-rhythmical accompaniment, based on the style, movement and rhythmical construction of the pieces rendered. This '*rhythmical harmony*' provided by the mridangam player contributes to the excellence of a concert of Indian music.

The ancient books on music refer to the classification of tālas into *mārgi* and *desi* and enumerate the classical 108 tālas. Latterly a system of 35 tālas developed and Purandara Dāsa gave prominence to this simpler system by composing alankāras, gītas and sūlādīs in them. While the 108

tālas make use of all the shadangas, the 35 tālas use only the laghu, drutam and anudrutam. In addition to these, a system of tālas known as the *Nava sandhi tālas* (நவசந்தி தாளங்கள்) has been in use in temple rituals from ancient times. There is also the Chāpu tāla with its varieties and the Desādi and Madhyādi tālas. The scheme of the 35 tālas is explained here. The other tālas are explained in Books III and IV.

The Scheme of 35 Talas

Briefly stated, the 35 tālas result by the change of the laghu jāti in the sapta tālas. The student will do well to recall to his mind the sapta tālas and their constituent angas given in Table VIII on P. 54 of Book I. Now taking the Eka tāla, if the chaturasra laghu is respectively substituted by the tisra, khanda, misra and sankirna laghus, we get four new varieties of the Eka tāla, the aksharakāla value of the āvarta varying in each case on account of the substitution of the laghus of different magnitudes. Thus the Eka tāla on account of the five laghu jātis admits of five varieties. In the same way, the other six tālas also admit of five varieties each and we thus get in all the 35 tālas from the seven principal tālas. There are the 35 Alankāras to illustrate the 35 tālas and these are given in Chapter IV of this book.

It should be remembered that the five angas: Anudrutam, Drutam, Guru, Plutam and Kākapādam do not admit of jāti bhedas and hence their values remain constant throughout.

In the Table given on Pp 16 - 19, the 35 tālas are given with their technical names, signatures and total aksharakāla for an āvarta in each case.

Arrangement of the 35 Talas

In the Table, under each tala, the various time-measures are presented in the increasing order of their magnitude i.e. in the sequence of Tisra, Chaturasra, Khanda, Misra and Sankirna.

It is also possible to think of an alternative arrangement for the 35 talas. The jātis under each tala may be presented in the traditional order of Chaturasra, Tisra, Misra, Khanda and Sankirna. In this arrangement, the serial numbers of the talas will differ from that of the previous arrangement. For instance the twelfth tala in the first arrangement will be the Chaturasra jāti Rupaka tala. In the second arrangement, the twelfth tala will be the Tisra jāti Rupaka tala and so on.

A third possible arrangement is to group the talas of identical jātis and present them in the usual order. In this arrangement, the Dhruva, Matya, Rupaka, Jhampa, Triputa, Ata and Eka talas of Chaturasra jāti will rank first, and then the same talas of Tisra jāti and then the same order of talas in Misra jāti and so on.

Nomenclature for the 35 Talas

There is an empirical nomenclature and a mnemonic nomenclature (based on katapayadi sankhya and bhuta sankhya) for the 35 talas. The former is given in the Table:

TABLE EXPLAIN

*The Scheme of the

The Sapta tālas.	No.	Their varieties and
I. Dhruva ధ్రువ	(1)	Tisra —
...	(2)	Chaturasra —
	(3)	Khanda —
	(4)	Misra —
	(5)	Sankirna —
II. Matya మత్య	(6)	Tisra —
...	(7)	Chaturasra —
	(8)	Khanda —
	(9)	Misra —
	(10)	Sankirna —
III. Rūpaka రూపక	(11)	Tisra —
...	(12)	Chaturasra —
	(13)	Khanda —
	(14)	Misra —
	(15)	Sankirna —

*On account of the *gati bhedas*, these 35 tālas give rise to 175

V

ING

Thirty-five Talas

technical names.	Signature.	Total aksharakāla for an āvarta.
Mani మణి	1 ₃ ○ 1 ₃ 1 ₃	3+2+3+3=11
Srīkara శ్రీకర	1 ₄ ○ 1 ₄ 1 ₄	4+2+4+4=14
Pramāṇa ప్రమాణ	1 ₅ ○ 1 ₅ 1 ₅	5+2+5+5=17
Pūrṇa పూర్ణ	1 ₇ ○ 1 ₇ 1 ₇	7+2+7+7=23
Bhuvana భువన	1 ₉ ○ 1 ₉ 1 ₉	9+2+9+9=29
Sāra సార	1 ₃ ○ 1 ₃	3+2+3=8
Sama సమ	1 ₄ ○ 1 ₄	4+2+4=10
Udaya ఉదయ	1 ₅ ○ 1 ₅	5+2+5=12
Udirṇa ఉదీర్ణ	1 ₇ ○ 1 ₇	7+2+7=16
Rāva రావ	1 ₉ ○ 1 ₉	9+2+9=20
Chakra చక్ర	○ 1 ₃	2+3=5
Patti పత్తి	○ 1 ₄	2+4=6
Rāja రాజ	○ 1 ₅	2+5=7
Kula కుల	○ 1 ₇	2+7=9
Bindu బిందు	○ 1 ₉	2+9=11

The Thirty-five

The Sapta tālas.	No.	Their varieties and
IV. Jhampa ఝంప	...	{ (16) Tisra — (17) Chaturasra — (18) Khanda — (19) Misra — (20) Sankirna —
V. Tripata త్రిపుట	...	{ (21) Tisra — (22) Chaturasra — (23) Khanda — (24) Misra — (25) Sankirna —
VI. Ata అట	...	{ (26) Tisra — (27) Chaturasra — (28) Khanda — (29) Misra — (30) Sankirna —
VII. Eka ఏక	...	{ (31) Tisra — (32) Chaturasra — (33) Khanda — (34) Misra — (35) Sankirna —

Talas (*continued*)

technical names		Signature.	Total aksharakāla for an āvarta.
Kadamba	కడంబ	1 ₃ ∪ ○	3 + 1 + 2 = 6
Madhura	మధుర	1 ₄ ∪ ○	4 + 1 + 2 = 7
Chana	చణ	1 ₅ ∪ ○	5 + 1 + 2 = 8
Sura	సుర	1 ₇ ∪ ○	7 + 1 + 2 = 10
Kara	కర	1 ₉ ∪ ○	9 + 1 + 2 = 12
Sankha	శంఖ	1 ₃ ○ ○	3 + 2 + 2 = 7
Ādi	ఆది	1 ₄ ○ ○	4 + 2 + 2 = 8
Dushkara	దుష్కర	1 ₅ ○ ○	5 + 2 + 2 = 9
Līla	లీల	1 ₇ ○ ○	7 + 2 + 2 = 11
Bhoga	భోగ	1 ₉ ○ ○	9 + 2 + 2 = 13
Gupta	గుప్త	1 ₃ 1 ₃ ○ ○	3 + 3 + 2 + 2 = 10
Lekha	లేఖ	1 ₄ 1 ₄ ○ ○	4 + 4 + 2 + 2 = 12
Vidala	విదళ	1 ₅ 1 ₅ ○ ○	5 + 5 + 2 + 2 = 14
Loya	లోయ	1 ₇ 1 ₇ ○ ○	7 + 7 + 2 + 2 = 18
Dhīra	ధీర	1 ₉ 1 ₉ ○ ○	9 + 9 + 2 + 2 = 22
Sudha	సుధ	1 ₃	3
Māna	మాన	1 ₄	4
Rata	రత	1 ₅	5
Rāga	రాగ	1 ₇	7
Vasu	వసు	1 ₉	9

The 35 tālas are analysed and presented according to the magnitude of their āvartas in Table VI. It will be seen from this Table that the tāla with the maximum number of aksharakālas (29) for an āvarta, is the Sankīrna jāti Dhruva tāla and the tāla with the minimum number of aksharakālas (3) for an āvarta, is the Tisra jāti Eka tāla. It will also be seen that there are a few tālas whose āvartas consist of the same number of aksharakālas. These tālas however differ from one other on account of their varying constituent angas resulting in different modes of counting and the stresses falling at different places in the āvarta. For example, the Chaturasra jāti Matya tāla, Misra jāti Jhampa tāla and Tisra jāti Ata tāla all consist of 10 aksharakālas each for an āvarta; yet they differ from each other on account of their modes of reckoning and the beats falling on different points of the āvarta.

TABLE VI
The 35 Talas: Analysed

Total akshara- kāla for an āvarta.	Tāla	Its jāti.	Signature.
29	Dhruva	Sankīrna	1, 0 1, 1,
23	Dhruva	Misra	1, 0 1, 1,
22	Ata	Sankīrna	1, 1, 0 0
20	Matya	Sankīrna	1, 0 1,
18	Ata	Misra	1, 1, 0 0
17	Dhruva	Khanda	1, 0 1, 1,
16	Matya	Misra	1, 0 1,

Total akshara- kāla for an āvarta.	Tāla.	Its jāti.	Signature.
14	{ Dhruva Ata	Chaturasra Khanda	1 ₄ ○ 1 ₄ 1 ₄ 1 ₅ 1 ₅ ○ ○
13	Tripura	Sankirna	1 ₉ ○ ○
12	{ Matya Jhampa Ata	Khanda Sankirna Chaturasra	1 ₅ ○ 1 ₅ 1 ₉ ∪ ○ 1 ₄ 1 ₄ ○ ○
11	{ Dhruva Rūpaka Tripura	Tisra Sankirna Misra	1 ₃ ○ 1 ₃ 1 ₃ ○ 1 ₉ 1 ₇ ○ ○
10	{ Matya Jhampa Ata	Chaturasra Misra Tisra	1 ₄ ○ 1 ₄ 1 ₇ ∪ ○ 1 ₃ 1 ₃ ○ ○
9	{ Rūpaka Tripura Eka	Misra Khanda Sankirna	○ 1 ₇ 1 ₅ ○ ○ 1 ₉
8	{ Matya Jhampa Tripura	Tisra Khanda Chaturasra	1 ₃ ○ 1 ₃ 1 ₅ ∪ ○ 1 ₄ ○ ○
7	{ Rūpaka Jhampa Tripura Eka	Khanda Chaturasra Tisra Misra	○ 1 ₅ 1 ₄ ∪ ○ 1 ₃ ○ ○ 1 ₇ .
6	{ Rūpaka Jhampa	Chaturasra Tisra	○ 1 ₄ ○ ₃ ∪ ○
5	{ Rūpaka Eka	Tisra Khanda	○ 1 ₃ 1 ₅
4	Eka	Chaturasra	1 ₄
3	Eka	Tisra	1 ₃

Law of Homogeneity

Of the sapta tālas, the Dhruva, Matya and Ata alone admit of a plurality of laghus. And within each one of the varieties of these tālas, the laghu retains its homogeneous character. That is, if we take the Tisra jāti Dhruva tāla, all the three laghus figuring in that tāla are of the *tisra* type—not that one can be chaturasra and the other khanda and so on. In the same manner, Khanda jāti Matya tāla means, both the laghus therein are of the khanda variety; likewise Sankīrna jāti Ata tāla means, the two laghus therein are of the sankīrna variety and so on. Thus in tālas consisting of more than one laghu, no two varieties of the laghu can come in one and the same variety of the tāla *i.e.*, the laghu retains its *homogeneous* character within the tāla.

Presumptions regarding the seven talas.

Unless otherwise stated, the following presumptions hold good:—

Duruva tāla	means	Chaturasra jāti	Dhruva tāla.
Matya tāla	means	„	Matya tāla.
Rūpaka tāla	means	„	Rūpaka tāla.
Jhampa tāla	means	Misra jāti	Jhampa tāla.
Tripura tāla	means	Tisra jāti	Tripura tāla.
Ata tāla	means	Khanda jāti	Ata tāla.
Eka tāla	means	Chaturasra jāti	Eka tāla.

CHAPTER III

MUSICAL FORM

Music that is heard in an Indian concert falls under two heads :—

Manodharma sangīta and Kalpita sangīta.

In the former, the performer sings or performs his own *improvised music*—music improvised on the spot without any previous thought. This improvised music is of four kinds :—*Rāga ālāpana*, *Madhyamakāla* or *Tāna*, **Pallavi exposition* and *Svara kalpana*. *Sahitya prastara* in kritis called *Niraval* (நிறைவு) is also a species of creative music. In *kalpita sangīta*, the singer or the performer reproduces the compositions already *created* or *composed* by other composers or even by himself. *Kalpita sangīta* is older than *manodharma sangīta*. The forms of *manodharma sangīta* are dealt with in detail in Book IV.

Kalpita sangita comprises all the musical compositions. A musical composition is a piece of music set to time. It is an exposition of the raga in conformity to the chosen rhythm. *Slokas*, *chūrnikas*, *padyas* and *viruttams* are only instances of literary forms sung to music. They are not set to time.

* The Pallavi theme itself with its sangatis (having already been composed) belongs to *kalpita sangita*. It is only the exposition of the Pallavi that constitutes *manodharma sangita*. Pallavis like "sa ri ga pa ga ichchene" (Mohana) which are inspired by particular occasions and sung off-hand may be classed under *manodharma sangita*.

A musical composition can be compared to a building. What the bricks are to a building, the component svaras are to a tune. The different graces linking up the svaras contribute to ornamental effect. These graces can be compared to the cementing medium holding the bricks together and also to the outer decorative work. Just as there are small buildings and big buildings, there are short compositions like the gītas, and long compositions like the varnas. Rāgamālikas and kritis abounding in technical beauties can be compared to luxuriously decorated and furnished buildings.

The author of a musical composition is called a *Vāggeyakāra*.

Classification

South Indian music in the course of its long history has evolved many musical forms. These might be studied under the heads of *Vocal forms*, *Instrumental forms* and *Dance forms*. Indian music being of the melodic type, has evolved many vocal forms. These vocal forms fall under two divisions: *sacred forms* and *secular forms*.

Musical forms might also be studied under the heads of:— *Art music*, *Sacred music*, *Dance music*, *Opera music* and *Folk music*. The several forms under these heads possess distinctive characteristics of their own. Some forms like the kritis and varnas contain numerous examples while others like the rāgamālika and tillāna contain fewer examples.

Musical compositions can again be classified into those belonging to *Pure music* and *Applied music*. Applied music embraces all compositions wherein music is *applied* or *used* for a specific purpose. The sāhitya is an important

factor in this group of compositions and the music which clothes the *sāhitya* serves merely as a vehicle for the better and effective interpretation of the ideas enshrined in it. Religious music, dance music and opera music and the music of the *yaksha gāna*, *kālakshepa*, *nondi nātaka* and *nritya nātaka* are examples of Applied music. Some of these compositions have brilliant music in them and deserve to be placed side by side with specimens of art music.

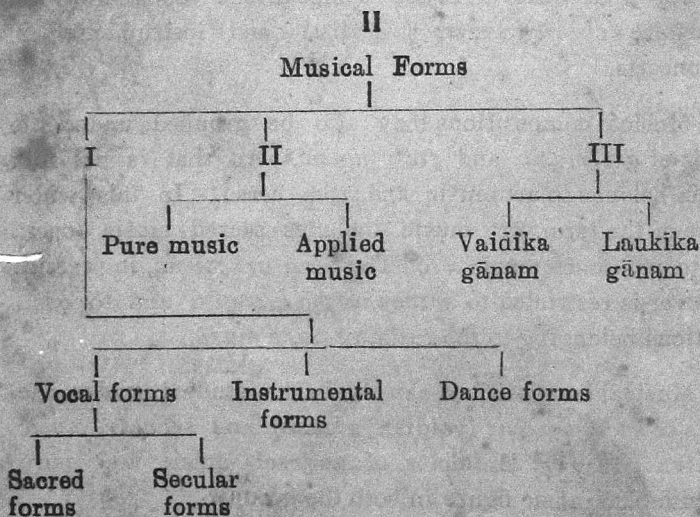
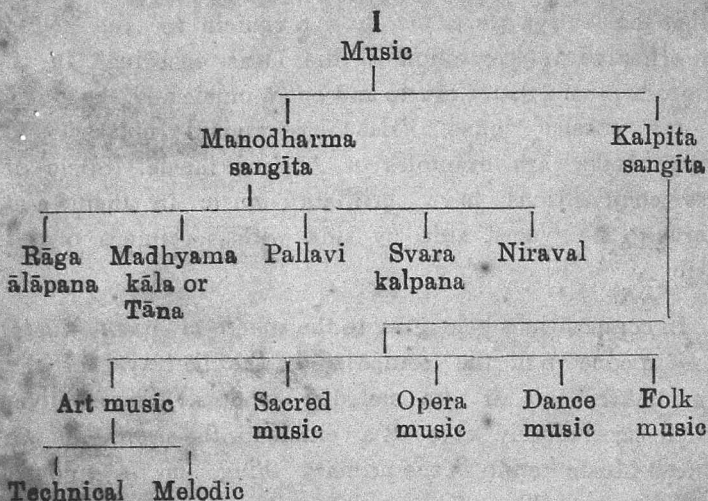
In compositions belonging to the sphere of *pure music*, the main concern of the composer is the portrayal of the *rāga bhāva* in all its melodic richness. The *sāhitya*, in such cases merely serves as a vehicle for the *singing of the music*. Music herein is the primary thing and is enjoyed for its own sake. These compositions constitute the repertoire of performers (vocalists and instrumentalists) in concerts.

Musical compositions may also be grouped under the heads of *art music* and *folk music*. All that is not folk music belongs to art music and *vice versa*. In this wider sense of the term, art music includes sacred music, opera music and dance music also. The term *art music*, in practice however is restricted to *manodharma sangita* and to compositions belonging to the realm of *pure music*.

Musical compositions can again be studied under the heads of *sacred music* (*vaidika gānam*) and *secular music* (*laukika gānam*). Examples of abstract music and pure instrumental music figure in both the groups.

TABLE VII

Classifications of Musical forms



Under each head, we will first study the major forms and then take up the minor forms.

Compositions belonging to the realm of art music are classified into:—

1. *Technical*

2. *Melodic*

The former group comprises the *svara* exercises *alankāras*, *gītas*, *chitta tānas*, *varnas* and other exercises which serve a specific technical purpose and help the student to acquire musical technique. These compositions constitute the *vacalises* and are aptly grouped under *abhyāsa gānam*. The melodic group includes *kritis*, *kīrtanas*, *padas*, *jāvalis*, *rāgamālikas*, *tillānas* and other compositions performed in a concert. These compositions are grouped under *sabhā gānam* (concert pieces).

The distinctive features of the compositions belonging to the technical and melodic groups may be summed up as follows:—

Technical.

Melodic.

1. The music is the more important factor and the *sāhitya* is a mere mnemonic aid to remember the music.

1. The music and the *sāhitya* are of equal importance and sometimes the *sāhitya* contains beautiful ideas and sublime thoughts.

The *sāhitya* herein may have a value independent of its music.

2. The compositions are illustrative of some musical law, fact or technical principle.

2. The one idea in the mind of the composer in composing pieces coming

ple. For example, the purpose of the alankāras is to illustrate the 35 talas; the purpose of the lakshana gītas is to enumerate the rāga lakshana and so on.

3. Music here is the product of *conscious* effort. The composer takes the paper and pencil in his hand and writes the music.

4. The appeal is more to the intellect.

5. The composer conceives of the *dhātu* first and then thinks of an appropriate *sāhitya* to it.

6. The range of the compositions under this group sometimes goes up to three octaves.

under this group is the presentation of the rāga bhāva in all its rich colours.

3. Here the music is frequently the product of inspiration.

4. The appeal is equally to the intellect and emotion. Sometimes we feel as if lifted to a higher plane.

5. The *dhātu* and *mātu* are simultaneously conceived (Ex. Most of Tyāgarāja's *kritis*).

6. The range here, rarely exceeds two octaves.

It is possible sometimes to learn by rote compositions under this group.

Art music—Technical Group.

GITA.

ధాతు మాతు సమాయుక్తం గీతమిత్యుచ్యతే బుద్ధైః ॥

(The union of Music and words is said by the learned to constitute gita)

Gītas are the simplest of melodies. The term 'gīta' literally means a 'song' but in music it signifies a particular type of composition. The music of the gīta is a simple melodic extension of the rāga in which it is composed. Its tempo is uniform. It is a continuous composition* without the sections, pallavi, anupallavi and charana. There are no sangatis or variations and the flow of music is natural. Neither intricate combinations nor terse sanchāras are found in its music. The raga svarūpa is well brought out in each case. For each note of the dhātu, there is usually a syllable in the sāhitya. The theme of the sāhitya is praise of God. (Gitas in praise of musical luminaries and Achāryas also exist: for Ex. the *sapta tāla gita* in Nāta raga beginning with the words: *Gana vidya Dhurandhara* in praise of Venkata-subhayya, by Paidāla Gurumurti Sastri). Sometimes meaningless phrases like *a iya, ti iya, a iyam, vā iya*, etc, called *mātrka syllables* are found interspersed in it. These quaint syllabus called *gītālankāra phrases* lend a characteristic beauty to the sāhitya of gītas. They are introduced for ornamentation only. The gīta is sung without repetition from beginning to end. Some gītas have two sections: (khandikas) and some three. Some gītas are concluded by repeating a portion of the opening part. Gītas are set in medium tempo.

There are instances of famous sanskrit slokas which have been cleverly introduced as sāhityas for sanchāri gītas. The Bhairavi gīta, *Sri Rāmachandra* and the Nāta gīta, *Amari kabari* are wellknown examples.

* Raganga raga lakshana gītas have sections (See Book III).

There are gītas in sanskrit, *bhāndīra and kannada.

Students learn the gītas after a course in the preliminary svara exercises and alankāras. There are gītas in all the sapta tālas and their varieties. In the pre-Tyagaraja period, many composers delighted in composing gītas.

Gitas are of two kinds :—

(1) Sāmānya gīta and (2) Lakshana gīta.

Sāmānya gīta is the ordinary gīta and is also called by other names as *sādhārana gīta*, *lakshya gīta* and *sauchāri gīta*.

The points of lakshana mentioned above for a gīta hold good in the case of the sāmānya gīta. But in a lakshana gīta, the sāhitya, instead of being praise of God, enumerates in so many words, the lakshana of the rāga in which it is composed—giving amongst other details, its varja and vakra svaras, graha, nyāsa and amsa svaras, its audava, shādava or sampūrna character and lastly its parent rāga, if it is a janya raga lakshana gīta; and the anya svaras, if any, if it is a bhāshānga raga lakshana gīta.

* *Bhandira* ಭಂಡಿರ, ಭೃಂಜಿರ *bhasha*. Formerly sanskrit was used for the sāhitya of musical compositions. Later on, *bhandira* (a kind of Prakrit) was used. Still later, compositions came to be written extensively in the vernaculars and the *bhandira bhasha* fell into disuse. According to Visvesvara (alias Vagisa) who has written a treatise on the grammar of this language, "*Bhandira* is best suited for music, having had its origin in the melodious medley of the lyrical notes that arose when Sri Krishna danced with the flute in His hand, in the company of the Gopis of different countries and tongues. This language is thus a creation from Kambhoji, Magadhi, Gaudi, Maharashtri, Kalingi and Gairvani, with a sense to its potency for rich musical effect". The *bhandira bhasha* received an impetus for development from the time of Bhoja and Someswara. Some lakshana gītas and some of the gītas of Purandara Dasa are in *bhandira*.

There are lakshana gītas for most of the current rāgas and for a few obsolete rāgas. At a time when the art of printing was not known and copies could not be multiplied in thousands, lakshana gītas were of great value in helping students to remember the lakshanas of rāgas. The Rāgāṅga raga lakshana gītas are a special class by themselves and are referred to in detail in Book III.

In a gīta, the number of svaras present in an āvarta is equal to the number of aksharakālas forming the āvarta—the dirgha svara being reckoned as two svaras. This being so a gīta in chaturasra jāti dhruva tāla should not be reckoned in the tisra triputa tala, reckoning two svaras for each count; and likewise a gīta in chaturasra jāti rūpaka tala should not be reckoned in the tisra jāti eka tāla, with two svaras for each count and so on. This will not be in keeping with the rhythmical construction of the composition.

Ghana rāga gītas are gītas in ghana ragas like Nāta, Gaula, Ārabhi, Srīrāga and Varālī.

Purandara Dāsa's introductory gītas in praise of Vignesvara, Mahesvara and Vishnu are sometimes referred to collectively as *Pillāri gītas*. The significant introduction of the vowels: *a, i, u, e* and *o* in the very first gīta is noteworthy and testifies to the genius of the composer.

Paidāla Gurumurti Sāstri was a prolific composer of gītas after Purandara Dāsa. He is referred to as *Veyi gita* (1000 gītas) Paidāla Gurumūrti Sāstri. After him no noteworthy composer has attempted sanchāri gītas. *Rāmāmātya* the author of *Soramela kalānidhi* also wrote many gītas. *Govinda Dikshitar* and *Venkatamakhi* are credited with many lakshana gītas.

Rāgamālā gīta is a miniature rāgamālīka after the model of a gīta.

Gīta prabandha is a gīta composition, containing in it the features of a prabandha.

Chitta tānas

Chitta tānas (called *Katakam* by ancient writers) are set exercises for the vīna and are intended to enable the students of this instrument to acquire better technique in playing. This is strictly speaking an instrumental form. There are chitta tānas for many current rāgas.

Katakam is also the name given to a dictionary of ragas; for ex. the *Vyasa Katakam*.

Suladi

Sulādi (from *sūda*, a *desya* word for gīta) is a composition very much like the gīta in musical structure and arrangement. It is a tālamālīka, the sections being in different tālas. *Sūlādis* are illustrative of the *sūlādi tālas* and are of a higher standard than the gītas. The *sāhitya* syllables are fewer than in gītas and are characterised by a profusion of vowel extensions. The *sāhitya* is devotional. Unlike the gīta, *sūlādis* are composed in different tempos i.e., *vilambita*, *madhya* and *druta*. *Sūlādis* are the counterpart of the earlier *Tālārnavam* and *Pancha tālesvaram*. Purandara Dāsa has composed many *sūlādis*.

Svarajati

Svarajatis are pleasing melodies. They are learnt after the gītas. They form the stepping-stone to the next important composition—the *varna*. In point of musical structure and speed of execution, they resemble the *varnas*. A *svarajati* consists of a *pallavi*, *anupallavi* and

charanas—the charanas being set in different dhātus. Sometimes the anupallavi is dispensed with. The theme of the sāhitya may be either devotional, heroic or amorous. It may be an invocation to some favourite Deity or may relate to the glorious and valorous deeds of some hero. In a few svarajatis, solfa syllables and rhythmical syllables are introduced.

Syāmā Sāstri, Adiyappiah, Svāti Tirunāl, Sobhanādri, Merattūr Venkatarāma Sāstri, Wālājapet Krishnaswāmy Bhāgavatar and Chinni Krishna Dāsa have composed beautiful svarajatis.

Jatisvaram

Jatisvaram is a composition very much like the *svarajati* in point of musical structure, but has no sāhitya and the piece is sung with the solfa syllables. It is a composition belonging to the realm of dance music. The piece in Bilahari raga *S, r G P D S N D* is a splendid example of this type of composition. The Sāhitya '*Rāra Venu gopābālā*' is a later composition, tacked on to the piece by some obscure composer. Some jatisvara compositions are moulded on the patterns of jati passages.

In some Jatisvaras, the muktayi svaras consist of half-āvarta svara and half-āvarta jatis. Ponnayya, Vadivelu and Sivānandam have composed jatisvaras of this type.

This *solfeggio* composition is also known as *svara pallavi*.

Rāgamālīka Jatisvaras also exist. H. H. Svāti Tirunāl has composed some good compositions belonging to this type.

Svarajatis and Jatisvaras may be composed in *chauka kālā* (slow tempo) or in *madhyamakālā* (medium tempo).

CHAPTER IV ALANKARAS

Lesson 1.

1. Dhruva tāla—Tisra jāti (*Mani tāla*) I_3
Total Aksharakāla :— $1_3 \bigcirc 1_3 1_3 : 2+2+3+3=11$.

3	○	3	3
s r g	s g	r g m	g m p
r g m	r m	g m p	m p d
g m p	g p	m p d	p d n
m p d	m d	p d n	d n s
s n d	s d	n d p	d p m
n d p	n p	d p m	p m g
d p m	d m	p m g	m g r
p m g	p g	m g r	g r s

2. Dhruva tāla—Chaturasra jāti (*Srikara tāla*) 1_4
Total Aksharakāla :— $1_4 \bigcirc 1_4 1_4 : 4+2+4+4=14$.
(See Book I p. 55)

3. Dhruva tāla—Khanda jāti (*Pramāna tāla*) I_5
Total Aksharakāla :— $1_5 \bigcirc 1_5 1_5 : 5+2+5+5=17$.

5	○	5	5
s r g m p	m g	s r g m g	s r g m p
r g m p d	p m	r g m p m	r g m p d
g m p d n	d p	g m p d p	g m p d n
m p d n s	n d	m p d n d	m p d n s
s n d p m	p d	s n d p d	s n d p m
n d p m g	m p	n d p m p	n d p m g
d p m g r	g m	d p m g m	d p m g r
p m g r s	r g	p m g r g	p m g r s

4. Dhruva tāla—Misra jāti (*Purnā tāla*) I_7 Total Aksharakāla:— $1_7 \bigcirc 1_7$: $7+2+7+7=23$.

7	○	7	7
s r g m p d p	m g	s r g m p m g	s r g m p d n
r g m p d n d	p m	r g m p d p m	r g m p d n s
s n d p m g m	p d	s n d p m p d	s n d p m g r
n d p m g r g	m p	n d p m g m p	n d p m g r s

5. Dhruva tāla—Sankīrna jāti (*Bhuvana tāla*) 1_9 Total Aksharakāla:— $1_9 \bigcirc 1_9$: $9+2+9+9=29$.

9	○	9	9
S R G m p d	p m	S R G m p m	S R G m p d
R G M p d n	d p	R G M p d p	R G M p d n
G M P d n s	n d	G M P d n d	G M P d n s
Ś N D p m g	m p	Ś N D p m p	Ś N D p m g
N D P m g r	g m	N D P m g m	N D P m g r
D P M g r s	r g	D P M g r g	D P M g r s

Lesson 2.

6. Matya tāla—Tisra jāti (*Sāra tāla*) II_3 Total Aksharakāla:— $1_3 \bigcirc 1_3$: $3+2+3=8$.

3	○	3
s r g	s r	g m p
r g m	r g	m p d
g m p	g m	p d n,

3	○	3
m p d	m p	d n s
s n d	s n	d p m
n d p	n d	p m g
d p m	d p	m g r
p m g	p m	g r s

7. Matya tāla—Chaturasra jāti (*Sama tāla*) II₄

Total Aksharakāla:—1₄ ○ 1₄ = 4+2+4=10.

(See Book I p. 56)

8. Matya tāla—Khanda jāti (*Udaya tāla*) II₅

Total Aksharakāla:—1₅ ○ 1₅ : 5+2+5=12.

5	○	5
s r g m g	r g	s r g m p
r g m p m	g m	r g m p d
g m p d p	m p	g m p d n
m p d n d	p d	m p d n s
s n d p d	n d	s n d p m
n d p m p	d p	n d p m g
d p m g m	p m	d p m g r
p m g r g	m g	p m g r s

9. Matya tāla—Misra jāti (*Udirna tāla*) II₇

Total Aksharakāla:— 1₇ ○ 1₇ : 7+2+7=16

7	○	7
s r g m p d p	m g	s r g m p d n
r g m p d n d	p m	r g m p d n s
s n d p m g m	p d	s n d p m g r
n d p m g r g	m p	n d p m g r s

10. Matya tāla—Sankirna jāti (*Rāva tāla*) II,

Total Aksharakāla :— 1, 0 1, : 9+2+9=20.

9	0	9
S R G m p m	d p	S R G m p d
R G M p d p	n d	R G M p d n
G M P d n d	s n	G M P d n s
Š N D p m p	g m	Š N D p m g
N D P m g m	r g	N D P m g r
D P M g r g	s r	D P M g r s

Lesson 3.

11. Rūpaka tāla—Tisra jāti (*Chakra tāla*) III,

Total Aksharakāla :— 0 1, : 2+3=5.

0	3
s r	g m p
r g	m p d
g m	p d n
m p	d n s
s n	d p m
n d	p m g
d p	m g r
p m	g r s

12. Rūpaka tāla—Chaturasra jāti (*Patti tāla*) III,

Total Aksharakāla :— 0 1, : 2+4=6.

(See Book 1 p. 56)

13. Rūpaka tāla—Khanda jāti (*Rāja tāla*) III₅
 Total Aksharakāla:— O 1₅ : 2+5=7.

O	5
s r	s r g m p
r g	r g m p d
g m	g m p d n
m p	m p d n s
s n	s n d p m
n d	n d p m g
d p	d p m g r
p m	p m g r s

14. Rūpaka tāla—Misra jāti (*Kula tāla*) III₇
 Total Aksharakāla:— O 1₇ ; 2+7=9.

O	7
s r	s r g m p d n
r g	r g m p d n s
s n	s n d p m g r
n d	n d p m g r s

15. Rūpaka tāla—Sankīrna jāti (*Bindu tāla*) III₉
 Total Aksharakāla:— O 1₉ : 2+9=11.

O	9
s r	S R G m p d
r g	R G M p d n
g m	G M P d n s
s n	Š N D p m g
n d	N D P m g r
d p	D P M g r s

Lesson 4.

16. Jhampa tāla—Tisra jāti (*Kadamba tāla*) IV₃Total Aksharakāla.—1₃ ∪ ○ : 3+1+2=6.

3	∪	○
s r g	m	P
r g m	p	D
g m p	d	N
m p d	n	S
s n d	p	M
n d p	m	G
d p m	g	R
p m g	r	S

17. Jhampa tāla—Chaturasra jāti (*Madhura tāla*) IV₄Total Aksharakāla :—1₄ ∪ ○ : 4+1+2=7.

4	∪	○
s m g r	g	M
r p m g	m	P
g d p m	p	D
m n d p	d	N
p s n d	n	S
s p d n	d	P
n m p d	p	M
d g m p	m	G
p r g m	g	R
m s r g	r	S

18. Jhampa tāla—Khandā jāti (*Chana tāla*) IV₅Total Aksharakāla :—1₅ ∪ ○ : 5+1+2=8.

5	∪	○
s r g m g	m	P
r g m p m	p	D
g m p d p	d	N
m p d n d	n	S
s n d p d	p	M
n d p m p	m	G
d p m g m	g	R
p m g r g	r	S

19. Jhampa tāla—Misra jāti (*Sura tāla*) IV₇Total Aksharakāla :—1₇ ∪ ○ : 7+1+2=10.

(See Book I p. 57.)

20. Jhampa tāla—Sankīrna jāti (*Kara tāla*) IV₉Total Aksharakāla :—1₉ ∪ ○ : 9+1+2=12.

9	∪	○
S R G m p m	p	D
R G M p d p	d	N
G M P d n d	n	Ś
Ś N D p m p	m	G
N D P m g m	g	R
D P M g r g	r	S

Lesson 5.

21. Tripura tāla—Tisra jāti (*Sankha tāla*) V_3
 Total Aksharakāla:— $1_3 \bigcirc \bigcirc : 3+2+2=7$.

(See Book 1 p. 57)

22. Tripura tāla—Chaturasra jāti (*Adi tāla*) V_4
 Total Aksharakāla:— $1_4 \bigcirc \bigcirc : 4+2+2=8$

4	○	○
s m g r	s r	g m
r p m g	r g	m p
g d p m	g m	p d
m n d p	m p	d n
p s n d	p d	n s
s p d n	s n	d p
n m p d	n d	p m
d g m p	d p	m g
p r g m	p m	g r
m s r g	m g	r s

23. Tripura tāla—Khanda jāti (*Dushkara tāla*) V_5
 Total Aksharakāla:— $1_5 \bigcirc \bigcirc : 5+2+2=9$.

5	○	○
s r g m p	g m	p d
r g m p d	m p	d n
g m p d n	p d	n s
s n d p m	d p	m g
n d p m g	p m	g r
d p m g r	m g	r s

24. Triputa tāla—Misra jāti (*Līla tāla*) V_7
 Total Aksharakāla:— $1_7 \bigcirc \bigcirc : 7+2+2=11$.

7	$\bigcirc$	$\bigcirc$
s r g m p d n	m p	d n
r g m p d n s	p d	n s
s n d p m g r	p m	g r
n d p m g r s	m g	r s

25. Triputa tāla—Sankirna jāti (*Bhoga tāla*) V_9
 Total Aksharakāla:— $1_9 \bigcirc \bigcirc : 9+2+2=13$.

9	$\bigcirc$	$\bigcirc$
S R G m p d	m p	d n
R G M p d n	p d	n s
Ś N D p m g	p m	g r
N D P m g r	m g	r s

Lesson 6.

26. Ata tāla—Tisra jāti (*Gupta tāla*) VI_3
 Total Aksharakāla:— $1_3 1_3 \bigcirc \bigcirc : 3+3+2+2=10$.

3	3	$\bigcirc$	$\bigcirc$
s r g	r g m	P	P
r g m	g m p	D	D
g m p	m p d	N	N
m p d	p d n	Ś	Ś
s n d	n d p	M	M
n d p	d p m	G	G
d p m	p m g	R	R
p m g	m g r	S	S

27. Ata tāla—Chaturasra jāti (*Lekha tāla*) VI₁

Total Aksharakāla :— 1₄ 1₄ ○ ○ : 4+1+2+2=12.

4	4	○	○
s r g m	s r g m	P	P
r g m p	r g m p	D	D
g m p d	g m p d	N	N
m p d n	m p d n	Ś	Ś
s n d p	s n d p	M	M
n d p m	n d p m	G	G
d p m g	d p m g	R	R
p m g r	p m g r	S	S

28. Ata tāla—Khanda jāti (*Vidala tāla*) VI₅

Total Aksharakāla :— 1₅ 1₅ ○ ○ : 5+5+2+2=14.

(See Book I p. 58)

29. Ata tāla—Misra jāti (*Loya tāla*) VI₇

Total Aksharakāla :—1₇ 1₇ ○ ○ : 7+7+2+2=18.

7	7	○	○
s R g m p d	S r g m p d	N	N
r G m p d n	R g m p d n	Ś	Ś
ś N d p m g	Ś n d p m g	R	R
n D p m g r	N d p m g r	S	S

30. Ata tāla—Sankīrṇa jāti (*Dhira tāla*) VI,

Total Aksharakāla:—1, 1, ○ ○ : 9+9+2+2=22.

9	9	○	○
s R G M p d	S r G M p d	N	N
r G M P d n	R g M P d n	Ṣ	Ṣ
s N D P m g	S n D P m g	R	R
n D P M g r	N d P M g r	S	S

Lesson 7.

31. Eka tāla—Tisra jāti

(*Sudha tāla*) VII,

Total Aksharakāla:—1, =3.

| 3

s r g
r g m
g m p
m p d
p d n
d n s
s n d
n d p
d p m
p m g
m g r
g r s

32. Eka tāla—Chaturasra jāti

(*Māna tāla*) VII,

Total Aksharakāla:—1, =4.

(See Book I p. 58)

33. Eka tāla—Khandā jāti
(Rata tāla) VII₅

Total Aksharakāla:—1₅=5.

34. Eka tāla—Misra jāti
(Rāga tāla) VII₇

Total Aksharakāla:—1₇=7.

| 5

s r g m p

r g m p d

g m p d n

m p d n s

s n d p m

n d p m g

d p m g r

p m g r s

| 7

s r g m p d n

r g m p d n s

s n d p m g r

n d p m g r s

35. Eka tāla—Sankirna jāti

(Vasu tāla) VII₉

Total Aksharakāla:—1₉=9.

| 9

S R G m p d

R G M p d n

G M P d n s

S N D p m g

N D P m g r

D P M g r s

Lesson 8.

ADDITIONAL ALANKARAS

Dhruva tāla—Khandā jāti

5	○	5	5
s m G m	r g	s g R g	S r g m
r p M p	g m	r m G m	R g m p
g d P d	m p	g p M p	G m p d
m n D n	p d	m d P d	M p d n
p s N s	d n	p n D n	P d n s
s p D p	n d	s d N d	Ś n d p
n m P m	d p	n p D p	N d p m
d g M g	p m	d m P m	D p m g
p r G r	m g	p g M g	P m g r
m s R s	g r	m r G r	M g r s

Dhruva tāla—Misra jāti

7	○	7	7
s m G m r g	s r	s g R g s r	S R G m
r p M p g m	r g	r m G m r g	R G M p
g d P d m p	g m	g p M p g m	G M P d
m n D n p d	m p	m d P d m p	M P D n
p s N s d n	p d	p n D n p d	P D N s
s p D p n d	s n	s d N d s n	S N D p
n m P m d p	n d	n p D p n d	N D P m
d g M g p m	d p	d m P m d p	D P M g
p r G r m g	p m	p g M g p m	P M G r
m s R s g r	m g	m r G r m g	M G R s

Tripura tāla—Misra jāti

7	○	○
s m g m r g m	s r	g m
r p m p g m p	r g	m p
g d p d m p d	g m	p d
m n d n p d n	m p	d n
p s n s d n s	p d	n s
s p d p n d p	s n	d p
n m p m d p m	n d	p m
d g m g p m g	d p	m g
p r g r m g r	p m	g r
m s r s g r s	m g	r s

Ata tāla—Tisra jāti

3	3	○	○
s r g	m g r	s r	g m
r g m	p m g	r g	m p
g m p	d p m	g m	p d
m p d	n d p	m p	d n
p d n	s n d	p d	n s
s n d	p d n	s n	d p
n d p	m p d	n d	p m
d p m	g m p	d p	m g
p m g	r g m	p m	g r
m g r	s r g	m g	r s

CHAPTER V

GITAS

The four gītas in Malahari rāga included in Lessons 9—12 are the compositions of Purandara Dāsa.

Lesson 9.

15. Malahari rāga--Rūpaka tāla { s r m p d s
s d p m g r s

1. ப்ரீகணநாந ஸிந்தூரவர கருணாநாந கரிவதன
லம்போதர லகுமிகரா அம்பாஸுத அமரவிஸுத
லம்போதர லகுமிகரா ||

2. ஸிந்தூரண ருணசீவித ஸித்திவிநாயக தே நமோ நமோ (லம்)

3. ஸகலவித்யாதி பூஜித ஸர்வோத்தம தே நமோ நமோ (லம்)

1. ப்ரீ கணநாத வரிந்தூரவர்ண கருணாஸாகர கரிவதன
லம்போதர லகுமிகரா அம்பாஸுத அமர விஸுத
லம்போதர லகுமிகரா ||

2. வரித்த சாரண கணஸேவித வரித்தி விநாயக தே நமோ
நமோ (லம்)

3. ஸகல வித்யாதி பூஜித ஸர்வோத்தம தே நமோ நமோ
(லம்)

Vignesvara gita.

○ 4	○ 4	○ 4	○ 4
m p d s r	r s d p m p	r m p d m p	d p m g r s
1. Sri . Ga na nā tha	sin dhū . ra var na	ka ru nā sā ga ra	ka ri va da . na
2. Sid dha chā . ra na	ga na se . vi ta	sid dhi vi nā ya ka	te . na mo na mo
3. Sa ka la vi dyā .	. di pū . ji ta	sa . rvo . tta ma	te . na mo na mo
{ S r m g r	s r g r S	r m p d m p	d p m g r s
Lam bo . da ra	la ku mi ka rā	am . bā su ta	a ma ra vi nu ta
{ S r m g r	s r g r S		
Lam bo . da ra	la ku mi ka rā		

Gānakrama—The three khandikas in the above gita have the same music; at the conclusion of each, the portion marked within brackets [*i.e.* Lambodara...lakumikarā] should be sung.

Lesson 10.

15. Malahari rāga—Rūpaka tāla $\begin{cases} s r m p d s \\ s d p m g r s \end{cases}$

1. సుందరౌర గౌరీవర మందిరాయ మానమకుట

మందార కుసుమాకర మకరందం వాసితువా ||

2. హేమకుట సింహాసన విరూపాక్ష కరుణాకర (మం)

3. చందమామ మందాకిని మందిరాయ మానమకుట (మం)

1. క్రుంతకెలర కెలరీవర మన్తీరాయ మానమక్రూడ

మన్తార క్రుసుమాకర మకరన్తమ్ వావలితువా ||

2. ధేహమక్రూడ లలిమ్హరాసన విశ్రుపాక్ష కరుణాకర

(మన్తార)

3. శన్తమామ మన్తాకిని మన్తీరాయ మానమక్రూడ (మన్తార)

Mahesvara gita.

○ 4	○ 4	○ 4	○ 4
d p m g r s	r m p d m p	d r r s d p	d p m g r s
1. kuu da gau . . ra	gau . rī . va ra	mandi rā . . ya	mā . na ma ku ta
2. he ma kū . . ta	sim . hā . sa na	vi rū pā . . ksha	ka ru nā . ka ra
3. Chan da mā . . ma	man . dā . ki ni	man di rā . . ya	mā . na ma ku ta.
{ S R R man dā ra	d p m g r s ku su mā . ka ra	s r M g r ma ka ran dam . .	s r g r S vā . si tu vā

Gānakrama.—The above three khandikas have the same music; at the conclusion of each, the portion marked within brackets [mandāra.....vāsitu vā] should be sung.

Vishnu gita

Lesson 11.

15. Malahari rāga—Triputa tāla

	s	r	m	p	d	s	
	s	d	p	m	g	r	s

1. కెరెయ నీరసు కెరెచలీ వరప పడెదప రంతి కాణిరో
హరియ కరుణ దొళాద భాగ్యవ హరిసమర్పణే మాడి బదుకిరో.
హరియ కరుణ దొళాద భాగ్యవ॥

2. శ్రీ పురందర విఠలరాయ చరణ కమలవ నోడి బదుకిరో (హరియ)

1. కెరెయరేరెను కెరెరెకె శుల్లి వరవపడెతవ రమ్మి
కాణిరో

హరియ కరుణదొళాద పాక్యవ హరిసమర్పణే పాడు

హరియ కరుణదొళాద పాక్యవ [పతుకిరో

2. మ్రీపురందర విట్టల రాయ శరణ కమలవతోడు పతుకిరో
(హరియ)

	o	o		o	o
--	---	---	--	---	---

1. d s s d p m p
ke re ya ni . ra nu

d d s d p m p
va ra va pa de da va

[s r r s r s r
Ha ri ya ka ru na do

d p d s d p
Ha ri sa mar pa ne

[s r r s r s r
Ha ri ya ka ru na do

2. d s s d p m p
Sri . Pu ran . da ra

d d s d p m p
cha ra na ka ma la va

d d p m m P
ke re ge cha . lli

d d p m g r s
ram . ti ka . ni ro

d d p m g r s
lā . da bhā . gya va

d d p m g r s
mā . di ba du ki ro

d d p m g r s
lā . da bhā . gya va ||

d d p m m P
vi ta la rā . ya

d d p m g r s
no . di ba du ki ro

Here, repeat the portion within brackets and conclude.

Lesson 12.

15.

Malahari rāga—Tripudā tāla.

$$\begin{Bmatrix} s & r & m & p & d & s \\ s & d & p & m & g & r & s \end{Bmatrix}$$

పదుమనాభా పరమపురుషా పరంజ్యోతి స్వరూపా
 విదురవంద్యా విమలచరితా విహంగాది రోహణా
 ఉదదినివాస ఉరగశయన ఉన్నతోన్నత మహిమా
 యదుకుల త్రయ యజ్ఞరక్షక యజ్ఞశిక్షక రామనామ
 (పదుమనాభా)

విభీషణపాలకా నమో నమో ఇభవరదాయకా నమో నమో
 శుభప్రద సుమ నోరథ సురేంద్ర మనో రంజనా
 అభినవ పురందర విరల్లబల్లరే రామనామ (పదుమనాభా)

పతుమనాభా పరమపురుషా పరంజ్యోతి స్వరూపా
 విదురవంద్యో విమలచరితా విహంగాది రోహణా
 ఉదదినివాస ఉరగశయన ఉన్నతోన్నత మహిమా
 యదుకుల త్రయ యజ్ఞరక్షక యజ్ఞశిక్షక రామనామ
 (పతుమనాభా)

విభీషణ పాలకా నమో నమో ఇభవరదాయకా నమో నమో
 శుభప్రద సుమ నోరథ సురేంద్ర మనో రంజనా
 అభినవ పురందరవిరల్లబల్లరే రామనామ
 (పతుమనాభా)

Vishnu gita

3 ○ ○	3 ○ ○	3 ○ ○	3 ○ ○
r s d S S	m g r m m P	s D d p m p	d d p m g r s
.Pa du ma nā bhā	pa ra ma pu ru shā	pa ran jyo . . ti	sva rū . pā . .
*vi du ra van dyā	vi ma la cha ri ta	vi ham gā . . di	ro . ha na . . .
p m p d s d s	r s d d s d p	d d p P p m	r m m P P
u da di ni vā . sa	u ra ga sa ya . na	u . nna ton na ta	ma hi . ma .
d d p P p m	R m m g r s	S s d d d p	P p m g r s
ya du ku lo tta ma	yaj na ra . ksha ka	yaj na si . ksha ka	Rā ma nā . . ma
			r s d S S
			Pa du ma nā bha

*The music of this line is the same as that of the previous line . . .

_s ○ ○	_s ○ ○	_s ○ ○	_s ○ ○
d Š d p m p Vi bhī sha na pā .	d d p m g r s la kā . na mo na mo	d Š d p m p i bha va ra dā .	d d p m g r s ya kā . na mo na mo
p m p d s d s su bha . pra da su ma	r s d d s d p no . ra da . . su	d d p P p m re . ndra ma no .	r m m P P ran . ja na .
d d p P p m a bhi . na va Pu	R m m g r s ran da ra . . vi	S s d d d p ta lla bha] . la re	P p m g r s Rā ma nā . . ma
			r s d S S Pa du ma nā bhā

Lesson 13.

29. *Suddha sāveri rāga—Triputa tāla.* $\begin{cases} s & r & m & p & d & s \\ s & d & p & m & r & s \end{cases}$

అనలేకర పున్నిబోలతి సకలశాస్త్ర పురాణ ధిన్నం

తాళధిన్నం తాళపరిఘటు రేరే అ...సేతువాహ పరిఘటం సం

జటాజూట సకలశాస్త్ర పురాణ ధిన్నం తాళ ధిన్నం

తాళపరిఘటు రేరే అ...సేతువాహ పరిఘటం సం ||

శ్రీనలేకర వున్నిబోలతి సకల శాస్త్ర పురాణతీర్థ ప్రాణతీర్థం
తాగ తీర్థం తాగ పరికతురేరే అ. . సేతువాహ

పరికతీర్థం

జటాజూట సకల శాస్త్ర పురాణతీర్థం తాగ తీర్థం
తాగ పరికతు రేరే అ. . సేతువాహ పరిక తీర్థం ||

| s ○ ○

| s ○ ○

r m r r s d s
ā . na le . ka ra

S s d p m p
vu nni bo . la ti

[d d s D d p
sa kā la sās tra pu

p m r d d d p
rā . na dhi . nnam .

P p d d d p
tā la dhi . nnam

P p m p d p
tā la pa ri gha tu

p m r s r s r
re . re a . . .

p m p s r s r
.

p p d p p m r
.

r s r M M
se . tu vā hā

[d p d S S |
pa ri gha tam nam |

r r s d p m p
ja tā . jū . . ta

Repeat here the portion
within brackets and
conclude.

Lesson 14.

GHANARAGA GITAS

Ambika gita

Appayya Dikshitar

36. Nāta rāga—Eka tāla

$$\begin{cases} \text{s r g m p d n s} \\ \text{s n p m r s} \end{cases}$$

அசுரீ கலீர் ஞார ஞ்ஞுரீ முஞுரீ க்ஞுதம்

நாடீ கலீது நுதம் ஞாரீ ஞ்ஞா ஸங்கஜம்॥

அமரீ கபரீ பார ப்ரமரீ முகரீ க்ருதம்

தாரீ கரோது துரிதம் கௌரீ சரண பங்கஜம் ॥

4	4	4
s s s n a ma ri . p s s n bhra ma ri . p n s r dū . . ri p n s n Gau . ri .	p s s n ka ba ri . p n s r mu kha ri . m r s r ka ro . tu p s n p cha ra . na	p m g m bha . . ra s s S kru ta m s s s n du ri tam . m m r s ॥ pan . ka jam ॥

Lesson 15.

Sri Rama gita

29. Arabhi rāga—Tripura tāla

$$\left\{ \begin{array}{l} s r m p d s \\ s n d p m g r e \end{array} \right.$$

சேரே ஸ்ரீராமசுந்தர ரகு வம்சதிலகா

ராமசுந்தர அ.....அபிசேகசுந்தர

ஸ்ரீராமசுந்தர சேரே ஸ்ரீராமசுந்தர அபிசேக

அ ..இய இய அ ..இய இய அ.. இயே தீன ஜன மந்தாருமாமவ ||

சேரே ஸ்ரீராம சந்தர ரகு வம்சதிலகா

ராமசுந்தர அ அபிசேக ஜன போஷ குரே

ஸ்ரீராமசுந்தர சேரே ஸ்ரீராமசுந்தர அபிசேக

அ..இய இய அ..இய இய அ..இயே தீன ஜன

மந்தாருமாமவ ||

s ○ ○	s ○ ○
P p m m P re re sri Rā r r s d d r s m g r r s S } vam . sa ti la ka } p m p m g r r a d d r s r s s p m p d s S po . sha ku . re m g r m m p m no . . ran . ja nu p m p d s s r Rā . va nā . su ra	m g r s r m g . . ma cham . . . R , , , s r drā Ra ghu p m m P P Rā . gha ven dra m g r s r s s d S d d d p . . sri ta ja na r s r m g r r Si . . tā . . ma P p P P re re dhī rā m g r s r s s an . ta ku . re .

s	○	○	s	○	○
d d r s r	s s		d d s	d d	d p
a . . i ya	i ya		a . . i ya	i ya	
p m p d s	S		Š s	d d	P
a . . i ya	re		dī na	ja na	man
p m p m g	r r		Here repeat the portion within brackets and conclude.		
dā . ru mē .	ma va				

Lesson 16.

Lakshmi gita

28. Mohana rāga—Rūpaka tāla

{ s r g p d s
s d p g r s

వరవీణా మృదుపాణీ వనరుహలాః చనరాణీ

సురుచిరబం బరవేణీ సురనుత కల్యాణీ

నిరుపమశుభ గుణలాలా నిరతజయ ప్రదక్షిణా

వరదప్రియ రంగ నాయకి వాంచితఫల దాయకి

సరసిజా సనజననీ జయజయజయ !!

వరవీణా మృదుపాణీ వనరుహలాః చనరాణీ

సురుచిరబం బరవేణీ సురనుత కల్యాణీ

నిరుపమశుభ గుణలాలా నిరతజయ ప్రదక్షిణా

వరదప్రియ రంగనాయకి వాంచితఫల దాయకి

సరసిజా సనజననీ జయజయజయ !!

○	○	○
g g P P	d P Š Š	r s d d P
va ra vī nā	mru du pā nī	va na ru ha lo
d p g g R	g p d s D	d p g g R
cha na rā . nī	su ru chi ra bam	ba ra ve . nī
g g d p G	p g g r S	g g g g r g
su ra nu ta kal	yā . . . nī	nī ru pa ma su bha
p g P P	g g d p D	d p Š Š
gu na lo la	nī ra ta ja ya	pra da sī lā
d g r r s s	d s d d d p	g p d s d p
va ra da . pri ya	ran ga nā . ya ki	vān . chi ta pha la
d p g g r s	s g G G	g r p g R
dā . . . ya ki	sa ra si jā	sa na ja na nī
s r s g r s		
ja ya ja ya ja ya		

Lesson 17.

Vishnu Gita

65th Melakarta : Kalyāni rāga — Tripuṭa tāla { s r g m p d n s
s n d p m g r s .

కమలజదళ విమలసునయన కరివరద కరుణాంబుధే

కరుణశరధే కమలకాంతా

కేశినరకా సురవిభేదన వరదవేల సురపుష్ప త్రయ

కరుణశరధే కమలకాంతా ॥

కమలజతల విమలసునయన కరివరద కరుణాంబుధే

కరుణశరధే కమలకాంతా

కేశినరకా సురవిభేదన వరదవేల సురపుష్ప త్రయ

కరుణశరధే కమలకాంతా ॥

s ○ ○	s ○ ○	s ○ ○
s s s n d n s ka ma la ja . da la	n d p d p m p vi ma la su na ya na	g m p p d d a ka ri va ra da ka ru
d p m p g r s nā . mbu dhe . . .	d d d g g G ka ru na sa ra dhe	m P m g r s ka ma la . . .
R , S ; kān . tā .	g m p m p d p ke , si na ra kā .	n d p d p m p su ra vi bhe . da na
g m p p d d n va ra da ve . la .	d p m p g r s su ra pu ro . ttama	d d d g g G ka ru na sa ra dhe
m P m g r s ka ma la . . .	R , S ; ॥ kān . tā . ॥	

Lesson 18.

20 Bhairavi rāga—Dhruva tāla

$$\left\{ \begin{array}{l} \text{s r g m p}^* \text{d n s} \\ \text{s n d p m g r s} \end{array} \right.$$

ஸ்ரீராமచంద్ర శ్రీతపరిజాత సమస్త కల్యాణ నుణ అభిరామ

సీతామఖ అంధోరుహ చంచరీకు నిరంతరం మంగళ మాతనోతు ॥

ஸ்ரీராம சந்த்ர ச்ரீதபாரிஜாத ஸமஸ்த கல்யாண
குண அபிராம வஸீதா முக அபிபோருஹ சம்சரீகு
நிரந்தரம் மங்கள மாதனோது ॥

N.B.—The foreign note chatussruti dhaivata is shown with an asterisk wherever it occurs.

4	○	4	4
g r g m srī . Rā .	P ma	m g r g chan . dra .	m P M sri ta pā
p d n n . ri ja .	d p . ta	m n d p sa ma . . .	m g r s . . . sta
s r s p ka . . lyā	m p . na	g r g m gu na a bhi	g g r s Rā . . ma
r r g g Si . tā .	m m mu kha	g g - r g . . am .	m p m m bho . ru ha
p *d *d n cham . . .	n s . cha	p *d n s rī . . .	r g r s . . . ku
n r s g ni ram . ta	r s ram .	n n d m man . ga la	p *d n s mā . . ta
p d p s no . . tu	n s . .	p d m p	G r s ॥ . . . ॥

$$\left\{ \begin{array}{l} \text{g r g m P} \\ \text{srī . Rā . ma} \end{array} \right.$$

Lesson 19.

[Paidāla Gurumūrti Sāstri

20. Anandabhairavi rāga—Dbruva tāla } s g r g m p * d p s
 } s n * d p m g r s

பாஹி ஸ்ரீராமசுந்தர கோஸல்யா பாக்யரூபா
 க்ருபாளோ திசமே பக்திம் தேவதேவ காமித தாயக
 ரமாகாந்த ஸுரஸேவ்ய கீத அம்ருதபான
 அகிலலோக வந்தித சரண ஆச்ரிதஜன மந்தார
 ஜலஜாதா ப்ரபாவா ஆதிபூஜித கமலாக்ஷ
 நிகமவேத்ய நீல வர்ண....ஸ்ரீ குரு மூர்த்தே॥

பாஹி ஸ்ரீராமசுந்தர கோஸல்யா பாக்யரூபா
 க்ருபாளோ திசமே பக்திம் தேவதேவ காமித தாயக
 ரமாகாந்த ஸுரஸேவ்ய கீத அம்ருதபான
 அகிலலோக வந்தித சரண ஆச்ரிதஜன மந்தார
 ஜலஜாதா ப்ரபாவா ஆதிபூஜித கமலாக்ஷ
 நிகமவேத்ய நீல வர்ண....ஸ்ரீ குரு மூர்த்தே॥

,	○	,	,
S S pā hi	g r srī .	s g g m Rā . . ma	g r s n chan . . dra
s m G kau . sal	r s yā .	s r s n bhā . . gya	N S rū pā
m g G kru pā .	M lo	s n N di sa me	S S bhak tim .
S s p de va de	m g va	G m g kā mi ta	r g r s dā . ya ka

4	○	4	4
n S g Ra mā kā	g m . nta	g m d p su ra se .	m g r s . . . vya
P M gī ta	P a	m g p m mru ta pā .	g r s r . . . na
s n s g a khi la lo	g m . ka	p d p m van . di ta	g r S cha ra na
S s d ā sri ta	p m ja na	m p m g man . . .	G m m dā . ra
p n N ja la jā	Ś tā	p s n n pra bhā . .	Ś Ś . vā
P p s ā di pū	, s . .	s n n d ji ta . ma	d p p m lā . . ksha
g m p d ni ga ma vē	p m . dya	m d p m . . . la	g r s n va . . rna
s g g m (a) . . .	p m . .	g r - g m	p d P . . .
Ś n d sri . .	p m Gu ru	P - m p mū . .	m g r s . . . rte

Here, repeat the portion within brackets and conclude.

Lesson 20.

JATISVARAM

29. Bilahari rāga —Adi tāla

(s r g p d s
s n d p m g r s

Note --This composition though strictly a jatisvara, is, popularly called a svarajati. The sāhitya *Rāravenu gopā bāla* given here is a later interpolation. Faulty Prosody is seen in some parts of this sāhitya.

పల్లవి

రారా వేణు గోపా బాలా రాజిత సద్గుణ జయశీలా ॥

అనుపల్లవి

సారసాక్ష సేరమేమి మారుబారి కోర్వలేరా ॥

చరణములు

1. ననవిలుతుని గర్వమడంచినదా నను నీయెడపై దయతో పాదుగుర ॥

2. నంద గోపాలా నే నెందు బోజాలా నీ

విందురారా సదమలమదితో మదమలరగ నాకెదురుగ గదియర ॥

3. పలుమారును గారవముననిన్ బిలచిన బలుకవు నలుగకురా

కరివరదా మరిమరి నా యధరముగ్రో లరకనికరముగ ॥

4. రా నగధర రా మురహర రా భవహర రావేరా

ఈ మగువను ఈ లలనను ఈ సొగసిని చేజోరా

కోరిక లింపొందా డెందము నీయెడ జేరెను నిక జెంద

మరువకురా కరములచే మరిమరి నినుశరణనెదర ॥

5. నా తలపుల సమగూర్చుక సరసత వెలయంగక కరముల

ననుగొని చిత్తము మెప్పింపక మరివా తెరలానుచు నీవశమున

నా సకలముజేర్చక మారునియనిలోనక సారకుజయమొందక

నీవిటు వలగొనురా నాకిదె వలయునురా పరగుననిటు ॥

பல்லவி

ராரா வேணுகோபாபால ராஜிதஸக்குண ஜயசீலா ॥

அனுபல்லவி

ஸாரஸாக்ஷ நேரமேமி மாருபாரி கோர்வலேரா ॥

சரணங்கள்

1. நனவிலுதுனிகர் வமடம் சிஸ்தா நனுநீ யெடபை
[தயதோ பொதுகுர ॥
2. நந்தகோபால .. நே நெந்துபோஜால .. நீ
விந்து ராரா - ஸதமலமதிதோ - முதமலரக நா
[கெதுருக கதியர ॥
3. பலுமா ருனுகா ரவமுனநின் பிலசின பலுகவு
நலுகுரா.
கரிவரதா மரிமரிநா யதரமுக்ரோ லரகனி கரமுக ॥
4. ரா. நகதர ரா. முரஹர ரா. பவஹர ராவேரா.
ஈ. மகுவனு ஈ. லலனனு ஈ. ஸொகலினி சேகோரா.
கோரிகலிம்பொந்தா. டெந்தமு நீயெத. ஜேரெனு
நின்ஜெந்
த. மருவகுரா கரமுலசே. மரிமரி நினுசரணனெதர ॥
5. நா. தலபுல ஸமகூர்சன் - ஸரஸத லெலயங்கன் கரமுல
நனுகொனி சித்தமு மெப்பிம்பன் - மரிவா தெரலானுகுநீ
[வசமுன
நா ஸகலமு ஜேர்பன் மாருனி யனிலோனன்
[ஸாரெகு ஜயமொந்தன்
நீவிடு வலகொனூரா - நாகிதெவலயுனூரா ஸரகுனனிடு ॥

| 4

○

○

Pallavi

S , r G P D Ś N D P d p m g r s r s n d S ; ||
 rā . ra ve nu go pā bā lā rā ji ta sa . dgu na ja ya sī . lā ||

Anupallavi

S , r G P M , g P D R , ś N D P , m G R ||
 sā . ra sāk sha ne . ra me mi mā . ru bā ri ko . rva le ra ||

Charanas

*1. g p d r ś ś Ś . g ġ Ġ r r R . p p P m g G . r s S r s n d ||
 na na vi lu tu ni gar va ma dam chi sa dā na nu ni ye da pai da ya to po du gu ra ||
 (m g r g)

2. S , r G G . G ; ; - r g P , p P P P ; ; - d p
 nau . da go pā lā . . ne . nen . do bo jā lā . . nī .

Ś , ś Ś Ś . g r ś n n d P . p d p m g g R . g p m g r s r g ||
 vin . du rā rā sa da ma la ma di to mu da ma la ra ga nā ke du ru ga ga di ya ra ||

3. **p p P - r r R - g p m g G ; g p m g m g r s r g r s S ;**
 pa lu mā ru nu gā ra va mu na nin . bi la chi na ba lu ka vu na lu ga ku rā .

r s n d S ; m g r g P ; d p d r Š ; r s n d p m g r ||
 ka ri va ra da . ma ri ma ri nā . ya dha ra mu gro . la ra ka ni ka ra mu ga ||

4. **P ; m g r g D ; m g r g P ; m g r g P P P ;**
 rā . na ga dha ra rā . mu ra ha ra rā . bha va ha ra rā ve rā .

G ; ṙ ṡ ṅ ḋ Ṙ ; ṙ ṡ ṅ ḋ Ṧ ; ṙ ṡ ṅ ḋ Ṧ Ṧ Ṧ ;
 ī . ma gu va nu ī . la la na nu ī . so ga si ni che ko ra .

Ġ ṙ ṡ Ṙ Ṙ Ṙ ; - Ṙ ṡ ṅ D D D ; P m g G G
 ko rī ka lim pon dā . den da mu nī ye da . je re nu nin jen

G ; - s r g d P ; - ṙ ṡ ṙ ġ Ṧ ; - ġ ṙ ṡ ṅ ḋ p m g r ṡ ṅ ḋ ||
 da . ma ru va ku ra . ka ra mu la che . ma ri ma ri ni nu sa ra na ne da ra ||

| 4

○

○

*5. D; p d p m g r G G ; - p d p m g r G G ; - p d p m
nā . ta la pu la sa ma gūr chan . sa ra sa ta ve la yan gan . ka ra mu la

g g r g s s S S S S ; s r G r g P d p D m g r g
na nu go ni chi tta mu mep pim pan . ma ri vā te ra lā nu chu nī va sa mu na

D p m g r S S ; - R s n d p D D ; G r s n d R
nā sa ka la mu jer pan . mā ru ni ya ni lo nan . sā re ku ja ya mon

R ; - S r g s r s n D ; - P d* n p d p m G- g d p m g r ||
dan . nī vi tu va la go nu rā . nā ki de va la yu nu rā sa ra gu na nī tu ||

*The dhātu and mātu of charanas 1 and 5 are later interpolations

CHAPTER VI

ACOUSTICS

A musical note is produced by a continued vibration of regular frequency. A complete vibration is a whole to and fro movement. Musical notes are measured in terms of vibrations per second. The *pitch* or *frequency* of a note is its number of complete vibrations per second.

If the frequencies of two notes bear the ratio 2 : 1, the former note will be found to be the octave of the latter.

In other words, if the pitch of a note, say like the madhya sthāyi antara gāndhāra is equal to 300 vibrations per second, the pitch of the tāra sthāyi antara gāndhāra will be equal to 600 vibrations per second and so on.

A $\frac{9}{8}$ interval is called a major tone and is a *Chatussruti interval*

A $\frac{10}{9}$ „ „ minor tone and is a *tisruti interval*

A $\frac{16}{15}$ „ „ semi-tone and is a *dvisruti interval*

The chatussruti rishabha is a major tone above the shadja; the antara gāndhāra is a minor tone above the chatussruti rishabha ; $\frac{9}{8} \times \frac{10}{9} = \frac{5}{4}$; the suddha madhyama is a semi-tone above the antara gāndhāra : $\frac{5}{4} \times \frac{16}{15} = \frac{4}{3}$.

The major tone and the minor tone differ by an interval called *comma* $\frac{81}{80}$ (pramāna sruti) $\frac{9}{8} \div \frac{10}{9} = \frac{81}{80}$.

TABLE VII

Giving the relative frequencies of the svaras of the Sankarābharana and Māyāmālavagaula scales, assuming $sa = 240$ vibrations per second.

Name of the rāga	Relative frequencies of the svaras.							
	s	r	g	m	p	d	n	ś
Sankarābharana	1	$\frac{9}{8}$	$\frac{5}{4}$	$\frac{4}{3}$	$\frac{3}{2}$	$\frac{27}{16}$	$\frac{15}{8}$	2
	240	270	300	320	360	405	450	480
Māyāmālavagaula	1	$\frac{16}{15}$	$\frac{5}{4}$	$\frac{4}{3}$	$\frac{3}{2}$	$\frac{8}{5}$	$\frac{15}{8}$	2
	240	256	300	320	360	384	450	480

The sthāyis proceed in the ratio of 1, 2, 4, 8 etc. In consequence, the vibration numbers of the corresponding notes of the sthāyis also proceed in the same ratio. For instance the vibration numbers of the note *g* in the different sthāyis are in the following ratio :—

Mandra sthāyi	Madhya sthāyi	Tāra sthāyi	Ati.tāra sthāyi
g	g	g	
1	2	4	8

Some problems

Problem 1. The tāra sthāyi suddha madhyama is equal to 640 vibrations per second. What is the frequency of mandra sthāyi panchama?

$$m = 640. \quad \therefore s = 640 \div \frac{4}{3} = 480$$

$$\therefore s = 240 \text{ and } \dot{s} = 120$$

$$\therefore p = 120 \times \frac{3}{2} = 180 \text{ (Answer).}$$

Problem 2. Two notes have the frequencies 320 and 480 vibrations per second respectively. Assuming the note of the lower pitch to be antara gāndhāra, determine the other note?

Antara gāndhāra = 320 vibrations per second.

$$\therefore \text{shadja} = 320 \div \frac{5}{4} = 320 \times \frac{4}{5} = 256$$

$$\text{Now } \frac{480}{256} = \frac{15}{8} = kākali nishāda \text{ (Answer).}$$

Harmonic Series.

A harmonic series of notes is a series of notes whose vibration numbers progress in the following proportion:—

1 2 3 4 5 6 7 8 9 10 11 12 etc. \

TABLE VIII

Giving the frequencies and the values of the notes up to the 12th harmonic :—

No.	Frequency	Name of the note	Interval reduced to one octave
1	240	s	1
2	480	s	2
3	720	p	$\frac{3}{2}$
4	960	s	2
5	1200	g	$\frac{5}{4}$
6	1440	p	$\frac{3}{2}$
7	1680	—	$\frac{7}{4}$
8	1920	s	2
9	2160	r	$\frac{9}{8}$
10	2400	g	$\frac{5}{4}$
11	2640	—	$\frac{11}{8}$
12	2880	p	$\frac{3}{2}$

Note :—The svaras s r g p with three dots above them, belong to the *ati ati tārā sthāyi*.

If a stretched string like that of a tambura or a vīna is plucked or bowed, the string vibrates as a whole. The amplitude of vibration is greatest at the centre, and this part of the string is called the *antinode*. The two ends on either side of the vibrating length of the string are at rest and are called the *nodes*. A node is a place where there is no motion.

Every performer on a stringed instrument like the vīna or the violin knows that :—

1. When he plays on open strings, the entire length of the string vibrates ;

2. When he stops a string by pressing his fingers against the finger-board, he makes only a portion of its length i.e. the length between the bridge and the finger to vibrate ;

3. With the shortening of this vibrating length of the string, the pitch increases ;

4. With the increase in the tension of the string, the pitch increases ;

5. Thicker strings give notes of lesser pitch.

These truths are summed up in the following laws relating to the transverse vibration of strings :—

1. *The pitch of a string is inversely proportional to its length.*

2. *The pitch of a string is inversely proportional to its thickness.*

3. *The pitch of a string is directly proportional to the square root of its tension.*

Thus in a stringed instrument, the three factors that affect and determine the pitch of a note are the *length*, *tension* and *thickness* of the stretched string.

CHAPTER VII

TECHNICAL TERMS

Accidental, the *anya svara* or the visiting note in a *bhāshānga rāga*.

Adhama vaggeyakara, see under *vāggeyakāra*.

Adhara shadja, the *shadja svara* that is taken as the key-note or *sruti*; tonic note.

Adi, the name given to the *chaturasra jāti triputa tāla*; | . ○ ○ *Avarta* = 8 *aksharakālas*.

Alapana, exposition of a *rāga*.

Antinode, the mid-point in the vibrating length of a string and at which the amplitude of vibration is maximum.

Antiphony, alternate singing of solo and chorus; or responsive singing of two groups of singers.

Anupallavi, the second section of a melody in *Karnātic music* : also see under *pallavi*.

Anyā svara, visiting note or accidental; the foreign note in a *bhāshānga rāga*; opposite of *svakīya svara*. *Anyā svaras* give a flashing touch to the melodic beauty of *bhāshānga rāgas*.

Applied music, compositions wherein the music serves merely as a vehicle for a specific purpose. The *sāhitya* is an important factor in such compositions; ex- sacred songs and songs belonging to operas.

Asraya raga, the prasiddha raga after which a mela is named. Thus Sankarābharana is the āsraya raga of the 29th mela, Dhira Sankarābharana.

* **Audava raga**, a rāgā wherein only five of the sapta svaras are represented in both the ārohana and avarohana i.e., two notes being *varja* both ways. Ex. Mohana and Suddha sāveri.

Audava-audava raga, same as audava rāga.

• **Audava-sampurna raga**, a rāga wherein only five of the sapta svaras figure in the ārohana and all the sapta svaras find a place in the avarohana. Ex. Bilahari and Arabhi.

• **Audava-shadava raga**, a rāga wherein five of the sapta svaras figure in the ārohana and six of them figure in the avarohana. Ex. Malahari.

Audava, Shadava, Sampurna, terms used to describe the ārohana and avarohana of rāgas; they indicate the number of svaras present in the ascent and descent. They respectively indicate the numbers 5, 6 and 7.

Audava-svarantara raga, a rāga with an audava ārohana and a svarāntara avarohana.

Bhandira, a variety of sanskrit figuring in the sāhityas of earlier gītas : a form of Prākṛit.

① **Bhashanga raga**, a janya rāga wherein one or two foreign notes (notes *foreign* to its parent melakarta rāga) come in for the sake of enriching its beauty; ex. Bhairavi; the foreign note here is the chatussruti dhāivata.

Bhoga, the name given to the sankīrṇa jāti triputa tāla; |, ○ ○ Avarta=13 aksharakālas.

Bhuvana, the name given to the sankīrṇa jāti dhruva tāla; |, ○ |, |, Avarta=29 aksharakālas.

Bindu, the name given to the sankīrṇa jāti rūpaka tāla; ○ |, Avarta=11 aksharakālas.

Chakra, the name given to the tisra jāti rūpaka tāla; ○ |, Avarta=5 aksharakālas.

Chana, the name given to the khanda jāti jhampa āla; |, ∪ ○ Avarta=8 aksharakālas.

Charana, the third section of a melody in Karnātic music; also see under pallavi.

• **Chaturasra**, four

• **Chatuṣvara vakra raga**, a vakra rāga with four vakra svaras in both the ārohana and avarohana.

Chitta tanas, set exercises for developing the finger technique in vīna play.

Dance form, a composition belonging to the sphere of dance music.

• **Dhatu**, (ధాతు) the *music* of a composition as opposed to the *mātu* (మాతు) or the words; sāhitya or text of a musical composition.

Dhīra, the name given to the sankīrṇa jāti ata tāla |, |, ○ ○ Avarta=29 aksharakālas.

Drone, a musical instrument that is used for sounding the key-note or sruti. It is kept sounding throughout a musical performance. Instead of the drone music, giving rise to a feeling of monotony, it makes a most pleasing back-ground and greatly enriches the effect. Drones like the *ektār* and *ottu* give single notes—the *ādhāra shadjā*. These are called *monophonous drones*. But the *tambura*, the best of the *sruti vādyas*, is designed to give the basic *shadjā*, *panchama* and the higher *shadjā*, in addition to rich harmonics. Drones like the *tambura* and the *sruti-box* designed to give more than one note at a time are called *polyphonous drones*. Drones of the stringed group are played on open strings.

• **Dvisvara vakra raga**, a *vakra raga* with two *vakra svaras* in both the *ārohana* and *avarohana*.

• **Dvisvara varja raga**, *audava rāga*.

Dushkara, the name given to the *khanda jāti triputa tāla*; |, ○ ○ *Avarta* = 9 *aksharakālas*.

• **Ekasvara vakra raga**, a *vakra rāga* with one *vakra svara* in both the *ārohana* and *avarohana*.

• **Ekasvara varja raga**, *shādava rāga*.

Equal temperament, a system of tuning obtaining in key-board instruments of the piano type. Here the *sthāyi* is divided into twelve equal semitones or intervals, with the consequence that the frequencies of all the notes are slightly below or above their true ratios.

Gandharvam, the name for music in ancient works.

Gandharva tatva, the science of music.

Gandharva veda, the branch of vedic study dealing with music. It is one of the four *upa vedas*; the other three upa-vedas being *Ayurveda*, *Dhanurveda* and *Artha sāstra*.

Gandharva vidya, music.

Gati, the under-lying rhythm of a *tāla*.

Ghanaraga gita, a *gīta* in a *ghana rāga* like *Nāta*, *Gaula*, *Arabhi* or *Srirāga*.

Gita, the simplest of the musical forms. It has not got the division into *pallavi*, *antupallavi* and *charana*. It may however have 2 or 3 sections or *khandikas*.

Gita prabandha, a *prabandha* of the *gīta* type.

Gupta, the name given to the *tisra jāti* or *tāla*;
| : | : ○ ○ *Avarta* = 10 *aksharakālas*.

Hindusthani music, the system of music prevailing in North India; also see under *Indian music*.

Homophony, see under *polyphony*.

Indian music, the system of music in vogue in India. It is one of the oldest systems of music in the world. The bifurcation of Indian music into *Karnātic* and *Hindusthani* sub-systems came about 7 centuries ago.

Instrumental form, a composition intended for being played on instruments; ex. marches and overtures.

Interval, the ratio of the frequency of a note to that of a lower note.

Janaka raga, a *rāga* with a *sampūrṇa*, non-*vakra* *ārohana* and *avarohana* and with *svaras* which retain their

identical character in both the ascent and descent. Melakarta rāga, mēla rāga, karta rāga, sampūrna rāga, fundamental rāga, root-rāga and primary rāga are other terms signifying the same concept.

• **Janya raga**, derivative rāga.

• **Jati**, (ஜதி) the name given to the tāla solfa syllables: *taka tari kita naka tatin gina tom*; Pātam; solkattu (சொல்கட்டு).

• **Jati**, (ஜதி) kind. The term is used with reference to the laghu. The five kinds of the laghu are: tisra jāti laghu | 3, chaturasra jāti laghu | 4, khandā jāti laghu | 5, misra jāti laghu | 7 and sankirna jāti laghu | 9.

The term also signifies the old Indian mode of that name.

• **Jatisvara**, a composition very much like the svarajati in point of musical structure and arrangement but without a sāhitya. It has the division into pallavi, anupallavi and charana. The charanas are in different dhātus.

• **Just intonation**. In the scale of just intonation the notes that are employed are absolutely true in their pitch. Opposite of equal temperament.

• **Kadamba**, the name given to the tisra jāti jhampa tāla: | 3 ◡ ○ Āvarta = 6 aksharakālas.

• **Kalpita sangita**, music already composed and ready for being performed or taught.

• **Kampita svara**, a note subject to the kampita gamaka (shake).

Kara, the name given to the sankīrṇa jāti jhampa tāla; $1, \cup \bigcirc$ Āvarta=12 aksharakālas.

Karnatic music, the system of music prevailing in South India

• **Karta raga**, same as jahaka rāga.

Katakam, a rāga lexicon containing the exposition of rāgas in the form of tānas.

• **Khanda**, section; also five

• **Khandika**, section of a musical composition.

Krama, regular. The terms: **krama sampurna**, **krama shādava** and **krama audava** indicate that the ārohana or avarohana signified by them are regularly ascending and descending *ie.*; take a non-tortuous course in addition to their sampūrṇa, shādava or audava character.

Kula, the name given to the misra jāti rūpaka tāla; $\bigcirc | 7$ Āvarta=9 aksharakālas.

• **Lakshana**, the characteristic features; used with reference to a rāga, tāla or musical composition.

Lakshana gita, a composition of the gita type, wherein the sāhitya instead of being praise of God, enumerates the lakshana of its rāga.

• **Lakshya**, musical compositions; current practice.

Lakshya gita, the ordinary gita, as contrasted with the lakshana gita.

• **Lekha**, the name given to the chaturasra jāti āla āla $| 4 | 4 \bigcirc \bigcirc$ Āvarta=12 aksharakālas.

Lila, the name given to the misra jāti triputa tāla ;
 | 7 ○ ○ Āvarta = 11 aksharakālas.

Loya, the name given to the misra jāti ata tāla ;
 | 7 | 7 ○ ○ Āvarta = 18 aksharakālas

Madhura, the name given to the chaturasra jāti jhampa tāla ; | 4 ∪ ○ Āvarta = 7 aksharakālas.

Madhyama vaggeyakara, see under vāggeyakāra.

Major tone, a chatussruti interval ($\frac{9}{8}$).

Mana, the name given to the chaturasra jāti eka tāla ;
 • | 4 Avarta = 4 aksharakālas.

Mani, the name given to the tisra jati dhruva tālā
 | 3 ○ | 3 | 3 Āvarta = 11 aksharakālas.

Manodharma sangita, improvised music.

Matruka padam, quaint phrases like *a iya, ti iya, a iyam, vā iya*, occurring in gītas and which are introduced for decorative effects.

Matu, the sāhitya or the words of a musical composition.

• **Melakarta raga**, same as janaka rāga.

• **Mela raga**, same as melakarta rāga.

Minor tone, a tisruti interval ($\frac{10}{9}$).

Misra, mixed (misra rāga); also seven.

Mudra, the signature of a composer occurring in a musical composition.

Musical composition, a piece of music set to time and conforming to the lakshana of the form to which it belongs; prabandha.

Musical form, musical composition.

Musical instrument, any contrivance, mechanism, thing or apparatus capable of producing a musical note.

Musical type, same as musical form.

* **Nava sandhi talas**, nine talas figuring in the ritualistic music of temples.

Node, the two ends of the vibrating length of a string at which there is no motion.

Nyasa svara, a note in a rāga on which phrases can legitimately end.

† **Pallavi**, the first section of a melody in Karnātic music. Compositions like the Svarajati, Jatisvara, Varna, Kriti, Padam, Jāvali, and Rāgamālika have the three divisions: pallavi, anupallavi and charana. The pallavi is repeated at the conclusion of the anupallavi and every charana.

Patti, the name given to the chaturasra jāti rūpaka tala; ○ | . Āvarta = 6 aksharakālas.

Polyphony, a type of music, where several melodies, all of equal importance and each having its own individuality are simultaneously sung. In the *homophonic* type of music, which also consists of several melodies, one part sustains the melodic interest and the other parts simply form an accompaniment.

Prabandha, a musical composition; also the particular type of composition bearing that name.

Pramāna, the name given to the khanda jāti dhruva tāla: | : ○ | : | : . Āvarta = 17 aksharakālas.

Pure music, manodharma sangīta; also compositions whose claims to posterity lie in the value of their dhātu.

Pūrṇa, the name given to the misra jāti dhruva tāla; $\left| \begin{smallmatrix} 7 \\ \circ \end{smallmatrix} \right| \begin{smallmatrix} 7 \\ \end{smallmatrix} \left| \begin{smallmatrix} 7 \\ \end{smallmatrix} \right|$ Āvarta=23 akshara ālas.

Raga, the name given to the misra jāti Ēka tāla; $\left| \begin{smallmatrix} 7 \\ \end{smallmatrix} \right|$ Āvarta=7 aksharakālas; also melody-type

✓ **Ragamala gita**, a gīta in rāgamālika form.

✓ **Ragamalika jatisvara**, a jatisvara composition in the form of a rāgamālika.

Raja, the name given to the khanda jāti rūpaka tāla; $\circ \left| \begin{smallmatrix} 5 \\ \end{smallmatrix} \right|$ Āvarta=7 aksharakālas.

Rata; the name given to the khanda jāti Ēka tāla; $\left| \begin{smallmatrix} 5 \\ \end{smallmatrix} \right|$ Āvarta=5 aksharakālas.

Rava, the name given to the sankīrna jāti matya tāla: $\left| \begin{smallmatrix} 9 \\ \circ \end{smallmatrix} \right| \begin{smallmatrix} 9 \\ \end{smallmatrix} \left| \begin{smallmatrix} 9 \\ \end{smallmatrix} \right|$ Āvarta=20 aksharakālas.

• **Rhythmical harmony**, the cross-rhythmical accompaniment provided by the player of the mridanga or other tāla vādya to all measured music in a concert; the jatis or tāla mnemonics played by him emphasize the rhythmical construction and flow of the pieces.

Sacred form, a composition belonging to the realm or religious music.

Sadharana gita, same as sanchāri gita.

Sama, the name given to the chaturasra jāti matya tāla; $\left| \begin{smallmatrix} 4 \\ \circ \end{smallmatrix} \right| \begin{smallmatrix} 4 \\ \end{smallmatrix} \left| \begin{smallmatrix} 4 \\ \end{smallmatrix} \right|$ Āvarta=10 aksharakālas.

Also, the name of one of the classical 108 tālas;
 1 1 1 0 1 0 Āvarta = 13 aksharakālas.

Samanya gita, same as sanchāri gita.

Sampūrṇa raga, a raga wherein all the sapta svaras are present in both the ārohana and avarohana e.g. Māyāmālavagaula.

Sampūrṇa-audava raga, a raga with all the sapta svaras in the ārohana and with only five of them in the avarohana. Ex. Garudadhvani and Sāramati.

Sampūrṇa-sampūrṇa raga, same as sampūrṇa rāga.

Sampūrṇa-shadava raga, a rāga with all the sapta svaras in the ārohana and with only six of them in the avarohana Ex. Bhairavam.

Sampūrṇa-svarāntara raga, a rāga with a sampūrṇa ārohana and a svarāntara avarohana.

Sanchara, combination, prayoga, pidippu (பிடிப்பு); also a short exposition of a rāga

Sanchari, a short exposition of a raga in solfeggio and set to time.

Sanchari gita, the ordinary gīta, wherein the theme of the sāhitya is praise of God Also called *sāmānya gita* and *lakshya gita*.

Sankha, the name given to the tisra jāti tripura tāla;
 1 3 0 0 Āvarta = 7 aksharakālas.

Sankirna, mixed (sankirna rāga). Also nine.

Sara, the name given to the tīśra jāti matya tāla;
 | : O | : Āvarta=8 aksharakālas.

Secular form, composition of a non-religious character; ex. jāvalis and martial songs.

Semi-tone, a dvisruti interval ($\frac{1}{16}$).

• **Shadava-audava raga**, a raga wherein six of the sapta svaras are present in the ārohana and only five of them are present in the avarohana. Ex. Nātakuranji.

• **Shadava raga**, a raga wherein only six of the sapta svaras are represented in both the ārohana and avarohana i.e., one note is *varja* both ways. Ex. Srīranjani. Malayamārutam.

• **Shadava-sampūrṇa raga**, a raga with six of the sapta svaras in the ārodana and with all the sapta svaras in the avarohana. Ex. Kāmbhoji.

• **Shadava-shadava raga**, same as shādava rāga.

• **Sha-ava-svarāntara raga**, a raga with a shādava ārohana and a svarāntara avarohana.

• **Slur**, a curved line placed above a series of svaras to indicate that the notes are to be played smoothly as a single continuous phrase.

Srikara, the name given to the chaturasra jāti dhruva tāla; | : O | : | : Āvarta=14 aksharakālas.

Sudha, the name given to the tīśra jāti eka tāla; | : Āvarta=3 aksharakālas.

• **Sulādi**, a musical form of the tālamālika type.

Sura, the name given to the misra jāti jhampa tāla;
1, ∪ ○ Āvarta = 10 aksharakālas.

• **Svakiya svara**, In a bhāshānga raga, both the komala and tivra varieties of a note or notes occur. That note which belongs to the parent scale is called the *svakiya svara* and the note which is foreign to the parent scale and which comes occasionally for enriching the melodic beauty of the raga is called the *anya svara*.

• **Svarajati**, a composition with the divisions, pallavi, anupallavi and charana—the charanas being set in different dhātus.

• • **Svarāntara - audava raga**, a raga with a svarāntara ārohana and an audava avarohana.

• **Svarāntara raga**, a raga with four notes only in both the ārohana and avarohana.

• **Svarāntara - sampurna raga**, a raga with a svarāntara ārohana and a sampurna avarohana Ex. Vivardhani.

Svarāntara - shadava raga, a rāga with a svarāntara ārohana and a shādava avarohana. Ex. Navarasakannada.

• **Svarāntara - Svarāntara raga**, same as svarāntara rāga.

• **Svara pallavi**, same as jatisvara. Also a *solfeggio Pallavi* (i.e. a Pallavi theme sung with svaras alone) to which kalpana svaras are sung or performed.

Svara sthana, literally position of the note. In stringed instruments with plain finger-boards, the term

indicates the geometrical point on the string, which when touched by the finger, sounds the particular note *Svarasthāna* is also a region comprising a certain number of srutis of minute intervals, which for the practical purposes of rāga formation is treated as a unit. The sthāyi consists of 12 svarasthānas and the 22 srutis are distributed amongst them.

† **Svarūpa**, form or individuality ; rāga svarupa means the melodic entity of the rāga.

† **That**, the name for a janaka rāga in Hindusthāni music.

† **Tisra**, three. The terms, *Tisra*, *Chaturasra*, *Khanda*, *Misra* and *Sankīrna* respectively denote the numerals 3, 4, 5, 7 and 9. These are used to denote the laghu jāti and the tāla gati (the sub-rhythm of a time-measure).

† **Transilient scale**, varja rāga.

† **Trikāla**, the three degrees of speed—prathama, dvitiya and tritiya ; or vilambita, madhya and druta.

† **Trisvara vakra raga**, a vakra rāga with three vakra svaras either in the ārohana or avarohana or both.

† **Trisvara varja raga**, a svarāntara rāga.

† **Ubhaya vakra raga**, a rāga whose ārohana and avarohana are vakra.

† **Ubhaya varja raga**, a rāga which has varja svaras in both the ārohana and avarohana.

† **Udaya**, the name given to the khanda jāti matya tāla ;
| . ○ | . Āvarta = 12 aksharakālas.

Udirna, the name given to the misra jati matya tāla;
 | 7 0 | 7 Āvarta=16 aksharakālas.

Upāṅga raga, a derivative raga which takes only the notes figuring in its janaka rāga.

Uttama vāggeyakāra, see under vāggeyakāra.

Vāggeyakāra, composer; *dhātu-mātukāra* i.e., one who is the author of both the music and the sāhitya of a musical composition. Even the composers of compositions like the jatisvaras which admit of dhātu alone may, by courtesy be called vāggeyakāras.

An **uttama vāggeyakāra** is one who is the author of both the music and the sāhitya of a musical composition.

A **madhyama vāggeyakāra** is one who is the author of the music alone and has appropriated the sāhitya of another composer in his composition.

An **adhama vāggeyakāra** is one who appropriates the music or dhātu of another composer and inserts his own sāhitya

Thus the prominence given to *sangita kavītvam* is clearly evident in this concept.

• **Vakra**, irregular. The terms: **vakra sampūrṇa**, **vakra shadava** and **vakra audava** indicate that the ārohana or avarohana signified by them, take a tortuous course in addition to their sampūrṇa, shādava or audava character.

• **Vakra raga**, a rāga whose ārohana or avarohana or both, take a zig-zag, crooked or tortuous course. Ex. Anandabhairavi, Srīrāga and Sahāna.

• **Vakrāntya svara**, the note in a vakra raga. at which the vakratva ends and the prior course is resumed.

• **Vakra sampurna raga**, a vakra rāga wherein all the seven svaras are present in both the ārohana and avarohana. Ex. Sahāna.

• **Vakra sanchāra**, a musical phrase containing vakra svara combinations.

• **Vakra svara**, the note in the ārohana or avarohana of a vakra rāga at which a change in the course takes place; i.e., the note at which there is an interruption or break in the regular course of the ārohana or avarohana. The original course is resumed from the vakrāntya svara.

Vakratva, tortuousness.

• **Varja raga**, a raga wherein one, two or three svaras are absent either in the ārohana or avarohana or both.

• **Varja svara**, the eschewed note in a raga; ex. panchama is the varja svara in Sriranjani.

• **Varjatva**, deletion or elimination of notes.

Vasu, the name given to the sankīrna jāti eka tāla; | .
Āvarta=9 aksharakālas.

Vidala, the name given to the khandā jāti Ata tāla;
 | 5 | 5 ○ ○ Āvarta=14 aksharakālas.

• **Visrānti**, period of rest or silence in a musical composition.

• **Vocal form**, a composition intended for singing.

QUESTIONS

Technical terms:—

1. Explain the following terms:—

Just intonation, Equal temperament, Polyphony,
Anyasvara, Dhātu, Mātu, Varja rāga, Svakiya
svara, Vakratva.

2. (a) Define musical instrument. Explain if the
following are musical instruments:—

- (i) Police-man's whizzle.
- (ii) Horn of a motor-car.
- (iii) Church bells and temple bells.

(b) What is a drone? Give some examples.

3. What do you mean by the term *foreign note* or
accidental. How are accidentals denoted in a musical
composition?

4. Explain the use of vowel extensions in the *sāhitya*
of a musical composition.

Rāga:—

5. Define rāga and rāga ālāpana.

6. (a) Distinguish between:—

- (i) Janaka rāga and janya rāga.
- (ii) Upānga rāga and bhāshānga rāga.
- (iii) Vakra rāga and non-vakra rāga.
- (iv) Vakra svara and vakrāntya svara.

Give some instances for each of the above.

(b) Explain the terms: sampūrna, shādava and audava.

7. Give two examples for each of the following :—

- (i) Audava rāga. (ii) Audava-sampūrna rāga.
 (iii) Nishāda varja rāga. (iv) Ubhaya varja rāga.
 (v) Ubhaya vakra rāga.

8. (a) Give the ārohana and avarohana and the parent rāgas of the following janya rāgas :—

Malahari, Arabhi, Mohana,
 Suddhasāveri.

(b) Point out the anya svaras occurring in the following bhāshānga rāgas :—

Bhairavi, Bilahari.

9. Classify the varja rāgas and vakra rāgas.

10. What is the principle underlying the scheme of the 72 melakarta rāgas?

11. Give short phrases of your own in the following ragas :—Mohana, Bhairavī, Kalyāni, Bilahari.

12. Write the ārohana and avarohana of a shādava-shādava raga with the last note of the purvānga deleted. Assuming that the raga is a janya of the 16th mela, mention the svaras taken by the raga.

Tala :—

13. Explain briefly the scheme of the 35 tālas.

14. (a) Write the names of tālas whose total akshara-kāla for an avarta consists of :—

- (i) 14 units of time.
- (ii) 12 units of time.
- (iii) 10 units of time.
- (iv) 7 units of time.

(b) Explain how tālas whose āvartas are equal in point of duration can yet differ from each other.

15. What do you mean by presumptions in tālas?

16. (a) Which of the seven main tālas has :—

- (i) The largest number of laghus.
- (ii) Two drutams.
- (iii) All the three angas.

(b) Name the tāla which has for an āvarta :—

- (i) The maximum number of aksharakālas.
- (ii) The minimum number of aksharakālas.

17. (a) Which tāla excludes the drutam and which tālas exclude the anudrutam?

(b) Is there any tāla which entirely excludes the laghu? If not, can you assign any reason for this?

18. Explain the law of homogeneity with reference to the laghus in the thirty-five tālas.

19. Mention two tālas in the 35-group, the sum of whose āvartas will be equal to an āvarta of sankīrna jāti ata tāla.

20. Name the tāla that has 23 aksharakālas for an āvarta. Suggest a pair of tālas, the sum of whose āvartas will be equal to an āvarta of this tāla.

21. Suggest a pair of tālas the difference of the akshara-kāla-values of whose āvartas will be equal to an āvarta of trisra rūpaka.

22. In the scheme of 35 tālas, point out two talas wherein the number of aksharakālas for an āvarta of one is equal to the root of the number of aksharakālas for an avarta of the other.

23. How many aksharakālas are there in an avarta of the longest Matya tala and the shortest Jhampa tala.

24. Two musicians started singing simultaneously two different alankāras and they were found to finish simultaneously, although the one sang in prathamakāla and the other in dvitiyakāla. Assuming that the tālas of both the singers were in khanda jāti, determine the tālas of the two alankāras.

25. In the 35 tālas, point out the constituent angas and the total number of aksharakālas for an āvarta of the 9th, 17th, 23rd and 31st tālas.

26. Mention three tālas whose aksharakālas are together equal to an āvarta of khanda jāti dhruva tala.

27. Name the tala which has 12 aksharakālas for an an āvarta and wherein the beats fall on the first, fifth, ninth and eleventh aksharas.

Musical form :—

28. Distinguish between Kalpita sangita and Manodharma sangita.

29. How are musical compositions classified and what are the peculiar characteristics of the different groups?

30. What are the characteristic features of a gīta?

31. Point out the difference between a gīta and a svarajati in respect of:—

- (i) Constituent ngas. (ii) Sāhitya.
- (iii) Musical structure

32. What languages have figured in the sāhityas of gītas? Illustrate your answer with examples.

33. Distinguish between jatisvara and svarajati.

34. Give an example for each of the following:—

(a) A composition not having the divisions: pallavi, anupallavi and charana.

(b) A composition with charanas in different dhātus.

(c) A composition with angas in different tālas.

35. Mention the names of composers of gītas and svarajatis.

Acoustics:—

36. (a) Distinguish between:—

- (i) Node and Antinode.
- (ii) Major tone and Minor tone.

(b) Explain what you mean by a series of notes in the harmonic series.

37. What are the factors that determine the pitch of a note on a stretched string?

38. Enumerate the laws of transverse vibration of strings.

39. The tāra sthāyi Panchama = 768 vibrations per second. Find the frequency of the mandra sthāyi kākali nishāda.

General :—

40. Name the rāga that will be heard when a person after sounding the sārani string of the vina, places his fingers on the 2nd, 4th, 7th, 9th, and 12th frets respectively and plays.

41. You are given a printed musical composition. How will you proceed to find out whether it is a gīta or ā svarajati? Explain.

42. Write a short essay on the relative merits of vocal music and instrumental music.

43. Complete the following passage by supplying another ādi tāla āvarta music of your own :—

Kalyani - Adi

Ś n d n s r s - g g r r s n n d | P m n d m g r | g m p d n D,

44. Determine the rāga of the following passage:—

Rupaka tala

P, m g r	g p d s n d	Ś, s r s	n d Ś;
Ś, g r s	n d P m g	r g p m g r	s n d S,

45. Passages for Sight singing :—

(a) Mohana raga - Rupaka tala

Ś, s d p	p d r s d p	d s d d p g	p g r g p d
Ś, s d p	d g r s d p	d s d d p g	p g r S,
Ś, s d p	p d s r g r	G, p g r	Ś, d p d
D, d g r	D, d r s	D, d s d	p g r S,

(b) Kalyani raga - Adi tala

S, N, D, P M G r	G, N, D	, M G R s
D, N, R, G M D n	Ṛ, N, D	, M D N s
Ḍ, N, Ṛ, N Ṛ Ḡ m	G, Ṛ, N	, D N Ś r
D, Ḡ, Ṛ, N D m d n	Ṛ, N, D	, M G R s

46. Passage for Musical Dictation.

Bhairavi raga - Rupaka tala

n n d P, N d P,	p m p n d p	m g r g m p
n n d P, s n d P,	m g m p d p	m g r S,
n n d P, s n d P,	p m p n d p	m p d n Ś
Ś, n d n Ś, g r s	S, n d p	m g r S,

47. Sing the following passage :—

Mohana—Adi

D p g d p g r - s r g p G g r	s r g R s d p	p g p d S ;
D p g d p g r - g p d s d d p g	P g d d p g r	g g p d S ;
S , s d p - g p d s - d g r s d p	D , r r s d p	d d s s R ;
P , g r s - G , r s d - p g p d	R , s d p - D , p g r	S ;

48. Complete the following passage in four āvartas, by inserting svaras, commas or semicolons as you think fit, in the *blanks*. Indicate also the anya svaras, graced notes, phrasing and the sthāyis of the notes :—

Bhairavi—Adi

N , n d p m n d p m p - r g	M - p d p m p	m n d d P -
N , n d p m p d n - n d p m g	r - r g m d p	m g m p - r s
N , n p m p d n s r g - s n	N , g r s - d n s - s R -	
r g m - g r s n g r - n d p	p r S - n d p	P , m g r S

MUSIC BOOKS

BY THE
SAME AUTHOR

IN ENGLISH

The Teaching of Music	5 0 0
South Indian Music: Book I (Fourth Edition)	1 0 0
do. Book II (Fourth Edition)	1 8 0
do. Book III (Third Edition)	2 8 0
do. Book IV (Second Edition)	
(in the Press)	
The Melakarta Janya Raga scheme with Chart	0 12 0
The 72 Melakarta Chart (separately)	0 4 0
The Flute with Instructions for Practice	
(Second Edition)	1 0 0
Indian Melodies in Staff notation. Book I	1 0 0
Madras as a Seat of Musical learning	0 2 0
Grahabheda Pradarsini	0 4 0

IN TAMIL

Practical Course in Karnatic Music: Book I	
(Sixth Edition)	1 0 0
do. Book II	
(Fifth Edition)	1 8 0
do. Book III	
(Fourth Edition)	2 8 0
Kirtana Sagaram: Books 1, 2, 3 and 4	
(New editions in the Press)	
Tyagaraja's Nowkacharithram, with the songs in notation	1 4 0

The Indian Music Publishing House
4, BUNDER ST., G.T., MADRAS-1:

SOUTH INDIAN MUSIC

- - BOOK III - -



P. SAMBAMOORTHY

SOUTH INDIAN MUSIC

BOOK III

Third Edition

P. SAMBAMOORTHY B.A.,B.L.,

*Head of the Department of Indian Music,
University of Madras.*

All Rights reserved.] •

[Price Rs. 2-8-0

Copies can be had of:

THE INDIAN MUSIC PUBLISHING HOUSE,
4, Bunder Street, G.T., Madras.

Preface to the Third Edition.

The chapters on Raga, Rāga Lakshana, Musical Form, Folk Music, and Musical Instruments have been amplified. The evolution of the scheme of 72 melas and the mela nomenclature are explained in chapter II. The 60 points under which a detailed study of ragas can be made are dealt with in chapter III. Explanations of some more Technical Terms have been added to chapter IX. The Lakshana of Purvakalyāni is an addition to this edition. The book has been carefully revised and brought upto-date.

THE AUTHOR.

CONTENTS.

Chapter.		Page.
I	Rāga	... 1
II	The 72 Melakartas	... 18
III	Rāga Lakshana	... 39
IV	Tāla	... 52
V	Musical Form	... 65
VI	Folk Music	... 117
VII	Musical Instruments	... 131
VIII	Compositions	... 148
IX	Technical Terms	... 168
X	Description of Ragas	... 188
	Appendix (Arohana-avarohana of ragas)	... 221
	Questions	... 233
	Passages for sight singing	... 243

CHAPTER I.

RAGA

The outstanding feature of Indian music is the *raga system*. Every raga is a distinct musical entity by itself and possesses well-defined characteristics. The ideal of *absolute music* is reached in the concept of raga. Ragas are so many statues visible, or rather perceivable by the aural sense. They are solid musical facts and every musician is conscious of them. Musical compositions are concrete forms of the abstract raga. They are so many manifestations of the raga. They are the mirrors or channels through which we are able to see the form of the raga. The beauties underlying a raga are very subtle and delicate. Whereas a musical composition presents only a certain aspect of a raga, the detailed *alapana* of the same raga enables us to visualize it in its full form. Theoretically the number of ragas is infinite. Singing or performing raga *ālāpāna* (raga exposition) demands the highest degree of musical training and culture. Some ragas admit of an elaborate exposition while others admit of only a brief exposition.

योऽसौ ध्वनिविशेषस्तु स्वरवर्णविभूषितः ।

रञ्जको जनचित्तानां स च राग उदाहृतः ॥

Matanga's *Brhaddesi*.

And,

योऽसौ ध्वनिविशेषस्तु स्वरवर्णविभूषितः ।

रञ्जको जनचित्तानां स रागः कथितो बुधैः ॥

Sarngadeva's *Sangita Ratnakara*.

A raga is that which is beautified or decorated by the tonal excellence of *svaras* and *varnas* and which gives pleasure

to the mind of the listener. It is the sequence or combination of appropriate svara varnas that goes to make a raga. Varna here means the mode of singing—*gāna kriya*. Also,

रञ्जकः स्वरसन्दर्भो राग इत्यभिधीयते ।

Ahobala's Sangita Parijata.

A combination of svaras capable of pleasing the ear constitutes a raga.

In order to have a melodic entity, a raga must take at least five of the twelve notes of the scale. Even in the case of those ragas which take only four notes in the ārohana, the avārohana supplies the deficiency by being either audava, shādava or sampūrṇa. An audava raga with both *ma* and *pa* deleted will lack fixity and will be somewhat nebulous in character. Svaras which are eschewed in a raga, if introduced, will shatter its melodic individuality. Such notes will be *apasvaras* (wrong notes) for the raga and will produce a repulsive effect.

Classification

The subject of raga classification in Indian music may be studied under the following heads:—

- (1) Raga classification in ancient music, including the classification that prevailed in ancient Tamil music.
- (2) Raga classification in Hindusthāni music.
- (3) Raga classification in Karnātic music.

Of these, the topics mentioned in (1) and (2) are dealt within the next volume of this series. Here only No. (3) is dealt with.

The modern conception of a raga dates from the time of Matanga Muni (5th cent A.D.). The classification of ragas into janaka ragas and janya ragas is the most scientific system of raga classification. There are 72 janaka ragas based on the twelve svarasthānas of the sthāyi. The scheme of 72 melakarta ragas provides an excellent workable arrangement and it is explained in detail in Chap. II. Whereas the number of janaka ragas is fixed, the number of janya ragas is practically unlimited.

The janaka-janya system of raga classification need not give rise to the presumption that all janaka ragas are older than janya ragas. In fact a good number of these janaka ragas came into existence only during the modern period of Indian music. Many janya ragas like Gaula, Vasanta and Nilāmbari have been in existence for more than a thousand years. The raga Kathanakutuhalam may be mentioned as an example of a janya raga, which came into existence after the scheme of 72 melakartas was thought of.

The classification of janya ragas into *varja*, *vakra* and *upāṅga*, *bhāṣhāṅga* types has already been referred to (see Book II, Chapter II). These classifications are however not mutually exclusive. For example, a *varja* raga can be *vakra* and *upāṅga*; and a *varja* raga can be *vakra* and *bhāṣhāṅga*. Likewise a *varja* raga can be non-*vakra*, and *upāṅga* or *bhāṣhāṅga*. Again there are non-*varja*, *vakra* ragas of both the *upāṅga* and *bhāṣhāṅga* types and non-*varja*, non-*vakra* ragas of the *bhāṣhāṅga* type. The table on the next page gives examples for these different types of janya ragas :—

Table I.

KIND OF RAGA.				EXAMPLE.
Varja	vakra	& upānga	...	{ Sriraga Balahamsa
"	"	& bhāshānga	...	{ Mukhāri Nilāmbari
Varja	non-vakra	& upānga	...	{ Dhanyāsi Mohana
"	"	& bhāshānga	...	{ Kāmbhoji Bilahari
Non- varja	vakra	& upānga	...	{ Manjari Karnāṭaka byāg
"	"	& bhāshānga	...	{ Saurāshtra Sāranga
"	non-vakra	& bhāshānga	...	{ Bhairavi Mānji

Bhāshānga ragas like Kāmbhoji, Bilahari, Nilāmbari and Sāranga take only one accidental. Those like Hindusthan Behāg take two accidentals. There are a few bhāshānga ragas like Hindusthān Kāfi which take three accidentals. Thus from the point of view of the number of anya svaras taken, bhāshānga ragas may be classified into:—

- (1) Ekānyasvara bhāshānga raga i.e. taking only one foreign note.
- (2) Dvi-anyasvara bhāshānga raga i.e. taking two foreign notes.

(3) Tri-anya svara bhāshāṅga raga i.e. taking three foreign notes.

Note.—In (2) and (3), the anya svaras may be taken as pertaining to one or two different melas.

In a bhāshāṅga raga, there need not necessarily be the trace of a foreign raga. The accidental note is only a welcome visitor and serves to establish the *svarupa* of the raga. The foreign note as a rule should not be unduly emphasised in bhāshāṅga ragas. The test for a bhāshāṅga raga is, that the foreign note should belong to a svarasthāna not covered by its parent scale. The mere shade of a note emanating from an adjacent svarasthāna will not suffice.

For example, ragas like Sāveri and Begada present an interesting study in this connection. In some specific sanchāras therein, some notes are sung slightly flattened or sharpened but not to such an extent as to be considered belonging to the neighbouring svarasthānas. For example in Sāveri, in the prayogas *s r g r s* and *p d n d p*, the notes: *g* and *n* are slightly flattened and sung; but they are not so lowered in pitch as to become sādharana gāndhāra and kaisiki nishāda. Again, in Begada, in the prayoga *P, d N d P* the kākali *n* is slightly flattened and sung; but it does not become actually kaisiki nishāda. Such ragas might be called *ardha bhāshāṅga* (semi-bhāshāṅga) ragas. In the *Sangita Sāmpradāya Pradarsini* even these ragas, where only a neighbouring *sruti* is touched are styled bhāshāṅga ragas.

In bhāshāṅga ragas, the accidentals usually figure in sanchāras. But in a few cases, the accidental is incorporated in the ārohana and avarohana of the raga itself. That is to say the *anya svara* is heard even when merely the scale or

the mūrçhāna is sung. Asāveri, Bhairavi, Ananda bhairavi, Mukhāri and Sārāṅga are good examples of this type of bhāshāṅga raga. Thus bhāshāṅga ragas can be classified into:—

- (1) Where the anya svāra is incorporated in the ārohana and avarohana of the raga.
- (2) Where the anya svāra is not incorporated in the ārohana and avarohana of the raga, but occurs in the sanchāras of the raga. In this type of bhāshāṅga raga, it is possible to establish the melodic individuality of the raga without touching phrases containing the foreign note.

Whereas the compulsory use of the anya svāra is the feature of the former type of bhāshāṅga raga, the optional use of the anya svāra is the feature of the latter type.

Fixing janaka ragas for janya ragas.

It will be useful at this stage to ponder awhile about the rules observed in fixing janaka ragas for janya ragas. All janya ragas must either be upāṅga or bhāshāṅga. The following considerations are taken into account in fixing their janaka ragas.

In the case of the upāṅga ragas of the audava-sampūrṇa, sampūrṇa-audava, shādava-sampūrṇa and sampūrṇa-shādava varieties, and the vakra-sampūrṇa and sampūrṇa-vakra varieties, the janaka ragas are easily determined, since all the sapta svaras are represented in either the ārohana or the avarohana. It is also easy to determine the janaka ragas for the upāṅga ragas of the shādava-shādava, shādava-audava, audava-shādava

and audava-audava types, if in each case, the sapta svaras are found represented in the ārohana and avarohana taken together. It is likewise easy to fix the janaka ragas for the panchama-varja shādava-shādava, shādava-audava, audava-shādava and audava-audava ragas of the upānga type, provided the notes *r g m d n* are represented in the ārohana and avarohana taken together. The difficulty arises only in the case of those upānga ragas wherein one or two notes are completely eliminated in both the ārohana and avarohana.

Taking Mohana, for instance, it might be argued that it can be taken as a derivative of the Dhīra Sankarābharana, Vāchaspati and Mecha kalyāni melas also, taking into consideration its svarasthānas. Likewise Sarasāngi, Latāngi and Mecha kalyāni might be cited as the other possible janaka melas for Hamsadhvani; and Natabhairavi, Chārukesi and Harikāmbhoji as the other possible janaka melas for Madhyamāvatī. The author of the *Sangita kaumudi* tried to find a solution for this anomaly by enunciating a new rule—that, in all such cases the ragas should be allocated to the earliest possible mela in the scheme of 72. This theory naturally threw overboard all the relevant and important considerations that have weighed with the music scholars in the past in fixing the janaka melas for janya ragas. Considerations like:—

- (1) suggestive affinities to particular melas,
- (2) the subtle srutis figuring in the janya ragas, and
- (3) the history behind the development of the janya ragas;

were deemed really important in determining the janaka melas. The theory referred to above takes into consideration only the svarasthānas of a raga. The author of this theory was naturally led to place Kuntalavarāli under Vanas-

pati, Malahari under Gāyakapriya, Nāgasvarāvali under Chakravākam and Madhyamāvati under Natabhairavi, and so on. This method of allocating janaka melas is merely mechanical and has not found support.

All bhāshānga ragas were originally of the upānga type. People gradually discovered the enhanced beauty of the ragas when foreign notes were introduced and sung. The vidvans as well as the listeners relished the changes and slowly acquiesced in them. Bhairavi which was an upānga raga centuries ago, became a bhāshānga raga only later on. Khamās is an example of a janya raga which became bhāshānga in very recent times. Let it be remembered that Tyagaraja's Khamās as seen in his two kritis: *Sujanajivana* and *Sitāpate* is only an upānga raga. Therefore in bhāshānga ragas, the raga which would have been the janaka raga, in its prior upānga condition is presumed to be the parent mela even after the change. It is for this reason that Bhairavi and Anandabhairavi are regarded as the janyas of Natabhairavi.

In bhāshānga ragas, with a few exceptions, the accidental comes a lesser number of times compared to the svakiya svara. For example, in a Kāmbhoji raga piece, it will be found that the kākali nishāda (foreign note) occurs a lesser number of times compared to the kaisiki nishāda. So we say that Harikāmbhoji is the parent raga of Kāmbhoji on the presumption that the kaisiki nishāda is the inherent note or the svakiya svara. Likewise in Bilahari, the kaisiki nishāda occurs a lesser number of times compared with the kākali nishāda, and so Bilahari is deemed to be a derivative of Dhira Sankarābharana and so on.

In the case of some bhāshānga ragas, we are in a position to determine their original upānga condition almost

accurately. The accidentals are later additions. Even though these accidentals occur a greater number of times compared to the svakīya svaras, still they are regarded as *anya svaras* only. Ananda bhairavi is a good instance in point. In this raga, the accidental (chatusruti dhaivata) occurs more frequently than the suddha dhaivata; still the raga is presumed to be a derivative of Nata bhairavi only.

Bhāshānga ragas are a natural growth. In some works they are referred to as *deśānga ragas*.

The present meaning associated with the term bhāshānga raga is not more than three centuries old. In earlier times it connoted quite a different thing. It was regarded by some as a raga of provincial origin; thus, Saurāshtra, Mālavi and Surati were thought of as bhāshānga ragas. In the same manner the present meanings associated with the terms, raganga raga and upanga raga are a later development. They had different meanings in earlier times.

Usually in bhashanga ragas, the svakīya svāra and the anyā svāra can be sounded in all the three octaves. But Punnāgavarālī furnishes a remarkable example of a bhāshānga raga wherein the svakīya svāra occurs in the madhya sthāyi and the anyā svāra in the mandra sthāyi.

The term *kriyānga raga* does not denote any particular type of raga in modern music. Different scholars in the past held different views regarding the exact connotation of this term. The *Sangita darpana* of Damodara Misra mentions that kriyānga ragas were those that infused enthusiasm in us. Others held that they were ragas whose individualities were revealed by particular kriyas or sanchāras. Some held the view that kriyānga ragas were the same as vakra ragas; and some that they were sankīrna ragas.

Yet others thought that they were ragas whose names had the suffix, *kriya* ; thus Devakriya, Rāmakriya, Gamakakriya etc. A few held the view that kriyānga ragas were those which took foreign notes.

*

*

*

*

In some janya ragas, the scope of development is restricted to a limited part of the mandra and madhya sthāyis. The tāra sthāyi shadja is not touched at all. Such ragas have been classified into :—

- (1) **Nishadantya**, where the madhya sthāyi nishāda happens to be the highest note touched ;
- (2) **Dhaivatantya**, where the madhya sthāyi dhaivata happens to be the highest note touched ;
- (3) **Panchamantya**, where the madhya sthāyi pan-chama happens to be the highest note touched.

The table below gives examples for these three different types of janya ragas :—

Table II.

Type of janya raga	Examples		
	Name of the raga	Its ārohana and avarohana	Its janaka mela
Nishādāntya	Nādanāma-kriya	$\begin{cases} s & r & g & m & p & d & n \\ n & d & p & m & g & r & s & n \end{cases}$	15. Māyā-malavagaula
Dhaivatāntya	Kuranji	$\begin{cases} s & n & s & r & g & m & p & d \\ d & p & m & g & r & s & n & s \end{cases}$	29. Dhīra-sankarā-bharana
Pancha-māntya	Navaroj	$\begin{cases} p & d & n & s & r & g & m & p \\ m & g & r & s & n & d & p \end{cases}$	29. Dhīra-sankarā-bharana

The *Sāma gāna* scale (*m g r s n d p*) of ancient music stands as an example of a *madhyamāntya* raga.

Janya sampurnas are yet another group of janya ragas. In such ragas as the name itself indicates all the sapta svaras are represented in both the ārohana and avarohana. Such ragas differ from their respective janaka ragas either by being vakra or bhāshānga, or by having special characteristic *prayogas* which bring out the *svarupa* (form) of the raga; or, by the compass of its prastāra being limited to a defined range. For instance, there is no sanchara for Pantuvarali above the tara sthayi gandhara. Janya sampūrnas, if they are upānga, must necessarily be vakra; if bhāshānga, they may be vakra or non-vakra.

Classification of ragas in general.

In addition to the janaka-janya system, ragas in general have been classified into:—

I. Ghana, Naya, Desya.

A *ghana raga* is a raga whose characteristic individuality is brought about more easily by playing *madhyamakāla* or *tāna (ghanam)* in it. In such ragas, the notes may be played in a plain and unadorned manner without detriment to raga bhava.

Examples. The traditional five ghana ragas (*ghana panchaka*): Nāta, Gaula, Arabhi, Sriraga and Varāli.

Kedāram, Nārāyanagaula, Ritigaula, Sāranganāta and Bauli are another series of five ghana ragas and are referred to as the *dvitiya ghana panchakam*.

In a *naya* or *rakti* raga, the characteristic individuality is brought about both by *ālāpāna* in slow tempo and *tāna*.

Examples. Todi, Bhairavi, Kāmbhoji, Sankarabharana.

In a *desya* raga, the characteristic individuality is easily brought about by *ālāpāna*.

Examples. Kānada, Hindusthān Kāfi, Jhijnhoti, Hindusthān Behāg.

Sometimes the term *ghana raga* is loosely used in the sense of a raga affording wide scope for *ālāpāna*. Ragas usually resorted to for singing *pallavis* in concerts are, in this sense, referred to as *ghana ragas*.

Some scholars regard *ghana ragas* as those which have a grand and majestic effect; *naya* or *rakti ragas* as those which have a soft and soothing effect and *desya ragas* as those which combine in themselves the effects of both these types of ragas.

It may be of interest to note that in the past, vidvāns began their concerts with the singing of *ghana ragas*, followed them up with the rendering of compositions and *pallavis* in *naya* or *rakti ragas* and closed their concerts with some delightful *ālāpanas* of *desya ragas*. Tana varnas have now usurped the place of the *ghana panchakam* at the commencement of a concert programme.

II. Karnataka, Desya.

Karnāṭaka ragas are those which are indigenous to South Indian Music like, Bhairavi, Ananda Bhairavi, Kedāragaula and Sankarābharana.

Desya ragas are those which came from Northern India and other countries and have become popular in the South.

Examples. Pharaz, Jhijnhoti, Khamās and Hindusthān Behāg.

This is a geographical classification and has acquired significance since the time the bifurcation into the two systems of music, Karnatic and Hindusthani, took place.

III *Suddha, Chhayalaga, Śankirna.*

This is an old system of classification and was propounded before the janaka-janya system came into vogue. Says Matanga : -

शुद्धच्छायालगाप्रोक्ता संकीर्णच तथैवच

This sloka is quoted in the *Sangita Darpana*.

Suddha ragas were pure ragas and they conformed to the prescribed rules. They included within their compass the modern melakarta ragas and the janya ragas of the upānga type.

Examples. Māyāmālavagaula, Madhyamāvati, Sriranjani, Mohana, Kalyāni.

A *Chhāyālaga* or *Sālanka* or *Sālaga* raga was a raga which combined in itself the lakshana of another raga by taking a foreign note or by possessing common sanchāras. That is, the *chhāya* or trace or shade of another raga or the colour of another raga, was found in a *sālaga* raga.

Examples. Saurāshtra, Śāranga.

A *sālaga* raga need not necessarily be a *bhāshānga* raga. Bilahari may be cited as an example of a *bhāshānga* raga of

the non-*chhāyā* type and *Sourāshtra* as an example of a *bhashanga* raga of the *chhāyā* type.

A *sankirna*, *sankrama* or *misra* raga was a mixed raga. Traces of more than one raga were discernible in such ragas in a large measure on account of the presence of foreign notes or *sanchāras* suggestive of other ragas. *Sankirna* ragas are extreme types of *chhāyā* ragas. The *chhāyas* of the foreign ragas are very pronounced in them. Nevertheless *sankirna* ragas have their own melodic individuality.

Examples. Ahiri, Ghanta, Mānji, Jujāvanti.

There are many folk melodies in *misra* ragas.

IV. Classification based on *Kampita svaras*.

- (a) *Sarva svara gamaka varika ragas* are those wherein all the notes figuring in the raga are subject to the *kampita gamaka*; e.g. Todi, Mohana and Kalyani. These ragas are also referred to as *muktānga kampita ragas*.
- (b) *Ardha kampita ragas* are those wherein some of the notes figuring in the raga are subject to *kampita*; e.g. Kuntalavarali.
- (c) *Kampa vihina ragas* are those wherein the notes may be played pure i.e. without shake and without detriment to raga *bhāva*; e.g. Katanakutuhalam.

V. Classification according to *Rasa*.

In addition to the above, ragas in general may be classified according to their *rasas* i.e., the feelings they arouse in us.

Punnāgavarāli and Nādanāmakriya are instances of ragas which arouse feelings of sorrow. Atāna, Sāma and Sahāna are respectively examples for *raudra*, *sānta* and *karuna* rasas. Khamās is a good example of a raga for *sringāra* (love) *rasa*. Some ragas are capable of arousing two or more feelings. Even in such cases it is possible to say which is the primary or the dominant *rasa* of the raga and which is secondary.

VI. Classification according to the time of singing.

Lastly ragas in general might be classified according to the time of the day or night or seasons during which they should be sung. Some ragas there are, which may be sung at all times.

Examples. Ragas to be sung before sunrise are: Bhupāla, Revagupti, Malayamaruta and Desākshī. Bilahari, Kedaram and Dhanyasi are morning ragas. Asāveri is a forenoon raga; Sriraga and Madhyamavati are midday ragas. Vasanta, Nātakuranji and Pūrvakalyani are evening ragas. Chakravāka, Bhairavi, Kāmbhoji and Arabhi are instances of ragas which can be sung at all times.

All scholars are not agreed with regard to the *time theory* of ragas. The fact that when a king asks for a raga, a vidvan can sing it, irrespective of the time or season during which it should be sung, shows that the rule relating to the time for singing a raga was not a hard and fast one.

VII. Mitra ragas.

Ragas whose names possess common endings are called mitra ragas. Excepting this common terminology, there is nothing else in common between these ragas.

Examples. Ritigaula, Nārāyanagaula, Kedāragaula, Chhāyāgaula, Mālavagaula and Kannadagaula ;

Also, Nātakapriya, Kokilapriya, Bhavapriya, Rāmapriya, Shanmukhapriya, Rishabhapriya and Rasikapriya ;

Harikāmbhoji, Yadukulakāmbhoji, Chenchukāmbhoji, Gummakāmbhoji, Hamsakāmbhoji, Purnakāmbhoji, Kuntalakāmbhoji, Sudhakāmbhoji and Sajjakāmbhoji ;

Gundakriya, Sindhuramakriya, Nadanamakriya, Devakriya and Gamakakriya ;

Hindolavasanta, Gopikavasanta and Mallikāvasanta ;

Garudadhvani, Nagadvani, Hamsadvani, Kokiladvani, Pikadvani, Jhankāradhvani and Mayuradvani ;

Gambhiranata, Ahirinata Sāranganāta and Chhāyānāta ;

Sarasvatimanohari, Devamanohari, Isamanohari, Rāmanohari, Jayamanohari, Kamalāmanohari, and Madhavanohari ;

Punnāgavarali, Pratapavarali, Sokavarali, Pantavarali and Kuntalavarali ;

Jayantasri, Malavasri and Vijayasri.

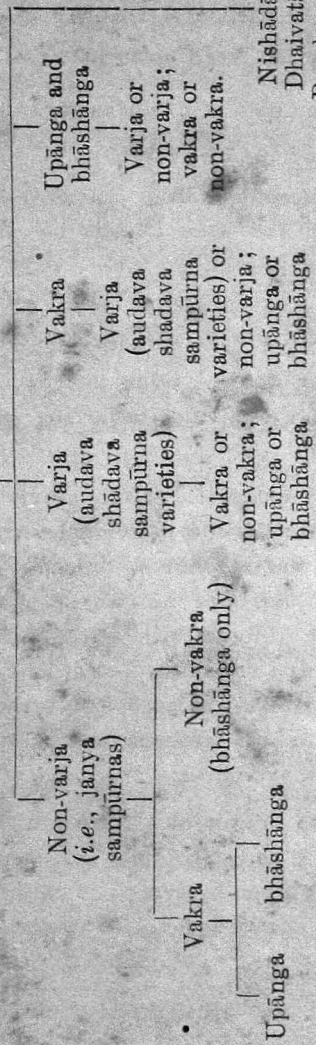
Ragas which can aptly succeed one another in a raga-malika are also termed *mitra ragas*. Therefore a raga which will be a mitra raga for a particular raga may turn out a *satru raga* for another.

Raga classification.

(A) Janya raga classification.

Table III.

Janya raga

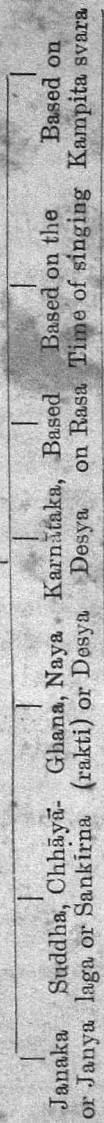


17

Nishādāntya,
Dhaivatāntya,
Panchamāntya

* (B) Raga classification in general.

Raga



* The classifications pointed out in this Table are also not mutually exclusive. For example a janaka raga like Mayamalavagaula is a suddha raga and also a rakti raga; a janya raga like Hamir kalyani is a chhayalaga raga and also a desya raga and so on.

CHAPTER II

THE 72 MELAKARTA RAGAS

* Scheme of Arrangement

The characteristic features of a janaka raga, as already explained are :—

(1) the *sampurna* character of its ārohana and avarohana *i.e.*, the full complement of the seven notes being represented in both the ascent and the descent.

(2) The *krama sampurna* character of its ārohana and avarohana *i.e.*, the ascent and descent being regular and not zigzag or *vakra*; in other words, taking the ārohana and avarohana separately, each svara letter occurring only once and in the *krama gati*.

(3) The *homogeneous* character of the svaras in both the ārohana and avarohana; *i.e.*, the individual svaras being of the same kind in both the ascent and descent. In other words, the notes: *ri ga ma dha ni* are not of one kind in the ārohana and of a different kind in the avarohana. Thus Bhairavi, which takes a *krama sampurna* ārohana and avarohana cannot be a melakarta, because it takes one kind of dhaivata (chatusruti) in the ārohana and another kind of dhaivata (suddha) in the avarohana.

There are 72 janaka ragas and they are arranged according to a definite plan. This plan of arrangement helps us to give the svaras taken by every one of the 72 mela ragas without difficulty. The scheme of 72 parent modes is

* The scheme is explained here in outline. For a fuller knowledge of the subject, the reader is referred to the Author's *Melakarta Janyaraga Scheme* (As. 12). The Indian Music Publishing House, G. T., Madras.

a mathematically accurate scheme and is based on the universally recognised twelve semitones of the gamut. The fixed notes *sa* and *pa* are present in all the 72 *karta ragas* and serve to give a certain fixity to their melodic character.

The Scheme

The 72 melakarta ragas are grouped under twelve *chakras*, each *chakra* comprising within it six mela ragas. The scheme is bifurcated into two halves. In the first half which includes *chakras* I to VI and melas 1 - 36, the *suddha madhyama* occurs as a constant note, and in the second half, which includes *chakras* VII to XII and melas 37 - 72, the *prati madhyama* occurs as a constant note. For this reason the first six *chakras* are referred to as the *suddha madhyama chakras* and the second six *chakras* as the *prati madhyama chakras*. The first half or the *suddha madhyama* half is referred to as the *purva* group and the second half or the *prati madhyama* half as the *uttara* group. Every *purva* melakarta has therefore its corresponding *uttara* melakarta and *vice versa*. The note *ma* is thus the bisecting point in the Melakarta scheme, the *uttara* half being a duplicate of the *purva* half, with the *prati madhyama* in the place of the *suddha madhyama*. The names of the twelve *chakras* as well as the serial numbers of the melakartas included in them are given in the table on the next page.

It may incidentally be noted that the names of the *chakras* are themselves suggestive of their serial numbers. Thus *indu* means moon and there is only *one* moon; and the name naturally suggests the *first* *chakra*. Likewise *netra* means eye and all living beings have *two* eyes; and the name naturally suggests the *second* *chakra*; likewise the

chatur *vedas*, pancha *bānas* (the five *bānas* of Manmatha), shad *rutus* (six seasons), sapta *rishis*, ashta *visus*, ekādasa *rudras* and dvīdasa *ātityas* (12 suns according to the purānas) suggest appropriately the serial numbers: iv, v, vi, vii, viii, xi and xii. The names *agni* and *brahma* suggest the numbers 3 and 9 respectively, because of the concepts of *agni trayam* or 3 sacred fires (Dakshina, Ahavaniya and Gārhapatya) and 9 *prajāpatis* (Brahmas), in our sacred literature. *Di i* or *Dik* suggests the number ten, because of the ten directions, north, south, east, west; the four corners: north-east, south-east, north-west and south-west; and up and down.

TABLE IV
The 12 Chakras

First half comprising the suddha madhyama or the <i>purva</i> melakartas (1 - 36).		Second half comprising the prati madhyama or the <i>uttara</i> melakartas (37 - 72).	
Number and name of the Chakra	Mela ragas included in it.	Number and name of the Chakra.	Mela ragas included in it.
I. Indu	1 - 6	VII. Rishi	37 - 42
II. Netra	7 - 12	VIII. Vasu	43 - 48
III. Agni	13 - 18	IX. Brahma	49 - 54
IV. Veda	19 - 24	X. Disi	55 - 60
V. Bāna	25 - 30	XI. Rudra	61 - 66
VI. Rutu	31 - 36	XII. Aditya	67 - 72

Having seen that the notes *sa* and *pa* are present in all the 72 melakartas and also that the suddha madhyama occurs in mela ragas 1 - 36 and the prati madhyama in mela ragas 37 - 72, it remains for us now to see in what order the varieties of the notes *ri ga dha ni* occur in them.

Within a chakra, the initial and terminal notes of both the pūrvāṅga and the uttarāṅga remain the same. Again, within a chakra, the pūrvāṅga notes remain constant, *i.e.*, the rishabha and gāndhāra retain their identical character in all the six mela ragas within the chakra—the change occurring only in the dhaivata and nishāda.

In every chakra, the

1st	mela raga takes the	suddha	<i>dha</i> ,	suddha	<i>ni</i>
2nd	"	suddha	<i>dha</i> ,	kaisiki	<i>ni</i>
3rd	"	suddha	<i>dha</i> ,	kākali	<i>ni</i>
4th	"	chatusruti	<i>dha</i> ,	kaisiki	<i>ni</i>
5th	"	chatusruti	<i>dha</i> ,	kākali	<i>ni</i>
6th	"	shatsruti	<i>dha</i> ,	kākali	<i>ni</i>

The rishabha - gāndhāra varieties occur in the same order as the dhaivata - nishāda varieties, but only change from chakra to chakra, instead of from mela to mela. That is, the

1st	chakra takes the	suddha	<i>ri</i> ,	suddha	<i>ga</i>
2nd	"	suddha	<i>ri</i> ,	sādhārana	<i>ga</i>
3rd	"	suddha	<i>ri</i> ,	antara	<i>ga</i>
4th	"	chatusruti	<i>ri</i> ,	sādhārana	<i>ga</i>
5th	"	chatusruti	<i>ri</i> ,	antara	<i>ga</i>
6th	"	shatsruti	<i>ri</i> ,	antara	<i>ga</i>

These six rishabha - gāndhāra combinations repeat in the same order in the uttara half *i.e.*, in chakras VII—XII.

The table on pages 22 and 23 gives the names of the 72 melakarta ragas as also the notes entering into their formation:—

Purva Melartas or Suddha Madhyama Melartas (ma) F Natural

Chakra No. and name.	Purvanga svaras.	Uttaranga svaras.	Name of the melakarta and its number.
I Indu	<i>ra - ga</i>	<i>dha - na</i>	1 Kanakāṅgi
		<i>dha - ni</i>	2 Ratnāṅgi
		<i>dha - nu</i>	3 Gānamūrti
		<i>dhi - ni</i>	4 Vanaspati
		<i>dhi - nu</i>	5 Mānavati
		<i>dhu - nu</i>	6 Tānarūpi
II Netra	<i>ra - gi</i>	<i>dha - na</i>	7 Senīvati
		<i>dha - ni</i>	8 Hanumatodi
		<i>dha - nu</i>	9 Dhenuka
		<i>dhi - ni</i>	10 Nātakapriya
		<i>dhi - nu</i>	11 Kokilapriya
		<i>dhu - nu</i>	12 Rūpavati
III Agni	<i>ra - gu</i>	<i>dha - na</i>	13 Gāyakapriya
		<i>dha - ni</i>	14 Vakulābharanam
		<i>dha - nu</i>	15 Māyāmālava gaula
		<i>dhi - ni</i>	16 Chakravākam
		<i>dhi - nu</i>	17 Suryakāntam
		<i>dhu - nu</i>	18 Hātakāmbari
IV Veda	<i>ri - gi</i>	<i>dha - na</i>	19 Jhankāradhvani
		<i>dha - ni</i>	20 Nathabhairavi
		<i>dha - nu</i>	21 Kīravāni
		<i>dhi - ni</i>	22 Kharaharapriya
		<i>dhi - nu</i>	23 Gaurīmanohari
		<i>dhu - nu</i>	24 Varunapriya
V Bāna	<i>ri - gu</i>	<i>dha - na</i>	25 Māraranjani
		<i>dha - ni</i>	26 Chārukesi
		<i>dha - nu</i>	27 Sarasāṅgi
		<i>dhi - ni</i>	28 Harikāmbhoji
		<i>dhi - nu</i>	29 Dhīrasankarābharanam
		<i>dhu - nu</i>	30 Nāgānandini
VI Rutu	<i>ru - gu</i>	<i>dha - na</i>	31 Yāgapriya
		<i>dha - ni</i>	32 Rāga vardhani
		<i>dha - nu</i>	33 Gāṅgeyabhushani
		<i>dhi - ni</i>	34 Vāgadhīsvari
		<i>dhi - nu</i>	35 Sūlini
		<i>dhu - nu</i>	36 Chalanāta

F. Sharp. (mi.) Uttara Melakartas or Prati Madhyama Melakartas

Name of the melakarta and its number.		Uttaranga svaras	Purvanga svaras	Chakra No. and name.
Sālagam	37	<i>dha - na</i>	<i>ra - ga</i>	VII Rishi
Jalārnavam	38	<i>dha - ni</i>		
Jhālavarāli	39	<i>dha - nu</i>		
Navanītam	40	<i>dhi - ni</i>		
Pāvani	41	<i>dhi - nu</i>		
Raghupriya	42	<i>dhu - nu</i>	<i>ra - gi</i>	VIII Vasu
Gavāmbhodhi	43	<i>dha - na</i>		
Bhavapriya	44	<i>dha - ni</i>		
Subhapantuvarāli	45	<i>dha - nu</i>		
Shadvidha mārgini	46	<i>dhi - ni</i>		
Suvarnāngi	47	<i>dhi - nu</i>	<i>ra - gu</i>	IX Brahma
Divyamani	48	<i>dhu - nu</i>		
Dhavalāmbari	49	<i>dha - na</i>		
Nāmanārāyani	50	<i>dha - ni</i>		
Kānavardhani	51	<i>dha - nu</i>		
Rāmapriya	52	<i>dhi - ni</i>	<i>ri - gi</i>	X Disi
Gamanasrama	53	<i>dhi - nu</i>		
Visvambhari	54	<i>dhu - nu</i>		
Syāmalāngi	55	<i>dha - na</i>		
Shanmukhapriya	56	<i>dha - ni</i>		
Simhendra madhyama	57	<i>dha - nu</i>	<i>ri - gu</i>	XI Rudra
Hemavati	58	<i>dhi - ni</i>		
Dharmavati	59	<i>dhi - nu</i>		
Nitimati	60	<i>dhu - nu</i>		
Kāntāmani	61	<i>dha - na</i>		
Rishabhapriya	62	<i>dha - ni</i>	<i>ru - gu</i>	XII Aditya
Latāngi	63	<i>dha - nu</i>		
Vāchaspati	64	<i>dhi - ni</i>		
Mechakalyāni	65	<i>dhi - nu</i>		
Chitrāmbari	66	<i>dhu - nu</i>		
Sucharitra	67	<i>dha - na</i>	<i>ru - gu</i>	XII Aditya
Jyotisvarūpini	68	<i>dha - ni</i>		
Dhātuvardhani	69	<i>dha - nu</i>		
Nāsikā bhūshani	70	<i>dhi - ni</i>		
Kosalam	71	<i>dhi - nu</i>		
Rasikapriya	72	<i>dhu - nu</i>		

The nomenclature given here for the 72 melakartas is the one in vogue and is found for the first time in Govindacharya's *Sangraha chudāmanī* (18th century). The other nomenclature for the 72, which includes asampurna scales, is given in the author's *Melakarta Janya raga scheme*.

The syllables, *pa पा, sri श्री, go गो, bhu भू, ma मा, sha षा* mnemonically represent the first, second, third, fourth, fifth and sixth melas of each chakra and may be styled the mela mnemonics. These syllables by themselves, indicate the numbers 1, 2, 3, 4, 5 and 6 according to the Katapayādi formula (see below). Thus when these syllables are tacked on to the chakra names, we can calculate the serial numbers of the melas. Thus *netra - pa, netra - sri, netra - go, netra - bhu, netra - ma* and *netra - sha* signify respectively the melakartas of serial numbers 7, 8, 9, 10, 11 and 12. Again *agni-go* stands for the 3rd mela in the III chakra and is the 15th mela, M̐yāmālavagaula; *bana - bhu* stands for the 4th mela in the V chakra and is the 28th mela, Harikāmbhojī and so on. It may be noted that in the phrases: *agni - go* and *bāna-bhu*, the chakra mnemonic gives the clue to the purvāṅga svaras and the mela mnemonic, to the uttarāṅga svaras of the melakarta.

Utility of the Melakarta Scheme.

The utility of the scheme lies in the fact that, from the *serial number* of a melakarta raga, one can readily find the svaras taken by it. Suppose the svaras of the 27th melakarta raga are to be determined; proceed as follows:—

- (1) Insert the svaras: *sa, pa* and the higher octave *sa* in their appropriate places leaving blank spaces for the remaining svaras as follows:—

sa pa sa

- (2) Notice whether the given number belongs to the *purva* group or the *uttara* group. The given number 27, belongs to the *purva* group and is therefore a *suddha madhyama* melakarta. Now insert *ma* in its appropriate place in the line as follows:—

sa . . . ma pa . . . sa

- (3) Next, in order to determine the notes of the *pūr-vāṅga*, find out the *chakra* to which the given number belongs. The number 27 belongs to the 5th *chakra* (comprising *melakartas* 25 - 30) and hence *ri* (*chatusruti rishabha*) and *gu* (*antara gāndhāra*) are the notes taken. Now insert *ri* and *gu* in their proper places thus:—

sa ri gu ma pa . . . sa

- (4) Now, to determine the notes of the *uttarāṅga*, find the rank of the given *melakarta* within the *chakra*. The number 27 occupies the 3rd rank; hence *dha* (*suddha dhaivata*) and *nu* (*kākali nishāda*) are the notes taken. Now insert *dha* and *nu* in the line as follows:—

sa ri gu ma pa dha nu sa

Thus the *melakarta raga* No. 27 takes the notes;—
sa ri gu ma pa dha nu or *shadja, chatusruti rishabha, antara gāndhāra, suddha madhyama, panchama, suddha dhaivata* and *kākali nishāda*. This is the *melakarta raga* known as *Sarasāṅgi* and its mnemonic phrase will be *bāna-go*.

In cases where the given number belongs to the *uttara* group (comprising *melakartas* 37 - 72) subtract 36 from the

given number and the resulting figure gives the number of the corresponding suddha madhyama melakarta. Determine the lakshana of this suddha madhyama melakarta by adopting the process mentioned above; and by substituting prati madhyama for the suddha madhyama, the svaras of the melakarta raga of the given number are obtained.

The several melakartas can also be represented by their svvara mnemonics; thus,

ra gu ma dha nu will signify the *Agni-go* mela or
Māyāmālavagaula; and

ri gu mi dhi nu will signify the *Rudra-ma* mela
or Mechakalyāni and so on.

The naming and singing of the note chatusruti rishabha with the letter *ga*, in the case of those scales wherein both the suddha rishabha and chatusruti rishabha occur (melas 1 - 6 and 37 - 72) became a musical necessity. Vocalists and Instrumentalists are alive to the resulting auditory delusion. The practice of singing a note belonging to the jurisdiction of one svvara, with the solfa letter of a higher or lower svvara was in vogue even before Venkatamakhi's time. The practice has been approved as a matter of musical convenience. The innovation also results in the partial obliteration of the vivādi effect. The graced utterance of the concerned note removes the vivāditva altogether. The arguments aforesaid apply to the pairs (1) sādharana gāndhāra: (shatsruti *ri*) and antara gāndhāra; (2) suddha dhaivata and chatusruti dhaivata (suddha *ni*); and (3) kaisiki nishāda (shatsruti *dha*) and kākali nishāda.

It may be noted that in the scheme of 72 melas, the melakartas of serial numbers 1, 8, 15, 22, 29 and 36 are entirely distinct from one another. In other words, excepting

for the notes *sa*, *ma* and *pa*, the notes taken by one mela are not repeated in any of the other five. Each mela has a distinct purvāṅga and uttarāṅga and the purvāṅga pattern and the uttarāṅga pattern of each mela are symmetrical i.e., the corresponding intervals between pairs of notes in the lower and upper tetrachords of each of these six melas are the same.

In the melakarta code, the reasons for ignoring the following svara combinations,

(a) chatusruti *ri* and suddha *ga* (ri - ga)

(b) shatsruti *ri* and suddha *ga* (ru - ga)

(c) shatsruti *ri* and sādharāna *ga* (ru - gi)

are clear. In (a), the notes belong to an identical svarasthāna; likewise in (c), the notes belong to an identical svarasthāna. Since, in a scale, the notes ascend by steps, these two combinations cannot validly come. In (b) the suddha *ga* is lower in pitch, compared to shatsruti *ri*; and the adoption of such a combination will result in *vakratva* being imported and go against the concept of regular ascent.

For the same reason, the following combinations:—

(a) chatusruti *dha* and suddha *ni* (dhi - na)

(b) shatsruti *dha* and suddha *ni* (dhu - na)

(c) shatsruti *dha* and kaisiki *ni* (dhu - ni)

are ignored in the formulation of the scheme of 72 melakartas.

It may incidentally be noticed that the number 72 is equal to twice the square of six ($6 \times 6 \times 2 = 72$). The number 32, representing the non-vivādi melas is equal to twice the square of four ($4 \times 4 \times 2 = 32$).

It is possible to suggest an alternative scheme of 72 melas based on the self-same twelve notes, but the present arrangement is perfect and logical, and must be left undisturbed.

Katapayādi Sankhya.

Thus, when the serial number of a melakarta raga is given or known, it is easy to give its lakshana. But how is the serial number of a melakarta determined? This is done by the application of a formula known as the *ka ta pa yā di sankhya*,* which is summed up in the four phrases: *kādinava, tādīnava, pādīpancha* and *yādyashta*.

The first two syllables of the name of each melakarta have been so ingeniously and dexterously fitted in, as to make them subserve the purpose of this formula. This formula is based on the principal letters of the Sanskrit alphabet. The letters of the alphabet are divided off into compartments as shown in Table VI on the next page and for the purpose of this formula, each letter takes the number under which it falls. In the column next to 9, the figure zero is placed instead of ten.

*It is interesting to note that this formula is made use of in many other arts and sciences of India.

Table VI

Katapayādi formula.	1	2	3	4	5	6	7	8	9	10
<i>Kādi nava</i> (a series of 9 letters from <i>ka</i>).	K క	KH ఖ	G గ	GH ఘ	NG ఙ	CH చ	CHH ఛ	J జ	JH ఝ	JN ణ
<i>Tādi nava</i> (a series of 9 letters from <i>ta</i>).	T ట	TH థ	D డ	DH ఢ	N ణ	T త	TH థ	D డ	DH ఢ	N ణ
<i>Pādi pancha</i> (a series of 5 letters from <i>pa</i>).	P ప	PH ఫ	B బ	BH భ	M మ					
<i>Yādyashta</i> (a series of 8 letters from <i>ya</i>).	Y య	R ర	L ల	V వ	S శ	SH ష	S స	H హ		

Application.—Take the first two syllables of the name of the melakarta, whose serial number is to be determined. Ascertain from the above table the numbers under which these two syllables fall and write down the two numbers in order. Then reverse this number of two digits and the resulting figure gives the number of the melakarta.

Example I.

Suppose the name of the melakarta^a whose serial number is to be determined is *Harikāmbhoji*.

The first two syllables of this raga are *ha* and *ri*; *ha* occurs in column 8 and *ri* in column 2; the resulting figure is therefore 82. Now reverse this number; the result is 28. The serial number of the *Hari-kāmbhoji* melakarta is thus 28.

Example II.

Suppose the serial number of the melakarta, *Nāmanārāyani* is to be determined:—

The first two syllables herein are *na* and *ma* and they give the figure 05. By reversing this we get 50. 50 is thus the serial number of the melakarta, *Nāmanārāyani*.

Other examples are to be worked out in the same manner.

Where samyuktāksharas or conjunct consonants figure in the katapayādi prefixes, the rule is, that the second or the last component letter of the conjunct consonant should be taken into consideration. Thus in Ratnāngi, Suryakānta, Jhankārādhvani, Gāngeyabhushani, Shadvidhamārgini, Shan-

mukhapriya, Dharmavati and Kāntāmani the correct serial numbers are obtained in this manner.

But in the case of the following melakartas : Chakravāka, Divyamani, Visvambhari, Syāmalāngi, Simhendra madhyama, Chitrāmbhari and Jyotisvarupini, the first component letter of the concerned conjunct consonant has to be taken (as shown in the following table), in order that the application of the *katapayādi* formula might give the correct number.

Thus these mela names constitute an exception to the *katapayādi* rule.

Name of the melakarta	Number.	Number after reversal.
Cha kra vāka	6 1	16
Di vya mani	8 4	48
Vi svam bhari	4 5	54
Śya ma lāngi	5 5	55
Si mhe ndra madhyama	7 5	57
Chi trā mbari	6 6	66
Jyo ti svarupini	8 6	68

The *katapayādi* prefixes are the *key syllables* for determining the serial numbers of melas. They are also called the *sankhyāksharas*.

The *katapayādi* formula does not apply to the names of janya ragas.

A separate nomenclature for the 35 suladi talas, answering to the katapayādi formula also exists. The Trisra, Chaturasra, Khanda, Misra and Sankirna varieties of the Dhruva tala, for examples, bear the names : *pika, vati, saka, lara and dhāra*. These names by the application of the katapayādi formula yield the numbers 11, 14, 17, 23 and 29 which respectively denote the aksharakāla value of an āvarta each of the concerned tālas.

In the Telugu work, *Sangita śāra sangrahamu* of Tiruvenkata Kavi, written sometime after the *Sangraha chudāmani*, names answering to the katapayādi formula are given for the twenty-four srutis used in an octave thus :—

yina (1), rāna (2), līna (3), ghana (4), mana (5), tanu (6), sena (7), dāna (8), dhana (9), naya (10), paya (11), thāya (12), loka (13), vaya (14), suka (15), toya (16), chhāya (17), jaya (18) dheya (19), nara (20), kara (21), khara (22), giri (23) and vira (24). Thus the name of the sruti itself gives the clue to its pitch and position in the octave.

Historical.

As already mentioned there are two nomenclatures for the 72 melas : (1) the well-known *Kanakāngi - Ratnāngi* nomenclature and (2) the *Kanakāmbari - Phenadyuti* nomenclature. The former nomenclature was followed by Tyagaraja and other composers. This is the nomenclature figuring in the immortal composition "*The 72 Melarāgamālīka*" of Maha Vaidyanatha Iyer. The other nomenclature, though popularly known as Venkatamakhi's, is, as subsequent researches have shown, *not his*. In his *Chaturdandi Prakāśika*, the illustrious author merely explains the scheme of 72 melas, and does not attempt a nomenclature for them.

It is but natural that he should have refrained from attempting a nomenclature inasmuch as he visualized only the remote possibilities of a good number of his melas. He mentioned the serial numbers in his scheme for the wellknown 19 melas of his time. In the raga chapter, he has allocated the janaka melas for the various janya ragas. He mentions Ritigaula as a janya of the 20th mela Bhairavi, and Kedaragaula as a janya of the 28th mela Kambhoji. Venkatamakhi's mela names do not have the katapayadi prefixes. A good number of his melas are not krama-sampurna in the ascent and descent, and some of them like the Bhupala mela (8th), are even transilient scales. He merely named a mela from a wellknown janya raga derived from it.

A later scholar taking this clue, enunciated the *Kanakambari-Phenadyuti nomenclature* for the 72 melas. This nomenclature may be styled the *earlier Kanakambari nomenclature*, and is given in the work *Sangraha Chudamani* (18th cent). The author of this nomenclature did not evidently bother about the katapayadi prefixes for the mela names. In some cases the mela names themselves, accidentally conformed to the katapayadi requirements and gave the correct serial numbers. As examples may be mentioned Kanakāmbari (1), Phenadyuti (2), Bhānumati (4), Viravasantam (24), Raghulila (42) and Simantini (57). There are many mela names like Sāma-varāli (3), Todi (8), Hejjujji (13), Vasantabhairavi (14), Vegavāhini (16), Suddha mālavi (18), Velāvali (23), Sāmāntam (30), Chhāyānāta (34), Varāli (39), Pantuvarāli (45), Rāmākriya (51) and Simharavam (58), which, by the application of the katapayadi formula, will give numbers different from those given within brackets against the concerned melas. Rightly enough, he has re-christened some of

the melas of Venkatamakhi with better and more appropriate raga names. Thus the Bhupāla mela (8), Gaula mela (15) and Ahiri mela (21) were re-named Todi mela, Mālavagaula mela and Kiranāvali mela. He realized the unwisdom in naming a mela after an audava raga like Bhupāla. Bhairavi and Kambhoji however continued as melas in this scheme.

The *Kanakāngi - Ratnāngi nomenclature* then came into existence. It stuck to the rule that a mela should have a krama - sampurna arohana and avārohana and also that each svara should retain its identical character in both the ascent and descent. This concept of a mela maintains intact the time-honoured distinction between a scale and a raga, already rooted in the concepts, murchhana and jāti; pālai and pan. This nomenclature which had the added merit of conforming to the katapayādi formula was since accepted by all lakshana-kāras as sound and has come to stay. It should be noted that Harikāmbhoji mela and Harikāmbhoji raga are two distinct entities. The former is the mere bony stuff, while the latter is the full-fledged raga, shining in all its life, flesh, blood and melodic beauty. For the sake of easy reference, the Kanakāngi - Ratnāngi system is referred to as the *sampurna mela paddhati* and the Kanakambhari - Phenadyuti system as the *asampurna mela paddhati*.

A later scholar, profiting by the merits of the Kanakāngi nomenclature, tried to introduce improvements in the earlier Kanakambhari nomenclature. In order to get the correct serial numbers, katapayādi prefixes were introduced for all those mela names which needed them. As examples may be mentioned, *Gānasamavarali* (3), *Janatodi* (8), *Dhunibhinnashadjam* (9), *Geyahējjuji* (13), *Vātivasantabhairavi* (14), *Toyavega-vāhini* (16), *Jayasuddhamālavī* (18), *Gaurivelāvali* (23),

Bhogachhāyānāta (34), *Sailadesākshi* (35), *Dhālīvarālī* (39), *Sivapantuvārālī* (45), *Kāsīrāmakriya* (51) and *Desisimharavam* (58). Some names of the earlier Kanakambari nomenclature were substituted by other names, but the fact remained that many shadava-sampurna, audava-sampurna and vakra sampurna ragas continued as melas. As examples of the changed mela names may be mentioned :

(12) Rupavati	which was	Raupyanagam	in the earlier Kanakambari nomenclature.
(17) Chhāyāvati	„	Supradipam	„
(20) Nāriritigaula	„	Bhairavi	„
(28) Harikedāragaula	„	Kāmbhoji	„
(30) Nāgābharanam	„	Sāmantam	„
(31) Kalāvati	„	Kalahamsa	„
(37) Saugandhini	„	Sālava	„
(41) Kumbhini	„	Prabhāvati	„
(42) Ravīkriya	„	Raghulila	„
(46) Stavarājam	„	Tivravāhini	„
(50) Nāmadeśi	„	Narmada	„
(51) Vamsavati	„	Vaisākha	„
(56) Chāmaram	„	Trimurti	„
(57) Sumadyuti	„	Simantini	„
(59) Dhāmavati	„	Dhaumyarāgam	„
(62) Ratipriya	„	Ratnabhānu	„
(63) Gitapriya	„	Gotrārī	„
(67) Santānamanjari	„	Satyavati	„
(68) Jyotirāgam	„	Jyotishmaṭi	„
(71) Kusumākaram	„	Kusumāvali	„

It is clear that this later Kanakambari nomenclature came into existence after the Sangraha Chudamani was written. Since neither of the nomenclatures is referred to in the

Sangita Sārāmṛta of Tulaja (1735), it is certain that the earlier Kanakāmbari nomenclature was conceived sometime after this work was written. The *Sangita Saramrita* merely gives the names for 21 melas and even these do not bear katapayādi prefixes.

Curiously enough, the ragas Ritigaula and Kedāragaula, which, Venkatamakhi expressly says, are janyas of the Bhairavi and Kāmbhoji melas respectively, are promoted to the status of melas in the later Kanakāmbari nomenclature, throwing overboard even the author of the earlier Kanakāmbari nomenclature. This was evidently done to replace bhāshānga ragas by upānga ragas.

Excepting the very few krama-sampurna melas, all the rest in the Kanakāmbari nomenclature figure as janya ragas under the respective melas in the Kanakāngi scheme.

The lakshana gita in Gundakriya raga, attributed to Venkatamakhi, gives the later Kanakāmbari nomenclature. From the fact that it mentions 24 srutis towards the close, it is proof positive that the composition is not Venkatamakhi's. Venkatamakhi has emphasised 22 srutis in no uncertain terms. It is true that Subbarama Dikshitar, in his errata to the *Sangita Sampradaya Pradarsini* mentions that *chaturvimsati* (24) is a misprint for *dvāvimsati*. But people familiar with printing know that it is too much to take this as a printing mistake. It is evidently an afterthought of Subbarama Dikshitar, and the correction was introduced to credit the authorship of the gita to Venkatamakhi. (See *Pradarsini* P. 244.)

The fact that the term rāgānga rāga is not used in the sense of a mela raga by Venkatamakhi is another proof that the Gundakriya lakshana gita cannot be his. He calls many

janya ragas as rāgāṅga rāgas. He says that Madhyamāvatī and Dhanyāsi are ragangas born of Srirāga mela. Since this gita uses the later Kanakāmbārī nomenclature, it is certain that this gita must have been written more than a hundred years after Venkatamakhi.

The raganga lakshana gitas based on the later Kanakāmbārī nomenclature, are therefore not the compositions of Venkatamakhi. Nevertheless, these compositions are of historical value. The Māyāmālavagaula gita *Ravikotiteja* in particular, is found in many early 19th century manuscripts.

It is interesting to note that even the later Kanakāmbārī nomenclature underwent some changes. In the 72 *Rāgāṅga Rāgamālīka* of Subbarāma Dikshitar and Krishna Kavi (See P. 97 Appendix *Pradarsini* Vol. II) the following changed names are seen :—

- | | | |
|--------------------------|-----|----------------------|
| (9) Dhvanibhinnashadjam | for | Dhunibhinnashadjam. |
| (14) Vāyuvasantabhairavi | for | Vativasantabhairavi. |
| (16) Tapovegavāhini | for | Toyavegavāhini. |
| (39) Dhūlīvarālī | for | Dhālīvarālī |
| (65) Matikalyāni | for | Sāntakalyāni |

The weakness of the asampurna mela paddhati lies in the fact that it rules out the possibilities of sampurna-sampurna ragas like Chakravākam, Kharaharapriya and Harikāmbhojī. It will lead to the position that Sriraga being a mela, Kharaharapriya has to be regarded as a *super mela*! Again if a mela is to be named after a wellknown janya raga generating from it, the problem arises as to which janya raga is to be preferred, since under each mela, more than one prasiddha raga can be thought of.

It may be mentioned in passing that the *Sangraha Chudamani* mentions the name Narabhairavi for the 20th mela and

not Nathabhairavi, which is a change effected later on. At the time the *Sangraha Chudamani* was written, the Kanakāngi-Ratnāngi nomenclature was the one in use, and it has since been accepted as the authoritative nomenclature, in spite of a later improved Kanakāmbari nomenclature. The *Melādhikāra Lakshana* also mentions the Kanakāngi nomenclature.

Muthuswamy Dikshitar has adopted the later Kanakāmbari nomenclature for the most part. The names of some mela ragas appear in his compositions without the katapayādi prefixes; for example, see his *Vinā pustaka dhārinim*, *Nilakantam bhajeham* and *Swāminatha*. In his compositions in the 35th, 50th, 55th, 58th and 68th melas, he adopts the names Sulini, Narmada, Sāmālangi, Haimavati and Jotishmati; and not the names Saila desākshi, Nāmadasi, Sāmala, Desi simhāravam and Joti rāgam (see *Sangita Sampradāya Pradarsini* Vol. III Pp. 1043, 1111, 1142, 1151 and 1235. Subbarama Dikshitar's note that Simantini is another name for Sumadyuti, and Hemavati is another name for Simhāravam (see *ibid* pp. 1147 and 1150) are noteworthy. In order to strictly conform to the requirements of the katapayādi formula, the 55th mela was called Sāmālāngi instead of Śyāmālāngi.

In view of the fact that all scholars in India as well as of the west have understood the 72 melas as *krama-sampurna* scales, the *asampurna mela paddhati* has become a matter of mere local history. The term *melakarta* implies that it is a karta or parent for janya ragas and hence the *asampurna mela paddhati* claiming a number of janya ragas as melas is faulty and unsound.

CHAPTER III

RAGA LAKSHANA.

Since the raga system forms the foundation of Indian music, every writer of note from Bharata downwards has paid attention to the clear elucidation of this subject. Many writers mention *ten lakshanas* under which the scope of each raga was defined and studied. The ten lakshanas enumerated however, are not, in all cases identical.

Bharata in his *Nāṭya Sāstra* (4th Cent. B.C.) says:—

ग्रहांशौ तारमन्द्रौ च न्यासोऽपन्यास एव च ।

अल्पत्वं च बहुत्वं च षाड्वौडुविते तथा ॥

(दशविधजातिलक्षणम्)

Graha, amsa, tāra, mandra, nyāsa, apanyāsa, alpatva, bahutva, shādava and audava are the ten lakshanas of jātis.

Jāti was the term that was used in early times to denote raga. The word raga comes to be used in the musical sense only in the post-Bharata period. Audava is the later form of auduva.

The *Sangita Ratnākara* (13th cent. A.D.) of Sārṅgadeva mentions the following *thirteen lakshanas*:—

ग्रहांशतारमन्द्राश्च न्यासापन्यासकौस्तथा ।

अपि सन्यासविन्यासौ बहुत्वं चारूपता ततः ॥

एतान्यन्तरमार्गेण सह लक्ष्माणि जातिषु ।

षाड्वौडुविते कापीत्येवमाहुस्त्रयोदश ॥

Graha, amsa, tāra, mandra, nyāsa, apanyāsa, sanyāsa, vinyāsa, bahutva, alpatva, antara mārga, shādava and audava.

The *Sangita Sudhā* (17th cent. A.D.) of Raghunātha Nāik also mentions these *thirteen lakshanas* :—

रागाणां त्रयोदश लक्षणम्

ग्रहाभिधानः प्रथमः परोऽशस्तारस्तृतीयोऽथ परस्तु मन्द्रः ।

स्यात्पञ्चमो न्यास इति प्रतीतोऽपन्याससंज्ञां लभते च षष्ठः ॥

सन्यासकः सप्तम एष वेद्यो विन्यासनामा पुनरष्टमः स्यात् ।

बहुत्वमन्यत्पुनरल्पतान्या त्वेकादशीऽप्यन्तरमार्गिनामा ॥

स्यात् द्वादशः षाडवनामधेयस्त्रयोदशः स्यात्पुनरौडुवाख्यः ॥

Venkatamakhi in his *Chaturdandi Prakāsikā* says :—

ग्रहांशौ मन्द्रतारौ च न्यासापन्यासकौ तथा ।

अथ सन्यासविन्यासौ बहुत्वं चाल्पता तथा ॥

Graha, amsa, mandra, tāra, nyāsa, apanyāsa, sanyāsa, vinyāsa, bahutva, alpatva.

Shadava, audava and antara marga were omitted, because they became separate types of janya ragas.

A few of these lakshanas have either become obsolete or are of mere academic interest at the present day. As a result of the progress made in music during the recent centuries, we are in a position to give a more amplified and scientific description of the ragas and define their scope in clearer and more accurate terms. An analytical study of all the available compositions in a raga not only throws a flood of light on the lakshana of the raga but also helps us to fix its *raga ranjaka* combinations, its *visesha* sanchāras, *sanchāra kramas*, etc. Compositions are after all ragas in a crystalline form.

The lakshana of a raga, at the present day can be studied under the following heads :—

(1) Whether janaka or janya.

If janaka, its serial number in the scheme of 72 melakartas, and the number and name of the chakra to which it belongs, as also its mnemonics.

(2) If the two tetrachords of the janaka raga are symmetrical as in the case of Māyāmālavagaula and Kharaharapriya ; or if each note of the raga is a samvādi of some other note occurring in the raga, as in the case of Harikāmbhoji.

(3) If it is a janaka raga claiming a large number of janya ragas.

(4) If it is a janya raga, the name and serial number of the melakarta from which it is derived.

(5) Difference of opinion if any, concerning the correct janaka mela of the janya raga and the arguments for and against.

(6) The ārohana and avarohana of the raga and any difference of opinion concerning the same.

As a rule, in a raga, it is the frequently occurring phrases that are codified and presented in its ārohana and avarohana. Sometimes an alpa prayoga is incorporated in the ārohana and avarohana of a raga in order to indicate its precise janaka mela ; examples are Nāta and Srirāga. Rare sanchāras are also sometimes incorporated in the ārohana and avarohana of ragas in order to clearly reveal and establish their melodic individuality.

(7) If the ārohana and avarohana are *symmetrical* or otherwise.

A raga is said to possess a symmetrical ārohana and avarohana, when the notes that are present in the ascent are also present in the descent. All mela ragas, and shādava and audava ragas like Sriranjani and Mohana may be cited as examples. It may be noted that an audava - audava raga like Mayuradhvani (*s r m p n ś - ś n d m r s* — 28) does not possess a symmetrical ārohana and avarohana ; because, *pa* which is present in the ārohana is absent in the avarohana and its place taken by *dha*.

Of course, only non-vakra ragas are contemplated in this section.

(8) If dirgha svaras, kampita svaras and janta svaras are present in the ārohana and avarohana.

Such notes, if present, are vital to the entity of the raga. Examples are Manirangu, Begada and Rītigaula.

(9) If the foreign note is incorporated in the ārohana and avarohana. This applies only to bhāshānga ragas.

Bhairavi, Mukhāri and Sāranga are examples of bhāshānga ragas wherein the foreign note is heard while singing the ārohana and avarohana.

(10) Names of the svaras taken by the raga and their frequencies.

(11) Varja or non-varja ; if varja, audava, shādava or sampūrna.

(12) Vakra or non-vakra ; if vakra, whether the ārohana or avarohana or both, are vakra.

The vakra svaras and the vakrāntya svaras and the compass of vakratva in each case. Also, if the raga is an ekasvara vakra raga or dvisvara vakra raga or trisvara vakra raga or chatusvara vakra raga.

N.B.—A vakra ārohana or avarohana does not necessarily imply that a svara is repeated in the course of its progression. For example in the ārohana of Katana kutuhalam (*s r m D n g p s*), there is no repetition, whereas in the ārohana of Anandā bhairavi (*s g r g m p d p s*), the gāndhāra and panchama repeat.

(13) In the case of ubhaya vakra ragas, if the number of vakra svaras in the ārohana and avarohana is equal or otherwise. For example, in Nīlāmbari, the ārohana and avarohana have each one vakra svara; but in Sahana, the ārohana has one vakra svara and the avarohana two vakra svaras.

(14) Nishādāntya, Dhaivatāntya or Panchamāntya.

(15) Upānga or bhāshānga. If the latter, the accidental note or notes met with, and the sanchāras wherein they figure.

Also if it is an ekānya svara bhāshānga raga or dvi-anya svara bhāshānga raga or tri-anya svara bhāshānga raga; and if the anya svara and the svakiya svara are of equal status and importance, as in Bhairavi and Athāna.

(16) Jiva (amsa or raga chhāyā) svaras.

There are instances of ragas like Yadukulakāmbhoji and Nādanāmakriya, which have different jiva svaras in their ārohana and avarohana.

(17) Nyāsa svaras.

The notes which are major nyāsas and notes which are

minor nyāsas in the raga. Some ragas have *alpa nyāsas*; as for instance, the panchama in Nātakuranji.

(18) The resting notes round which one can weave an ālāpana.

Every note round which an ālāpana can be developed will be a nyāsa svāra; but the converse need not necessarily be true. For example, in Athāna, *dha* is a nyāsa svāra but not a note on which one can rest and weave round an ālāpana. The kaisiki *ni* of Anandabhairavi is another similar case, *Ga* in Sankarābharana is both a nyāsa svāra and a note round which one can develop an ālāpana. Resting notes are stable notes and admit of plain utterances.

(19) Raga ranjaka combinations—phrases or sanchāras or pidippus — *பிடிப்புச்சுரை*; catches; pakāḍ in Hindusthāni music.

Example. *d p G; p G; R s* in Mānji.

(20) Viseshā sanchāras (i.e., combinations not in accordance with the raga's ārohana and avarohana krama) that the rāga admits of.

In every raga, phrases either covered by its ārohana and avarohana or implied in the same, can validly come. In a few ragas, phrases which are not in accordance with the ārohana and avarohana krama come in, to enrich the beauty of the raga. Such phrases are known as viseshā sanchāras.

Examples. *ṡ n p* and *ṡ d p* of Sankarābharana and *p n s D p* of Dhanyāsī.

(21) If the raga belongs to any group like ghana-panchaka.

(22) The slight or passing touch of a note, if any.

Such notes will not occur as long notes and they will be just touched in passing ; for example the *ga* in the phrase *M, g r s R* of Arabhi. Such notes are alpa svaras and can neither be emphasised nor made nyāsa as a rule.

(23) The janta svara and the dātu svara prayogas that the raga admits of.

(24) The characteristic *srutis* that suggest the melodic entity, individuality and colour of the raga.

(25) If there are any phrases, wherein a note occasionally deviates from its pitch and is rendered either slightly sharp or flat. For example, the notes *ma* and *ga* in the phrases *D m d n S* in Todi, and *g g r s* in Surati respectively.

(26) If a sarva svara gamaka varika raga or otherwise.

(27) Kampita svaras of the raga and also the intensity, compass and speed of their shake.

The compass of the shake of sādharana *ga*, in Sriraga and Anandabhairavi are different.

(28) The characteristic *gamakas* that bring out the *svarupa* of the raga.

There are instances of ragas wherein a note is subject to one variety of gamaka in the ārohana and a different variety of gamaka in the avarohana ; for example in Nāta raga, the rishabha in the ārohana is subject to *nokku* or *stress* and the same note in the avarohana is subject to *kampita* or *shake*.

(29) Ghana, naya (rakti) or desya raga.

(30) Suddha, chhāyāлага or sankīrna raga.

(31) Within the range of the three sthāyis, the highest and the lowest notes if any, beyond which the raga sanchāra cannot extend.

The idea in prescribing the upper and lower limits in the sthāyi for some ragas is to maintain intact their melodic individuality. This is done to prevent the suggestion of other ragas even in a remote manner. The appropriateness of this will be realised from experience. For example Khamās and Anandabhairavi which have no sanchāra below the mandra sthāyi nishāda ; and Sīranga and Pantuvarāli which have no sanchāra above the tara sthāyi gāndhāra.

(32) If the raga is a Karnataka raga or a Desya raga.

(33) Major raga or a minor raga.

A raga which admits of a detailed ālāpana is a major raga and is useful as a pallavi raga in concerts. As examples of ragas which admit of an extensive and intensive ālāpana may be mentioned, Todī, Sāveri, Bhairavi, Kāmbhoji, Sankarābharana and Kalyāni.

(34) Phrases which have to be used sparingly in a raga.

The undue repetition of an alpa or *kvachit* prayoga will result in abhāva and consequent loss of melodic individuality.

(35) The *rasas* ; i.e., the feelings that the raga is capable of arousing in us.

If the raga is capable of portraying feelings like joy, sadness, courage, fear, disgust, compassion, love, wonder, pity, mirth, pathos, anger, heroism, mystery, pleading, repentance, tenderness (vātsalya), devotion, loneliness, forest life (detachment from the crowd), communion with nature and tranquillity.

(36) If the raga is an auspicious one and hence useful for composing a mangalam.

(37) If the raga is useful for singing themes relating to varnana or description.

For example, Dhanyāsi, Kedāragaula and Surati are useful for varnana.

(38) The curative effects of the raga.

(39) The extent of its use in the spheres of art music and applied music.

Ragas of pronounced rasas like Ahiri are used in operas and ragas like Kedāragaula figure largely in Purāna patanam and religious discourses. Ragas like Sahāna and Nādanāmakriya figure in nāmāvālis. Nilāmbari and Ananda-bhairavi figure in lullabies. Saindhavi, Punnāgavarāli, Kuranji and Navaroj figure in marriage songs and folk melodies.

(40) Whether the raga derives its characteristic individuality by *chauka kāla* sanchāras or by *madhyama kāla* sanchāras.

N. B.—As a rule, all the ragas admit of both *chauka kāla* and *madhyama kāla* sanchāras. But this section is intended to cover cases like (1) Arabhi, which shines more by its *madhyama kāla* sanchāras and (2) Devagāndhārī which shines more by its *chauka kāla* sanchāras.

(41) If the raga is a popular raga or a scholarly raga.

Mohana and Anandabhairavi are popular ragas; but Nārāyanagaula and Mānji for example are scholarly ragas.

(42) If the raga is a *prasiddha* (wellknown) raga or an *apurva* (rare) raga.

(43) Closely allied ragas, if any.

Bhairavi and Mānji are closely allied ragas; likewise are Darbār and Nāyaki; Bilahari and Desākshi; Mukhāri and Sālagabhairavi. It must be noted that each raga of the pair, has however a separate melodic individuality.

(44) Its distribution amongst musical compositions.

(45) The time of the day or night and the season best suited for singing the raga.

Some ragas are amenable to the time theory.

(46) The svaras which are recognised as appropriate for commencing melodies in this raga.

Such notes are generally notes common to both the ārohana and avarohana.

(47) If there are tunes in the raga, known by specific names.

Anandakalippu, Pancha chāmaram, Mattakokilam and Kappal are all names indicating particular tunes. At a time when the practice of writing songs in notation was not extensively cultivated, it was found useful to refer to wellknown tunes by specific names.

(48) Important rāgas if any, that result by the application of the process of modal shift of tonic to this raga.

For example, Mohana's *ri* as *sa* gives Madhyamāvatī and its *pa* as *sa* gives Suddha sāveri and so on.

(49) Current raga or obsolete raga.

Ragas like Mohana and Bhairavi are current ragas; while, ragas like Kondamalahari and Mukhāripantu were in vogue in the 15th century and are now obsolete.

(50) Any story, anecdote or tradition concerning the raga.

For example, the *adi Nāta - antya Surata* tradition i.e., a concert should be commenced with Nāta raga and concluded with Surati raga.

(51) Pictorial representation of the raga, if any.

The pictures of rāgas and rāginis communicate in a visual manner, the power or the emotional aspects of ragas.

The svara graph and the svarasthāna graph of a raga's ārohana and avarohana reveal the contour of the raga and the symmetrical or non-symmetrical structure of its ārohana and avarohana.

A rāga is said to possess a symmetrical ārohana and avarohana, when the number of svaras present in its ascent and descent is equal. Such ragas have identical svaras in the ascent and descent as in Hamsadhvani (*s r g p n̄ s̄ - s̄ n̄ p g r s - 29*). A raga possessing svara symmetry (i.e., identical svaras in the ascent and descent) need not necessarily possess svarasthāna symmetry. Bhairavi for example, has svara-symmetry but not svarasthāna-symmetry, since it takes chatusruti *dha* in the ārohana and suddha *dha* in the avarohana (also see item 7 on page 42).

(52) If the raga and melodies in it can be sung or played in the madhyama sruti.

Ragas like Punnāgavarāli, Nādanāmakriya, Jhanjhuti, Kuranji and Navaroj, wherein the highest note touched is a note below the tāra shadja, are examples.

(53) If slokas, padyas and viruttams can be sung in the raga.

(54) If the raga can figure aptly in a series of kalpana svaras in the rāgamālika section of a Pallavi.

(55) If the raga is present in other systems of music, including ancient Tamil music ; if so, the names by which it is known in those systems.

Abheri for example corresponds to the Bhimpalās of Hindusthāni music ; Kīravāni corresponds to the harmonic minor scale of European music ; the Tamil pan Kausikam corresponds to Bhairavi and so on.

(56) Names of prominent musicians who have made this raga, the subject of their exclusive study, practice and research and who have been honoured with the name of the raga itself as a mark of recognition.

(57) History of the raga.

Changes in the name of the raga and changes in its lakshana if any. For example Nādarāmakriya and Madhyamādi are earlier names for Nādanāmakriya and Madhyamāvati. The introduction of *dha* in Sriraga is a later development. Mālavagaula was mentioned as the janaka mela for Vasanta and Saurāshtra at a time when the scheme of 72 melas had not been evolved. Suryakāntam will now be their correct janaka mela.

(58) The classical works on music in which this raga is referred to and the earliest composer to compose in this raga.

(59) If the name of the raga stands for or conveys, some other musical idea or concept.

Vasanta for example is the name of a raga and is also the name of a tala in the scheme of 108 talas.

(60) Significant meanings if any, attached to the name of the raga.

For instance, the name Athāna (a + thāna) is interpreted as meaning a raga which frees one from bondage i.e., confers freedom from life and death. The raga *Sri* was given that name by pūrvāchāryas, because it took the notes of the sāma gāna scale and was hence auspicious and free from doshas. The song *Sri Kamalāmbike* in this raga, is appropriately sung as a mangalam in the Dikshitar school. Concerts can be concluded with *Sriraga* or *Madhyamāvati*.

South Indian Music is one and indivisible. The ragas form the fountain source for all melodies. The above-mentioned 60 points help one to get a true and a complete picture of a raga covering its scientific, cultural and historical aspects. No study of a raga is complete without a study of some of the brilliant lakshyas or compositions in it. Classical compositions present all the quintessential aspects of ragas and constitute ideal stepping stones to the attainment of *rāga jñāna*, the ultimate aim of all musical studies. Since each composition delineates a particular aspect of the raga, the importance of the study of a good number of classical compositions in it, needs no emphasis.

CHAPTER IV

TALA.

175 TALAS.

The function of rhythm in a musical composition is to maintain the balance of its music. Just as a minimum of three straight lines is required to enclose a space, and just as at least five notes are required to constitute a raga, a minimum of three aksharakālas is necessary to constitute a tāla. Thus trisra jāti eka tala is the shortest time-measure that can be thought of.

The famous aphorism, श्रुतिर्माता लयःपिता,

(*sruti* is the mother and *laya* is the father) emphasises the importance of singing to accurate *sruti* and accurate time. *Sruti suddha* and *laya suddha* are two of the fundamental requisites of all good music.

It was pointed out in Chapter III of the preceding volume of this series, that the seven principal tālas give rise to the 35 varieties on account of the *pancha jāti bhedas* (the five kinds of the laghu).

Each of these 35 tālas again gives rise to five varieties on account of the *gati bheda* or the change of the *gati*. Thus we have in all $35 \times 5 = 175$ talas. Even as there are the *pancha jāti bhedas*, there are also the *pancha gati bhedas*. Therefore each of the sapta talas comes to admit of 25 varieties on account of the *pancha jāti-gati bhedas*. When not otherwise mentioned, the presumption with regard to a tala is, that it is in the chaturasra gati. The change of *jāti* applies only to the laghu but the change of *gati* applies to all the angas in a tala.

Table VII The Tala (gati bheda) chart (A)

showing how each of the sapta tālas comes to admit of 25 varieties on account of the *change of gati*.

(*Rupaka tala* is taken as an example and worked out here)

Jāti.	Constituent angas and the total aksharakālas for an āvarta	Gati bheda.	The resulting total minor units of time for an āvarta on account of the change of gati.
Trisra	○ ₃ = 5	• { Trisra Chaturasra Khanda Misra Sankirna	$5 \times 3 = 15$ $5 \times 4 = 20$ $5 \times 5 = 25$ $5 \times 7 = 35$ $5 \times 9 = 45$
Chaturasra	○ ₄ = 6	• { Trisra Chaturasra Khanda Misra Sankirna	$6 \times 3 = 18$ $6 \times 4 = 24$ $6 \times 5 = 30$ $6 \times 7 = 42$ $6 \times 9 = 54$
Khanda	○ ₅ = 7	• { Trisra Chaturasra Khanda Misra Sankirna	$7 \times 3 = 21$ $7 \times 4 = 28$ $7 \times 5 = 35$ $7 \times 7 = 49$ $7 \times 9 = 63$
Misra	○ ₇ = 9	• { Trisra Chaturasra Khanda Misra Sankirna	$9 \times 3 = 27$ $9 \times 4 = 36$ $9 \times 5 = 45$ $9 \times 7 = 63$ $9 \times 9 = 81$
Sankirna	○ ₉ = 11	• { Trisra Chaturasra Khanda Misra Sankirna	$11 \times 3 = 33$ $11 \times 4 = 44$ $11 \times 5 = 55$ $11 \times 7 = 77$ $11 \times 9 = 99$

In the same manner, the remaining six talas also admit of 25 varieties each.

Table VIII

The Tala (gati bheda) chart (B)

Showing how the 35 suladi talas give rise to the 175 varieties, on account of the gati bhedas.

Serial number in the scheme of the 35 talas.	Tala.	Jāti.	Total akshara-kālas for an āvarta	Change of gati and the resulting number of minor units for an āvarta in each case.					Serial numbers in the scheme of the 175 talas.
				Trisra gati.	Chatu-rasra gati	Khanda gati.	Misra gati.	Sankirna gati.	
1	Trisra		{ 11	33	44	55	77	99	1 — 5
2	Chaturasra		{ 14	42	56	70	98	126	6 — 10
3	Khanda		{ 17	51	68	85	119	153	11 — 15
4	Misra		{ 23	69	92	115	161	207	16 — 20
5	Sankirna		{ 29	87	116	145	203	261	21 — 25
6	Trisra		{ 8	24	32	40	• 56	72	26 — 30
7	Chaturasra		{ 10	30	40	50	70	90	31 — 35
8	Khanda		{ 12	36	48	60	84	108	36 — 40
9	Misra		{ 16	48	64	80	112	144	41 — 45
10	Sankirna		{ 20	60	80	100	140	180	46 — 50
11	Trisra		{ 5	15	20	25	35	45	51 — 55
12	Chaturasra		{ 6	18	24	30	42	54	56 — 60
13	Khanda		{ 7	21	28	35	49	63	61 — 65
14	Misra		{ 9	27	36	45	63	81	66 — 70
15	Sankirna		{ 11	33	44	55	77	99	71 — 75

Thampa.	16	Trisra	6	18	24	30	42	54	76—80
	17	Chaturasra	7	21	28	35	49	63	81—85
	18	Khanda	8	24	32	40	56	72	86—90
	19	Misra	10	30	40	50	70	90	91—95
	20	Sankirna	12	36	48	60	84	108	96—100
Tripura.	21	Trisra	7	21	28	35	49	63	101—105
	22	Chaturasra	8	24	32	40	56	72	106—110
	23	Khanda	9	27	36	45	63	81	111—115
	24	Misra	11	33	44	55	77	99	116—120
	25	Sankirna	13	39	52	65	91	117	121—125
Ata.	26	Trisra	10	30	40	50	70	90	126—130
	27	Chaturasra	12	36	48	60	84	108	131—135
	28	Khanda	14	42	56	70	98	126	136—140
	29	Misra	18	54	72	90	126	162	141—145
	30	Sankirna	22	66	88	110	154	198	146—150
Eka.	31	Trisra	3	9	12	15	21	27	151—155
	32	Chaturasra	4	12	16	20	28	36	156—160
	33	Khanda	5	15	20	25	35	45	161—165
	34	Misra	7	21	28	35	49	63	166—170
	35	Sankirna	9	27	36	45	63	81	171—175

Chapu tala

The Chāpu tāla is one of the time-measures used in Indian music from very early times. There are many folk melodies in this tala. It is a syncopated time-measure and is counted with two beats. Sometimes for the sake of convenience, instead of two beats, it is reckoned with a beat and a visarjita.

There are four varieties of the Chāpu tala :—

- (1) *Misra chāpu* ($3+4\approx 7$) where the first beat has a duration of three units of time and the second four.
- (2) *Khanda chāpu*, ($2+3=5$) where the duration of the first beat is two units of time and the second three.
- (3) *Tisra chāpu* ($1+2\approx 3$) where the duration of the first beat is one unit time and the second two.
- (4) The *Sankirna chāpu* ($4+5\approx 9$) where the duration of the first beat is four units and the second five. This tala is rather an uncommon variety and figures in some pallavis.

When merely the term chāpu tala is mentioned on the top of a piece, the presumption is that it is *misra chāpu*. Other varieties like khauda chāpu etc. have to be specifically mentioned as such.

Desadi, Madhyadi talas

The *Desādi* and *Madhyādi* talas consist of 4 counts each, for an āvarta and are reckoned with a visarjita (wave of the hand) and three beats. Whereas in pieces in the *Desādi* tala

the music commences in the visarjita after the lapse of $\frac{3}{4}$ aksharakāla, in the pieces in Madhyādi tāla, the music commences after the lapse of $\frac{1}{2}$ an aksharakāla. In other words, at the very commencement, there is a period of rest (*visrānti*) of $\frac{3}{4}$ and $\frac{1}{2}$ unit time respectively in the pieces in these two talas. It is also customary to reckon the rhythm of the pieces in these two talas after the manner of the ādi tāla and the music in such cases starts immediately after these periods of rest from corresponding points in the āvarta. These two time-measures are a recent introduction into South Indian Music and Tyāgarāja is the first great composer to compose kritis in these talas and show their great possibilities.

The pieces, *Enta vedukondu Rāghava* (Sarasvati manohari), *Bhuvini dāsudane* (Sriranjani), *Sitāpate* (Khamās) and *Raghunāyaka* (Hamsadhvani) are examples of compositions in Desādi tāla. The pieces: *Nāmakusumamula* (Srirāga), *Meru samāna* (Māyāmālavagaula), *Enduku nirdaya* (Hrikāmbhoji) and *Rāga sudhārāsa* (Mayūradhvani) are examples of compositions in Madhyādi tāla.

Dhruva rupaka is a mixed time-measure. A composition in this tāla, as also the sections of a composition in this time-measure start with two drutas and two laghus and are then followed by the rupaka tāla āvartas. The gita *Areyānaka* in Nāta is a wellknown composition in this tāla.

The sulādi tarangas of Narayana Tirtha in the sapta tālas and the sapta tāla gita "*Gāna vidya dhurandhara*" in Nāta rāga are compositions of special interest from the rhythmic point of view. The latter piece is set in Dhruva tāla but its musical construction admits of being reckoned in the other six sulādi tālas as well without detriment to general effect.

The length of the composition is 30 āvartas (420 aksharakālas) of Dhruva tāla. As one sings it, reckoning the Dhruva tāla, six other persons can start simultaneously counting each, one of the other sulādi talas. At the conclusion of the gita, it will be found that all the seven persons finish their āvartas completely,

the person counting the	Dhruva	tāla	executing	30 āvartas
„	Matya	tāla	„	42 „
„	Rupaka	tāla	„	70 „
„	Jhampa	tāla	„	42 „
„	Tripata	tāla	„	60 „
„	Ata	tāla	„	30 „
„	Eka	tāla	„	105 „

Kuru jhampe is a folk time-measure. It consists of a drutam, a khanda laghu and a Tisra laghu $O \mid_5 \mid_3$ Avarta = 10 aksharakālas. There are *jakkini darus* in this type of tāla.

Tala dasa pranas.

The subject of tāla dasa prānas deals with the analytical study of rhythm in all its aspects. Some of the prānas are of mere academic interest. The ten elements (*dasa prānas*) of musical time are :— kāla, marga, kriya, anga, graha, jāti, kala, laya, yati and prastāra.

कालो मार्गः क्रियांगानि ग्रहोजातिः कळालयः ।

यतिः प्रस्तारकंचेति तालप्राणादशस्मृताः ॥

Of these, the first five are referred to as the *mahā prānas* or main elements and the rest as *upa prānas* or secondary elements. The more important of the dasa prānas are treated of here. The rest are dealt with in the next volume of this Series.

Kriya is the manner of counting time. It is the *kriya*, that indicates the constituent angas of a tāla. The beat of the hand, the visarjita and the finger counts are different kinds of *kriyas*.

Kriyas are of two kinds:—

- (1) *Sasabda kriya* (सशब्दक्रिया), i.e., execution accompanied with sound, as in the clapping of hands or in the beating of the right hand on the right thigh and cauterization.
- (2) *Nissabda kriya* (निशब्दक्रिया) i.e. soundless execution as in finger-counts, *visarjita*, *krishya*, *sarpini*, *patākam* etc.

Sasabda kriya is seen in *anudrutam*, which is reckoned with a beat. In the *drutam*, we have both the *sasabda* (beat) and the *nissabda* (*visarjita*) *kriyas*. In the *laghu* also we have the two *kriyas* represented.

Anga. Angas are the constituent parts or the limbs of a tāla. Excepting the Eka tāla, all the other talas consist of a plurality of angas. There are the shadangas (six angas) *anudruta*, *druta*, *laghu*, *guru*, *pluta* and *kākapāda*.

अनुद्रुतो द्रुतश्चैव लघुर्गुरुः प्लुतस्तथा ।

काकपादं तथा प्रोक्तं ताळांगमिति षड्विधम् ॥

The symbols for these angas, their values and their mode of execution are given in detail in Chapter II of Book I of this Series. The *sulādi sapta talas* take only the *anudruta*, *druta* and *laghu*. The *shadangas* figure in the scheme of the classical 108 talas. Of the *sulādi tālas*, the *Dhruva tala* and the *Ata tala* have four angas each; the *Matya*, *Jhampa* and

Tripura tālas, have three angas each ; Rupaka, two angas and Eka tala only one anga. Three of the sapta tālas (Dhruva, Rupaka and Ata) possess an even number of angas ; the rest (Matya, Jhampa, Tripura and Eka) possess an odd number of angas.

Graha. The place of commencement of music in the tāla āvarta, is known as the *graha* — எடுப்பு or ఎత్తుట. The *graha* is *sama* when the music commences along with the tāla and *vishama* if otherwise.

Vishama graha is of two kinds : *Atita* and *Anāgata*.

It is *atita* when the music commences before the tāla and *anāgata* when it commences after the tāla. Gītas and tāna varnas in ādi tāla furnish instances of compositions beginning on *sama graha*. The pallavi, anupallavi and charana of āta tāla varnas, and kritis like *Svara rāga sudhārāsa* furnish instances of *anāgata grahas*. Since there should be a reasonable measure of time between the padagarbham and the eduppu, the upper limit of the *anāgata graha* will be two counts in ādi tāla compositions and pallavis. Instances of *atita graha* are comparatively rare. *Atita grahas* are met with in the classical pallavis. The anupallavi of the kriti *Venugāna loluni* in Kedāragaula and the anupallavi of the kriti *Kshinamai tiruga* in Mukhāri furnish good examples of *atita grahas*. In *atita graha* compositions, the music commences at the end of a (presumed) previous āvarta. The *atita graha* is resorted to in order to suit the exigencies of prosody. In the case of compositions in *anāgata* and *atita grahas*, we always precisely indicate the point of commencement of music by stating at the top. The number of aksharakālas or fraction of an aksharakāla, the starting-point is removed from the commencement of the tāla.

Sārṅgadeva, in the *Sāṅgita Ratnākara*, says:—

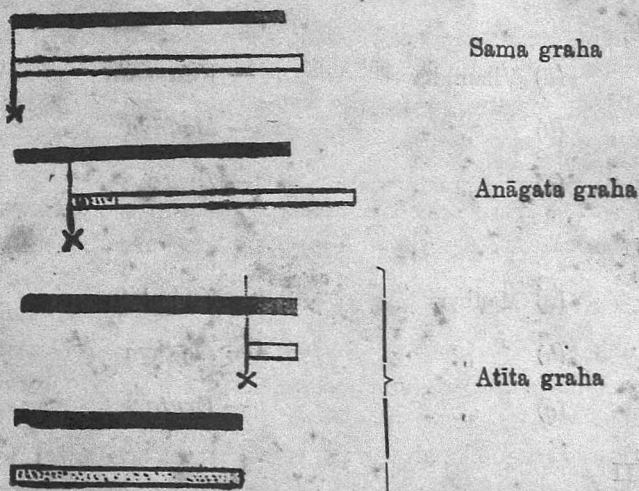
समोऽतीतोऽनागतश्च ग्रहस्ताळे त्रिधा मतः ॥

Tables IX and X explain these three types of grahas:—

Table IX — Graha (eduppu)



Table X

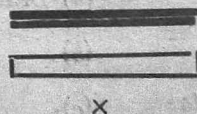


Reference :

Tāla

Music

Starting-point of music



Jāti There are the five jātis : tisra, chaturasra, khanda, misra and sankīrna.

Laya is tempo, speed or kāla pramāna. Three degrees of speed are recognised for all practical purposes :—

Vilambita laya (slow),

Madhya laya (medium) and

Druta laya (quick).

Intermediate gradations of speed under each of these degrees are also recognised. In the increasing order of quickness they are :

I

(a) Vilambita	— <i>Vilambita</i>
(b) „	— <i>Madhya</i>
(c) „	— <i>Druta</i>

II

(a) Madhya	— <i>Vilambita</i>
(b) „	— <i>Madhya</i>
(c) „	— <i>Druta</i>

III

(a) Druta	— <i>Vilambita</i>
(b) „	— <i>Madhya</i>
(c) „	— <i>Druta</i>

Mode of Reckoning Time

Two kinds of units are used in reckoning musical time. One is the *akshara* and the other, the *mātra*. The former is equivalent to the *anudruta* and the latter to the *laghu* (*chaturasra* type). The mode of reckoning by *aksharas* is seen in the compositions belonging to the 35 *talas* (employing *laghu jātis*). Reckoning by *mātras* is seen in more difficult and high class music as in the classical 108 *tālas* (without *jātis*) and a few other terse time-measures. The table below gives the relative values of the *shadangas* in *aksharas* and *mātras* :—

Table XI

Name of the anga.	Aksharas.	Mātras.
Anudruta	1	1/4
Druta	2	1/2
Laghu	4	1
Guru	8	2
Pluta	12	3
Kākapāda	16	4

There are also the *shodasāngas* or sixteen *angas* beginning with the *anudrutam* and ending with the *kākapādam*.

Table XII (Shodasangas).

Name.	Duration.	
	In aksharakāla	In mātra
Anudruta	1	$\frac{1}{4}$
Druta	2	$\frac{1}{2}$
Druta virāma	3	$\frac{3}{4}$
Laghu	4	1
Laghu virāma	5	$1\frac{1}{4}$
Laghudruta	6	$1\frac{1}{2}$
Laghudruta virāma	7	$1\frac{3}{4}$
Guru	8	2
Guru virāma	9	$2\frac{1}{4}$
Gurudruta	10	$2\frac{1}{2}$
Gurudruta virāma	11	$2\frac{3}{4}$
Pluta	12	3
Pluta virāma	13	$3\frac{1}{4}$
Plutadruta	14	$3\frac{1}{2}$
Plutadruta virāma	15	$3\frac{3}{4}$
Kākapāda	16	4

Reckoning by *sarva laghu* means, reckoning time evenly with beats, the duration of each beat being equal to four units of time.

CHAPTER V

MUSICAL FORM

A musical composition presents a concrete picture of a raga. The jurisdiction of a composer is essentially *sangita kavītvam* and not *sāhitya kavītvam*. When the composer happens to be also a poet, as in the case of Tyāgarāja, we have the happy coincidence of beautiful music coupled with poetic thoughts. Words are used in poetry for their sense; in musical compositions they are used for both their sense and sound. The claim of a musical composition to permanence lies primarily in its musical setting. In every musical composition the syllables of the *sāhitya* should beautifully blend with the *dhātu*.

The lakshana of a musical form can be studied under the following heads:—

1. Whether the form belongs to the sphere of *abhyāsa gāna* (vocalises) or *sabhā gāna* (concert pieces).
2. Whether it is a rhythmical form or a non-rhythmical form.

Non-rhythmical forms are forms like *chūṇikās* and *daṇḍakas* which are not set to any specific *tāla*.

3. Whether the form has to be in a specific tempo. For instance, *padas* have to be in slow time and *tāna varnas* in medium tempo; *kritis* may be in slow tempo or medium tempo.

Also the *tālas* in which the form is found.

4. Whether the form admits of a mātu (sāhitya) or is sung merely as a solfeggio.

For example, the jatisvaram has no sāhitya and is merely sung to solfa syllables.

5. Its constituent angas inclusive of essential and non-essential angas.
6. Its gāna krama *i.e.* the order in which the several sections have to be sung.
7. Rules if any relating to the graha of the piece and the graha of its component angas.

For example gitas have to be in sama graha; but in a kriti, the eḍuppu of the pallavi, anu-pallavi and charana may be identical or different.

8. The theme of the sāhitya.
9. If the musical structure of the form admits of apt themes for developing niraval and kalpana svaras.

For instance, kritis contain themes fit for niraval and kalpana svaras, but not forms like gitas, padas and tillānas.

10. If the form has a number of examples or only a few.
There are thousands of kritis and kirtanas whereas there are only a few rāgamālikas.
11. The value of the form as an authoritative lakshya.

Forms like kritis, tāna varnas, sanchāri gitas and lakshana gitas can be 'quoted as authoritative lakshyas in support of the admissibility or otherwise of particular prayogas in ragas.

12. In musical forms with plural charanas, whether all the charanas have necessarily to be sung or some of them can be optionally sung.

In svarajatis, rāgamālikas, kritis with charanas of different dhātus and Tyāgarāja's pancharatnas all the charanas *have to be sung*. In divya-nāma kirtanas all the charanas have to be sung because of their sacred value.

Individual compositions under each form can be critically studied under the following heads:—

1. The raga, tala, mārga and tempo of the composition.
2. Its design, construction and style.
3. The commencing notes of its pallavi, anupallavi and charana.

The commencing note of the pallavi and the commencing note of the anupallavi usually bear one or other of the following relationships:—

- (a) They may be *sama svaras* (identical notes) (Ex. *Nāḍopāsana*—Begada).
- (b) They may be an octave apart (Ex. *Janani ninnu vīna*—Ritigaula).
- (c) They may have the shadja-panchama bhāva. (Ex. *Chakkani rāja*—Kharaharapriya).
- (d) They may have the shadja-madhyama bhāva (Ex. *Mariyādagādura*—Sankarābharana).

4. The number of āyartas and pādas of each section-

5. Technical and literary beauties figuring in the composition.
6. The number of sangatis in each section and the beauty underlying their sequence.
7. Themes in the composition suitable for developing niraval and kalpana svaras.
8. Places in the composition where one can suitably halt.
9. Readings and changed versions of the dhātu, if any.
10. Any liberties taken with grammar (of language or raga). Faulty idioms if any in the Sāhitya.
11. Gamakas figuring in the piece.
12. The compass of the piece.
13. Scholarly piece or a popular piece.
14. The entertainment value of the piece and its value as an important lakshya.
15. Circumstances if any, that occasioned the composition.
16. If the composition is a separate piece or belongs to a group like the Pancharatna, Navaratnamālīka etc.
17. If the composition is a kriti with plural charanas, the particular charana that is usually sung and the reason for the preference.
18. Prosodical beauties, if any.
19. If it is a frequently performed piece or a rarely performed piece.

20. Prominent musicians if any, who specialised in the piece and brought it to lime-light.

*

.*

*

*

The points of distinction between an ordinary gita and a lakshana gita have been already referred to (see Book II Chapter IV). We shall now take up the study of the structure and arrangement of the *rāgāṅga lakshana gitas*.

These gitas generally consist of three sections or *khandas*: *sutra khanda*, *upāṅga khanda* and *bhāshāṅga khanda*. In the *sutra khanda*, the initial syllables of the *sāhityas* of the *āvartas* give the clue to the kinds of *svaras* taken by the *mela*.

For example, the initial syllables of the first section of the *Māyāmālavagaula lakshana gita* (see post) are:—*ra gu ma pa dha nu*. From this one is able to infer that the *suddha rishabha*, *antara gāndhāra*, *suddha madhyama*, *suddha dhaivata*, and *kākaḍi nishāda*, (besides *sa* and *pa*) are the notes taken by this *raga*. Further the phrase *Agni-go chakra* (अग्नि गो चक्र) gives the clue to the fact that it is the 3rd *raga* in the *Agni* or the III *chakra* i.e., its serial number is 15. The next two sections of the *gita* respectively give the list of *upāṅga ragas* and *bhāshāṅga rāgas* derived from this *melakarta*. This codified list of *rāgas* is of great use in determining the history of *rāgas*. Some *rāgas* figuring in the *upāṅga* list have since become *bhāshāṅga*. Again, a few *rāgas* mentioned in these gitas are not *now current*. Hence the historical value of these *rāgāṅga lakshana gitas*.

Lakshana gitas relating to *rāgāṅga ragas*, which do not claim an appreciable number of *janya ragas*, do not have

these three sections. Their musical structure is after the manner of the ordinary gita. The mnemonics for the suddha-vikṛta svaras as also the mela mnemonics however figure therein.

Since ragas not mentioned in the *Chaturdandi prakāśika* figure in these rāgāṅga lakshana gitas, it is certain that these gitas are the compositions of a later composer and not those of Venkatamakhi.

There are lakshana gitas for all the current 72 mela ragas (Kanakāṅgi-Ratnāṅgi series) and these are printed in the *Gānendu Sekharam* of Tachchur Singarāchārū and in the *Sangraha Chudāmani*. The older confusing nomenclature of panchasruti rishabha and panchasruti dhaivata has rightly been replaced by the correct and self-explanatory names, chatusruti rishabha and chatusruti dhaivata in these gitas. The values of shatsruti rishabha and shatsruti dhaivata being what they are, the terms panchasruti rishabha and panchasruti dhaivata speaking correctly and logically, ought to denote the notes of frequencies, $32/27$ and $16/9$ and not the notes of frequencies, $9/8$ and $27/16$.

Govinda Dikshitar, Venkatamakhi, Paidāla Gurumurti Sastri and Govindāchārya (the author of *Sangraha Chudāmani*) are some of the prominent names amongst the composers of lakshana gitas.

Varna

Varnas are scholarly compositions. They are elaborate melodies replete with rāga bhāva. A varna contains within it not only the rāga ranjaka combinations, but also the viśeṣa sanchāras and the several apurva prayogas and dātu prayogas that the raga admits of. Amongst the compo-

sitions of the technical group (*abhyāsa gāna*), the varna takes the first rank in point of importance. Varnas are learnt and practised with great care and assiduity by both vocalists and instrumentalists. The practice of varnas considerably helps one in the *artistic, polished and stylish rendering* of pieces. The paucity of words and the consequent profusion of vowels in the *sāhitya* as also their even distribution make it an ideal piece for the training of the voice. To the instrumentalist, it develops his finger skill and improves his technique of execution. The *ettugada svara* passages serve as models for the development of *kalpana svaras*.

The *sāhitya* of a varna is comparatively short and insignificant and may relate to either *bhakti* (devotion) or *sringāra* (love) or it may be in praise of a patron or be descriptive of the particular varna.

It requires great skill, technical capacity, creative faculty of a high order and detailed knowledge of the *lakshanas* of ragas to compose varnas. Composers of varnas are few and the number of all the available varnas does not exceed a few hundreds. Compared with this, we have thousands of *kriti* and *kirtana* compositions and more than a hundred composers of these types.

Among the pieces belonging to the realm of *abhyāsa gāna*, the *tāna varna* is the last type to be practised before beginning concert forms like the *kriti*.

The constituent *angas* of a varna are :—

- (1) The *purvāṅga*, comprising the *pallavi*, *anupallavi* and the *muktāyi svara*.
- (2) The *uttarāṅga*, or the *ettukkadaḍai* comprising the *charaṇa* and the *charaṇa svaras*.

The purvāṅga and the uttarāṅga are of almost equal length.

The charana of a varṇa is also known by other names as *ettugada pallavi*, *upa pallavi* and *chitta pallavi* (i.e. as opposed to the pallavi, forming a branch of manodharma sangita). The charana of a varṇa is analogous to a pallavi since it is repeated at the conclusion of each ettugada svara.

The ettugada svara passages should progressively increase in length and complexity. The first ettugada svara passage is usually of the length of one āvarta and is characterised by a profusion of dīrgha svaras. The length of each subsequent ettugada svara passage is either the same as the one preceding it, or more. The last ettugada svara passage is the longest and may be of two or four āvartas. Ettugada svaras of the length of three āvartas are seen in a few varṇas.

Even if the order of the ettugada svaras of a varṇa is changed and given, it is possible to re-arrange them in the order intended by the composer. Even in the case of ettugada svaras of an equal number of āvartas, it is possible to say which precedes which, taking into consideration the manner of development of the dhātu.

Barring the *Pancharatna* of Tyāgarāja, the varṇa is the only composition containing an *upa* (extra) *pallavi*. Some varṇas have even two *upa pallavis*.

Varnas are of two kinds :—

- (1) *Tāna varṇas*, which are the compositions played or sung at the commencement of a concert and which are practised by students of music after a course in the gītas and svarajatis. In a tāna

varna, the pallavi, anupallavi and charana alone have sāhitya. The other portions are sung as solfa passages. Thus the tāna varna furnishes an instance of a composition, wherein a part is sung as a solfeggio and the rest with the sāhitya. On account of the preponderance of tāna jātis or phrases in this form, it came to be called tāna varna. The wide dispersal of the sāhitya syllables is a characteristic feature of the tāna varna.

- (2) *Pada varnas* (also called *chauka varnas* and *āta varnas*) are the compositions heard in dance concerts. The entire composition herein has sāhitya. The mātu is characterised by less of vowel extensions. The music is in a somewhat slower tempo and is intended to give full scope to convey the *bhāvas*. Because of its affinity to the padam, both in point of tempo and the theme of the sāhitya, this composition came to be called pada varna. Jatis (சொல் கட்டுகள்) are met with in some pada varnas.

Tāna varnas are found in Adi, Ata, Jhampa, Khandā jāti Triputa and such other long tālas and not in short time-measures like Rūpaka. Short time-measures are an impediment to the free flow of tāna ideas. There are pada varnas in rūpaka tala- Tāna varnas present the svarupa of their ragas in a nut-shell. Hrasva nyāsas, dirgha nyāsas and alpa nyāsas of ragas are all clearly illustrated in tāna varnas. Tāna varnas are intended for being practised in trikāla (three degrees of speed) but not so pada varnas.

Rāgamālīka varnas are compositions wherein the sections are in different ragas. The *Navarāga mālīka varna* in the nine ragas : Kedāra (pallavi), Sankarābharana (anupallavi), Kalyāni and Begada (muktāyi svara), Kāmbhoji (charana), Yadukulakāmbhoji, Bilahari, Mohana and Srīrāga (ettugada svaras); the *Dinarāga mālīka varna* in the eight ragas : Bilahari (pallavi), Dhanyāsi (anupallavi), Madhyamāvati (muktāyi svara), Kalyāni (charana), Pūrvakalyāni, Kedāragaula, Mohana and Bhūpāla (ettugada svaras); and the *Ghanarāga mālīka varna* in nine ghana ragas beginning with Nāta are wellknown compositions. There are also *rāgamālīka varnas* belonging to the category of *pada varnas*.

Because of the occurrence of certain sections as solfeggios, the reason for the non-inclusion of the *rāga* names in the *sāhityas* of *rāgamālīkā varnas* is obvious.

As for the *gāna krama* of a *varna*, the pallavi, anupallavi and the muktāyi svara are sung in order and concluded with the pallavi. Each *āvarta* is sung twice. Halting on shadja or panchama or on some other suitable note, for the rest of the *āvarta* is made at apt places. The charana is next sung followed by the ettugada svaras. At the conclusion of each ettugada svara passage, the charana is again sung. The ettugada svaras are not repeated. The sangatis if any, are sung only once. Since in the *pada varna*, the muktāyi svara and the ettugada svaras have *sāhitya*, the svara part of each section is first sung, and then the corresponding *sāhitya* part. For the svara part *nritta* is performed and for the *sahitya* part, *abhinaya*.

With the exception of Tyāgarāja's *Pancharatnam*, the *varna* is the only form wherein the original pallavi is ignored at a subsequent stage of the composition.

Ramasvamy Dikshitar has composed a beautiful *sthāna varna* (*sa ri ga da ni*) in Todi raga, ādi tala, bristling with *svarākshara* beauties.

Some chauka varnas have *sāhitya* for the pallavi, anu-pallavi and charana alone and the rest of the composition sung as solfa passages, after the model of a *tāna varna*; Ex. *Rūpamu juchi* in Todi raga, Adi tala by Muthusvamy Dikshitar.

Pada jati varna is a pada varna wherein jatis figure.

Formerly varnas had a supplementary section called the *anubandham*. It consisted of a *sāhitya* part and a solfa part. This *sāhitya* served to complete the idea in the *sāhitya* of the rest of the varna. The *sāhitya* beginning with the words *chiru chamatalu చిరు చామతాలు* (See P. 116 of *Sangita Sarvārtha Sāra Sangraham*—Telugu) constituted the *anubandham* for the famous varna *Viriboni* in Bhairavi raga. Some *anubandhas* did not have a separate solfa passage and in such cases, the *anubandha* was followed by the singing of the *muktāyī svara* of the *purvānga* part and the original pallavi then sung and the composition concluded. As the *anubandha* did not very much add to the musical excellence of the varna, it gradually fell into desuetude. Nobody sings the *anubandha* section of the *Viriboni* varna at present. Subsequent composers of varnas like Vīna Kuppayyar did not bother about the inclusion of the *anubandha* in their compositions. *Anubandhas* figure in the *tāna* varnas of Ramasvamy Dikshitar and Sonti Venkatasubbayyar (see *Sangita Sampradāya pradarsini* Vol. II, Pages 908 and 956). The *anubandham* may be compared to the coda of European music. Since it disturbed the balanced length of the *purvānga* and *uttarānga*, it was gradually given up.

Pachchimiriyam Adiyappiah, Sonti Venkatasubbayyar, Syāma Sāstri, Vīṇa Kuppayyar, Pallavi Gopālayyar, Svāti Tirunal, Mānambuchāvaḍi Venkatasubbayyar, Muthusvāmy Dikshitar, Paramesvara Bhāgavatar, Annasvāmy Sāstri, Tiruvārur Aiyāsami, Patnam Subrahmanya Iyer, Garbhāpuri, Kottavāsāl Venkatarama Iyer, Tiruvottiyur Tyāgayyar, Ramnad Srinivasa Iyengar, Kuppusvami and Fiddle Ponnu-svami are some of the famous composers of tāna varṇas.

Govindasāmāyya and Kūvanaṣāmāyya of Kārvetnagar Rāmasvāmy Dikshitar, Vāḍivel Nattuvanār, Pallavi Seshayyar, Rāmasvāmy Sivan, Subbarama Dikshitar, Mysore Sadasiva Rao and Kunrakudi Krishnayyar are some of the famous composers of paḍa varṇas.

Kṛiti

The kṛiti composition is the most highly evolved amongst art musical forms. It is the most important of the melodic group of compositions. Every composer of note during the last two centuries has attempted this type of composition. The elastic nature of the form coupled with the fewness of rules, afforded ample scope to the composer for the display of his creative genius. Freed from the tyrannical grip of words, the composer was able to pour forth his thoughts through the language of pure music in an abundant manner. Kṛitis form the bulk of the musical compositions at the present day. In a modern concert more than half the time is taken up with the rendering of kṛitis and rightly so. The kṛiti has come to occupy that important place amongst concert pieces on account of its inherent beauties. The composer enjoyed ease and freedom in the expression of his musical thoughts in this form. He enjoyed freedom in the matter of the choice of the raga, tāla, tempo, style and theme,

The only ideal present in the mind of the composer, during the composition of a *kṛiti*, is the delineation of the *raga bhāva* in all its varied and rich colours. *Kṛitis* stand as examples of *absolute music*. Anything like distinctive styles in musical compositions is seen only in *kṛitis*. *Kṛitis* contain apt themes for developing *niraval* and *kalpana svaras*. With the dawn of the *kṛiti* composition, many of the older types of compositions became obsolete.

It will be useful at this stage to draw the line of distinction between the two forms, *kṛiti* and *kīrtana*. The term *kṛiti* refers to the composition whose claim to permanence lies principally in its music and not in its *sāhitya*. *Kīrtanas* are older than *kṛitis*. *Kṛiti* is a development from the *kīrtana*. The *kīrtana* had its birth about the latter half of the fourteenth century. The *kṛiti* in its fully developed form appears about four centuries later.

Although the term *kṛiti* in a wider sense means any musical composition (*यत् कृतं तत् कृतिः* —that which is composed is a *kṛiti*) still composers and scholars during the last 500 years have felt the necessity to restrict the term *kṛiti*, to those *kīrtanas* whose claim to permanence lay primarily in their musical setting. The Tāllapākam composers (15th century) have used the term. Purandara Das in his song *Vāsudevana nāmāvaliya* in Mukhāri rāga, says that he has composed 4,75,000 *kṛitis*. Tyagarāja in his piece, *Sogasuga mridanga tālamu* (Sriranjani) gives the lakshana of an ideal *kṛiti*. Walajapet Venkataramana Bhāgavatar in his *sīsa padyam E kalā kalitundu* ఏ కళా కలితుండు says " I pay my homage to Tyagaraja who has composed different types of *kṛitis* ". Scholars and composers like Tachchur Singarāchārlu, Tiruvottiyur Tyagaayyar, T. M. Venkatesa

Sastri and others have uniformly used the term *kṛiti*, to denote the compositions of Tyagaraja and other similar compositions and have restricted the term *kīrtana* to those compositions whose *sāhityas* had a special spiritual value. That a *kṛiti* sounds perfect when performed on an instrument is proof of the fact that the essential factor in this form is the *dhātu*.

The *kīrtana* is a strictly sacred form. Its *sāhitya* may be of a devotional character, or may relate to a purāṇic theme. It may also be in praise of great devotees (*bhaktas*). Many *kīrtanas* are doxologies. The music as well as the rhythm of a *kīrtana* are simple. It is a composition belonging to the realm of *applied music*. The music is used herein only as a vehicle for the singing of the glories of God. In other words, the music is used simply as a means to an end. The music is subordinated to the *sāhitya*. Words are many and the *charanas* are all sung to the same *dhātu*. Sometimes the *charanas* have the same music as the *pallavi*. The *anupallavi* is a dispensable *anga* in a *kīrtana*. The different *angas* are characterised by the same *eduppu*. The compass of the music is short and the piece can easily be learnt *by rote*.

In the *kṛiti*, the *sāhitya* may be of a sacred or secular character. It may relate to an ethical or didactic theme. Words are few and they serve only as a vehicle for the singing of the music. The music is complex and bristles with technical beauties. There may be one or more *charanas*. The *charanas* may have the same *dhātu* or different *dhātus*. The compass of a *kṛiti* extends usually from $1\frac{1}{2}$ to 2 octaves. *Atita-anāgata* complexities are frequently met with in *kritis*. *Kritis* are veritable raga crystals. We derive knowledge of the many *apūrva* ragas through them. We find the

musical language in its purest form in a kriti and such a thing as *musical interpretation* is possible only in this form. Whereas kirtanas can be sung by even persons of average skill and training, justice can be done to kritis only by those initiated in music. A musical form can have prose or poetry for its s̄ahitya. The s̄ahityas of many kirtanas are characterised by poetic metres. The s̄ahityas of a good number of kritis have dignified prose in them. Kirtanas are in common ragas; but kritis are in common and scholarly ragas. Many rare ragas live through kritis alone.

There are however some compositions on the border line. They contain high-flown music and lofty spiritual thoughts. It will be difficult to say in such cases whether they are to be classified under kritis or kirtanas.

Whereas in a svarajati, the charanas can be of varying length, the charanas of an individual kriti or kirtana should be of the same length. Even in kritis with plural charanas this rule holds good.

The raga system of India shows all the melodic and aesthetic possibilities in the realm of music. In order to form a complete picture of a raga, one should listen or learn at least ten compositions in it, representative of the forms: gita, varna, kriti and padam. In this connection it may be mentioned that a person who performs an ālāpana of a raga with the background of a kriti in that raga in his mind, suffers from a certain limitation. A kriti is an exposition of a particular aspect of a raga. The phrases figuring in the kriti dominate his imagination and he finds it difficult to go beyond them and give an elaborate ālāpana. Persons wishing to attempt a detailed ālāpana of a raga would do well to think

of the raga as a whole and start the ālāpana and not be obsessed by a particular composition in it.

The *pallavi*, *anupallavi* and *charana* are the minimum and essential angas of a kriti. There may be one or more charanas. In many kritis, the dhātu of the latter part of the charana is found to be the same as that of the anupallavi. But in the kritis of Muthusvamy Dikshitar, the dhātu of the anupallavi does not repeat in the charana. A number of simple compositions of this composer have only the two sections, pallavi and anupallavi; Ex. *Sri Sarasvati Nomostu te*, Arabhi. Such compositions may be compared to the earlier *ugābhogas*.

In kritis with plural charanas, as a rule it is the *mudra charana* (the charana containing the signature of the composer) that is sung. A charana other than the *mudra charana* may be preferred, if that charana contains an apt and intricate theme for performing niraval or kalpana svaras; Ex. *Tambura chekoni* in the charana, *vekuva jamuna* of *Koluvamaragada*, Todi; and *Baktula vāgamrita pānamu* in the first charana of *Buddhi rādu*, Sankarābharana. A non-mudra charana is also preferred when it contains a fine idea; Ex. the first charana of the kriti, *Svararāga sudhā rasa*, Sankarabharana. If the charanas are set in different dhātus, all of them have necessarily to be sung as in the kriti, *Enduku nirdaya* (Harikāmbhoji).

Decorative Angas:

The kriti composition has been enriched by the introduction of *non-essential angas* like :—

- (1) *Chitta svara*. This is a set solfa passage in 2 or 4 āvartas if in ādi tāla, and 8 or 16 āvartas if in chāpu, tripura or rūpaka tāla and is sung at the

end of the anupallavi and charana. Usually it is set in *madhyama kālā*. Chitta svaras are crystallised *kalpana svaras*. The kritis : *Nimadi challaga* (Anandabhairavi), *I vasudha nivanti* (Sahāna), *Raghuvamsa sudhāmbhudhi* (Kathanakutūhalam), *Sringāralahari* (Nīlāmbari), *Pāhimam Sri* (Janarājanī) and *Sri Raghukula nidhim* (Huseni) contain some of the best chitta svaras.

Some chitta svaras contain the beauty known as 'figure.' In such cases, the same phrase recurs at the commencement of each āvarta or half-āvarta or alternate āvarta. The chitta svara to the kriti : *Inta parākelanamma* in Begada of Vina Kuppayyar is an example.

There are instances wherein appropriate chitta svaras have been added to kritis by subsequent composers. As an example may be mentioned the chitta svara adorning the kriti, *Māmava satatam* (Jaganmohini rāga) of Tyagaraja and composed by his disciple, Walajapet Krishnaswamy Bhāgavathar.

Viloma Chitta svara. This is the case of a chitta svara which can be sung from beginning to end and again sung in the reverse order from the end to the beginning (i.e. in both the *anuloma* and *viloma krama*—forwards and backwards) without offence to rāga bhāva. The rāga bhāva should not suffer even partially in the *apasavya* part. For example, the following passage in Kalyāṇi raga might be sung both forwards and backwards as indicated and still maintain the rāga bhāva :—



Ś n d P p m G g m P



i.e., when sung backwards, it will be

P m g G m p P d n Ś

It is not an easy thing to compose chitta svaras of this type. Such chitta svaras can be composed only in ragas with a symmetrical ārohana and avarohana, i.e., in krama sampūrna, shādava and audava ragas having the same notes in both the ārohana and avarohana.

The classic instance of a viloma chitta svara is met with in the 2nd *Kamalāmbā Navāvarana kriti*: *Kamalāmbām bhajare* in Kalyāni of Muthuswami Dikshitar:—

4	○	○
sṛgṃdn - rg̣pd-ṃd ng̣ sṛ	ṇ ṛ g̣-ṇ ṣ ṇ-ṛṣ	N-n D-d P
(The same passage from	the end to the	beginning)
P d D n N-ṣṛnṣ ng̣ṛ ṇ	ṣ g̣nd-ṃ d p	gr-ndṃgrṣ

Another example of an *anuloma-viloma krama* chitta svara is seen in the kriti: *Sadāvinata sādare* (Revagupti rāga, Rūpaka tāla) of Muttuswami Dikshitar:—

ṛ G̣ P̣ ḍ Ṣ́ ṛ g̣ Ṛ | ṣ Ḍ p̣ G̣ p̣ ḍ p̣ ḍ Ṣ́ (anuloma part)

Ṣ́ ḍ p̣ ḍ p̣ G̣ p̣ Ḍ ṣ | Ṛ g̣ ṛ Ṣ́ ḍ P̣ G̣ ṛ || (viloma part)

- (2) *Svara sāhitya*. When an appropriate sāhitya is added on to the chitta svara, the technical appendage is called a *svara sāhitya*. In this case the svara part is sung at the end of the anupallavi and the sāhitya part at the end of the charana. The sāhitya of this section is so couched that a continuity of sense is maintained when sung at the conclusion of the anupallavi or charana.

The pieces : *O Jagadamba* (Anandabhairavi), *Janani ninnu vina* (Ritigaula), *Ninu sevinchina* (Yadukula kam-bhoji), *Sri Pārthasārathe* (Bhairavi) and *Vāchāma gocharundani* (Atāna) contain some fine examples of svara sāhitya. The kritis of Subbaraya Sastri and Mysore Sadasiva Rao contain some of the most beautiful svara sāhityas.

There are also instances when beautiful and fitting svara sāhityas have been added to kritis by subsequent composers. For example the svara sāhitya for Syāma Sastri's *Palinchi Kāmākshi Pāvani* (Madhyamāvatī) was the addition of Annaswāmy Sāstri.

- (3) *Madhyamakāla sāhitya*. This is an integral part of a kriti. This passage may occur at the end of the anupallavi or charana or both and is set in the madhyama kāla (quicker tempo) *i.e.* in the second degree of speed. The madhyama kāla sāhityas add a certain majesty to compositions. Excellent examples of this technical beauty are to be found in the compositions of Muttuswamy Dikshitar. Sometimes madhyamakāla sāhityas also occur in the pallavi, as for instance in the kriti, *Sri Sarasvatī namostu te* in Arabhi.

Madhyamakāla sāhityas are not appropriate themes for developing niraval, but they may admit of kalpana svaras being developed. As an example may be mentioned the madhyamakāla sāhitya adorning the kriti, *Koniyādina nāpai* (Kambhoji) of Vīna Kuppayyar.

- (4) *Solkattu svara*. This is the case of a regular chitta svara, where, in some portions, instead of the solfa syllables, appropriate *jatis* (tala mnemonics) are introduced and sung. The jatis are sung to the music of the displaced svaras. As the section is sung, one will hear the svaras and jatis alternately. This svara passage interspersed with jatis forms a pleasant variety in the midst of a kriti and heightens the beauty of the composition. The pieces: *Sri Mahā Gaṇapati* (Gaula), *Ananda natana prakāsam* (Kedāra) and *Pārthasārādhini sevimpā* (Yadukula kāmboji) contain splendid examples of solkattu svaras.

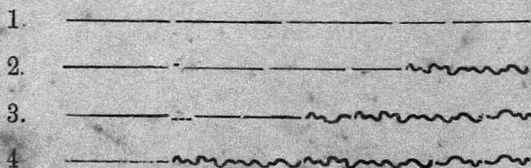
There are instances of apt solkattu svaras being added to kritis by subsequent composers. The solkattu svara to the Gaula kriti, *Sri Mahā Gaṇapati* is the contribution of Radhakrishna-Bhāgavathar, the son of Pallavi Somu Iyer of Talanāyar.

Kritis have also been enriched by the introduction of *sangatis*. Sangatis are variations on a musical theme, developed step by step. Each sangati is an evolution from the previous one and marks an improvement upon it. Sangatis are also an integral and indispensable part of the composition. They might be compared to the stones of an arch and the deletion of even one of them or

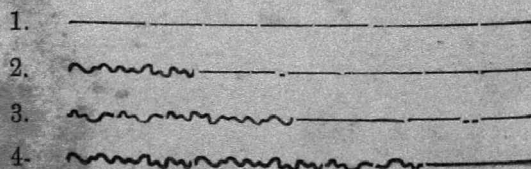
the change in their sequence will destroy the beauty and the composite character of the piece. Sangatis have been introduced either for emphasising certain delicate and latent shades in the meaning of the *sāhitya*, or for bringing out the colourful and varied aspects of the *rāga bhāva*. Some kritis like *Chera rāva demina* (Ritigaula) have sets of sangatis. The credit of introducing sangatis in kritis with a definite musical purpose goes to Tyagaraja.

Sangatis may be developed from the terminal or initial phrase of a musical theme. The sangatis for the pallavi of *Koluvamaregada* (Todi) may be cited as an instance of the former type and the sangatis for the pallavi of *Sri Raghu-varāprameya* (Kāmbhoji), as an instance of the latter type. Rarely sangatis may progress from the central part of a theme as in the phrase: *srīngāramu* of the pallavi of *Chetulāra* (Bhairavi). The illustrations A, B and C given below visually represent the progression of sangatis in these three types. The wavy lines show the *varied portions* of the theme:—

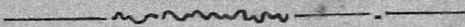
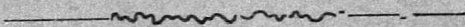
A. Sangatis progressing from the end of a theme.



B. Sangatis progressing from the beginning of a theme.



C. Sangatis
progressing
from the
central part
of a theme.

1. 
2. 
2. 
4. 

In reckoning the sangatis, the fundamental theme itself is reckoned as the first sangati. The last sangati wherein the climax is reached is characterised by melodic fulness and rhythmical liveliness. In some cases the dhātu of the last sangati is found to be entirely different from the music of the original theme. In the sangatis of the kritis, *Darini telusu konti* (Suddha sāveri) and *Nājivādhāra* (Bilahari), some of the ancient alankāras (svara-group patterns) are aptly introduced. In order to enable the listeners to grasp and appreciate the subtle and progressive changes of the dhātu, each sangati is sung twice.

The number of sangatis in the different sections of a kriti ought to bear a just proportion. The anupallavi may have an equal number of sangatis as the pallavi, or a less number. The charana may or may not have sangatis. It will not be in keeping with the symmetrical construction of the piece, if the charana is loaded with a number of sangatis, and its pallavi and anupallavi have either few or no sangatis.

Sangatis in the compositions of some minor composers are found to be artificially developed. As a rule, it is not advisable to add sangatis to compositions, wherein the composers themselves did not contemplate them. Such an introduction will interfere with the scheme of development of the dhātu followed by the composer. The compositions sound perfect without the added sangatis. But it must be

said tha the sangatis added by Mahā Vaidyanātha Iyer (1844-1893) to the kritis: *Vātāpi Ganapatim* (Hamsadhvani), *Chintaya mā* (Bhairavi) and *Sri Subrahmanyāya namaste* (Kāmbhoji) nicely fit in with the pieces.

In addition to the above, we also meet with some literary and prosodical beauties in the sāhitya of kritis.

Svarākshara is one such, and has been successfully attempted by some composers. In a svarākshara passage, the mātu and the dhātu are exactly identical i.e., the sāhitya syllables as well as their corresponding svara letters are the same. It requires intellectual gifts of a high order to attempt this kind of technical beauty. The compositions of Svāti Tirunāl of Travancore are full of this technical beauty. In the following examples the bracketed portions are examples of svarāksharas :—

(1) { pa da sa } ro ja —the charana of the Navarāga
{ ప ద స } రో జ mālika varna.

(2) Sri Rama { pā da ma } Amritavāhini kriti of
శ్రీ రామ { పా ద మా } Tyāgaraja.

The first ettugada svara of the Kāmbhoji varna beginning with the words: *Pankajākshi pai* :—

(3) { Ni dā ri ni da pa ga mā ni ni } yunnadi
{ నీ దా రి ని ద ప్ప గ మా ని ని } యున్నది

(4) { Ni sa ri sa } mā na Manipravāla kriti in
{ నీ స రి స } మా న Bhairavi.

(5) { sa ri ga pā ga } ichchene { sā dā pā ga } ichchera
{ స రి గ పా గా } ఇచ్చెనే { సా దా పా గా } ఇచ్చెరా

(A pallavi in Mohana raga).

Svarāksharas may be classified into :—

1. Direct,
2. Suggestive.

The examples given above are all instances of *direct svarāksharas*. *Suggestive svarāksharas* are cases wherein the sāhitya syllables do not possess the same vowel endings as the corresponding svara letters. The opening phrases of Syāma Sastri's kriti : *Durusuga* (Sāveri) and Svāti Tirunāl's kriti : *Sārasāksha* (Pantavarāli) furnish good examples of this latter class :—

$$1. \left\{ \begin{array}{ccc} \dot{D} & \dot{r} & \dot{s} \\ \dot{D}u & ru & su \end{array} \right\} \begin{array}{c} D \\ ga \end{array} - \left\{ \begin{array}{ccc} \dot{d} & \dot{r} & \dot{s} \\ \dot{d}u & ru & su \end{array} \right\} \begin{array}{c} \dot{d} \\ \dot{r} \end{array}$$

$$2. \left\{ \begin{array}{ccc} \dot{S} & \dot{r} & \dot{S} \\ Sā & ra & sā \end{array} \right\} \begin{array}{c} n \\ ksha \end{array} - \left\{ \begin{array}{ccc} \dot{n} & \dot{r} & \dot{n} \\ \dot{n}a & r & \dot{n}a \end{array} \right\} \begin{array}{c} \dot{n} \\ \dot{k} \end{array}$$

Combinations of direct and suggestive svarāksharas also occur in some cases. The following phrase, from the charana of Subbaraya Sastri's kriti : *Ninu sevinchina* (Yadukulakāmbhoji) is a good example :—

$$\left\{ \begin{array}{ccc} p & \dot{D} & S ; r & S \\ pa & \dot{d}a & sā & ra & sa \end{array} \right\} \begin{array}{c} R & P \\ yug & ma \end{array} - \left\{ \begin{array}{ccc} \dot{p} & \dot{d}a & \dot{s}a ; r & \dot{s}a \\ \dot{p} & \dot{d} & \dot{s}a & r & \dot{s} \end{array} \right\} \begin{array}{c} \dot{r} & \dot{p} \\ \dot{y}u & \dot{g} \end{array}$$

Manipravāla kritis. In the sāhitya of these songs, the words of two or more languages figure and the sentences are so framed and presented, as not to offend against the rules of grammar or prosody. A complete idea is conveyed in each

case. Muttusvamy Dikshitar's kriti in Kāpi raga: *Venkatāchalapate*, is a good example. The sāhitya of the pallavi and anupallavi of this song is given below in the scripts of the respective languages for the sake of clearness :—

Pallavi :—

வேகடாச்சுலபதே விஸ்நு நமஸ்து தீர்த்தே நமஸு ரக்ஷயிஷ்யமயா ॥

Anupallavi :—

பங்காசனமுதாதிவிநுத வதம நாக்ரயிஞ்சி வாரி கௌ

சங்கடமுல தீர்த்தி சம்பவலிச்சி மங்களம் பொருந்திய
புளியலத்தில் விளங்கும் ॥

The kritis: *Ni sari samāna* in Bhairavi and *Sri Tyāgarāja Svami ni mahima* in Vāchaspati raga are also instances of manipravāla kritis.

In some kritis, the *prāsa* beauty is carried to extremes. The jingle of the *recurring prāsa* at regular intervals adds beauty to the song. The charanas of the kritis: *Eduta nilachite* (Sankarābharana) and *Parāsakti manuparāda* (Saveri) are good examples. The charanas of the kritis: *Nārada gānalola* (Athana) of Tyagaraja and *Kanakasabhāpati darisanam* (Dhanyāsi) of Gopalakrishna Bhārati contain beautiful antya prāsas.

The sāhityas of the kritis: *Pāhimām Sri Rāmayante* (Yadukulakāmbhoji) of Bhadrāchala Rāmadās and *Māye tvam yāhi* (Sudhātārangini) of Muthuswami Dikshitar are luxuriously decorated with rhetorical beauties. The sahitya of the kriti: *Tyāgarājayogavaibhavam* (Anandabhairavi) of

Muthuswami Dikshitar has both the gopuchcha and the srotovaha types of literary beauties within it.

In the sāhityas of songs relating to deities associated with dance like Natarāja, Krishna and Ganapati, jatis are introduced. Such solkattu sāhityas are interesting to hear. In the song *Natanamādinār* (Vasanta) we have a beautiful passage of jatis.

A kriti may be the product of inspiration or of conscious effort. The technical beauties mentioned above are all products of conscious effort.

All these technical and literary beauties are styled *non-essential*, because, even if all these are absent, the kriti will still be a perfect composition. The non-essential angas may be compared to the dazzling and attractive designs, and the lace and embroidery work figuring in costly sarees. Too many of the non-essential angas tacked on to a kriti will result in heaviness and the piece itself will not be able to sustain the ornamental load.

Since the kriti composition alone is capable of being embellished to such an extent as shown above, it is no wonder that every composer during the Tyagaraja and post-Tyagaraja period showed a definite bias towards this type of composition.

As for the *gānakrama* of a kriti, the pallavi, anupallavi and the chitta svara if the composition has one, are sung in order and the part concluded with the pallavi. This is followed by the charana. After this the chitta svara is again sung and the composition concluded with the pallavi. If instead of the chitta svara, the composition has a svara sāhitya, the solfa part of this technical beauty is sung at the end of the

anupallavi and the sâhitya part at the end of the charana. Each sangati is sung twice as a rule, in order to enable the listeners to follow the gradual changes of the dhātu with interest. A feeling of *expectancy* is aroused in the audience as they listen to the sangatis. When one sangati is sung, they eagerly await the next one, and so on. A feeling of æsthetic joy and fulness comes to them when they listen to the last sangati. At the conclusion of the anupallavi and charana, the last sangati of the pallavi is sung, but only once and the section or the composition concluded (Example: *Kannatandri nāpai*, Devamanohari). In the case of kritis wherein the *peak sangati* of the pallavi (i. e. the sangati wherein the climax of the melodic beauty is reached) is not the last sangati, but the penultimate sangati, (Example: *Bhajana seya rāda*, Nata) the penultimate sangati is sung at the conclusion of the anupallavi and the charana. The pallavis of some kritis are provided with a special sangati for being sung at the conclusion of the anupallavi and the charana. In such cases, this special sangati of the pallavi should alone be sung at the conclusion of the anupallavi and charana and the section or the composition concluded. In kritis like *Nājivādhāra* (Bilahari), some of the later sangatis of the pallavi have small terminal phrases which appropriately lead on to the next sangatis. In such cases, the terminal phrase is sung during the repetition of the sangati in order to naturally lead on to the next sangati.

In kritis with charanas of different dhātus, the singing of all the charanas is obligatory. Where the charanas have the same dhātu, it is open to a singer to sing one, some or all the charanas. Usually the mudra charana is sung; but some other charana may be sung in the place of the

mudra charana, if the preferred charana has a theme appropriate for developing niraval or kalpana svara, or contains a nice idea or rhetorical beauty. Where the sâhitya happens to be richly descriptive, as in the kriti : *Lekana ninnu* (Asâveri), all the charanas are sung, even though in this piece, the dhâtu of the anupallavi and the four charanas happens to be the same.

Halting on a note may be made at appropriate places in the kriti. Besides adding to the euphony, the halting gives breathing space to singers. The accompanying Violinist also contributes his share to the general effect. A valuable opportunity is provided herein for the steadying of laya and the mridangam player fills up this part with suitable rhythmic display. In pieces in adi tâla, the duration of the halt may be about $\frac{1}{2}$ or $1\frac{1}{2}$ âvartas and in pieces of shorter time-measures like rūpaka or chāpu, the duration of the halt may be one or three âvartas. The anupallavi of the kriti : *Ninu vinā nāmadendu* (Navarasakannada) provides an excellent example of a halting place.

Where appropriate, kalpana svaras alone or niraval followed by kalpana svaras may be attempted. Appropriate themes for niraval may be found in the anupallavi or charana of a kriti. Such themes may occur at the commencement of the section or in the middle of the section.

Group kritis

Those kritis, which are not separate and distinct units by themselves, but form links in a chain of compositions composed on a common theme are termed *group kritis*. Pieces like *Evari mātā vinnāvo* and *Evarani nirnayin-*

chirirā are separate kritis by themselves having a complete sense. But pieces like *Kamalāmbām bhajare* and *Saroja dala netri* form units of a group of kritis forming a composite whole. The former piece belongs to the *Kamalāmba Navāvaranam* of Muttuswamy Dikshitar and the latter to the *Navaratna mālīka* of Syāma Sāstri. The number of individual compositions in group kritis is usually either 5 or 9.

The following Table gives „ some of the prominent group kritis :—

Table XIII

Name of the composer and the title of the group kritis.	Theme
Tyagaraja's	
(1) <i>Pancharatn m</i>	The well-known compositions, in Nāta, Gaula, Arabhi, Srīrāga and Varāli, of that name.
(2) <i>Kovur Pancharatnam</i>	A set of five kritis composed in praise of Sri Sundareswara swamy of Kovur when he visited that shrine.
(3) <i>Tiruvottiyur Pancharatnam</i>	A set of five kritis composed in praise of Goddess Tripurasundari of the Tiruvottiyur temple during his visit to that place.
Muthuswamy Dikshitar's	
(1) <i>Kamalāmba Navāvaranam</i>	9 kritis on Kamalāmbika.
(2) <i>Abhayāmba Navavaranam</i>	9 kritis on Abhayāmbika.

Table XIII—*contd.*

Name of the composer and the title of the group kritis	Theme
(3) <i>Siva navāvaranam.</i>	9 kritis on Siva (Tyagaraja).
(4) <i>Panchalinga Sthala kritis</i>	5 kritis in praise of the 5 lingas:— <i>Prithiri, Appu, Teyu, Vāyu</i> and <i>Akāsa</i> , enshrined respectively in the temples at Conjeevaram, Tiruvānaikkāval, Tiruvannāmalai, Kālahasti and Chidambaram.
(5) <i>Navagraha kritis</i> (also called <i>Vāra kirtanas</i>)	In praise of the planets:— <i>Sūrya</i> (sun), <i>Chandra</i> (moon), <i>Angāraka</i> (mars), <i>Budha</i> (mercury), <i>Bṛhaspati</i> (jupiter), <i>Sukra</i> (venus), <i>Sanaischara</i> (saturn) and <i>Rāhu</i> and <i>Ketu</i> (the two <i>chhāyā</i> grahas).
Syama Sastri's <i>Navaratna mālīka</i>	9 kritis in praise of Goddess <i>Mīnākshi</i> of <i>Madura</i> .
Vina Kuppayyar's <i>Kālahastisa Pancharatnam</i>	5 kritis on <i>Kālahastisa</i>
<i>Venkatesa</i> „	Do. <i>Venkatesvara</i>

Like group kritis, there are also the group kirtanas. Tyagaraja's *Divyanāma kirtanas*, *Utsava sampradāya kirtanas* and *Samkshepa-Rāmāyana kirtanas* are examples.

The names of some of the prominent composers of kritis, their signatures (ankitam or mudra) and the languages in which they have composed are given in the following table :—

Table XIV.

Composer's name.	Signature.	Languages in which he has composed.
Musical Trinity {	<i>Tyāgarāja</i>	Telugu & Sanskrit
	<i>Muthuswāmy Dikshitar</i>	Sanskrit, Telugu & Tamil
	<i>Syāma Sāstri</i>	Telugu, Sanskrit & Tamil
Rāmaswāmy Dikshitar	<i>Venkata Krishna</i>	Telugu and Sanskrit
Mārgadarsi Seshayyangār	<i>Kosala</i>	Sanskrit
Svāti Tirunāl	<i>Padmanābha</i> or the equivalent of that name.	Sanskrit, Hindi and Telugu and in <i>Manipravālam</i> (Sanskrit - Malayalam)
Anayya	<i>Umādāsa</i>	Telugu and Tamil
Pallavi Gopālayyar	<i>Venkata</i>	Telugu
Vina Kuppayyar and Tiruvottiyur Tyāgayyar	<i>Gopāla dāsa</i>	Telugu & Sanskrit
Subbarāya Sāstri	<i>Kumāra</i>	Telugu
Srinivasa	<i>Vijayagopala</i>	Telugu

Table XIV —*contd.*

Composer's name.	Signature.	Languages in which he has composed.
Patnam Subrahmanya Iyer	<i>Venkatesa</i>	Telugu, Sanskrit & Tamil
Karur Dakshināmurti Iyer & Devudu Iyer	<i>Garbhapuri</i>	Telugu
Mysore Sadāsiva Rao	<i>Sadāsiva</i>	Telugu & Sanskrit
Pallavi Seshayyar	<i>Sesha</i>	Telugu
Rāmaswāmi Sivan and Mahā Vaidyanātha Iyer.	<i>Guhadāsa</i>	Sanskrit, Telugu and Tamil.
Gopālakrishna Bhārati	<i>Gopāla-Krishna or Bālakrishna</i>	Tamil

The charanas of some kirtanas have jatis introduced at appropriate places and they provide a welcome and pleasing variety. Such passages of jatis are termed *solkattu* சொகட்டு *sāhityas* on the analogy of *solkattu svaras*.

Ādiya pāda ஆடிய பாடா (Sankarābharana) of Gopala krishna Bhārati, some of the songs figuring in the *Krishna lila tarangini* of Nārāyana Tirtha and many Tiruppugazh hymns contain beautiful *solkattu sāhityas*. In the Tamil song, *Natana mādinar* (Vasanta) of Gopālakrishna Bhārati, there is a whole passage of *solkattu*, and like a *chitta svara*, it is sung at the end of the *anupallavi* and the *charana*.

The *Devaranāmas* of Purandara Dās are typical models of devotional songs. They are the outpourings of a sterling devotee during moments of intense religious experience. Their language is simple and can be understood by the average person. They are pregnant with lofty ideas and contain within them the quintessence of the Upanishads. They breathe the fragrance of bhakti. Clothed in delightful music, they touch our hearts when heard.

As for the *gānakrama* of a kirtana, the procedure is the same as that for a kriti with the sections: pallavi, anupallavi and charanas. All the charanas are however sung herein, on account of their devotional value. In the case of divyanāma kirtanas of the *ekadhātu type* (i. e. wherein the pallavi and the charanas are sung to the same dhātu), the charanas are sung continuously without reverting to the pallavi at each stage. *Sri Rāma Jayarāma* and *Pāhi Rāmachandra Rāghava*, both in Yādukulakāmbhoji raga, are examples of this type. Where the divyanāma kirtana is of the *dvidhātu type* (i. e. wherein the music of the charana is different from that of the pallavi), the pallavi is sung at the conclusion of each charana. *Sri Rāma Sri Rāma* (Sahāna) and *Pāhi Rāmachandra pālita Surendra* (Sankarābharana) are examples of this other type. It will be seen that in this latter case, the dhātu as well as the mātu of the charanas naturally lead on to the pallavi. A sense of completeness is felt only when the pallavi is repeated at the conclusion of each charana.

It may be observed in passing, that in cases of compositions like Tyāgarāja's *Rāma nannu brōvara* (Harikāmbhoji), which lie on the borderland between a kriti and a kirtana, a performer in a kacheheri will lay more emphasis on the

excellences of its musical construction and will attempt a beautiful niraval and kalpana svaras for the opening theme of the charana. The same piece when sung in a bhajana, will be rendered with emphasis on the spiritual contents of the sāhitya. The responses of the audience too, differ in the two cases. In the kachcheri, the listeners grow rapturous over the stylish rendering, the thrilling niraval and the kalpana svaras teeming with complex svara-group patterns. In the bhajana, the audience listen to the piece with reverential devotion and the spiritual strings of their hearts find a ready echo.

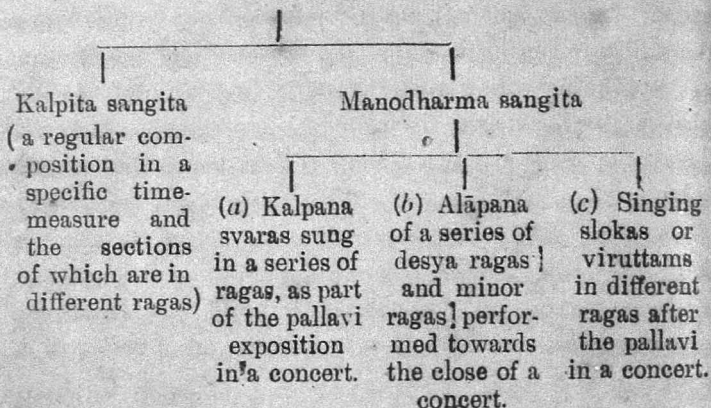
Purandara Dās, Bhadrāchala Rāmadās, Tāllapākam Chinnayya, Nārāyana Tirtha, Giriraja Kavi, Sadāsiva Brahmendra, Vijayagopālasāwmy, Rāmachandra Yatindra, Sārangapani, Tyāgarāja, Gopālakrishna Bhārati, Arunāchala Kavirāyar, Kavikunjara Bhārati, Madhurakavi Bhārati, Māmbazhakkavirāyar, Rāmalinga Swāmi and Nilakanta Sivan are some of the prominent composers of kirtanas.

R ā g a m ā l i k ā

Rāgamālikās are interesting types as showing how variety can be attained by couching the different sections of a composition in different ragas. By the term '*rāgamālikā*' is generally meant the composition of that name. It is a set piece like the varna or a kriti. There are also *rāgamālika* varnas, *rāgamālika* kirtanas and *gītas* and *svarajatis* after the model of a *rāgamālika*. In *manodharma sangita*, however the term *rāgamālika* signifies the chain of *kalpana* svaras sung in different ragas at the end of a *pallavi*. Also, when a musician sings *slokas*, *padhyas*, *viruttams* and the stanzas of a *Tevāram* or *Tiruvāchakam* in different ragas,

he is said to sing a *rāgamālika*. Brief *ālāpanas* of different ragas performed towards the close of a concert are also referred to as a *rāgamālika*.

RAGAMĀLIKA



The *rāgamālikā* (garland of ragas) proper is a beautiful form consisting of a pallavi, anupallavi and many charanas. The charanas are of the same length. The anupallavi may be in the same raga as the pallavi, or in a different raga. In the former case, the length of the pallavi and anupallavi, together, will be found to be equal to the length of the charana. Sometimes the anupallavi is dispensed with. All the sections are in different ragas and the raga names are dexterously interwoven with the words of the *sāhitya*, without affecting its meaning. Composers of *rāgamālikas* have exhibited a certain cleverness in dissecting the raga names for this purpose.

The music of the anupallavi and the charanas is followed by an appropriate *chitta svara* (solfa passage) in the respective ragas. This is again followed by a short complementary

svara passage in the pallavi raga. This bridge-like complementary svara passage serves as a connecting link between the music of the anupallavi and the charanas on the one hand, and the music of the pallavi on the other ; and the transition from one raga to another is effected in a pleasing manner. This solfa link in the pallavi raga is like the coda of European music and facilitates the return to the pallavi. At the end of the composition there is a string of full āvarta or half-āvarta svara passages in all the ragas, but in the *inverse order* (*viloma krama*). This coloured solfa passage sung at the end greatly heightens the beauty of the composition. Longer rāgamālikas are divided into sections, each section being an independent part. The sāhitya of a rāgamālika is usually of a devotional character. It may also be on a love theme or in praise of a patron.

As for the order in which ragas should succeed one another in a rāgamālika, certain general principles are observed. There are cases wherein the composer is tied down to a particular order, irrespective of aesthetic considerations, as for instance when he chooses to compose a rāgamālika embracing all the 72 melakarta ragas. Likewise in the *īnarāgamālika varna* also, the order of ragas is determined. But where the composer is free to choose his own order, the following considerations are kept in view.

From the stand-points of *bhāva* and *rasa*, there should be a naturalness in the sequence of ragas. A feeling of abruptness should not be experienced when the transition from one raga to another takes place. It is with a view to avoid this feeling of abruptness that a complementary svara passage in the pallavi raga (sometimes referred to as the *pallavi*

svara) is composed for being sung at the end of each section. Ragas which possess one or more common *svaras* and which are able to rouse similar or related *rasas* (feelings) can succeed one another in a fitting manner. Ragas which from an æsthetic point of view can succeed one another in a *rāgamālīka* are termed *mītra rāgas*.

Closely related ragas like Darbār and Nāyaki, Bhairavi and Mānji, Ahiri and Vakulābharana, Sahāna and Dvijāvanti, Kedāragaula and Nārāyanagaula, Vārāli and Vijayasrī cannot come one after another. Any two contiguous ragas in a *rāgamālīka* should be melodically distinct and clear-cut from the point of view of the general listener. With a few exceptions, *janya* ragas belonging to the same *mela* will not occur in succession. Ragas of diametrically opposite *rasas* too, like Athāna and Punnāgavarāli will not occur as contiguous ragas.

Four will be the minimum number of ragas for a *rāgamālīka* composition. The maximum number of ragas is sometimes defined by the theme chosen by the composer as for instance the *Pakshamālīka*, where the number of *rāgas* has to be 15, and the *Nakshatramālīka*, where the number of ragas has to be 27 and so on.

In a *rāgamālīka* the *pallavi* and the last *charana* should be in auspicious ragas. Ragas which can be sung at all times are generally preferred in a *rāgamālīka* unless the composer is obliged to choose a particular set of ragas.

A person who wishes to compose a *rāgamālīka* may choose the ragas figuring in any of the standard *rāgamālīkas* and adopt either the same sequence of ragas or the inverse order of their sequence. But Bhupāla, which is quite a nice raga for the last *charana* of a *rāgamālīka* composition, will not be good as an opening raga for this form.

Rāgamālikas are lovely and enjoyable concert pieces. Besides a high entertainment value, this form possesses a lakshya value as well. The introduction of the raga names sets at rest doubts regarding their correct etymology. For example, from the *Chaturdasa Rāgamālika* of Muthuswamy Dikshitar, we learn that *Sāma* is the correct name of the raga and *not Syāma*. The melodic individualities of some rare ragas like *Pratāpa chintāmani* are revealed to us through some rāgamālikas.

There are some rāgamālikas which lack in one or two essential points relating to the lakshana of the form. The raga names are absent in some, and a ^{few} do not possess chitta svaras.

Raga kadambakam is the name for a rāgamālika in earlier works.

Some of the well-known rāgamālikas are:—

- (1) *Nitya Kalyāni Rāgamālika*, a typical composition in 8 ragas by Sitārāmayya.
- (2) *Pannagendra sayana*, a beautiful rāgamālika in 8 ragas by H. H. Swati Tirunal Maharajah of Travancore.
- (3) *Chaturdasa Rāgamālika* in 14 ragas by Muthuswamy Dikshitar.

In this rāgamālika, the viloma krama chitta svara has also a sāhitya.

- (4) *Apurupa rāga Chatushtaya Rāgamālika* (*Siva Bhupate—Desādi tāla*) in 4 ragas, and *Navaratna Rāgamālika* (*Karuninchumu Lokādhāra—Adi tāla*) in 9 ragas; both by Mānambuchāyādi Venkatasubbayyar.

The ragas figuring in the *Chatushtaya rāgamālīka* are : Pratāpa chintāmani, Abhogi, Vijayasri and Purnachandrika ; and in the *N waratna rāgamālīka*, Nāta, Todi, Bhairavi, Kāmbhoji, Kalyāni, Athāna, Madhyamāvatī, Nāyaki and Surati. In these two rāgamālīkas, each section is an independent unit by itself and is concluded by singing the opening theme of the self-same section ; when a section is over, the next section is commenced without reverting to the pallavi.

- (5) *Ambā ninnu nera nammiti*, a rāgamālīka in 9 ragas. There are no chitta svaras in this rāgamālīka and the two halves of each charana are set in two different ragas. This composition is by Chinni Krishna Dāsa.
- (6) *Ārabhimānam* in Tamil, in 16 ragas by Tarangambādi Panchanadayyar.
- (7) *Paksha mālīka* in 15 ragas.
- (8) The 72 *Melakarta Rāgamālīka* by Mahā Vaidyanātha Iyer.
- (9) The 72 *Rāgānga Rāgamālīka* by Subbarāma Dikshitar and Krishna Kavi.
- (10) *Manasāvedi*, a rāgamālīka in 48 ragas by Ramaswami Dikshitar.
- (11) *Navaratna Rāgamālīka (Gāravamū ganna)* in 9 ragas by Subbarāma Dikshitar.
- (12) *Sriramana padma nayana hari*, a rāgamālīka in 16 ragas by Tiruvottiyur Tyāgayyar.

NOTE.—The *Sata rāga ratna mālīka* of Tyāgarāja is a garland of 100 kirtanas in 100 different rāgas and is a monumental composition.

In addition to the above composers, Parameswara Bhāgavatar and C. S. Krishnaswami Iyer also have composed rāgamālikas.

Rāgamālika kirtana is a composition wherein the pallavi, anupallavi and the charanas are set in different rāgas. A fine example of this type is the piece: *Jaya Jaya Gokula pāla* wherein we come across the rāgas: Bhairavi, Athāna, Kāmbhoji, Kalyāni and Surati. Nārāyana Tirtha, the author of the song composed it only in Kuranji rāga, but it was converted into a rāgamālika by Tiruvottiyur Tyāgayyar.

The Tamil song, *Enakkun irupadam ninaikka varam arulvāi*, figuring in the prologue to Arunāchalakkavirāyar's opera, *Rāma nātakam* is another example of a song which, originally set by the composer in Saurāshtra raga—Triputa tala, has been metamorphosed into a rāgamālika in recent times. In this changed version, the pallavi is set in Kalyāni and the other sections in appropriate rakti ragas. There are no chitta svaras. The rāgamālika kirtana of Sarangapāni, *Kanna tolli karuninchi brovumika* in Adi tāla, consists of a pallavi, anupallavi and three charanas. Each charana consists of four pādas and each pāda is in a separate raga, the raga name being incorporated in the sāhitya of each pāda. This composition stands as a unique example of a rāgamālika kirtana, wherein the dhātū and the mātū are by the same composer.

Tālamālika is a composition wherein the different sections are in different tālas, but the entire piece itself is in one and the same rāga. As in rāgamālikas, in tālamālikas also, there should be a naturalness in the sequence of the talas.

We come across tālamālikas in the sphere of manodharma sangīta as well. Herein the musician selects a pallavi and

renders it in different tālas, compressing or extending the original musical theme according to the magnitude of the new tāla. It is only certain classes of pallavis that are eminently suited for this purpose. Tiruvottiyur Tyāgayyar used to delight his audiences by his tālamālikas in pallavis.

Pancha tālesvaram is a tālamālika in five sections, each section being set in one of the five mārgi tālas. *Tālārnavam* was a tālamālika and its sections, udgrāha, dhruva, and ābhoga were in different tālas. The sāhitya was either of prose or poetry. This is an obsolete form.

Rāgatālamālika is a rāgamālika and a tālamālika rolled into one. It is a very difficult type of composition and only composers of extraordinary skill and creative talents can attempt this type. In South Indian music, we have a grand example of this type in the monumental *Rāgatālamālika* of Ramaswamy Dikshitar in 108 rāgas and tālas, beginning with the words:—*Nātakādi vidyala*. Each section, besides being in a separate rāga and tāla, has the name of the rāga and tāla incorporated in the sāhitya. *Srivilāsa*, *Sriranga prabandham* and *Umātilaka prabandham* are varieties of rāgatālamālikas.

Rāgamālikas and Rāgatālamālikas are the longest compositions in Indian music.

P a d a

Padas (పద పద్యం పదము) are scholarly compositions. The term *pada* was originally used to signify a devotional song. It is in this sense, that we talk of the Kannada padas of Purandara Dās (పూరందర పద్యము) and the Tamil padams of Muttu Tāndavar. In the musical parlance of the modern

period, the term is restricted to the type of composition which belongs to the sphere of dance music and which treats of the varied aspects of *nāyaka-nāyaki* relationships. Although strictly a dance form, yet the pada is sung in concerts of art music, on account of its musical excellence. To understand a pada aright and to enter truly into its spirit, one must have some knowledge of the *nāyaka-nāyaki* (lover and the beloved) lakshanas

One of the outstanding features of Indian culture is the development of the idea of *sringāra* to a degree of perfection. This accounts for the profusion of songs on the love theme. In fact there are as many songs on *sringāra* as on *bhakti* (devotion). These two themes provided a fund of material for the Indian composers to draw their inspiration from. The characteristics of various types of *nāyakas* and *nāyakis* are described in minutest detail in the standard works on the subject. There are names given to the different types of *nāyakas* and *nāyakis*. Before singing a pada, one should visualise before his mind, the situation in which the pada is sung, by whom it is sung and to whom it is addressed. There are padas sung by *nāyakas*, *nāyakis* and *sakhis*. Kshetrajna, the greatest composer of padas, has composed padas for almost all the possible situations conceived of in the *sringāra sāstra*.

Whereas the kirtana seeks to reach god through praise, the pada seeks to attain the goal through love. The *madhura bhāva* method of approach to god is one of the primordial concepts of the Hindu mind. The union of the individual soul with the universal soul, the poetic conception of love, the ideal of spiritualized love, the sufferings of love, the expectation of happiness or the failure to realise the goal are some

of the themes found in the padas. The bhāva of the dhātu and the bhāva of the sāhitya balance each other and contribute to the unity of the composition. The sahityas of some padas contain far-fetched ideas. Most of the padas treat of *gaurava sringāra* (dignified love).

The doctrine, that the worship of God in the *nāyaka-nāyaki bhāva* is one of the *sreshta mārgas* (dignified methods) found great support during the mediæval period and the earlier part of the post mediæval period. Padas were composed in profusion mostly during these periods. All pada compositions admit of a dual meaning: the outward *sringāra* meaning and the inner philosophical meaning (*bahir sringāra* and *antar bhakti*). The characters: *nāyaka*, *nāyaki* and *sakhi* stand respectively as the equivalents of the Lord (*Paramātma*), the devotee (*Jīvātma*) and the Guru who leads the devotee on to the path of mukti (liberation) by his sage counsel. The *Gita Govinda* of Jayadeva which is the earliest work of acknowledged merit in this direction, served as a beacon-light to many composers of padas. There is a belief that Jayadeva re-incarnated himself as Nārāyana Tirtha and still later as Kshetrajna, to write on the same theme, but in different forms.

The feelings and experiences of a devotee in quest of God and the feelings and experiences of a woman, yearning for the *nāyaka of her choice* are corresponding ones and these are immortalised in the padas. The language though simple, is pregnant with meaning.

Whereas the Telugu padakāras chose Krishna as their hero, the Tamil padakāras chose Subrahmanya instead.

There are padas of a purely sringāra nature which will not admit of any philosophical meaning by any stretch of imagination. There are also the satirical padas and humorous padas.

The padas of Parimalaranga contain rhetorical beauties like yamakam (*Sāranganyanaro*). The humorous padas of Sārangapāni contain many popular sayings. He has written many padas on other themes as well. His *Ī simala harinakshi* ఈ సీమల హరిణాక్షి (Kalyani - Adi) contains the names of some ragas. The pada *Avāluganti mātala* అవాలుగంటి మాటల (Saveri - Triputa) contains the names of herbs. *Padatinestamu* పడతినేస్తము contains the names of trees. *Kadapadāti rāniya* కడపదాటిరానీయ (Pantavarali-Adi) contains the names of places. *Varakanyā tilaka* వరకన్యాతిలక (Gaulipantu - Jhampa) contains the names of medicines. *Kankanamu gattinādu* కంకణము గట్టినాడు (Gaulipantu - Adi) contains the names of jewels.

The pada has the sections:— pallavi, anupallavi and charana. There may be three or more charanas. There are no sangatis and no terse sanchāras. Sangatis if found, are only later introductions. The music is slow and dignified and flows in a natural manner. Its diction is simple. The piece is replete with rāga bhāva and a sustained balance is maintained between the words and the dhātu throughout. The charanas have the same music. Colloquial words figure in the sāhitya. The signature of the composer may occur in the pallavi, anupallavi or the last charana.

In many padas it will be found that the music of the anupallavi repeats itself in the second half or the last quarter

of the charana, according as the charana is twice the length, or four times the length of the anupallavi. *Dāriju chu chunnadi* in Sankarābharana and *Aligite bhāgyamāye* in Huseni stand respectively as examples of these two types. In a few padas, the music of the first half of the charana is found to be the same as that of the pallavi. *E mātā lādina* in Yadukulakāmbhoji may be cited as an example.

Thus from the point of view of the dhātu, padas may be classified into :—

1. Where the music of the charana happens to be the sum of the music of the pallavi and anupallavi.
2. Where the music of the anupallavi alone is repeated in the charana.
3. Where the music of all the three āngas is distinct.

As for the *gānakrama* of a pada, it is the same as that for a kirtana with the divisions, pallavi, anupallavi and charana. But in the case of padas like *Yālāne vānipai* (Kāmbhoji) and *Ayyayyo vegatāyene* (Nādanāmakriya) it is usual to begin with the anupallavi. The anupallavi followed by the pallavi gives a *completed idea and this is a positive advantage from the listener's point of view. In addition, the music of the anupallavi is relatively brighter, inasmuch as its dhātu embraces the notes of the upper tetrachord and a few notes of the higher octave. This in part serves to relieve the monotony of the slow-time music characteristic of the pada.

* This procedure is sometimes adopted even while singing kritis like *Mariyadagadura* (Sankarabharana) and *Ela ni daya radu* (Athana) and for the same reason.

Svarasthāna pada is a composition wherein at the commencement of each āvarta, the svarākshara beauty is met with. Sārangapāni's well-known composition in Kalyani rāga, Adi tāla, beginning with the words: *Dāni prāyamu padārendlu* is an example.

Group padas. Just like group kritis, there are the *group padas*. The classic instance is the *Vijaya Rāghava Pancharatna*, a set of 5 padas composed by Kshetrajna in honour of Vijaya Rāghava Naik of Tanjore, a great patron of music in those days.

The names of some of the prominent composers of padas, their signatures and the languages in which they have composed are given in the following table :—

Table XV

Composer's name.	Signature.	Language.
Kshetraya ...	Muvvagopāla ...	Telugu
Sārangapāni ...	Venugopāla ...	Telugu
Muvvalur Sabhāpati Iyer }	Rajagopāla ...	Telugu
Ghanam Sinayya ...	Mannāruranga ...	Telugu
Subbarāmayyar ...	Muttukkumāra ...	Tamil
Ghanam Krishnayyar	Muttukkumāra or the equivalent }	Tamil
Kavi Kunjara Bhārati }	Kavikunjara ...	Tamil

Other prominent comoposers of Telugu padas are:—Kārvetnagar Govindasāmiāh, Pedda Dāsari, Parimalaranga, Kastūriranga, Yuvaranga, Merattur Venkatarāma Sastri, Sobhanagiri Vāru, Ghatapalli Vāru, Bollapuramu Vāru, Jatapalli Vāru, Inukonda Vāru, Sivarāmapuramu Vāru, Venangi Vāru, Mallikārjunudu, Virabhadrayya and Kavi Mātrubhutayya-

Māmbazha Kavirāyar has composed beautiful padas in Tamil.

Jāvali

Contrasted with the padas, which are songs of divine love or earnest and respectable love, are the *jāvalis*, which are songs treating of light love. They are songs of an erotic nature. The bright, attractive and catchy music in which they are clothed is mainly responsible for their popularity. The music is generally in madhyama kāla. Jāvalis are in common rāgas and tālas. Some of them are in attractive desya rāgas like Pharaz, Janjhuti, Kāfi, Behāg and Hamir-kalyāni. There are jāvalis sung by the *nāyaka*, the *nāyaki* and the *sakhi*. The *nayika-nayaka conventions* bereft of their dignity to some extent, are seen in this form. The language is usually colloquial and sometimes obscene.

The Jāvali had its birth in the nineteenth century. The word jāvali can be traced to the Kannada word *jāvadi*, which means a kind of lewd poetry. The fluency of musical flow is a characteristic feature of jāvalis. These love lyrics are clothed in a lighter and popular type of classical music. The deep and penetrating character of the bhāvas and dhātus, so characteristic of the pada, is absent in this form. Some jāvalis

have sangatis- A few musicians occasionally sing kalpana svaras for this amorous form. There are jāvalis in Telugu and Kannada. This form corresponds to the *ghazal* of Hindusthāni music.

Whereas the *padanāyaka* is a dignified character, no such convention is attached to the *nāyaka* in jāvalis. The theme of a *nāyaki* pining for the lover of her choice is there but both are human characters and are actuated by human desires and motives. The *sābityas* of jāvalis do not admit of the dual interpretation, *agapporul* (అకప్పొరుల్) inner meaning and *purapporul* (పురప్పొరుల్) outward or apparent meaning, so characteristic of the *padas* and wherein human *nāyakis* and divine *nāyakas* figure-

Some jāvalis like *Pāripovalera* (Bilahari—Rupakam) of Pattābhirāmayya contain rhetorical beauties. Sivarāmayya has composed a jāvali introducing sentences and phrases in English amidst Telugu words, and without offending the rules of prosody. The following relevant portions of the composition will bear this out:—

Kharaharapriya - Adi

Pallavi.

Oh my lovely లలనా - ఏలనే పొమ్మంటి ||

Charana.

2. ఇటువంటి step, is it fit to take ?

sit a while here - let me convince you ||

3. ఎవరి వద్దను don't be angry

శివరాముని పదముల పాడు ||

The jāvali has the sections: pallavi, anupallavi and charana. There may be one or more charanas. Some jāvalis

do not have an anupallavi. The charanas have the same dhātu. In a few jāvalis, the music of the charana is found to be the same as that of the anupallavi (Ex. *Innālla vālegāde-Pharaz*). Where the length of the charana happens to be twice that of the anupallavi, the music of its latter part will be found to be the same as that of the anupallavi.

The gānakrama of this form is the same as that of a sogn with the sections: pallavi, anupallavi and charana.

Besides Dharmapuri Subbarāyar (mudra: *Dharmapuri*), Pattābhirāmayya (mudra: *Tālavanesa*), Chandrasekhara Sastri of Bangalore (mudra: *Bālachandra*) and Bellary Rājā Rao (mudra: *Tirupatīsa*), Patnam Subrahmanya Iyer, Sivarāmayya, Rāmnād Srinivasa Iyengār and Venkatagiri-yappa of Hyderabad have composed jāvalis.

D a r u

Daru (దారు) is one of the types of compositions belonging to the sphere of applied music and figures in operas and dance dramas. It may be on a love theme or on a historical or purānic theme; it may also be in praise of a patron. The music is ordinarily in madhyama kāla. There is a profusion of words in the sāhitya. Arunāchala Kavi rāyar's *darus* figuring in the *Rāma Nātakam* are a class by themselves. Each *daru* contains a tamil proverb. Annāsawāmi Sāstri's "*Kāminchi yunnadira కామించి యన్నదిరా*" (Kedāragaula raga, Rūpaka tala) in praise of his patron, the Zamindar of Udayarpalayam, is a well-known *daru*.

The word *daru* can be traced to the ancient form, *dhruva*. The *pravesika daru* or the entrance song in dance dramas is always a beautiful composition. Whereas kirtanas are songs in praise of God, *darus* are songs narrating a part of a story or an episode.

The *darus* have the sections: *pallavi*, *anupallavi* and *charana*. Some of them are in couplets or quatrains. Some *darus* have *jatis* or *solkattu* (சொல்கட்டு). The presence of a number of *charanas*, the *charanas* being sung to the same *dhātu* is a characteristic feature of *darus*. Some musical dialogues are composed in this form: *Merattur Venkatarāma Sāstri* has composed some beautiful *darus* in Telugu.

Jakkini darus are interesting compositions. The *mātu* of the first section consists entirely of *jatis* and we come across *sāhitya* in the second part. The occurrence of *madhyama kāla* passages adds liveliness to the piece. These compositions belong to the medieval period and we find in some of them, rare time-measures like *Kuru jhampe* O 1₅ 1₃ (10 aksharakālas for an *āvarta*).

Oradi kirtanai (ஓரடிக் கீர்த்தனை), *Oradi padam* (ஓரடிப் பதம்) and *Oradi daru* (ஓரடி தரு) are long forms of the respective types and belong to the realm of applied music. These are Tamil forms and have the divisions: *pallavi*, *anupallavi* and *charana*. The characteristic feature of these compositions is the presence of unduly long *charanas*. Excepting for the concluding part, the remaining *pādas* of a *charana* are sung to the same *dhātu*. Since the interest of the form centres mainly round its *sāhitya*, the repetition of the same *dhātu* does not bore a listener. The *charanas* of some *darus* have *madhyamakāla sāhityas*. Long narratives, picturesque accounts of the glories of the cities of ancient India and description of battle scenes are fit themes for these long forms.

The *gānakrama* of the *daru* as well as the above three forms is the same as that of a *kirtana*.

Tillāna

The *Tillāna* is an adaptation of the *desya* type, *tiri tillāna*. Its tempo is usually *madhyamakāla* and the music is brisk and lively. The *mūtu* consists of *jatis* interspersed with *svaras* and ordinary words.

This lively form has the sections: *pallavi*, *anupallavi* and *charana*. The sections have different *dhātus*. There are instances of *tillānas* with a *pallavi* and *anupallavi* alone or with a *pallavi* and *charana* alone. Such compositions, are as complete as the *dvīdhātu prabandhas*, *ugābhogas* and *kritis* with *samashti charanas*. The *pallavi* and *anupallavi* usually consist of *jatis* and the *charana* of words, *solfa* syllables and *jatis*. Some *tillānas* have beautiful *sangatis*. This form figures in the post-*pallavi* part of a concert programme and invariably in dance concerts. It is usual for a *Harikatha* performer to sing a *tillāna* immediately after the introductory part or the *purva pithika* and before the commencement of the *katha* proper, in order to create an atmosphere of liveliness. If in the course of his discourse, the *Bhāgavatar* finds that a section of the audience has gone a bit drowsy, he would re-establish the atmosphere of liveliness by suddenly plunging into a *tillāna* of quick tempo.

The *gānakrama* of a *tillāna* is the same as that of a composition with the divisions: *pallavi*, *anupallavi* and *charana*.

The *tillāna*, *Gauri nāyaka* (*Kānada raga*—*Simhanandana tala*) of *Mahā Vaidyanātha Iyer* is a scholarly composition. The entire composition is in two *āvartas*, the first *āvarta* consisting of words and the second of *jatis*. The *Kamba Ramayana tillana* of *Kundrakkudi Krishnier* is also a scholarly composition.

Jāvalis and tillānas are examples of smaller forms and will not take more than four minutes to perform. They may be in quick tempo or medium tempo.

In addition to the composers referred to above, Virabhadrayya, H. H. Swāti Tirunal Mahārājah of Travancore, Pallavi Seshayyar, Mysore Sadāsiva Rao, Patnam Subrahmanya Iyer and Ramnad Srinivasa Iyengar are some of the great composers of this type of composition.

Tillāna daru is a composition like the tillāna with the angas : pallavi, anupallavi and charana. But the major portion of the *mātu* consists of words after the model of a *daru*. Krishnaswamy Ayya's *Tillāna daru* in Surati raga, Adi tala, beginning with the *jatis* "*Nādiri dāni tondari dāni*" is an excellent example.

CHAPTER VI

FOLK MUSIC

Few countries in the world can claim to have developed a system of art music. But all countries, including those inhabited by aborigines have folk music and folk dance. Folk music and folk dance have a distinct place in the cultural heritage of a country. They play an important part in the life of the common folk. They come through *anādi sampradāya*. They developed spontaneously. The folk music of all countries possesses certain common characteristics. Intended as they are for being sung by rustic folk with untrained voices, their compass is limited. They are characterised by simple music and easy rhythm. Folk music is older than art music.

Under folk music is included all the songs that do not strictly come within the sphere of art music. Folk music comes mostly through unknown authorship as opposed to art music which is the contribution of known vāggeyakāras. Folk music is the foundation upon which the later classical music is built. Tyāgarāja amongst classical composers has done a distinct service to South Indian Music by immortalising many folk tunes current in his time, in his operas, *Divyanāma kirtanas* and *Utsava sampradāya kirtanas*.

Folk music, called variously பொதுஜனகானம், பாமாஜனகானம், நாட்டுப் பாட்டு, நாடோடிப் பாட்டு, పల్లెపాటలు and గ్రామ్యగానం is the music of the dumb millions of villagers. It is the privileged possession of the masses of men and women of a country. It affords endless solace to the weary farmer and the labourer when they return home after a day's hard toil. It is the music which gives infinite delight and pleasure to the housewife and the householder. It is the music which is sung daily in the homes of hundreds of millions of men and women, old and young. It is the music of the masses. It is these rustic, uncouth village songs that have a pedigree longer than that of classical music. Folk songs have a charm, all their own and please as the moment we hear them. As examples of simple beautiful melodies, they remain unsurpassed. For a proper appreciation of classical music, one needs to know its science. Classical music is generally confined to the metropolis and to some important towns and centres. Occasionally we hear classical music even in rural parts, but such parts always happen to be either musical centres or are connected with the name of some illustrious composer or musician who flourished there at a

not far off date. To listen to folk songs in their pristine purity, one should go to villages removed some 50 to 60 miles away from the railway station, or to places that have not yet succumbed to the influences of modern civilisation. Classical music is essentially intellectual music and is the music of the *upper ten thousand*.

Folk songs are perhaps the one means of discovering the real feelings and ideas of a people. Verses are added to, or subtracted from, as new ideas come in and old ones pass away. The up-to-date inner feelings of a people always find expression in their folk songs. Although these songs never rise to the level of set literature, yet they are the faithful reflection of all popular sentiments and beliefs.

There is a profusion of folk songs in the South Indian languages. Their *dhātus* or musical settings have a peculiarity of their own. With the exception of the *prati madhyama* (tivra ma or F sharp) all the other notes of the gamut figure in them. Since the notes are, in most cases, sung in a plain, unadorned manner and since the compass of most of the tunes is limited, it is not possible to assign specific ragas to these songs. Some songs are very crude, uncouth and primitive and comprise only three or four notes. But marriage songs and folk songs of a *refined* nature are in well-known old and popular ragas. The Kuranji rāga has its origin in the *kuram* songs. Some songs are literally packed with words. The music and the *sāhitya* being simple, there is no place for *sangatis* (variations) and vowel extensions. The *varek gamaka* (grace) is present in some songs. The compass of most folk songs embraces the upper tetrachord of the lower octave and the lower tetrachord of the middle octave. Songs are mostly in couplets and quatrains and the

division into pallavi, anupallavi and charana is noticed only in a few instances. Of the time-measures, Adi, Rupaka and Chāpu inclusive of the Misra, Khanda and Tisra varieties are frequently met with. Songs in tisra gati are also met with. Though many songs begin in sama graha, songs in the anāgata graha are not uncommon. The tunes of the songs used in sorcery, witch-craft, demon worship and Kāli worship are of an awe-inspiring character.

The theme of a folk song is never serious and the language used not of a high order. The laws of prosody are surprisingly enough adhered to. Some folk songs teem with rhetorical beauties. The fantastic antya prāsas present in a few songs, add to their humour and general effect. So etimes we come across songs in the andādi (அந்தாதி) style. In South India, there is a folk song for every event in life.

The ideas in the sāhityas of some folk songs are highly suggestive and thought provoking. There is the famous story told of the great Tamil poet Kambar, that one evening he heard the men working on a well sweep or picottah (ஏற்றம்) sing a song and as the sun was sinking in the western horizon they stopped with the line: மூங்கிலிலே மேலே, தூங்கும் பனி நீரே (On the leaf of the bamboo tree, the sleeping dew drops). The poet was wondering what the succeeding line could be. He brooded and brooded and nothing struck him. His curiosity was so much roused that he resolved to spend the night in the open and wait for the morn, when the men would come back for the work. The morning came and the workmen, fresh with vigour resumed their song. They continued, மூங்கிலிலே மேலே தூங்கும் பனி நீரே, தூங்கும் பனி நீரை வாங்கும் கதிரோனே (the sleeping dew drops, disappearing before the

sun). On listening to the second line, Kambar was filled with amazement and wondered that the logical idea contained in the second line did not strike him. The popular saying: ஏற்றப் பாட்டுக்கு எதிர்ப் பாட்டில்லை (There is no counter-song, to a well sweep song); has come into existence since that incident.

The folk songs of South India are a treasure-house of historical and sociological information. The occupational songs, tribal songs, marriage songs, worship songs and ballads especially contain a mine of information. Songs relating to palmistry and astrology and stanzas relating to the curative properties of herbs and herbs useful for curing particular diseases are interesting. On the lighter side, we have the humorous songs, teeming with meaningless alliterations, fantastic rhymes and lazy colloquialisms. The unconnected nature of the topics dealt with in the interminable verses of folk songs is due to the fact that from time to time new verses on current events and incidents have been composed and added. For instance, in the *Muttu Virāyi Pāttu* there is a stanza containing a reference to the Whiteman's money; in the *Muttālamman Pāttu* there is a reference to the bamboo bobbins and links of a cotton mill.

In addition to being a stimulant to workers, occupational songs serve to regulate the work by their rhythm. When the amount of work turned over during the duration of a bar or āvarta is known, it is possible to calculate the total amount of work that will be turned out at the end of the song. For example, imagine a huge log of wood being pushed by a batch of workers from one place to another. Simultaneous push by all, at the precise moment is very important for the successful accomplishment of the task. The tune used in

such cases furnishes the clue to the moment when they should all apply force.

In the following simple tune, all the workers simultaneously push the log when the two underlined notes (shadja) are sung :—

Kharaharapriya notes - Adi tāla (Tisra gati).

4	o	o	o
S, R, G r S, - S, R, G r S,	<u>S</u> ;; ;;;	<u>S</u> ;; ;;;	

From the distance travelled by the log in the space of one āvarta, it will be possible to say when the log will move on to the required place. Rowing songs wherein the oars are dipped into water by the crew at regular intervals and pounding songs wherein the pestles are lowered at regular intervals to crush the grain are other instances of songs for concerted action.

Labour songs serve to relieve the dullness and monotony of the work and also lightens the strain to some extent. The sāhityas of some of these songs deal with the details of their time-honoured occupations like mat-making etc.

Some folk tunes have specific names. When such a name is mentioned on the top of a song every one knows how to sing it. Such names as Ānandakalippu, Nondichindu and Lāvani may be mentioned in this connection. Even in cases where two or three different varieties of tunes exist under the same name, the metre and the structure of the song will give the clue to the particular tune that is intended.

The rural inhabitants of India are as proud of their folk music as their brethren in Bavaria or Ireland. The instruments used by the rustic folk for accompanying their music and dance are crude ones. They are mostly percussion instruments and wind instruments. Stringed instruments like the Nanduni and Vīna kunju are used on the west coast.

The catchy nature of folk tunes has attracted the attention of many a classical composer. They wrote their own sāhityas for those tunes and thus contributed to the immortality of those tunes. The names of Tyāgarāja, Gopāla-krishna Bhārati and Rāmaswāmy Sivan may be mentioned in this connection. Many folk tunes have found a place in Bhajana songs.

Classification.

From the musical point of view, folk songs may be classified under two main heads :—

1. Those of a *rustic* nature—*e.g.*, the agricultural, craft, and occupation songs.
2. Those of a *refined* nature—*e.g.*, the puranic songs and marriage songs.

Songs of the former class are mostly found in rural parts and are current amongst the lower strata of society. The music though crude is nevertheless charming. Songs of the latter class have a somewhat polished music and are in some of the well recognised ragas. The Padyam (பத்யம்), Lāli (லாலி), Nalangu (நலங்கு), Oonjal (ஊஞ்சல்), Odam (ஓடம்) and Suvvi (சுவிவி) are all instances of this class.

Amongst the Badagas of the Nilgiris, one comes across genuine examples of primitive music.

There are folk songs intended for being sung by :—

- (1) Individuals, (2) Groups and (3) An individual and a group alternately. Apt choric phrases for the group will be found in this third case.

There are folk songs intended for being sung by men alone and women alone and also songs to be sung by both of them.

From the point of view of their subject matter, folk songs may be classified into :—

1. *Moral Songs*.—Teaching morals and principles of ethics and the way in which one should conduct oneself in society.

2. *Philosophical and proverbial songs*.—Teaching the philosophy of life and containing adages, old proverbs and sayings of great sages.

3. *Ceremonial songs*.—கோம்புப் பாட்டுகள், சடங்குப் பாட்டுகள், Songs sung on occasions like birth, nāmakaranam (naming ceremony), cradling, marriage, death etc.

The Badaga and Coorg songs of this class are especially worthy of mention.

4. *Labour songs*.—Under this head come the occupation and craft songs, milkmaid's songs, songs of the cartpullers and drawers of water from wells for irrigation purposes and generally the songs of the working classes. The barge songs (படகோட்டிப் பாட்டுகள்) and the Malabar boat songs come under this group. Songs of this group are generally in the vulgar dialect. The pestle songs (உலக்கைப் பாட்டு) and the Vallaippattu (வள்ளைப்பாட்டு) sung by women while pounding the grain are well-known,

The music of the *Doli* bearers on the Tirupati Hills, which consists of only three notes, is an interesting example under this group, and contains traces of primitive music.

5. *Agricultural songs*.—Under this head, come the songs relating to rainfall, songs relating to the various seasons of the year and songs sung on the occasion of the sowing of seeds and planting of crops and the harvest songs. The (உழுத்திப்பாட்டு) ploughwoman's song, பண்ணைப் பாட்டு, விவசாயப் பாட்டு, நடவுப்பாட்டு, ஏற்றப் பாட்டு and முளைப்பாட்டு come under this group. In the wheat plains of the North, singers and drummers are engaged during harvest time to perform. The labourers working to the accompaniment of music and rhythm turn out more work.

6. *Cradle songs*.—Mothers' songs (lullabies) composed for and sung to children. There are many such swing songs (ஊசல் அல்லது தாலாட்டு) in the South Indian languages and most of them are either in the Nilāmbari raga or in the Anandabhairavi raga.

7. *Devotional and Worship songs*.—Songs of prayer and songs in praise of the presiding deities of villages.

The *Sopānam* songs of the west coast and the *Pujāripattu* (புஜாரிப் பாட்டு) and the various songs sung in Māriyamman and Kāli temples are examples.

8. *Tribal songs*.—Every tribe in India has its own characteristic song which relates amongst other things the origin and history of the tribe, its great ancestors, its hoary traditions, its time-honoured profession etc. etc. These songs consist of a series of stanzas and the tribes take a patriotic delight in singing them. In fact on the occasion

of important annual celebrations, the tribal song is given precedence over others.

9. *Craft songs*.—The sahitya herein relates to the technique of their calling, like the process of mat making etc.

10. *Historical songs*.—These are in the style of the ballads and are of popular interest. Their themes relate to historic events of great significance. *Raja Vesingu songs*, *Bobbili Pāta*, the *powādas* of Mahārāshtra and songs about the conquest of India by the British are only too well-known.

11. *Epic and Puranic songs*.—These are songs celebrating the valorous deeds of the great epic and purānic heroes like Rama, Krishna and Murugan. There are countless numbers of songs of this type current amongst the masses. Songs on heroic themes have a powerful appeal.

12. *Songs in praise of local heroes*—Every important village has its own hero and there are songs in praise of such heroes. The *Umayyan pāttu* and the *Chandana Devan pāttu* are well-known examples.

13. *Congregational Songs*.—Songs for groups: the *Kummi* (கும்மி) and *Kolāttam* (கோலாட்டம்) songs.

There are various types of kummis ranging from the simplest to the most complicated. The songs for Pinnal kolāttam are interesting.

14. *Riddle songs*.—(புதிர்ப்பாட்டுகள்) which present intelligent problems for solution during leisure hours.

15. *Satirical songs*.—பரிசுரப்பாட்டுகள் and the ஏசல். The satirical songs sung by the lady members of the bride's

party and bride-groom's party during marriage dinners provide a good deal of mirth and merriment. Women skilled in singing such songs (சம்மந்திப் பாட்டுகள்) are sometimes specially engaged to sing on behalf of each party.

16. *Songs for games.*— The *Kazhakkodi* and the *ammānai* songs (songs for a game with three wooden balls.)

17. *Songs relating to cures of ailments.*— Remedies for the various ailments and the curative effects and medicinal properties of herbs are mentioned in these songs.

18. *Songs figuring in folk dances, folk dramas and folk festivals.*— The *valandānai* and *oyil* of Pudukottai, and *pallu*, the songs of the gipsies, wandering minstrels and fortune tellers, the songs heard during the *javandarai* festival, the music of the *nondi nātakam*, *kuluva nātakam* and the *kuravanji nātakam* (dance drama staged in temples), the songs figuring in the *kaikotti kali* and *tiruvātira kali* of Malabar, the *gobbi* dance, the *garba* dance of Guzerat, the *Rāsa* of Bengal and the songs sung during the performances of *bommalaṭṭam* (மரப்பாவை கூத்து or puppet show) and *torpāvaikkuttu* (marionette show or show with leathern puppets) are all interesting.

19. The *Arti* songs of the different provinces of India have fascinating melodies.

20. *Miscellaneous:*— Under this head come all the comic songs, buffoonery songs (கோமாளிப் பாட்டு, வீனோதப் பாட்டு, வேடிக்கைப்பாட்டு), musical dialogues and the various popular reels and jigs. The spicy humour contained in some of these songs will send listeners into roars of laughter. The buffoon song “முள்ளு முனையினாலே மூணுகுளம் வெட்டிவச்

சேன்" is known throughout Southern India. The musical dialogue between a kuravan and kuratti beginning with the words:—"Arupattu nālu muzham" (அறுபத்து நாலு முழம்) is interesting both on account of its catchy music and its crisp ideas. The satirical extempore songs of the palanquin bearers on the hills having a sharp revenge on stingy employers are only too well known. The Themmāngu (Thenpangu is the more correct term), Teppān, Lāvani, Kuram, Odam, and the other 'Every day songs' of the unlettered folk which have a mere ephemeral existence (often a few months or sometimes a few years) and then sink into oblivion like "Sri Rama Chandirane" and "Andi Pandaram" also come under this group. Songs on nature themes (இயற்கைப் பாட்டு) also exist.

Chindu is a highly popular form of folk music. It consists of several stanzas. The music of the different stanzas is the same. There are several well-known chindus having distinct tunes of their own. The Kāvadi-chindu (pilgrims' song), Nondichindu, Surul nondichindu (சுருள் கொண்டிச்சிந்து), வண்டிச்சிந்து and the Vazhinadai-chindu (வழிநடைச்சிந்து) are some of the varieties. The last mentioned type helps one to get rid of the tedium of journey.

Characteristics of Folk Songs,

1. The musical range of the folk songs is generally within one sthāyī (octave) and it is so, because they are intended to be sung by village folk who rarely have the opportunities to develop the compass of their voices by the practice of technical exercises.
2. Songs in the prati madhyama ragas and *apurva*-ragas are rarely met with.

3. They are very simple and uncultured in their poetical form.

4. The theme chosen is often commonplace.

5. The music is simple, homely and catchy and impresses the moment one hears it.

6. Songs are generally in stanzas, each stanza having the same music. Occasionally there is the division into pallavi, anupallavi and charana. Songs with these divisions must have come into existence only during the last five hundred years.

7. Sangatis or variations and gamakas and other technicalities generally speaking, are absent. The varik gamaka is however found in some songs.

8. A good number of songs are in sankirna ragas and in very simple talas or time-measures. Some of the recognisable ragas in folk music are Anandabhairavi and Nilāmbari; and Nishādāntya, Dhaivatāntya and Panchamāntya ragas like Nādanāmakriya, Punnāgavarāli, Kuranji, and Navaraj.

Primitive songs when heard give the impression that they are being hummed to some inarticulate syllables.

The village folk have their own indigenous system of dance, with appropriate music. In addition they have their own crude bands consisting of metallic horns, bamboo flutes, castanets, sticks, cymbals and drums.

Music plays as important a part in the life of the common folk as in the case of the refined folk. Although folk music may not move a person and lift him up to serene heights and make him commune with Nature, it has nevertheless an unfailing charm. The wandering minstrels of India have kept alive certain classes of folk songs. Singing games like

the *ammānai*, provide a good pastime. The kolattam performances given by young trimly clad girls, with their sticks, about a span long and painted red and yellow are a treat to the eye and the ear.

Girls and ladies playing kolāttam are depicted in the sculptures in (1) the mantapam in front of the Nataraja shrine at Perur, (2) the southern outermost prākāram (corridor) of the temple at Rāmesvaram and (3) the Achutappa Bhupāla mantapam at Avadayārkovil. The graceful postures of the performers responding to the partners on their left and right are worthy of special attention.

In folk songs, we come across pieces of varying grades of musical quality — from the simplest sing song tune, to the song almost bordering on art music. Nursery songs, agricultural songs (நாற்றுப்பாட்டுகள் முதலியன), purānic songs (புராணப்பாட்டுகள்), songs on village deities (இராமதேவதைகள் பாட்டு) and songs relating to pregnancy (முளைப்பாட்டு) and games of girlhood, shepherds songs, potters songs, and songs sung during husking of rice are instances of simpler folk songs of varying grades of musical quality. Some folk songs are literally packed with words.

The masses have been made familiar with purānic stories through the form, *odam* or *kappal* (ஓடம் or கப்பல்). The *The Rāmāyana odam* is a well-known composition familiar to the ladies of the Tamil nādu. In the *odam*, the introductory part and the concluding part are sung in slow tempo and the bulky middle part called *mudugu* (முடுகு) in quick tempo. The *Roga odam* (ராக ஓடம்) is an interesting composition giving a catalogue of the well-known ragas. Some folk songs contain a wealth of religious philosophy. There are also martial songs.

CHAPTER VII

MUSICAL INSTRUMENTS

India possesses a rich variety of musical instruments. Almost all the types, representative of the *stringed*, *wind* and *percussion* groups are seen here. Gourds, bamboo, canes, reeds, jack-wood, black-wood, earthen-ware, the skin of sheep, calf, buffalo, varanus and silver, bronze, brass, copper and iron amongst metals are the materials used in the manufacture of musical instruments. The plant, animal and mineral kingdom have contributed their share in the making of musical instruments. *Gamakas* being the life and soul of Indian music, instruments like the *svaramandala* and *yāzh* (ياز) which were not capable of producing gamakas, gradually fell into disuse.

The subject of instrumentation (*i.e.* the study of the characteristics of various instruments) is one of absorbing interest. Instruments of varying degrees of loudness, compass and tone-colour are met with. Instruments like the gotuvādyam provided with sympathetic strings and with facilities for the accurate adjustment of sruti are of interest from the acoustical and physical points of view. The decorative work on some instruments contributes to their dignity and aesthetic appearance.

Classification

Musical instruments, are generally classified into :—

- (1) *Stringed instruments* where the sound is produced by setting in vibration, strings.
- (2) *Wind instruments*, where the sound is produced by the vibration of a column of air in the tube.

- (3) *Percussion instruments* where the sound is produced by the vibration of a stretched membrane or skin or a piece of metal or wood. In *tāla vādyas*, the sound is produced either by striking, plucking morsing or stroking the drum-head.

Stringed instruments, (also called *chordophones*) are the *tata தத vādyas* and wind instruments (also called *aerophones*) are the *sushira சுசிர vādyas*. Percussion instruments of the drum class are called *avanaddha அவனத்த vādyas* (*membranophones*) and those of the cymbal and castanet varieties as *ghana கன vādyas* (*autophones*.) கரம்புக்கருவி, துளைக்கருவி, தோல் கருவி and கஞ்சக்கருவி are the respective names for these four types of instruments, in Tamil.

I. **Stringed Instruments** are of three kinds :—

- (a) Those performed on by friction with a bow; ex. the violin, *sārangi*, *dilrūba*, *bālasarasvati* (*tavūs* or *mayūri*, மயில்வாத்யம்) and *esrāj*.

Rāvanāstram, the earliest bowed instrument known to human history had its origin in India.

- (b) The plectral instruments, where the strings are plucked by a plectrum or the fingers and played; ex. the *vīna*, *rudra vīna*, *gotuvādyam*, *sītār* (also called *sundarī* the beautiful) *svarabat*, (the more correct name however is *svaragat*), *sārode*, *nanduni*, guitar, mandoline and harp. The drone instruments like the *tamburā* and *ektār* come under this group.

- (c) Those struck with a hammer or a pair of sticks either mechanically or otherwise; as the piano-forte, svaramandala and the gettuvādyam.

Of the stringed instruments, some like the tamburā, tuntina, ektār and gettuvādyam are played on open strings and the rest like the vina and violin, stopped and played. The vina is an example of a stringed instrument wherein some strings are played as open strings (ex. the 3 tāla strings) and the rest stopped and played (ex. the four playing strings).

N. B.—Playing on *open strings* means causing the entire length of the strings to vibrate all the time, as for instance while playing the tambura. *Stopping the strings* means causing a fractional length of the string to vibrate; for example when a finger is placed on the finger-board of a violin and the particular string bowed, the fractional length of the string from the bridge to the point of contact of the finger alone, vibrates.

The plectral and bowed varieties (where the strings are stopped) admit of two varieties:—

- (1) Those with a plain finger-board as the sārōde and the violin, the strings being stopped by the fingers or by a piece of wood held in the hand as in the gotuvādyam.
- (2) Those with a finger-board with frets as the vina, sitār, dilrūba and tavūs.

The plectral instruments may again be classified into:—

- (1) those wherein the left hand fingers are in direct contact with playing strings as the sitar and vina; and

- (2) those wherein the playing strings are in contact with an intervening object or mechanism held or operated by the left hand; ex. gotuvādyam, bālakokil and bulbul tāra.

The plectral instruments may also be classified into those wherein a wire plectrum is used (ex. sitar) and those wherein a horn plectrum is used (ex. svarabat).

The piano and the bulbul tāra are instances of stringed instruments provided with a key-board.

II- Wind Instruments are of two kinds:—

- (a) Those wherein the wind is supplied by some mechanical contrivance, commonly a bellows. The organ and the harmonium are instances of this class.
- (b) Those wherein the wind is supplied by the breath of the performer.

Here again, we have the mouth-blown and nose-blown varieties.

The mouth-blown varieties are of two classes:—

- (i) Those which are blown through vibrating reeds or tongues or mouth-pieces. The clarinet, oboe, nāgasvaram, mukhavina and the sanāi are instances of this class.
- (ii) Those wherein the wind is blown through orifices in the wall of the instrument, like the flute.

There are instruments under this head which have finger-holes like the flute and the nāgasvaram and those which have no finger-holes like the gaurikālam, tiruchinnam, ekkālam, kombu, reed dulcimer, bhūri and the conch.

In the tiruchinnam, the mouth-piece is cup-shaped.

The snake-charmer's instrument, *magudi* (also called *bhujanga svaram*) is an instance of a compound wind instrument provided with a tune-pipe and a drone-pipe.

Wind instruments are either of the *wood-wind type* like the *nāgasvaram*, clarinet or oboe, or of the *brass-wind type*, like the tiruchinnam and kombu (metallic horn).

III. **Instruments of Percussion** are usually time-keeping instruments. A few like the *nagāra* and *bheri* are used in war. These two instruments were also used in the village *look-outs* in former times, to warn the villagers, whenever robbers and marauding plunderers were sighted at a distance. Some drums like the *tamuku* and *parai* are used by the State for publicity purposes.

To the class of drums belong the *mridanga*, *tabala*, *nagāra*, *tavil*, *dolak*, *damaru*, *mardalam*, *suddha maddalam*, *udukkai*, *udal*, *davandai*, and *pambai*.

Drums may be classified into :—

- (1) Those played by hand; ex. *mridangam*.
- (2) Those played by sticks; ex. *damārum*.
- (3) Those played partly by hand and partly by stick; ex. *tavil*.
- (4) Those which are self-struck; ex. the *damaru* and *budubuduke*. The instrument is rattled *i.e.*, rocked to and fro, to enable the knotted end of the string to strike alternately against the two faces.

- (5) Those wherein one side is struck and the other side is stroked ; ex. the perumālmādu drum.

Drums may further be classified into:—

- (1) Drums with a single face.
- (2) Drums with plural faces.

The latter may be classified into:—

- (1) Drums with a plain face as the udukkai and panchamukhavādyam.
- (2) Drums with complex faces *i.e.* with two or three concentric rings of skin ; as the mridangam and tabla.

The mridangam stands as the finest example of a double-faced drum with complex drum-heads. On simpler drums, characteristic rhythmic phrases or solkattu-patterns are played.

Several kinds of cymbals are in use. These are exclusively time-keeping instruments and are made of metal. The jālra is a good example. It is largely used in Bhajana parties and Harikathas. Larger cymbals (Brahma tālam) are used in temple ceremonies and bands. Different kinds of castanets are also common throughout India.

Percussion instruments may be broadly classified into:—

- (1) those with which a regular cross-rhythmical accompaniment can be provided in concerts ; ex. mridangam, tabala, kanjira, tavil, dolak, ghatam and jālra ; and
- (2) those wherein such a thing is not possible ; ex. gongs, nagāra and bheri.

Tāla vādyas may be classified into :—

- (1) those which are indispensable in concerts like the mridangam or tavil or tabla. These are the *pradhāna tāla vādyas*.
- (2) those which can be used at the option of the performer or singer, like the kanjira, ghatam, dolak and conch. These are the *upa tāla vādyas*.

Tāla vādyas may again be classified into :—

- (1) those which can be tuned to a desired pitch; like the mridangam and tabla; and
- (2) those whose pitch is determined at the make, like the ghatam.

Of the time-keeping instruments, the ghatam and morsing are of special interest. The ghatam is the only rhythmic instrument without detachable parts and made of a single material. In morsing, the projecting tongue is plucked by the right hand and the mouth acts as the resonator.

Konugol is the art of reciting jatis in a pleasant manner. This type of rhythmic accompaniment provided by man is a peculiarity of South Indian music. In addition to the primary rhythmic syllables like *ta, di, tom, nam*, other euphonious and rhythmic syllables are used. The jatis are recited sometimes in a prosaic manner and sometimes in a musical manner. *Konugol solos* when rendered by melodious and impressive voices will be interesting to hear. Experts in this art are able to recite jatis even in the sixth degree of speed. This art affords plenty of scope for the exercise of one's creative faculty.

Concert Instruments in general may be classified into :—

- (1) *Sruti vādyas*, which are instruments used only as drones ; ex. the tamburā and the ottu.
- (2) *Tāla vādyas*, which are instruments used only as rhythmic accompaniments : as the mridanga, ghatam, kanjira, tavil, dolak, morsing, gettu-vādyam, jālra, chiplā and silambu.
- (3) *Sangita vādyas*, with which musical pieces and rāga ālāpanas could be played ; as the vina, violin, gotuvādyam, flute, nāgasvaram and jalatarangam (udaka vādyam).

All these three types of concert instruments are represented in the stringed, wind and percussion varieties. The following table gives examples for each of these :—

Table XVI

Variety	Used as	Examples
Stringed	... { —sruti vādyā ... —tala vādyā ... —sangita vādyā...	tambura and ektār. gettuvādyam. vina, violin and gotu- vādyam.
Wind	... { —sruti vādyā ... —tala vādyā ... —sangita vādyā...	ottu, sruti upānga and sruti box. conch. flute, nāgasvaram.
Percussion	... { —sruti vādyā ... —tala vādyā ... —sangita vādyā...	... mridangam. jalatarangam, tabla tarang and ghanta tarang.

Of the strings which are used for stopping and playing music, the string which gives the highest note is always reckoned as the *first string* and the other strings in the decreasing order of pitch are numbered accordingly. In the vīna, the strings are always kept in *medium tension* and played ; otherwise, the pitch of the strings will get altered, every time they are pulled or deflected for the purpose of producing a gamaka. In the gotuvādyam and the violin however, where the strings are *not pulled aside* for the production of gamakas, the strings are kept in a high tension.

Other systems of Classification.

From the point of *utility*, musical instruments are classified into :—

- (i) those used in *concert music* ; like the vīna, gotuvādyam, flute, mridangam and jalatarangam.
- (ii) those used in *temple music* ; like the metallic horns, trumpets, bhūri, kudamuzha (குடமுழா) and udal.
- (iii) those used in *martial music* ; like the conch, dundubhi and bheri.
- (iv) those used in *folk music*; like the nanduni, nedunkuzhal, kombu, potdrum and crude iron cymbals.

Musical instruments are either *monophonous i.e.* capable of giving only one note at a time (ex. human voice, flute and nāgasvaram) or *polyphonous i.e.* capable of giving more than one note at a time (ex. vīna, violin and jalatarangam).

Concert instruments like the vīna, flute and gotuvādyam enjoy the status of *primary instruments* ; while others like

the violin and sārangi are mere *accompaniments*. *Primary instruments* are either performed solo or to the accompaniment of other instruments. Eminent violinists give solo performances on their instruments. The violin on such occasions attains the status of a primary instrument.

E v o l u t i o n

Of the stringed, wind and percussion groups of instruments, the percussion varieties are the oldest. We come across wind and stringed instruments at somewhat later stages of human history. Before the highest type of the percussion group was reached, many forms of wind instruments had come into existence: and like-wise before the highest type of the wind instrument group was reached, many forms of stringed instruments had come into existence.

The following instruments illustrate roughly the main stages of evolution under each group:—

Percussion group:—

- (1) Stone-gongs and rude castanets.
- (2) Metallic cymbals.
- (3) Xylophones.
- (4) Drums with an open frame *e.g.*, thambattam, magudam and kanjira.
- (5) Pot-drums
- (6) Wooden drums (conical drums) with skin on one side,

- (7) Drums with skin on both sides like the dolak and tavil.
- (8) Drums capable of being tuned to a desired pitch as the mridangam ; such drums have complex drum heads.

Wind group :—

- (1) Horn, kombu, and long musical pipes without finger-holes. .
- (2) Gourd pipes.
- (3) Reed dulcimer ; pan-pipes.
- (4) Musical pipes with a few finger-holes.
- (5) Musical pipes of the flute species with 7 or 8 finger-holes.
- (6) Musical pipes with mouth-pieces as the nāgasvaram and sanāi,
- (7) Wind instruments with a key board ; ex. the harmonium and the organ. These instruments are of European origin and are only a few centuries old.

Stringed group :—

(Here the plectral varieties precede the bowed varieties).

- (1) Bow-string, pināka, and the harp.
- (2) The primitive lute.
- (3) Ektār and tuntinā with resonators.

- (4) Instruments performed on with a primitive bow like the *Ravana hasta*.
- (5) Svaramandala.
- (6) Vīna with movable frets (*eka raga mela vīna*).
- (7) Vīna with fixed frets *e.g.*, the Rudra vīna and the Sarasvati vīna (*sarva raga mela vīna*).
- (8) Mahānātaka vīna (*gotuvādyam*).
- (9) Bowed varieties of the advanced type : the violin and the sārangi.
10. The mechanically plucked or struck varieties and provided with a key-board ; ex. the harpsichord and the piano.

The remote ancestor of the piano, is the *sata tantri vina* of ancient times, played by a little hammer.

A **detailed study** of a musical instrument can be made under the following heads :—

1. Its name ; significance if any, attached to the name.
2. The main head and the sub-head under which it can be classified.
3. Polyphonous or Monophonous.
4. Materials used in its manufacture.
5. Its varieties. The nāgasvaram for example, admits of the two varieties, timiri and bāri.

6. Its construction and the names of its parts.
7. (a) If a chordophonic instrument, the number of strings used ; of the strings used, how many are of metal or of gut or of silken thread wound by silver coil. The gauge numbers of metallic strings. The notes to which the strings are tuned. The strings that are stopped and the strings that are played as open strings. If provided with tāla strings and sympathetic strings.
- (b) If an ærophonic instrument, the number of its finger-holes. If it is a *keyed* (ex. clarinet), or a *key-less* (ex. Indian flute) instrument.
- (c) If a percussion instrument, the number of drum-heads, and if the heads are simple or complex. The dimensions of the drum-heads and if their pitch can be increased or decreased.
8. Its compass.
9. Technique and styles of play and the technical terms used in this connection.
10. Possibilities in speed and limitations in the playing of gamakas.
11. Whether used as a primary instrument or as an accompaniment or both.
12. Whether a concert instrument, or one used in temple music, martial music or folk music.
13. Whether practised extensively or cultivated only by a few.

14. Places noted for the manufacture of the instrument.
15. Its geographical distribution.
16. Its origin and history. The various stages through which it passed through before reaching the final form. The names of the early pioneers and the later specialists in this instrument. The various works in which it is referred to.

O r c h e s t r a

One of the note-worthy events in the history of Indian concert music in recent times, is the development of the *orchestra*. Concerts by Indian orchestras have now become popular throughout India. The possibilities of orchestral music have however, not yet been fully explored.

Small orchestras in some form or other have been in existence in India from early times. We hear of the *brinda gānam* and *vamsaka brindam* in early literature. The *naubat* (literally nine performers) stationed in balconies over the arched gateways of cities, palaces, mansions, mosques and important mausoleums and tombs and the *peria melam* (the Tanjore nāgasvaram band) were later developments. It is recorded that Emperor Akbar, took delight in performing in the *naubat*. In all these cases, the instruments merely repeated the chosen tune or tunes in unison and perhaps occasionally doubled them in the octaves. The number of performers usually ranged from five to twelve.

But the idea of having a certain definite proportion in the number of stringed and wind instruments with a view to produce a beautiful, consolidated, pleasing and rich tonal

volume, at the same time giving an effective and proper representation to the tone-colour effects of the different instruments is a thing of recent growth. *Orchestral music is absolute music in its purest form.* A classical piece like the *Sahāna kriti*, ' *Giripai nela* ' of Tyagaraja may be heard respectively from a vocalist, an instrumentalist and an orchestra. Any *rasika* will immediately feel the enriched effect in the last case, on account of the various qualities of the tone of the different stringed and wind instruments constituting the orchestra.

Indian music is essentially melodic in its character, and *melodic orchestration* is therefore the only possibility if the purity of the *rāga* system is to be preserved intact. There are compositions which are intended for being performed by orchestras. Select pieces of the classical composers might also be chosen and scored for the orchestra. The entire orchestra is in theory a single instrument and the conductor is supposed to play on that complex instrument. A piece rendered by the same orchestra but under the direction of two different conductors will produce different effects. The conductor of an orchestra must possess plenty of musical imagination and a natural feeling for *orchestral colouring*. He must have an accurate *laya gnānam* and a strong memory and be thoroughly familiar with the pieces performed. He must possess a keen musical ear and be able to identify the tone colour of every instrument even while the full orchestra is performing. Lastly, he must be able to interpret the pieces, enter into the spirit of the compositions and work out the *ghana, naya effects* properly.

A singer takes a certain risk when he gives beforehand a programme of his concert, and includes in it such pieces as

Nagumomu ganaleni (Abheri), *Darini telusu konti* (Suddha saveri) and *Nājivādhāra* (Bilahari). If by some accident he catches cold or suffers from sore-throat on the day of the performance, he will not be able to do justice to pieces teeming with madhyamakāla sangatis. But in the case of an orchestral performance, there are no such problems. The performers go on playing the pieces mentioned in the programme sincerely and to the best of their ability. The surrounding environments and the whims and fancies of the listening audience have only a negligible effect on them.

On account of their strength, orchestral concerts are bound to have a mass appeal. Even the most difficult compositions can be made popular through orchestral renderings. The senior performers with a good degree of technique and creative faculty in them can play ālāpanas, niraval and kalpana svaras and keep to the orthodox kachcheri plan. The contrast of individual tone colour, the tonal balance and the harmonious blending of the tone colour of different instruments, all have a powerful appeal. Besides, an orchestra can conveniently accommodate, three or four *upa tāla vādyas*. The audience get an opportunity to know something of the tone colour, technique and possibilities of these *upa tāla vādyas*. To listen to them is both an education and an entertainment. The *upa tāla vādyas* can rightly find a place even in the ordinary kachcheri. The seating plan of the performers on such occasions presents an impressive sight. The presence of additional rhythmic accompaniments has a healthy influence on the mridangam player and he acquits himself much better. A feeling of earnestness and an anxiety to give their best are noticed in the performers on such occasions. The mridangam player instead of being worked right through, gets

his deserved share of rest on such occasions. The combined rhythmic harmony and the spicy rhythmical accompaniment of the upa tāla vadyas, while playing individually or collectively produces a delightful effect. Morsing is an interesting upa tāla vadya of the plucked type, and belongs to the monophonous group. Capable as it is of being tuned to the ādhāra sruti of the performer, it always proves a successful rhythmic accompaniment.

An orchestra is, in a sense, a democratic institution. It gives opportunities for even second class performers to sit along with the first class performers and perform. The performers in an orchestra should always be *mentally alert*. They should quickly grasp and respond to the directions of the conductor. The performances of orchestras, which have no conductors to lead them, will be characterised by lifelessness and a deadly monotony. For orchestras of less than ten performers, there may not be the necessity for a conductor. For large orchestras, a conductor is absolutely necessary, both for keeping up the precision in rhythm and for reminding the performers of the correct sequence of sangatis, especially when long pieces like *Darini telusukonti* (Suddha sāveri) and *Nājivādhāra* (Bilahari) are played. Performers need guidance because they play from memory and not with music sheets before them. To listen to a *Sāta vādya brinda gāna* will be a rare treat to the ear and an experience as well.

CHAPTER VIII

COMPOSITIONS

Mayamalavagaula — Matya tala.

Lakshana gita

15th Rāgānga rāga

{ s r g m p d n s
s n d p m g r s

148

|₄ O |₄

|₄ O |₄

SECTION I (Sutra khanda)

ḍ ḍ p p m g m g r s

ravi ko . ti te . . ja

ḍ p m p m g m g r s

ma . hā . nu bhā . . va

r r g r g m p p m g

gu na ga na bha ta bha . . va

m g r g r s r s n d

pa ri pā . li ta Pā . nda va

Mayamalavagaula—Matya tala (contd.)

l_4	O	l_4	O	l_4
$\dot{d} \dot{p} n n$ u pā . nga	$\dot{d} \dot{p}$ Sā .	$\dot{D} \dot{d} \dot{p}$. lan . ga		$\dot{p} \dot{m} \dot{m} \dot{d} \dot{d} \dot{p}$ nā . . ta Ohā . yā . .
$\dot{p} \dot{p} m g$ gau . . la	$\dot{m} \dot{g}$ Man .	$\dot{r} \dot{r} \dot{S}$ ga la kai		$\dot{s} \dot{r} \dot{g} \dot{m} \dot{p}$ si ki Me , . ga ran . ji
$\dot{r} \dot{g} \dot{r} \dot{r}$ Me . . cha	$\dot{s} \dot{n}$ bau .	$\dot{d} \dot{d} \dot{p} m$ li Ta . kka		$\dot{d} \dot{d} \dot{p} n$ Nā . . da
$\dot{s} \dot{d} \dot{p} \dot{d}$ Pa . . di	$\dot{p} m$ Re .	$\dot{p} m g r$ va gu . pti		$\dot{r} \dot{r} \dot{r} \dot{s} n s$ Kan . na da
$\dot{d} . \dot{d} \dot{d} \dot{p}$ Gau . . la	$\dot{m} \dot{p}$ La li	$\dot{d} n s r$. . . ta		$\dot{r} \dot{r} \dot{r} \dot{s} n s$ gā . lā
				$\dot{d} n s r$ Gu . jja ri
				$\dot{g} m \dot{p} m$ da . kri ya

g m p ḍ p̣ ḍ n̄ S̄ ,

Ma la ha ri Bau . li .

ḍ g̣ r̄ s̄ n̄ ḍ p̄ d̄ n̄ s̄

De . va ran . ji a . . gni

S̄ ; || g m p d̄ n̄ s̄

ie . || su bhā . . . ngā

S̄ ; ; ; ; ;

gā . . . ; ||

SECTION III (*Bhāṣāṅga khanda*).

ḍ ḍ p̄ p̄ m̄ ḡ m̄ ḡ r̄ s̄

bbā . shā . . nga rā . . ga

ḍ p̄ m̄ p̄ m̄ ḡ m̄ ḡ r̄ s̄

A . . rdra de . . . si

r̄ s̄ n̄ d̄ p̄ m̄ p̄ m̄ ḡ r̄

go . cha . kra . na . ga ru

ḡ r̄ r̄ ḡ r̄ r̄ s̄ n̄ d̄ n̄

ā . ru . da kha ga tu ran .

r̄ r̄ ḡ r̄ ḡ m̄ p̄ p̄ m̄ ḡ

Sau . rā . . shtra Pn . ri vi

Mayamalavagaula—Matya tala (contd),

$\frac{1}{4}$ ○ $\frac{1}{4}$	$\frac{1}{4}$ ○ $\frac{1}{4}$
$\dot{d}$ $\dot{p}$ $\dot{m}$ $\dot{p}$ $\dot{m}$ $\dot{g}$ $\dot{m}$ $\dot{g}$ $\dot{r}$ $\dot{s}$ Gau . di pan . tu Mā . ru va $\dot{S}$ $\dot{r}$ $\dot{g}$ $\dot{g}$ $\dot{r}$ $\dot{s}$ $\dot{n}$ $\dot{d}$ Pan cha ma Pu . rna pan . $\dot{n}$ $\dot{d}$ $\dot{N}$ $\dot{d}$ $\dot{p}$ $\dot{d}$ $\dot{p}$ $\dot{M}$ ma ka li Pa ru . . ju $\dot{S}$; " $\dot{g}$ $\dot{m}$ $\dot{p}$ $\dot{d}$ $\dot{n}$ $\dot{s}$ gā ; su bhā . . . nga $\dot{S}$; ; ; ; gā	$\dot{m}$ $\dot{g}$ $\dot{r}$ $\dot{g}$ $\dot{r}$ $\dot{s}$ $\dot{r}$ $\dot{s}$ $\dot{n}$ $\dot{d}$ Sā . ve . ri Mā . la va $\dot{s}$ $\dot{s}$ $\dot{s}$ $\dot{n}$ $\dot{r}$ $\dot{s}$ $\dot{s}$ $\dot{n}$ $\dot{d}$ $\dot{p}$ cha ma Mā . rga de . si Bā . $\dot{G}$ $\dot{M}$ $\dot{d}$ $\dot{d}$ $\dot{p}$ $\dot{m}$ $\dot{g}$ $\dot{r}$ Gau ri va sa . nā rā . $\dot{g}$ $\dot{r}$ $\dot{r}$ $\dot{g}$ $\dot{r}$ $\dot{r}$ $\dot{s}$ $\dot{n}$ $\dot{d}$ $\dot{n}$ ā . ru . da kha ga tu ran .

TANA VARNAS.

[Composer:—Vina KUPPAYYAR.]

$$\left\{ \begin{array}{l} \text{sr g m p d n s} \\ \text{s n d p m g r s} \end{array} \right.$$

29. I. Sankarabharana raga — Adi tala.

- ப. ஸாயி நின்னே கோரி ப. சாமி விசுநீரீர
சரல மருவு கொன்னதிரா சால மருவோசுநீரீர
- அ. தாமஸமு ஸேயக ல. சாமசயு ஸேயக
தயஜுடிரா குமாரா டயஜுடிரா குமாரா
- ச. நீரஜாக்ஷி நீபை ச. நீரஜாக்ஷி நீபை

| 4

○

○

Pallavi

S ;	n s d n	P-m p	G M	P-d n P-d n	sr-s n d p d n
சக	...	mi . .	ni .	nne . . . ko .	 ri . .
S id	p m P-	p m g r	s r g s	n p d n S-p m	g-r g m-P d n
chā la .	... ma	ru . . .	lu . . .	ko nna .	di . . ra . .

Sankarabharana raga — Adi tala (contd.)

154

	○	○
<i>Anupallavi</i> S d d p m - d P m - g p G m r tā . . . mā . sa	g m p d d p - m p mu . se . . ya .	d n s n S - r g ka . . .
m g r s - s r s n d p - d n s r S da . . ya . . ju . . da . . . rā <i>Muktayi svara</i>	s d p P m g r ku .	s m g m P d n . mā . . ra . .
s r n s - d n s - p d n s d p - m p d	m p - g m p - r g m	s r g m p d n s
r g m g r g r s n p d n S P <i>Charana</i>	s n d P m g r	s R' g m p d n
P d n s - s n d - p m g r G M ni . . . ra . . jā	P - m D p - s n kshi ni . . . pal .	d p - m g m r g m

Ettagada svaras

1. P, M, P, - GM - Rg

, - SRGm ||

2. pDp mg - mPmgm - rGr

R - nSrgm ||

3. Mdp mg - Mpgm - rgSn

(rg)
srgmP - gm

pdn - pdnsr - sgR - sndn

mgrs - rGm ||

4. Pmp gmrg S - mgrsnp

(srgm)
srgmP - dp

Sn Rs mg rgS - npdn

mgrS - rgm ||

S, - R, N

sndn - pdns

smgr - sndn

Snd - Pd

Dns rsN

SS - ndP

[Composer:—Fiddle PONNUSWAMY

$$\left\{ \begin{array}{l} \text{sr g m p d s} \\ \text{s n d p m g r s} \end{array} \right.$$

II. Kambhoji raga—Adi tala

28.

ப. தருணி நின்னுபாணி-தாளவேது ரா ப. கருவி ன்னு வாசி - தாళவேது
 அ. தரலோ வெலவின ஸ்ரீ-தியாகேச ஐகதிச ம. தரலாபெலிந ஸ்ரீ - தாళுநீச ஐகதிச
 ச. ஸரஸகு ராரா ச. ஸரஸக் ராரா

* Kākalī Nishāda.

14	○	○
P D S - r n d p - d s r g m m ta ru ni ni d s r m m g - s r g m p d - m g p d t ā la le	g g - r R s - m g nu b ā . r Ṣ n d p - d p d u	r g s s N d p si . . , m g r - r S * n r s .

Anupallavi

n n d d p m - p n d P d M - g m

dha ra lo . . .

m m g - s r g - d s r - p d s - m g p d

Tyā . . . ge sa . . . Ja . . .

Muktayi suara

* n p d S s - p d s R r - d r R

s r g S s - r m g S - r p m g s

m g r S s - n n d P d - m p G

r g m R g - s r g S r - n d p d

Charana

S S n n D - m p d d n n d p

Sa ra Sa

{ : }

p p d d S - r g

si . na . Sri . . .

n d p - m g r s * n

di . . . sa

, g r g - s r n d

s m g m P ;

d p d - m g p d s

d p m g r S * n ||

p G M P d ||

ra . ra ||

Kambhoji raga — Adi tala (contd).

158

[4	○	○
<i>Ettugada svaras</i>		
1. Ś, N, D, P, - M G	R, S, R	, - G M P d
2. śndP - ndp mgr - dp mgr	r s* n P - d s r	g - s r g m P d
3. ndp M, - p d p M p - m g m p	m d p M - p n d	m p s n d - s r g
4. D; ; - n p d n d - M p d	P; ; - m p	d M p - m g m p
d p m - n d p - s n d - m g p d - s r g	S n d P - m g	r S - r g m p d
5. Ś; ; ; - s n d p m g r - s r g	S; ; ; - s n	d p d - m g P d
r g m P - m g m p D - g m p d n	, - p d n n d - m p	n d p d P, - d
p m g M - p m p d D - p s n n d	p d s - g p d s - r	g m p d - S n d
s R s n d - r s n d - g R s n d	p d s r G - g p	d s r - r g m p d

III. Navaragamalika varna — Adi tala,

[PATNAM SUBRAHMANYA AYYAR

ப. வலசி வச்சியுன்ன நாடாப
சவமு ஸேயமேரா ஸாமி ||

அ. செலுவுடைன ஸ்ரீ வெங்கடேசா
கவளி மெலனி கௌகலிஞ்ச ||

ச. பதஸரோஜ முலனே நம்மி ||

ப. வலசி வச்சியுன்ன நாடாப
சவமு ஸேயமேரா ஸாமி ||

அ. செலுவுடைன ஸ்ரீ வெங்கடேசா
கவளி மெலனி கௌகலிஞ்ச ||
ச. பதஸரோஜமுலனே நம்மி ||

159

4

Pallavi

1. Kedaram.

P N S ; - s n s r s s n n

va la e hi . va e che hi

p n s - m g m - p n p - s n P - m m g

cha . . . la . . . mu . . . se . y a me . . .

s m g m - p n p p m m g g - r r s n

yu . . . n na n ā pai

r S , - s n p m g - n p m g r e n ||

. ra . s ā mi ||

₄	○	○
2. Sankarabharana. <i>Anupallavi</i> S P p m g r — G M P ; che lu vu . . . dai . na . n s g r s n - s r G - m g r s n p ka . la . . . si . . me . . la . .	g m p - d d p m p Sri . . Ven . . ka . n s r S - m p d si . . kau ga . .	d n s n S ; te . . . sa . P - p m g r s n . li . . ncha . . . s r g m P ; m p d n S :
3. Kalyani. <i>Muktayi svara</i> d n s R g - s r g M - d p m g r d m g r S - d n s R - G m p d		

4! Begada.

ndpMgr-gdMgrsn-d

pmdp-snr s

grgmR s-nrs-rndp

, -mggrsrn||

Charana

5. Kambhoji.

PDŠ-s nD-d nP;

ddpd-pmgm||

pa da sa ro . . . ja .

nam . . . mi . . . ||

Ettugada svaras

6. Yadukulakambhoji.

P, M, G, R, -G R

, S, , -R m||

7. Bilahari.

pdpmgrG-dpmgrs n d

r s r g P ;

p m g R - g p d Š - r g p d Š

r g P - m g r g ||

Navaragamalika varna — Adi tala (contd.)

4	○	○
8. Mohana.	Sgr-srS	rsds-rgpd
Pd-p-grG-dpgr-gpgr	igrs-dpds	dpgr-srgr
sdpgrs-dpgrs-rgpds	S, -snpN	, -SRMm
9. Sriraga.	psnPm-rg	rS-rmpns
P, pmr-G, grs-nsg	grgSr-ns	rNs-pnsr
pmrgs-nsrmp-srmpn	m-Rgrs-gr	snp-rsnpm
pnsRr-nsrGgrs-nn		
nGgrs-nRrsn-pdnp		

[Composer :—Pachchimiriyam ADIYAPPIAH.

IV. Bhairavi raga — Ata tala.

20

ப. விரிபோணி நின்னே கோரி
மருவ கொன்னதிரா

அ. ஸரஸுடேள தக்ஷிண த்வாரகா
ஸாமி பூரீ ராஜகோபால தேவ

ச. சிரு நவ்வு மோமுன *Chatussruti dhaivata.

{ s r g m p* d n s
s n d p m g r s

ப. விறிவீசி நின்னே கோரி

மருவ கொன்னதிரா

அ. ஸரஸுடே தக்ஷிண த்வாரகா

ஸாமி பூரீ ராஜகோபால தேவ

ச. சிரு நவ்வு மோமுன

5

5

O

O

Pallavi

—N S R, g - S R

viri bo . . .

{ S, r N* D }
a

g r g g R ; - g g r g - m p d - m p g r s

ni ni

n s m g r s - n s

nne ko .

r g g s r - n n d n

Bhairavi raga — Ata tala (contd.)

₅	₅	○
sgrn sndp—pdpd-nndp-*d n s r	ri ma . ru . lu	○
p*dns-r g m p m g r g - m n d p m g r n	ko nna di	s r g m g r g g
m g r - S r n * d	ra	R ; - s n d p
.	dhva	g r g m p * d n s
Anupallavi	n d P d m p	 ra . ka .
s n d p m g r g - m n d p	sa . ra . su dau	
m g r - p m g r s - p * d n s r g - n s r g m p	 da kshi . na	

p*dn s-r g m g-r g s r-n g r s-n*d n s

sa mi Sri

g r s - s n n d d p - m n d p - m g r g r s n s r g - m p * d n s n d d p m - P

Ra jago pa la de va

, m g r - s r n * d ||

. ||

Muktayi svara

g g r s - r s n n - * d n s r

m m p p * d * d n n - p p p - d * d * d n n n - s s r p * d n s - r g m p d p m d P - n n

d d d p p m - n * d n - p * d n - m p * d n s r n * d

m g r s r - n s r - r G m p d - m P * d n s n R s n * d - S , n d p - P , m

g r - S , r n * d || (viri)

Bhairavi raga — Ata tala (contd),

166

₅	₅	₅
<i>Charana</i> M M d p d - m p g M ohi ru nau P ; P ; - m p n n d p m g - m n d p mo s n d p m g r g 	m g r g - m p d - m mu	p m D P - m p na (m p) n n d D - m M
<i>Ettugada svaras</i> 1. G, R s - N, D p M, - p * D n s n R - n s r g m g M - n n d d N d d m g r s n S r g (chiru)		

(D)

2. nndD-nddM,-ndpM,-dpm
 gRGmpd-mPd-p*d n-*dn srs
 n*Dn sgrg || (chiru)

3. SrgsrGR;-Ns rnsR
 S,rNn*d-G,Rs-N,*Dn
 dpGRr-n*d rSs-mGr-pMg
 rGm-pdpm-nndDn-ddpPm
 nsng-rmgp-mdpndn-pdmpgr
 gmpm-p*dns-nsgrg-nenr
 ssrrgg-mggi-mgrs-ngrs-nr
 sndp-dnsr-mmpp*d*dnn-sgrn
 grsn-Srg || (chiru)

mPm-grsr

ngr-Ndpd

p*dns R ;

P, - *Dnsr

mpgm P ;

gR-Gmpd

p*dnn S-nn

nrsn dpdm

ddnd-dm M

, *d-rsN-dn

CHAPTER IX

TECHNICAL TERMS.

Adi guru, the first teacher who taught music in a systematic form and wrote for this purpose, the graded musical exercises: svarāvali, alankāras, gitas etc. (refers to Purandara Dās).

Aditya, the name of the twelfth chakra in the scheme of 72 melakartas.

Agni, the name of the third chakra in the scheme of 72 melakartas.

Alpatva, a note sparingly used in a raga; (also see under trayodasa lakshanas.)

Amsa, the note which brings out in bold relief the melodic entity of the raga; also referred to as *jiva svara* and *rāga chhāyā svara*. A raga may have two or more amsa svaras.

Anagata graha, a case where the tala precedes the music.

Antara marga, see under trayodasa lakshanas.

Apanyasa, see under trayodasa lakshanas.

Arohi, see under varna.

Atita graha, a case wherein the music starts before the commencement of the tala āvarta.

Audava, see under trayodasa lakshanas.

Auduva, refers to the number of notes, *five* figuring in a raga; same as audava.

Avarohi, see under varna.

Bahutva, a note that is frequently used in a raga; (also see under trayodasa lakshanas.)

Bana, the name of the fifth chakra in the scheme of 72 melakartas.

Bhashanga khanda, the name given to the third section of a rāgāṅga rāga lakshana gita, and which contains the names of the bhāshāṅga ragas derived from that mela.

Bhava भाव, soul of expression in music.

Bhayakara, a corrupt form of ubhayakāra; vāggeyakāra or composer.

Brahma, the name of the ninth chakra in the scheme of 72 melakartas.

Chauka varna, a kind of varna (see under varna).

Chhayalaga raga, a raga wherein the trace of another raga is perceivable occasionally.

Chinna melam, (சின்னமேளம்) the group of performers figuring in a South Indian dance concert; sadir.

Chitta svara, a set solfa passage in the kriti and introduced as an extra appendage for enriching the beauty of the composition.

Dātu svara दातु स्वर, a pair of non-contiguous notes i. e., a pair wherein an intervening note or notes that can validly occur is deleted; thus the pairs: (a) p g (b) m r and (c) g s are dātu svaras occurring in Sankarā bharana. The number of intervening notes deleted in a dātu svara may vary from 1 to 4. The notes constituting a dātu svara may be related as samvādi svaras or anuvādi svaras.

Dātu svara prayoga, a phrase containing dātu svaras. All conceivable dātu svara prayogas are not admissible in a raga. Only those which reveal the rāga bhāva are used and the rest ignored. In the *viriboni varna* (Bhairavi) the third āvarta of the third ettugada svara begins with a beautiful dātu svara prayoga: n s | n g | r m | g p | m d | p n |

Desi sangita, the modern music prevailing in this land—*terrestrial music* as opposed to *celestial music*.

Disi, the name of the tenth chakra in the scheme of 72 melakartas.

Druva rūpaka, a variety of rūpaka tāla. A composition in this time-measure is set only in rūpaka tāla, but at the commencement of each section of the composition, there are two drutas and two laghus followed by the usual rūpaka tāla āvartas ; ex. the gita *Areyānaka* (Nāta raga).

Dvi-anya svāra bhāṣaṅga raga, a bhāṣaṅga raga with two foreign notes ; ex. Hindusthān Behag.

Eduppu (எடுப்பு), the equivalent of graha in Tamil ; the starting point of music in the tāla āvarta.

Ekanya svāra bhāṣaṅga raga, a bhāṣaṅga raga with one foreign note ; ex. Kāmbhoji.

Ettugada svaras, the solfa passages figuring in the latter part of a varṇa. The concluding note of an ettugada svāra passage is usually a brahva svāra ; dirgha svaras and janta svaras will not be appropriate concluding svaras in such cases.

Figure, svāra-group of a definite pattern,

Gana gita, the music which is the contribution of composers or vāggeyakāras. This is *art music*.

Gana-krama, the order in which the constituent angas of a musical form should be sung.

Gandharva gita, the music which developed spontaneously i. e., through *anūdi sampradāya* (அநுதி ஸம்பிரதாயம்). This is older than gāna gita.

Gayaka, a singer ; vocalist.

Ghana panchaka, the traditional five ghana ragas :—
Nāta, Gaula, Arabhi, Srirāga and Varāli.

Graha, the starting-point or the eduppu (ఎదుப்பு) of the music in the āvarta.

Graha, the note on which a raga commences ; one of the thirteen lakshanas of a raga (also see under trayodasa lakshanas.)

Heptatonic scale, same as sampūrṇa raga (having all the seven notes.)

Hexa tonic scale, same as shūdava raga (having six notes).

Indu, the name of the first chakra in the scheme of 72 melakartas.

Jiva svara, a note which reveals the individuality of a raga. Such notes may or may not be nyāsa svaras. In bhashanga ragas even anya svaras may be jiva svaras ex. Sāranga ; (same as *amsa svara* and *rāga chhāyā svara*).

Kalahastisa Pancharatna, a set of five kritis in Telugu in praise of Sri Kālahastisa, by Vīṇa Kuppayyar.

Kalpayishyamana melakarta, see under kalpita melakarta.

Kalpita melakartas, the name suggested by Venkatamakhi for the 19 melas (out of his 72) which were already in vogue and well-known. The remaining 53 melakartas were grouped under : *Kalpyamāna*— in the process of making i.e., becoming popular and *Kalpayishyamāna*—to be made hereafter i.e., to become popular at some future date.

Kalpita sangita, music already made ; refers to the compositions of vāggeyakāras, as opposed to *manodharma sangita*, which is music created extempore.

Kalpyamana melakarta, see under kalpita melakarta.

Karnataka sangita pita maha, the founder of Karnatic music; refers to Purandara Dās.

Katapayadi Sankhya, कटपादिसंख्य — the formula which helps us to find the serial number of a melakarta when its name is given. Once the serial number is found, it is easy to give its lakshana. The formula is summed up in the phrases: *kādinava* कादिनव, *tādinava* टादिनव, *pādipancha* पादिपंच, *yādyashta* याद्यष्ट.

Kelikkai, a dance concert.

Koluppittal கொலுப்பித்தல், see under *konugol*.

Konugol, the name given to the art of reciting jatis in conformity to a tāla in a musical manner.

Konuppittal (கொனுப்பித்தல்) or *Koluppittal* (கொலுப்பித்தல்) is the practical art of reciting the jatis in the manner mentioned above.

Konuppittal, see under *konugol*.

Kovur Pancharatna, the 5 kritis composed by Tyagaraja in praise of Sundaresvara Swamy of Kovur. They are: *Sambho Mahadeva* (Pantuvārāli), *I vasudha nivanti* (Sahāna), *Kori sevimpā rare* (Kharaharapriya), *Sundaresvaruni* (Sankarābharanam) and *Nimmi vachchīna* (Kalyāni).

Kvachit prayoga, a note or a phrase sparingly used in a raga — opposite of *bahula prayoga*.

Laukika ganam (लौकिकगानम्), secular music.

Madhyamakala मध्यमकाल or *Tāna* तान (also called *ghanam*) is a branch of creative music. In this style of raga development, the music is measured, though not into so many clear-cut āvartas.

Madhyamakala sahitya मध्यमकालसाहित्य — the portion of a kriti in madhyamakāla.

Mandra, see under trayodasa lakshanas.

Manodharma sangita, मनोधर्मसंगित — Creative music.

Music that is performed in a concert is of two kinds:—

- (1) The performer sings or plays the musical compositions of great composers *i e*, he reproduces music which has already been created or composed.
- (2) The performer sings or plays extempore music —the music being the offhand creation of his own fertile imagination.

The latter is termed *manodharma sangita* or creative music and is of five kinds:—

- (a) Rāga ālāpana, (b) Madhyamakāla or tāna,
- (c) Pallavi, (d) Svara kalpana and (e) Niraval.

Composing musical compositions is no doubt creative music, but here the composer has unlimited time at his disposal and is able to exercise a good deal of thought, judgment, attention and skill in perfecting them. In the instances of creative music cited above, the music sung is *extempore* and simply flows spontaneously.

Marga sangita, the name given to ancient music and which is said to exist in Heaven ; celestial music.

Matu, (मातु) the sāhitya or the words of a musical composition.

The mātu may consist of:—

- (1) The ordinary spoken words, as in the case of the sāhitya of a kriti, padam or jāvali.
- (2) The svara-letters *sa ri ga ma pa dha ni* interspersed with ordinary words as in a tillāna.
- (3) The tāla-solfa syllables or jatis like *taka-tari-kita naka-tom-janu* etc. as in tillānas and kaivāra prabandhas.

(4) Phrases like *a iya, ti iya, a iyam, vā iya* as in gitas.

As a rule for every musical composition there is a *mātu*. But compositions like the *jatisvaram* have no *mātu*.

Misra raga, same as *sankirna raga*.

Muktayi svāra, the solfa passage that occurs after the *anupallavi* in *tāna varnas*.

Musical fact. Any phenomenon or truth relating to music.

That there are only seven *svāras* is a musical fact; that when a note and its octave or its fifth are sounded together, a concordant effect is produced, is a musical fact; that the vibration values of the notes, *shādja* and *panchama* bear the ratio 2 : 3 is a musical fact; that the fifth harmonic, *antara gāndhāra* is heard from a well-tuned *tambura* is a musical fact.

Muttamil, (முத்தமிழ்), the three branches of Tamil learning : literature, music and drama (இயல், இசை, நாடகம்).

Naubat, the band of players that sit on the elevations over the arched gateways of palaces, mausoleums and tombs and perform.

Navagraha kirtanas, a set of *kirtanas* on the Planets by the composer, *Muthuswami Dikshitar*.

Navarasa, the nine kinds of feeling (emotion) :— *sringārā* (love), *hāsyā* (laughter), *karuna* (pathos), *raudra* (anger), *vira* (heroism), *bhayānaka* (fear), *bibhatsa* (disgust), *adbhuta* (surprise), and *sānta* (patience). *Bhakti* (devotion) is regarded as the tenth *rasa*.

Navaratna malika, literally a garland of nine gems; the name given to the nine *kritis* composed by *Syama Sastri* in praise of the presiding Deity of *Madura temple* : *Sri Minakshi*.

Navavarana kirtanas, a group of nine kirtanas in praise of Devi by Muthuswamy Dikshitar. There are three sets of these : Kamalāmba navāvaranam, Abhayāmba navāvaranam and Siva navāvaranam.

Netra, the name of the second chakra in the scheme of 72 melakartas.

Nyasa, the note on which a raga or a phrase ends; (also see under trayodasa lakshanas).

Pada jati varna, a kind of varna (see under varna).

Pada varna, a kind of varna (see under varna).

Paddhati, पद्धति—Procedure or method; ex. rāga ālāpana paddhati.

Pan (பண்), the equivalent of raga in ancient Tamil music; also a song or tune.

Panchalinga sthala kritis, a set of five kritis in Sanskrit by Muthuswamy Dikshitar in praise of the five Lingas : Pritivi (Conjeevaram), Appu (Tiruvānaikkāval), Teyu, (Tiruvannāmalai), Vāyu (Kālahasti) and Akāsa (Chidambaram).

Pancharatna, literally five gems : refers to the famous five compositions of Tyagaraja in the ghana ragas :— Nāta : (Jagadhānandakāraka), Gaula : (Dudukugala), Arabhi : (Sādhinchene), Sriraga : (Endaro mahānubhāvu) and Varāli : (Kanakana ruchira).

Panniyam (பண்ணியம்), a shādava raga in ancient Tamil music.

Patam பாடல், jatis or tāla mnemonics; tāla solfa syllables.

Patantaram, repertoire.

Penta tonic scale, same as audava raga.

Periya melam (பெரிய மேளம்), the nāgasvaram set, consisting of the players of the nāgasvaram, ottu (drone), tavil (drum) and cymbals.

Pidippu (பிடிப்பு) पिडिप्पु—The name given to the more prominent sanchāras or raga ranjaka combinations of a raga and which bring out its svarūpa or identity; catches; called *pakad* in Hindusthāni music.

Prati madhyama karta, a melakarta taking the prati madhyama or F sharp.

Prayoga प्रयोग—sanchāra संचार: combination.

Purva mela, same as pūrva melakarta (see below).

Purva melakarta, a melakarta belonging to the pūrva half or the first half of the scheme of 72 melas; i.e., a suddha madhyama karta.

Purva prasiddha melas, the 19 or 20 wellknown melas current before the time of Venkatamakhi and referred to by scholars as such.

Quadra tonic scale, same as svarāntara rāga.

Raga chhaya svara, same as amsa svara or jiva svara.

Ragamalika, a composition wherein the sections are in different ragas, the tala being constant throughout.

Ragamalika kirtana, a composition of the kirtana form wherein the sections are in different ragas e. g., *Enakkun iru padam* (எனக்குள் இரு பதம்) of Arunāchala Kavirāyar and *Jaya Jaya Gokula Pala* of Nārāyana Tirtha.

Ragamalika varna, a composition of the varna form with the sections in different ragas e. g., the *Navaraga malika varna* and the *Dinaragamalika varna*.

Ragana (रागण) Matya tala, a tala which has the following constituent angas: guru, laghu and guru i.e., 8 | 8; an āvarta of this tala consists of 20 aksharakālas. The ordinary Matya tala consists of | ○ | and an āvarta of this tala consists of 10 aksharakālas.

Raga tala malika, a composition wherein each section is composed in a separate raga and a separate tala.

Rasika, a cultured person; one who is able to genuinely enjoy and appreciate good music; a person with an accredited, refined and critical taste.

Resting note, a note on which one can rest or repose and around which, one can [develop an ālāpana. Every resting note is a nyāsa svara, but every nyāsa svara need not necessarily be a resting note.

Rishi, the name of the seventh chakra in the scheme of 72 melakartas.

Rudra, the name of the eleventh chakra in the scheme of 72 melakartas.

Rutu, the name of the sixth chakra in the scheme of 72 melakartas.

Salaga raga, same as chhāyāлага raga.

Salanka raga, same as chhāyāлага raga.

Sama graha, a case wherein the music and the tala begin simultaneously.

Samvadi, exact consonance; (also see under vādi).

Sanchari, see under varna.

Sangati, a technical beauty met with in the kriti and a few other types of compositions. It is the name given to the variations developed, or built on a musical theme, step by step.

Sankirna raga, a mixed raga *i. e.*, a raga wherein traces of other ragas are seen in a pronounced manner.

Sankrama raga, same as sankirna raga.

Sanyasa, one of the trayodasa lakshanas.

Sarva laghu, literally, laghu all through; counting by sarva laghu means, measuring time in an even manner *i. e.*, reckoning by mere aksharakālas instead of reckoning by its constituent angas.

Sata raga ratna malika, a garland of 100 kirtanas in Telugu, in 100 different ragas by Tyagaraja.

Shadava, one of the trayodasa lakshanas.

Shodasangas, the 16 angas beginning with the anudrutam (duration, one aksharakāla) and ending with the kākāpādam (duration: sixteen aksharakālas).

Solfa passage, a musical passage which has no sāhitya and which is sung with the svara letters.

Solkattu (சொக்கட்டு), jatis; tāla solfa syllables.

Solkattu svara (சொக்கட்டு ஸ்வரம்), a passage of chitta svara interspersed with jatis and figuring in some kritis; it is an additional appendage introduced to enrich the beauty of a composition. The gānakrama of this technical beauty can be like that of a svara sahitya *i. e.*, the passage with the jatis may be sung after the charana, and the dhātu part alone may be sung through the medium of solfa letters at the end the anupallavi.

Sthayi, see under varna.

Suddha madhyama karta, a melakarta taking the suddha madhyama.

Suddha raga, a pure raga, *i. e.*, unalloyed by the presence of traces of other ragas.

Sutra khanda, the name given to the first section of a rāgānga rāga lakshana ṭīṭa, and wherein the svaras figuring in the rāgānga rāga are given in the form of mnemonics.

Svarakshara, a literary as well as a musical beauty met with in kritis, varnas, padas and jāvalis. A svarākshara passage is one wherein the solfa letters figure in the whole or part of a sāhitya and the particular passage

is sung to the music signified by those letters. In such a passage therefore, the svaras and the corresponding sâhitya letters happen to be exactly identical.

Svara sahitya, स्वर साहित्य—A technical beauty figuring in the kriti composition and wherein the chitta svara passage is adorned with an appropriate sâhitya.

Svayambhu svaras, over-tones or upper partials.

Symmetrical raga, a non-vakra raga which takes the same number and kind of notes in both its ārohana and avarohana. The symmetry can easily be perceived in the ārohana - avarohana graphs of these ragas.

Tala malika, a composition wherein the sections are in different talas or time-measures, the raga being constant throughout.

Tara, one of the trayodasa lakshanas.

Tattakara (தத்தகாரம்), the name given to a passage of tala mnemonics or jatis, illustrating a particular tala. There are standard tattakāras for almost all the time-measures used in sacred and secular music.

Tiram (திரம்), a janya raga; also an audava raga in ancient Tamil music.

Tirattiram (திரத்திரம்), a svarāntara raga in ancient Tamil music.

Tiruvottiyur Pancharatna, the five kritis composed by Tyagaraja in praise of Sri Tripurasundari Amman of Tiruvottiyur; they are:

<i>Sundari ni divya rūpamunu</i>	— Kalyāni.
<i>Darini telusukonti</i>	— Suddha sāveri.
<i>Sundari nannundarilo</i>	— Begada.
<i>Sundari ninnu varnimpa</i>	— Arabhi.
<i>Kannatalli ninnu</i>	— Sāveri.

Trayodasa lakshanas, the thirteen characteristics of a raga, mentioned in the Sanskrit works on music and which established its svarūpa or melodic entity :—*Graha*, the note on which the raga commenced ; *amsa*, the note which revealed the melodic entity or the *svārūpa* of the raga ; also called the *jīva svara* (soul of the raga) ; *nyāsa*, the note on which the raga was concluded ; *mandra* and *tāra*, the lowest and the highest notes respectively, beyond which the raga *sanchāras* should not extend ; *alpatva*, the note that was used sparingly in the raga ; *bahutva*, the note that was used frequently in the raga ; *apanyāsa*, *vinnyāsa* and *sanyāsa*, the ending notes of intermediate phrases in the course of the rāga ālāpana ; *shādava*, constituted of 6 notes ; *audava*, constituted of 5 notes ; *antara mārگا*, the introduction of a note or *chhāyā*, not belonging to the rāga.

Tri-anya svara bhashanga-raga, a bhāshānga raga with three foreign notes : ex. Hindustān Kāfi.

Ubhayakara or **bhayakara**, dhātu-mātu kāra *i.e.*, one who has the ability to compose music and also set a suitable sāhitya to it ; composer or vāggeyakāra.

Upanga khaṇḍa, the name given to the second section of a rāgāṅga rāga lakshana gita, and wherein the upāṅga ragas derived from that mela are enumerated.

Uttara mela, same as *uttara melakarta* (see below).

Uttara melakarta, a melakarta belonging to the *uttara* half or the second half of the 72 melakartas, *i.e.*, a *prati madhyama karta*.

Vadi, samvadi, anuvadi and vivadi.

Svaras are divided into four classes :—

Vādi, samvādi, anuvādi and vivādi.

Vādi, is the principal or the predominant note of a raga. The *vādi* *svara* is compared to a king. This royal or regnant note is sounded several times in a raga.

Samvādi *svaras* are those between which there are eight or twelve *srutis*. In other words, if two notes are related as *shadja* and *panchama*, or as *shadja* and *suddha madhyama*, they are called *samvādi* *svaras*. *Samvāditva* means the consonance of the fifth or the fourth. The *samvādi* *svara* is like a minister to the king *vādi*.

Shadja and *Panchama*, *Shadja* and *Suddha Madhyama*, *Suddha Rishabha* and *Suddha Dhaivata*, *Suddha Gāndhāra* and *Suddha Nishāda*, *Sadhārana Gāndhāra* and *Kaisiki Nishāda*, *Antara Gāndhāra* and *Kākali Nishāda*, *Suddha Rishabha* and *Prati Madhyama* are *samvādi* *svaras*.

Vivādi, if between two *svaras*, there is only one *sruti*, these two notes are said to be *vivādi* to one another; the *vivādi* note is like the enemy.

Anuvādi, *svaras* which are neither *vādi*, *samvādi* nor *vivādi* are called *anuvādi*. The *anuvādi* *svara* is compared to a servant; compared to the *samvādi* *svara*, the *anuvādi* *svara* relatively speaking, is somewhat less consonant.

Thus 'the *sonant* or the speaking note is the *vādi*. The *consonant* note is the *samvādi*. The note which clashes with it and produces a discordant effect is the *vivādi* or the *dissonant* note. The note which increases

the beauty of the raga is the *anuvādi* or the *assonant* note.'

Thus from the point of view of the *interval relationships* of notes, *svaras* have been classified into:— *vādi*, *samvādi*, *anuvādi* and *vivādi*. The simultaneous sounding of *samvādi* *svaras* (consonant notes or intervals) results in a pleasant effect; the simultaneous sounding of *vivādi* *svaras* (dissonant notes or intervals) results in a repulsive effect; the simultaneous sounding of *anuvādi* *svaras* results in an effect which is intermediate between these two; *i.e.*, neither wholly pleasant nor wholly repulsive. These are fundamental musical truths and hold good in all systems of music.

Vaidika ganam (वैदिक गानम्) sacred music.

Varik, shake or *kampita*; shake of the interval and not merely the tremolo of a *svara sthāna*.

Varik style, a style of playing wherein the notes are seldom sounded pure and wherein one gets the aural impression of a series of musical curves.

Varna, the mode of singing (*gānakriyā*) and is of four kinds:— *sthāyi*, *ārohi*, *avarohi* and *sanchāri*.

Varna, an art musical form belonging to the sphere of *abhyāsa gāna*. *Varnas* are of two kinds:— *tāna varna* and *pada varna*. In the former, the tempo is *madhyamakāla* and in the latter, *chauka kāla*. For this reason, *pada varnas* are also called as *chauka varnas*. There are some *chauka varnas* by great composers wherein *sāhitya* is found only for the *pallavi*, *anu-*

pallavi and charana, after the model of a tana varna—the remaining sections being sung as solfa passages. But a padavarna has always sāhitya for the entire piece.

Pada jati varna is a pada varna wherein we come across jatis in some portions.

Vasu, the name of the eighth chakra in the scheme of 72 melakartas.

Veda, the name of the fourth chakra in the scheme of 72 melakartas.

Venkatesa Pancharatna, a set of five kritis in Telugu, in praise of Sri Venkatesvara, by Vina Kuppayyar.

Vijaya Raghava Pancharatna, a set of five padas in Telugu composed by Kshetrajna in honour of Vijaya Raghava Naik of Tanjore, one of the royal patrons of the seventeenth century.

Viloma krama, reverse order.

Vinyasa, one of the trayodasa lakshanas.

Virama, a synonym for the anudruta.

Visesha sanchara, a musical phrase, which is not in accordance with the ārohana and avarohana krama of the raga but which nevertheless comes in, for the sake of enriching its beauty.

Visranti विश्रान्ति, a period of rest or silence in a musical composition.

Vivadi, an inimical note; also see under vādi. In Hindusthani music, the term vivādi svara is used in the sense of varja svara i.e., a note eschewed in the raga.

Vusi (వూసి), visarjitam.

Anuvadi, see under vādi.

Gramophone and the Radio, two of the boons of modern science, to humanity. Through the gramophone one is able to listen to a piece of recorded music, any number of times and through the Radio, one is able to listen to music performed thousands of miles away.

Gramophone recording is a complicated process. At one end of the recording apparatus is a microphone which picks up the music performed in the chamber and at the other end of the apparatus is the needle which records the music as a series of wavy lines on a revolving disc of wax. From this waxy disc, negatives are taken and from these, the gramophone records are made.

Some of the best specimens of world's classical music and folk music have been recorded on the gramophone. Long after the demise of an illustrious performer, one can still feast his ears with the recorded music of that performer. Group kritis and long compositions like the 72 *Melarāga mālīka* of Mahā Vaidyanātha Iyer can be recorded and made available to music lovers through sets of records. Some of the priceless musical legacies can thus be preserved for posterity. One can delight himself with gramophone music on mountain tops, in places where electricity is not available and in *dead spots* i.e., places where the Radio music cannot be heard. A certain amount of self-education in music is also possible through the gramophone. Thus in addition to entertainment, the uses of the gramophone are manifold.

In *Radio Broadcasting Stations*, musicians perform in sound-proof studios. The music performed in front of

the microphone is transmitted and broadcast. Every Radio Station has its own wavelength or wavelengths for its broadcasts and by tuning the receiving set to the particular wavelength, one is able to listen to the programme from the concerned station.

Echoes, reflected sounds. When sound waves strike a smooth, fixed and plane surface, they are reflected. If the echoes are to be *audible*, the person speaking or singing should be at a place sufficiently far away from the reflecting surface. Echoes can be heard in temple corridors, hill sides and in the neighbourhood of big walls. The phenomenon of clock-tower music being heard as janta svaras from particular places in the neighbourhood, is due to the fact that at those particular spots the person first listens to the direct sound emanating from the clock-tower bells and immediately afterwards, the same sounds reflected from a neighbouring wall or building; (one can experience this phenomenon by standing near the Senate House, Madras). In big concert halls, echoes are perceptible and in such cases, the defect can be rectified by covering the offending walls or surfaces with some sound-absorbent material.

Harmonics.—When a stretched string fastened at both ends is made to vibrate, it first vibrates in its entire length; then in two segments; then in three segments; then in four and so on. As a result we hear certain sounds in rapid succession superposed upon the principal sound. The lowest note *i.e.*, the note produced by the vibration of the whole length of the string is the loudest and is called the fundamental or *prime tone*; the others are called *over-tones*, *upper partial tones*

or *harmonics*. A note not accompanied by its harmonics is always thin and poor. In sanskrit, harmonics are called *anurananātmaka dhvani*: अनुरणनात्मकध्वनि: Somanatha in his *Rāga vibodha* calls harmonics as *svayambhu स्वयंभू svaras*.

Mute, the metal clamp that is placed over the bridge in the violin. The mute grips the bridge. As a consequence of the bridge being gripped and loaded, not only is the intensity of the sound reduced, but a new quality is imparted to the tone, emanating from the violin.

Range of audible frequency, the maximum and minimum limits of pitch beyond which it is not possible for human ears to hear. In absolute pitch, this compass extends from a note of about 16 vibrations per second to a note of about 20,000 vibrations per second i.e., over a range of eleven sthāyis.

Resonance, reinforcement of sound. The phenomenon of resonance is of great importance in the construction of musical instruments and in the production of the tone of the human voice. Musical boxes or resonance boxes in stringed instruments, and the pipe or tube in wind instruments are devices to reinforce the generated sound. Without these resonators, the music emanating from the strings or the mouth-pieces will be feeble.

Sangita Mahal, concert hall; kacheheri mantapam.

In an ideal concert hall, the music is audible at all parts of the hall; even very fast music is heard with clearness; the tone colour of the several instruments is heard in all purity; there is sufficient reverberation; there are no echoes. In an acoustically good hall (சூதக்கட்டு அல்லது மேளக்கட்டுள்ள மண்டபம்) there is

no need for the singer to *exert* and he feels it a pleasant thing to perform therein. In such halls, the requisite musical atmosphere is created soon after the commencement of a concert. The whole atmosphere becomes saturated with musical sounds. Concert halls should be sound-proof, so as to ensure freedom from extraneous noise or be situated away from the road-side to ensure calm and undisturbed listening. Concert halls are, usually rectangular shaped. The *Gewandhaus* in Leipzig, Germany is a world-famous concert hall and it is a pride and a privilege for any musician to perform there.

Sound-post, the tiny little cylindrical piece of wood seen inside the violin, connecting the table and the back. It not only supports the right foot of the bridge, but also transmits the vibrations to the back. The top and the bottom of the sound-post should be respectively shaped to the arching of the belly and the back, so as to ensure perfect contact.

Sympathetic vibration, a phenomenon noticed in the case of columns of air, strings or other objects, under the influence of a source of sound. If a string is set in vibration, it will cause any other string to vibrate, provided this other string is in close proximity and is tuned to the identical pitch of the generating string or to any one of its upper partials. It is wellknown that when one of the *sārani* strings of a *tambura* is plucked the other *sārani* string automatically vibrates. The phenomenon of sympathetic vibration has been taken advantage of in instruments like the *gotuvādyam* and the *sārangi* and the subsidiary notes emanating from the sympathetic strings add a richness to the music.

CHAPTER X

Description of Ragas.

Note.—In this chapter, lakshanas of 15 select ragas are given. The ragas are presented in the order of the melakartas. It is possible to describe each raga in terms of its precise srutis; but in conformity with the usual practice, the svarasthānas alone are mentioned for each raga. To enable the reader to form a fuller idea, a few prominent compositions are cited as examples under each raga. The sanchāras given here are to be sung in slow time.

1, Todi तोढि

The eighth mela raga; second mela in the *Netra* (2nd) chakra (*Netra-Sri*); came to be called Hanumatodi for the sake of the *katapyādi* formula. A mela claiming a large number of janya ragas.

Arohana:—

s r g m p d n s

Avarohana:—

s n d p m g r s

Note.—The panchama varja shādava raga (*s r g m d n s s n d m g r s*) under this mela is known as *Suddha todi*. The wellknown Rāmāyana gita, *Arere Dasaratha rāja* in Dhruva tala is composed in *Suddha todi*.

Besides Shādja and Panchama, this raga takes the *Suddha Rishabha*, *Sādhārana Gāndhāra*, *Suddha Madhyama*, *Suddha Dhaivata* and *Kaisiki Nishāda*.

Sampūrṇa raga; a raga with a symmetrical pair of tetrachords, the tetrachords being separated by the interval of

a major tone; *ga*, *ma* and *dha* are the raga *chhāyā* svaras; *ma*, *pa* and *ni* are *nyāsa* svaras. Janta svara combinations like **g g m m d d**, **m m d d n n**, **d d n n s s** and *dātu* svara prayogas like **n g r n d n r n d m**, **g m n d m G r S** are prominent. Panchama varja prayogas add beauty to the raga; **d n s D** and **r s D** are *visesha* prayogas. *Sarva svara gamaka varika rakti raga*. One of the major ragas; well distributed. Slokas, *padyas* and *viruttams* can be sung in this raga. All great composers and minor composers of note have composed in this raga. All types of compositions are represented in this raga. A raga affording scope for elaborate *ālāpana*. The tune called *Mattakokilam* is in this raga. Used in operas. Compositions in this raga begin on the notes: *sa*, *ga*, *ma*, *pa*, *dha* and *ni*. Can be sung at all times. Todi Sitaramayya, a brilliant musician, is said to have sung this raga for eight days.

Venkatamakhi's statement that Todi is an *auttara raga* (*i.e.*, came from the north) cannot be justified. Todi is one of the scales obtained by the process of modal shift of tonic to the primordial scale of Indian music and the *suddha mela* of ancient Tamil music. The *Sangita Ratnākara* mentions this raga.

Sanchara:—

d n S S s n D—d n s r r S, s n d p m—p d n d N s r
S s n D—d n s r G, r s n—d n s r g m G r r S—s n d
P—G m P—d n d P—p m G r r S—s n D, d n s r S ||

Some prominent compositions.

Type of composition.	Beginning words.	Tāla.	Name of the Composer.
<i>Svarajati Rāve Himagiri</i>		Adi	Syāma Sāstri.
<i>Varna Kanakāngi</i>		Ata	Pallavi Gopalayyar.
„ <i>Erānāpai</i>		Adi	Patnam Subrahmanya Iyer.
<i>Kriti Koluvamaregada</i>		Adi	Tyagaraja.
„ <i>Kaddanavāriki</i>		„	„
„ <i>Chesinadella</i>		„	„
„ <i>Dāsarathe</i>		„	„
„ <i>Endudāginādo</i>		Chāpu	„
„ <i>Tappi bratiki</i>		Rupaka	„
„ <i>Ninnu vina sukhāmu</i>		„	„
„ <i>Enduku daya</i>		Tripata	„
„ <i>Emi jesite nemi</i>		„	„
„ <i>Kamalāmbike</i>		Rupaka	Muttuswami Dikshitar.
„ <i>Ninne namminānu</i>		Chapu	Syāma Sāstri.
„ <i>Amba nādu</i>		Adi	Pallavi Gopalayyar.
„ <i>Amba nannu</i>		„	Anayya
„ <i>Emani pogadudu</i>		„	Garbhapuri.
„ <i>Sri Venkateswaram</i>		Rupaka	Ramnad Srinivasa Iyengar.
„ <i>Gajānana anuchu</i>		„	—

2. Mayamalavagaula मायामालवगौळ.

15th melakarta raga ; 3rd raga in the III (*Agni*) chakra ; (*Agni-go*). Mālavagaula was the original name of the raga. *Māyā* was prefixed to the raga name, after the advent of the scheme of 72 melas ; this was done in order to obtain by the application of the katapayādi formula, the number 15.

Arohana :—

s r g m p d n s

Avarohana :—

s n d p m g r s

Besides Shadja and Panchama the notes taken are:—
Suddha Rishabha, Antara Gāndhāra, Suddha Madhyama,
Suddha Dhaivata and Kākali Nishāda.

Sampūrṇa raga; sarva śvara gamaka varika rakti raga. A janaka-raga claiming a large number of janya ragas. A mela raga with a pair of symmetrical tetrachords — the tetrachords being separated by the interval of a major tone; *ga* and *ni* are jiva svaras; *ga* and *pa* are resting notes. Fairly distributed; can be sung at all times. A raga free from all *doshas*. Compositions in this raga begin on the notes, *sa*, *ga*, *dha* and *ni*. The raga is of a soft and soothing nature. One of the old ragas and is mentioned in the *Sangita Ratnākara*. This raga corresponds to the *Bhairava* raga of Hindusthani music.

This is the raga in which all students of Karnatic music are taught their preliminary śvara exercises. Svarasthānas with dual names are absent here. The only other mela wherein svarasthānas with dual names do not come in is *Kāmavardhani*. There is only a semi-tonal difference between the two notes of each of the four pairs: *s r*, *g m*, *p d*, *n s* and the two notes of each pair are played on contiguous svarasthānas on the vina. Further this raga admits of janta śvara and dātu śvara prayogas in quick time and slow time; achala svaras and kampita svaras also figure herein.

Sāñchāra :

s r g m p d n Ś—g m p d n s r Ś—s n d p d n Ś—
 s n d n s r g r G—m g r Ś—s n d P m G—g m p d n
 s r s n d P m g r S—s n d n s r S ॥

Some prominent compositions.

<i>Lakshhana</i>	} <i>Ravikotiteja</i>	<i>Mātya</i>	—
<i>gita</i>			
<i>Kṛitī: Merusamāna</i>		<i>Madhyādi</i>	<i>Tyāgarāja.</i>
„ <i>Tulasi dalamulache</i>		<i>Rupaka</i>	„
„ <i>Vidulaku mrokkeda</i>		<i>Adi</i>	„
„ <i>Srinathādi</i>		<i>Adi</i>	<i>Muttuswamy</i>
			<i>Dikshitar.</i>
„ <i>Māyātita svarupini</i>		<i>Rupaka</i>	<i>Ponnayya.</i>
„ <i>Devādi Deva</i>		„	<i>Mysore Sadāsiva</i>
			<i>Rao.</i>

3. *Chakravakam चक्रवाकम्*

16th melakarta raga; 4th raga in the III (*Agni*) chakra;
 (*Agni-bhu*)

Arohana :— s r g m p d n s

Avarohana :— s n d p m g r s

Besides *Shadja* and *Panchama*, the notes taken are:
Suddha Rishabha, *Antara Gāndhāra*, *Suddha Madhyama*,
Chatussruti Dhaivata and *Kaisiki Nishāda*.

Sampūrṇa raga ; sarva svara gamaka varika rakṭi raga ; *ri* and *ni* are the jiva svaras ; *g m R s* is a viśeṣa sanchāra ; *ri* and *pa* are nyāsa svaras. Fairly distributed. Compositions in this raga commence on the notes *sa*, *ga* and *pa*. Can be sung at all times. Tyagaraja brought this raga to prominence. *Vegavāhini*, a janya raga derived from this mela, figures as the 16th mela in the obsolete nomenclature for the 72 melas, under the name, *Toyavegavāhini*.

The illustrious singer of the last century, Mahā Vaidyanātha Iyer got his title, *Mahā* by singing this raga in his 12th year, before an assembly of sangita vidvāns.

Sanchāra :

s r g m P m—g m R s—s n d n s r G r—g m P m—
g m p d n s r S—s n d n P—d n s r G r—g m R s—
S n s r s n d P m—g m p d n s r s n d P m—g m p d n d
P m—g m R s—s n s r S s n d n P—d n s r S ||

Some prominent compositions :

<i>Varna : Jalajākshi</i>	Adi	Patnam Subrahmanya Iyer.
<i>Kṛiti : Sugunamule</i>	Rūpaka	Tyagaraja.
„ <i>Etulabrotuvo</i>	Triputa	„
„ <i>Inkādaya</i>	Adi	Patnam Subrahmanya Iyer
„ <i>Etula vrāsi</i>	Triputa	Patnam Subrahmanya Iyer.
„ <i>Nā manavini</i>	Rūpaka	Karur Devudu Iyer.
„ <i>Yadukula tilaka</i>	Adi	„
„ <i>Nive pālinchara</i>	Rūpaka	Karigiri Rao.
<i>Tiruppugazh : Apakāra</i>	Jhampa (Chaturasta.)	Arunagirināthar.

4/ Bhairavi भैरवी

Janya raga; derived from the 20th melakarta Nata-bhairavi.

Ārohana:— **s r g m p *d n s**

Avarohana:— **ṣ n ḍ p m g r s**

N.B.—The Dhaivata in the ārohana is Chatussruti Dhaivata. A janya rāga with a *krama sampurna* ārohana and avarohana; and a raga wherein the accidental note is incorporated in the scale itself.

Besides Shadja and Panchama, the notes taken are: Chatussruti Rishabha, Sādhārana Gāndhāra, Suddha Madhyama, Suddha Dhaivata, Chatussruti Dhaivata and Kaisiki Nishāda.

Ekānya-svara bhāshānga raga; the only accidental note Chatussruti Dhaivata, occurs in the combinations **p d n S**, **p d n ṣ Ṛ**, **p d n ḍ ṛ Ṣ** and **ṣ n ḍ n Ṣ**. Occasionally the phrase **p d n ṣ N** rendered in madhyamakāla, takes the suddha dhaivata. In the combination **p d n ḍ p**, both the *dha* notes are suddha. Usually in bhāshānga ragas, anyā svaras are not nyāsa svaras; but Bhairavi is an exception. Even here it occurs only as a hrasva nyāsa—**P d N ḍ**, **ḍ n ṣ ṛ ṣ N ḍ**, **ṛ N ḍ**.

Most of the compositions begin on the nishāda svara and a few on the rishabha or dhaivata; *ri*, *ga*, *ma* and *nī* are the rāga chhāyā svaras; *ri*, *ma*, *pa*, *nī* and chatussruti *dha* are nyāsa svaras; *ga*, *ma* and *nī* are kampita svaras; **r m G r s** is a viśeṣha prayoga.

Janta svara prayogas like **r r g g m m g g** and dātu svara prayogas like **n g r g s r**, **n r s r n S**, **p r S n d P**, **m n d P**, **m p G r s** are prominent. Sarva svara gamaka varika rakti raga;—the best of the rakti ragas. An evening raga according to some scholars; but can be sung at all times. One of the major ragas; well distributed. Slokas, padyams and viruttams can be sung in this raga. All great composers and minor composers of note have composed in this raga. All types of musical compositions are represented in this raga. A major raga admitting of elaborate scope for ālāpāna. Used in operas. This raga corresponds to the Tamil pan *Kausikam*.

History: Centuries back this raga was an upānga raga. The use of the Chatussruti Dhaivata in the ārohana-krama combinations was gradually acquiesced in by scholars and by the time of Venkatamakhi, it became a regular bhāshānga raga. This is one of the old ragas and is the 7th of the *nineteen prasiddha* (prominent) melas mentioned by old scholars. This raga is mentioned in the *Sangita Ratnākara*, *Sangita Makaranda* and *Sangita Samayasāra*.

Sanchāra:—

r g m p * d n S s n * D — * d n s r s r s N * d — n s
r s R — r g m G r S N * d — n s n g r g s r — n s n r s r
n S — p d p d p M — p R S r n d P — p m N d P — m n d
P m p G r s — r g m p d p G r S — r g m G r s N * D — n s
r s R — P * d n s r S

Some prominent compositions.

<i>Gita :</i>	<i>Sri Rāma</i>	Dhruva	—
<i>Svarajati :</i>	<i>Kāmākshi</i>	Chāpu	Syāmā Sāstri.
<i>Varna :</i>	<i>Viriboni</i>	Ata	Pachchimiriyam Adiyappiah.
<i>Kriti :</i>	<i>Koluvaiyunnāde</i>	Adi	Tyāgarāja.
"	<i>Chetulāra</i>	"	"
"	<i>Sri Raghuvāra</i>	"	"
"	<i>Upachāramulanu</i>	"	"
"	<i>Raksha bettare</i>	"	"
"	<i>Tanayuni brova</i>	"	"
"	<i>Upachāramu</i>	Rūpaka	"
"	<i>Tanayande</i> (<i>Nauka Charitram.</i>)	Chāpu	"
"	<i>Chintaya mā</i>	Rupaka	Muttuswamy Dikshitar.
"	<i>Bālagopāla</i>	Adi	"
"	<i>Mahā Tripura</i>	Rūpaka	Pallavi Gopalayyar.
"	<i>Ni pādamule</i>	Adi	Patnam Subrah- manya Iyer.
"	<i>Ika nannu brova</i>	"	Pallavi Seshayyar.
"	<i>Sri Pārthasārādhe</i>	Khanda- Tripura	Mysore Sadasiva Rao.
"	<i>Arukku</i>	Chāpu	Gopālakrishna Bhārati.
"	<i>Tudi seydidu</i>	Rūpaka	Ramaswamy Sivan.
2nd			
<i>Ash'apadi :</i>	<i>Srita kamalā</i>	Tripura	Jayadeva.
<i>Tarangam :</i>	<i>Jaya jaya</i> <i>gokulapāla</i>	Rūpaka	Nārāyana Tirtha.
"	<i>Govinda ghataya</i>	Jhampa	"
<i>Padam :</i>	<i>Mundati</i>	Tripura	Kshetrajna.
"	<i>Velavare</i>	Adi	Ghanam Krishnayyar.

5. Kharaharapriya खरहरप्रिय

22nd Melakarta raga; 4th raga in the IV (*Veda*) chakra.
(*Veda-bhu*).

Arohana :—

s r g m p d n s

Avarohana :—

s n d p m g r s

Besides Shadja and Panchama, the notes taken are:—
Chatussruti Rishabha, Sādhārana Gāndhāra, Suddha Madhyama, Chatussruti Dhaivata and Kaisiki Nishāda.

A mela raga with a pair of symmetrical tetrachords—the tetrachords being separated by the interval of a major tone. Sampūrṇa raga; sarva svara gamaka varika rakṭi raga; *ri*, *ga*, *dha* and *ni* are the raga chhāyā svaras; the pratyāhata प्रत्याहृत gamaka lends colour and svarūpa to this raga; fairly distributed; can be sung at all times. A mela raga with a large number of janya ragas. Compositions in this raga commence on the notes *sa*, *ri*, *pa*, and *ni*. We owe this raga to Tyagaraja. He is the only composer to have composed many beautiful kritis in it and thereby brought it to prominence. This raga corresponds to the *Kāphi* raga of Hindusthani music. With the emergence of Kharaharapriya, the svarupa of Bhairavi became clearly defined.

Srirāga, a janya of this mela figures as the 22nd mela in the obsolete nomenclature for the 72 melas.

Note:— There is an appropriateness in the raga name, *Harapriya* (i.e., pleasing to, or liked by Hara or Siva)—*Khara* being the Katapayādi prefix. This raga approximates to the ancient *sāma gāna scale*, the primordial scale of Indian music and the scale in which Siva delights in.

Sanchāra :—

. r g m P m G r—N d p d n d P m G r—r g m p d n S
 s n d P m G r—r g m p d n S s n D—p d n s R R—
 d n s r G G g r—g m G g r R—R S s n D—p d n s r g r
 s N d—p d p d n s N n d P—m p d n d p m G R—N n d d
 p p m m g g r R—S n d—n s r s R—n d p d n d P m G r
 S—n d n s r S ||

Some prominent compositions.

<i>Kṛiti</i> :	<i>Chakkani rāja</i>	Adi	Tyagaraja.
„	<i>Nadachi nadachi</i>	„	„
„	<i>Kori sevimpā</i>	„	„
„	<i>Vidamu seyaṇḍe</i>	„	„
„	<i>Pakkala nilabadi</i>	Tripura	„
„	<i>Rāma nī samāna</i>	Rūpaka	„
„	<i>Sankalpame</i>	Adi	Patnam Subrahmanya Iyer.
„	<i>Tyāgarāja</i>	„	Tiruvottiyur Tyāgayyar.

The raga of the *kṛiti* : *Rāmānīyeda* is only *Dilīpakam* and not *Kharaharapriya*.

6. Mohana मोहन

Janya raga; derived from the 28th melakarta *Hari-kāmbhoji*.

Arohana :—

s r g p d s

Avarohana :—

s d p g r s

Besides Shādja and Panchama, the notes taken are : the Chatussruti Rishabha, Antara Gāndhāra and Chatussruti Dhaivata.

Audava raga ; varja raga ; the notes *ma* and *ni* are varja. Symmetrical raga. Upānga raga ; *ri*, *ga* and *dha* are the raga chhāyā svaras ; *ga* and *pa* are resting notes. Janta svara prayogas like, **g g p p d d s s** and dātu svara prayogas like **d g r s d p**, **d r s d p**, **g d p g r** and **r p g r s** are prominent. Sarva svara gamaka varika rakti raga ; one of the major ragas and gives scope for elaborate ālāpana ; can be sung at all times, but still night time is best suited. One of the widely distributed, popular ragas. Slokas, padyas and viruttams can be sung in this raga. All types of compositions are represented in this raga. Used in operas. Useful for *varnana* or description. An auspicious raga. Compositions in this raga commence on the notes *sa*, *ga* and *dha*. Corresponds to the *Bhup* of Hindusthāni music.

The oldest raga known to man. This penta-tonic scale is found in the music of the different nations of the world, including the music of the primitive tribes. This is accounted for by the fact that the notes figuring in this raga are the earliest notes met within the *sa—pa* series (cycle of fifths). There are many folk songs in this raga.

Sanchāra :

g p d S s—p d s r G g r—s r g p G g r—s r g R
s—d s r s D d p—p g p d s r s D p—g p g D p g r—s r
g p G g r—s r g R s—d s r s—d d s D p—p g p d s d S||

Some prominent compositions.

<i>Gita:</i>	<i>Vara vina</i>	Rupaka	—
<i>Svarajati:</i>	<i>Sāmidayamera</i>	Adi	—
<i>Varna:</i>	<i>Ninne kori</i>	„	—
„	<i>Sarasijākshi</i>	Ata	Vina Kuppayyar.
<i>Kriti:</i>	<i>Bavanuta</i>	Adi	Tyagaraja.
„	<i>Nanupālimpa</i>	„	„
„	<i>Mohanarāma</i>	„	„
„	<i>Endukobāga</i>	„	„
„	<i>Rāma ninnu</i>	„	„
„	<i>Evarura</i>	Chāpu	„
„	<i>Maruvaku daya</i>	Adi	Karur Dakshinamūrti Sastri.
„	<i>Pedda derudani</i>	„	Mysore Sadāsiva Rao.
„	<i>Nenarunchara</i>	„	Karigiri Rao.
„	<i>En palli</i>	„	Arunāchala Kavirāyar.
„	<i>Arumarundoru</i>	Rūpaka	Muttu Tāndavar.
„	<i>Sannidhi</i>	Chāpu	Kavikunjara Bhārati.
<i>Tarangam:</i>	<i>Kshemamkuru</i>	„	Nārāyana Tirtha.
<i>Jāvali:</i>	<i>Mohamella</i>	Rūpaka	Pattābhirāmayya.

7. Kambhoji कांभोजी

Janya raga; derived from the 28th melakarta, Hari-kāmbhoji.

Arohana:—

s r g m p d s

Avarohana:—

s n d p m g r s

Besides Shadja and Panchama the notes taken are: Chatussruti Rishabha, Antara Gāndhāra, Suddha Madhyama, Chatussruti Dhaivata, Kaisiki Nishāda and Kākali Nishāda also in certain combinations (see next page).

Shādava-sampūrṇa raga. Varja raga; *ni* is 'varja in the ārohana. Ekānya-svara bhāshāṅga raga, the foreign note being the kākali nishāda; this note occurs in the phrases:

s n p d s and *s n p d s*. Dātu svara prayogas like *r p m g s*, *r m g s* and *d g r s* are common. Phrases like

(a) *m g s* (b) *p d M* (c) *m g p d s* and (d) *s r g s* are ranjaka prayogas. The notes *ma*, *dha* and *ni* (both the varieties) are raga chhāyā svaras; *ga*, *ma*, *pa* and *dha* are nyāsa svaras; *ga*, *pa* and *dha* are the notes on which one can rest and develop an ālāpana. Sarva svara gamaka varika rakti raga. Of the rakti ragas, this is widely known and sung. Well distributed. Can be sung at all times. One of the major ragas and affords scope for elaborate ālāpana. Slokas, padhyas and viruttams can be sung in this raga. All great composers and minor composers of note have composed in this raga. All types of musical compositions are represented in this raga. Useful for singing sāhityas relating to varnana or description. An auspicious raga. Useful for being sung at the commencement of concerts. Used in operas. Compositions begin on the notes : *sa*, *ga*, *ma*, *pa* and *dha*.

This raga is mentioned in the *Saugita*, *Ratnākara*, *Sangita Makaranda* and *Sangita samaya sāra*. The names, *Kāmbodi* and *Kāamboji* are also found in some works.

Sanchāra :

*s r g m p d S—d r s n d P—d m G—p d S s * n P—
d d s d S—m g p d S—p d s r G—G G—m g R m g r S*

s n D—p d s r g m g r S s n d P—d s d r s N d P—d m G
 —p d S s * n * n P d d s d S—m g p d S—s n d P m g R
 s—s r g m P m g R S s n d P—d r s n d P d m G—p d
 S s * n P d d S ||

Some prominent compositions.

<i>Gita :</i>	<i>Bhuvanatraya</i>	Dhruva	Paidāla Gurumurti Sastri.
<i>Varna :</i>	<i>Taruni ninnu bāsi</i>	Adi	Fiddle Ponnuswamy.
„	<i>Inta chalamu</i>	Ata	Pallavi Gopālayyar.
„	<i>Sarasija nābha</i>	Ata	Vādivelu.
„	<i>Pankajākshi pai</i>	Adi	Ramaswamy Sivan.
„	<i>Kamalākshi</i>	Jhampa	Kundrakkudy Krishnier.
<i>Kriti :</i>	<i>Marimari ninne</i>	Adi	Tyagaraja.
„	<i>O Rangasāgi</i>	„	„
„	<i>Evari mātā</i>	„	„
„	<i>Mā jānaki</i>	„	„
„	<i>Sri Raghavarāprameya</i>	„	„
„	<i>Sri Subrahmanyāya</i>	Rūpaka	Muttuswamy Dikshitar.
„	<i>Kāsi Visvesvara</i>	Ata	„
„	<i>Devi ni pada</i>	Adi	Syāma Sāstri.
„	<i>Koniyādina</i>	„	Vina Kuppayyar.
„	<i>Marimari ninne</i>	Rūpaka	Karur Dakshinā- mūrti Sastri.
„	<i>Nive nannu</i>	Adi	Kundrakkudy Krishnier.
„	<i>Nadamādi</i>	{ Khanda Chāpu	Pāpanāsa Mudaliyar.

"	<i>Kānāmal vinile</i>	Khanda chāpu	Muttu Tāndavar.
"	<i>Tiruvadi saranam</i>	Adi	Gopālakrishna Bhārati.
6th	<i>Ashtapadi; Nibruta</i>	Tripura	Jayadeva.
<i>Tarangam:</i>	<i>Alokaye</i>	Adi	Nārāyana Tirtha.
<i>Padam:</i>	<i>Yālāne vāṇipai</i>	Tripura	Kshetrajna.
<i>Jāvali:</i>	<i>Emi māyamu</i>	Rūpaka	Pattābhirāmayya.

8. Khamas खमास्

Janya raga; derived from the 28th melakarta Hari-kāmbhoji.

Arohana:— s m g m p d n s

Avarohana:— s n d p m g r s

Besides Shadja and panchama, this raga takes the Chatussruti Rishabha, Antara Gāndhāra, Suddha Madhyama, Chatussruti Dhaivata, Kaisiki Nishāda and Kākali Nishāda.

Vakra shādava-sampurna raga; ārohana alone vakra; eka-svara-vakra ārohana. Varja rāga; *ri* is eschewed in the ārohana. Ekānya-svara bhāshānga raga, the only foreign note being the kākali nishāda which occurs in the combination

s n Ś. Dātu svara prayogas like s m g m r g s r, p s * n s d n p d, and m n d n P lend colour to this raga. s g m,

m g s and p d m are viśeṣa sancharās. p d s n d is a very rare prayoga figuring in some compositions. The notes *ma*, *dha* and *ni* are raga chhāyā svaras; *ma* is a good nyāsa svara. Fairly distributed. Can be sung at all times. Slokas, padyas and viruttams can be sung in this raga. One of the most pleasing desya ragas.

Useful for portraying sringāra and bhakti rasas. Compositions begin on the notes : *sa*, *ma* and *pa*. The raga of the well-known tune, *pāñcu chāmaram* is Khamās. In the compositions in this raga, there is no sanchāra below the mandra sthāyi nishāda.

Originally this was an upānga raga. The two kritis of Tyagaraja in this raga do not use the kākali *nī*. This note appeared as an inter-loper with the composers of jāvalis and its use came to be gradually acquiesced in by scholars. Now it is a full-fledged bhāshānga raga. An ālāpana of Khamās can very well be made without resorting to the kākali nishāda prayoga. The names *Kamās* and *Kamāchi* are found in some early works.

Sanchāra :

m g m n D—d n Ś s n n d n p d n Ś s * n Ś—d n
s R r Ś s n D—d n Ś s * n—s m g m r g s r s * n Ś—d n
Ś—s n n d d p p m—g m p Ś—p s s n n d d p—p m p d
d p m g M—m g r g S ||

Some prominent compositions.

Svarajati : { *Sāmba-sivāyanave* } Adi Chinnikrishna dāsa.

<i>Kṛiti</i> :	<i>Sujana jivana</i>	Rūpaka	Tyagaraja.
„	<i>Śitāpate</i>	Adi	„
„	<i>Sārasasama</i>	„	Svāti Tirunāl.
„	<i>Igaparam tarum</i>	„	Nilakanta Dāsar.
„	<i>Paramādbhutamaina</i>	„	Mysore Sadāsiva Rao
„	<i>Nā tarama ninnu</i>	„	„

„	<i>Eḍuruga</i>	Adi	Pallavi Seshayyar.
„	<i>Brochevārevarura</i>	„	Vāsudevāchār.
„	<i>Pārka pārka</i>	Rūpaka	Gopāla Krishna Bhārati.
„	<i>Teruvil vārāno</i>	„	Muttu Tāndavar.
„	<i>Shadānana</i>	Adi	Panchāpakesa Sastriyar.
<i>Mānasika</i> } <i>pūjā</i> } <i>Paramātmuni</i> <i>kirtana</i> }		Rūpaka	Vina Kuppayyar
<i>Jāvali : Apudu manasu</i>		„	Patnam Subrahmanya Iyer.
„	<i>Marulukonnadira</i>	Adi	Ramnad Srinivasa Iyengar.
„	<i>Kommaro vāni</i>	„	—
„	<i>Chānaro</i>	Rūpaka	—
„	<i>Mātāda bāradeno</i>	Chāpu	Naraharāchār.

9. Sankarabharana शंकराभरण

29th melakarta raga; to suit the katapayādi formula 'Dhira' was prefixed to the name of this mela; 5th raga in the V (*Bāna*) chakra (*Bāna-ma*).

One of the melakartas with a large number of janya ragas.

Arohana:— s r g m p d n s

Avarohana:— s n d p m g r s

Besides Shadja and Panchama, the notes taken are:—
 Chatussruti Rishabha, Antara Gāndhāra, Suddha Madhyama,
 Chatussruti Dhaivata and Kākali Nishāda.

A raga with a pair of perfectly symmetrical tetrachords—the tetrachords being separated by the interval of a major tone. Sampūrna raga. Some scholars give a shādava avarohana to

this raga by deleting the nishāda. Nishāda varja prayogas like **s D p** are no doubt common in this raga, but that alone is not sufficient reason for fixing the avarohana as **s D p m g r s**. The phrase **s n d p** occurs in this raga extensively, and hence the avarohana is to be deemed sampūrna only.

Sarva svara gamaka varika rakti raga. All the svaras in both the ārohana and the avarohana are *rāga'chhāyā* svaras; *ri* and *dha* occur as dirgha and kampita svaras. One of the major ragas and affords scope for elaborate ālāpana. Janta svara prayogas like **s s r r g g m m p p** and dātu svara prayogas like **r n s d n p d m p g m r g S** are prominent in this raga. **s n p** is a visesha sanchāra and occurs rarely. The phrase **D, M, R** tactfully introduced in the last ettugada svara of the Sankarābharana varna, *Chalamela*, suggests western influence. Well distributed. The opinion of the pūrvachāryas (old scholars) is that this is an evening raga; but it can be sung at all times. Slokas, padyas and viruttams can be sung in this raga. Same as the pan, *pazham panjuram* (பண் பழம் பஞ்சரம்) of Tamil music.

All great composers and minor composers of note have composed in this raga. All types of compositions are represented in this raga. Figures in operas. The phrase **s n d p** in the lower octave is generally avoided, lest it should suggest the raga *Navaraj*. Compositions in this raga begin on the notes: *sa, ga, ma* and *pa*.

Sankarābharana Narasayya, one of the musical gems that adorned the Tanjore Samasthānam in the 18th century was an adept in this raga.

This raga corresponds to the *Bilāval* of Hindusthāni music. Excepting for the slight sharpening of the sixth (dhaivata), this raga is the same as the major diatonic scale of European music. One of the old ragas. This is the nishāda murchhanā (*Ranjani*) of the ancient scale, shadja grāma. This raga is mentioned in the *Sangita Ratnākara*, *Sangita Makaranda* and *Sangita samaya sāra*.

Sanchara:—

S P p m g m r g m p D n S—s n s d n p D n S—
 S s n s r r s N—s r g m G ; G ; m g R S n—s r g m P
 m g R S n—s g R r S n—s n s d n p D n S—g m p
 D n s r S n d P—s D P m g R g m P—s r g m P—
 p d n s r g m P—m g R s n s D n S ||

Some prominent compositions.

<i>Gita :</i>	<i>Are Dasaratha</i>	<i>Simhanandana</i>	—
<i>Varna :</i>	<i>Sāmi ninne</i>	Adi	Vina Kuppayyar.
„	<i>Chalamela</i>	Ata	Svāti Tirunal
<i>Kriti :</i>	<i>Enduku peddala</i>	Adi	Tyagaraja.
„	<i>Mariyāda gādura</i>	„	„
„	<i>Eduta nilachite</i>	„	„
„	<i>I varaku jūchinadi</i>	„	„
„	<i>Svara rāga sudhā</i>	„	„
„	<i>Emi neramu</i>	„	„
„	<i>Sundaresvaruni</i>	„	„
„	<i>Bhakti biksha</i>	Rāpaka	„

<i>Kṛiti :</i>	<i>Manasu svādina</i>	Chāpu	Tyagaraja.
"	<i>Buddhi rādu</i>	"	"
"	<i>Enduki chalāmu</i>	"	"
"	<i>Akshaya linga</i>	"	Muttuswamy Dikshitar.
"	<i>Sarojadala nētri</i>	Adi	Syāma Sastri.
"	<i>Devi mina netri</i>	"	"
"	<i>Bāgumiraganu</i>	Rūpaka	Vina Kuppayyar.
"	<i>Mahima teliya</i>	"	Anayya.
"	<i>Sri Hari pāda</i>	Ata	Tāllapākkam Chinnayya.
"	<i>Nrityati nrityati.</i>	Adi	Svāti Tirunal.
<i>Pada :</i>	<i>Dāri juchu</i>	Chāpu	Muvvalur Sabhāpati Iyer.
"	<i>Challa nāyenu</i>	Tripura	Kshetrajna.
"	<i>Evvade bhāma</i>	Misra laghu	"
"	<i>Nalla nalla nilavu</i>	Adi	Ghanam Krishnier.
<i>12th Ashtapadi</i>	<i>Pasyati disi disi</i>	Tripura	Jayadeva.
<i>Tarangam :</i>	<i>Sri Vāsudeva</i>	Chāpu	Nārāyana Tirtha.

10. Arabhi आरभी

Janya raga; derived from the 29th melakarta, Dhīra Sankarābharana.

Arohana :—

s r m p d s

Avarohana :—

s n d p m g r s

Besides-Shadja and Panchama, this raga takes the Chatussruti Rishabha, Antara Gāndhāra, Suddha Madhyama, Chatussruti Dhaivata and Kākali Nishāda.

Audava-sampūrṇa raga; varja raga; ga and ni are eschewed in the ārohana; upāṅga raga; ghana raga; gamaka

varika raga; the notes, *ri*, *ma* and *dha* are the jiva svaras; *ri* and *pa* are nyasa svaras; *ri* and *dha* are kampita. Janta svara combinations like **p p d d s s r r** and nishāda varja combinations like **s s d d p p m p m g r r** are very characteristic in this raga. **M, g r s R** is a ranjaka prayoga. One of the celebrated *ghana panchaka* ragas and is the third in the group. A raga which shines more by its madhyama-kāla sanchāras. The notes *ni* and *ga* are used sparingly in this raga; they will not occur as dirgha svaras; they are weak notes and are not stressed. In the phrases, **s n D** and **M, g r s R**, the *ni* and *ga* are just touched these two notes are not nyāsas. There are some compositions wherein the *ni* is totally eschewed. Can be sung at all times. The *pan pazh m takka ragam* (பழம் தக்க ராகம்) corresponds to Arabhi. Fairly distributed. Compositions begin on the notes *ri*, *pa* and *dha*. Auspicious raga. Benedictory verses are sung in this raga.

Sanchāra :

**r m p D d—m p d S s—s n D—d d s s r s R R—
M g R—s r s n D—d d R r—d d S s—p p D d—m p d s
d d p p m p m g r r—s r s n D—d d r r s d S ||**

Some prominent compositions:

<i>Gita :</i>	<i>Kere Sri Rāma</i>	Tripura	—
<i>Varna :</i>	<i>Sarasijamukhi</i>	Adi	Pallavi Duraisamy Iyer.
<i>Pancharatna :</i>	<i>Sādhinchene</i>	„	Tyāgarāja.

<i>Kṛiti:</i>	<i>Ambaninnu</i>	Adi	Tyāgarajā.
„	<i>Sundari ninu</i>	Chāpu	„
„	<i>Nāmoralanu</i>	Adi	„
„	<i>Chālākalla</i>	„	„
„	<i>Chūtāmu</i>	Rūpaka	„
„	<i>Nādasudhārasam</i>	„	„
„	<i>Srī Sarasvatī</i>	„	Muttuswamy Dikshitar.
„	<i>Pāhi Parvata</i>	Adi	Svāti Tirunāl.

11. Kedarm केदारम्

Janya raga; derived from the 29th melakarta, Dhīra Sankarābharana.

Arohana :—

s m g m p n s

Avarohana :—

s n p m g r s

Besides Shadja and Panchama, the notes taken are: the Chatussruti Rishabha, Antara Gāndhāra, Suddha Madhyama, and Kākali Nishāda.

Vakra audava-shādava raga; ārohana alone is vakra; eka-svara vakṛā ārohana. Varja raga; *ri* and *dha* are varja in the ārohana. Upanga raga. Ghana raga and belongs to the *dvitīyā ghana panchaka* group. Gamaka varika raga;

ma and *ni* are the rage chhāyā svaras. **s g m p, p Ś s n p, s r r G s, and P n m g** are visesha sanchāras and give beauty to the raga. The use of the dhaivata in this raga is not in conformity with the strict lakshana; *ma* can occur neither as a long note nor as a nyāsa svara. Can be sung at all times; but morning is decidedly better. Useful for singing

invocatory songs and verses, and nāndi, slokas, padyas, and viruttams at the commencement of an entertainment, drama, opera or religious discourse. Compositions in this raga begin on the notes; *sa ga, pa* and *ni*.

A raga with a limited scope for ālapana. This raga shines more by madhyamakāla prayogas. Can be sung with good effect in the rāgamālika section of a pallavi.

This raga is eminently suited for being sung at the commencement of concerts. On account of the presence of *tivra svaras* the requisite musical atmosphere is soon created.

Sanchāra:

P n n Ṣ n—s m g m P, m—g m p n Ṣ ṣ n—Ṣ, m Ḡ
 , r Ṛ, ṣ—s r r Ḡ, Ṣ—ṣ n P, m—g m p n Ṣ, n P, m—p Ṣ ṣ
 n P, m—m g g r r Ṣ—s r r Ḡ Ṣ, —s n P—p n s m g m—
 p s n P, m—m g g r r Ṣ—s r r Ḡ Ṣ ॥

Some prominent compositions.

<i>Pada jati</i>	<i>Ento vaibhavam</i>	Adi	Kundrakkudy
<i>varna:</i>			Krishnier.
<i>Kriti:</i>	<i>Rāmā nipai</i>	,,	Tyagaraja.
,,	<i>Marache vādana</i>	,,	,,
,,	<i>Ananda nataṇa</i>	Misra eka	Muttuswamy
			Dikshitar.
,,	<i>Bhajana sayave</i>	Rupaka	Anayya.
,,	<i>Samayamide</i>	,,	Patnam Subrah-
			manya Iyer.
,,	<i>Nīve nā jīvamani</i>	,,	Pallavi Seshayyar.

<i>Kṛitī</i>	<i>Durusuga kṛipā</i>	Rūpaka	Karur Dakshināmūrti Sāstri.
„	<i>Paluke bangāra</i>	Chāpu	Bhadrāchala Rāmadās.
„	<i>Anjādiru nenjame</i>	„	Gopālakrishna Bhāratī.
„	<i>Ellorum vārungal</i>	Adi	„

12. Suddha Saveri शुद्धसावेरी

Janya raga; derived from the 29th melakarta Dhira Sankarābharana

Arohana :—

s r m p d s

Avarohana :—

s d p m r s

Besides Shadja and Panchama, the notes taken by this raga are : the Chatussruti Rishabha, Suddha Madhyama, and Chatussruti Dhaivata.

Audava raga; varja raga; the notes *ga* and *ni* are varja. Symmetrical raga. The symmetrical positions of the notes in the purvāṅga and uttarāṅga may be noted. Upāṅga raga. Janta svara combinations like, **r r m m p p d d**, **m m p p d d s s**, **d d s s r r m m** and dātu svara prayogas like **d r s d p**, **m d p m R s** add beauty to the raga; *ri* and *dha* are jiva svaras and nyāsa svaras. Sarva svara gamaka varika rakti raga. Fairly distributed. The second jāma (9-12) is appropriate for singing this raga. Pieces in this raga commence on the notes: *sa ri*, and *dha*. One of the minor ragas and does not lend itself for an elaborate ālāpana. The *Durgā* of Hindusthāni music is this raga.

This raga is found in Chinese music. The *Devakriya* of the Dikshitar sampradāyam is the same as the Suddha saveri raga. Being the panchama murchhana of Mohana, this pentatonic scale occurs in the music of South-east Asia, Java and other neighbouring islands.

Sanchāra :

s r m p D d p — M p d Ś ś — d d s s r r —
 ś r m R s — D p d r s D p — M , p d s D p — m d p m R , s
 — r m p D — r r s D p — m p d s d d p p — m d p m r m r s
 — r m p m R r s D p — d d r r s d S ॥

Some prominent compositions.

<i>Gita :</i>	<i>Analekara</i>	Tripura	—
<i>Kṛiti :</i>	<i>Kālaharana</i>	Rūpaka	Tyagaraja.
„	<i>Darini telusu</i>	Adi	„
„	<i>Lakshanamulu</i>	„	„
„	<i>Sri Guruguha</i>	Rūpaka	Muttuswamy Dikshitar.
„	<i>Sri Vatukanātha</i>	Misra eka	„
„	<i>Sri Raghukulābdi</i>	Tripura	Pallavi Seshayyar.
„	<i>Sāmaja varada</i>	Rūpaka	Ramnad Srinivasa Iyengar.
„	<i>Ennattukkudavi</i>	Adi	Anayya.

13. Bilahari बिलहरी

Janya raga; derived from the 29th melakarta, Dhīra Sankarābharana. *Bilāhūri* and *Balahari* are the older names of this raga.

Ārohana :—

s r g p d ṡ

Āvarohana :—

ṡ n d p m g r s

Besides Shadja and Panchama this raga takes the Chatussruti Rishabha, Antara Gāndhāra, Suddha Madhyama, Chatussruti Dhaivata, and Kākali Nishāda ; and the Kaisiki Nishāda also.

• Audava-sampūrṇa raga ; varja raga ; *ma* and *ni* are varja in the ārohana. Ekānya-svara bhāshāṅga raga ; the foreign note met with in this raga is the kaisiki nishāda, which comes in the phrases **p d n d P**, **p d n p** and **p n d p** ; *ri*, *dha* and *ni* are the rāga chhāyā svaras ; *pa* and *ri* are nyāsas ; *ma* and *ga* are not nyāsas ; *ma* and *ni* are not kampita svaras. Janta svara combinations like **s s r r g g p p** and dātu svara combinations like **ḋ g ṙ ṡ n d p**, **p ṙ ṡ n d p** and **r g d p** are common ; **ṡ n P** is a viśeṣha sanchāra. Gamaka varika rakti raga. This raga inspires joy, courage, enthusiasm and heroism and easily cures people suffering from melancholy. Vira rasa can be depicted by this raga. Used in operas. Morning raga. Well distributed. Compositions in this raga commence on the notes : *sa*, *ga* and *pa*.

A closely allied raga is *Desākshi*. The individuality of Desākshi is established by its characteristic phrase in the tāra sthāyi.

The ārohana and āvarohana of Bilahari sung in the viloma-krama (inverse order) results in *Garudadhvani* **s r g m p d n ṡ—ṡ d p g r s**—Janya of the 29th mela.

Sanchāra:—

s r g P m g r—g p d Ś s n n d Ś—p d s r g P m g r
 Ś—s n d P—d g r s n d P— d r Ś s n d P—p d p d
 *n d P m g R—r g d d P m g R S—s n n d S ||

Some prominent compositions :

<i>Jatisvaram: S, r & P</i>	<i>Adi</i>	<i>—</i>
<i>Varna: Intachauka</i>	„	Vina Kuppayyar.
<i>Kriti: Nā jivādhāra</i>	„	Tyagaraja.
„ <i>Dorugunā itu</i>	„	„
„ <i>Kanugontini</i>	„	„
„ <i>Korivachchiti</i>	„	„
„ <i>Intakannānanda</i>	Rūpaka	„
„ <i>Tolijanmamuna</i>	Jhampa	„
„ <i>Narasimha</i>	Chāpu	„
„ <i>Nive gāni</i>	„	„
„ <i>Sri Bālasubrahmanyā</i>	„	Muttuswamy Dikshitar.
„ <i>Kāmākshi</i>	Adi	„
„ <i>Paridānamichchite</i>	Jhampa	Patnam Subrahmanya Iyer.
„ <i>Ento brahmā- nandamu</i>	Rūpaka	Chinni Krishna Dasa.
„ <i>Inta parānukha</i>	Adi	Vina Kuppayyar.
„ <i>Sārasa dala</i>	Rūpaka	Tiruvottiyur Tyāgayyar.
„ <i>Ezhundāle</i>	Chāpu	Arunāchala Kavirāyar.

Samvāda Manninil
daru :

Chāpu Arunachala
Kavirayar.

Kriti Māl maruganai

Adi Ramaswamy Sivan.

Tarangam: Puraya mama

,, Nārāyana Tirtha.

Jāvali: Pāri povalera Rūpaka Pattābhirāmayya.

14. Purvakalyani पूर्वकल्याणी

Janya raga; derived from the 53rd melakarta, Gamana-srama.

Arohana:— **s r g m p d p s**

Avarohana:— **s n d p m g r s**

Besides Shadja and Panchama, the notes taken by this raga are: Suddha Rishabha, Antara Gāndhāra, Prati Madh yama, Chatussruti Dhaivata and Kākali Nishāda.

Vakra shādava-sampūrṇa raga; ārohana alone vakra; eka-svara vakra ārohana. Vārja raga; *ni* is varja in the ārohana. Upāṅga raga; gamaka varika raga; *ri*, *ma*, *dha* and *ni*

are the rāga chhāyā svaras; **s d p m g r** and **s d s** are ranjaka prayogas. The phrase **p d s** occurs rarely. In the phrase **g m d m g r s**, the *dha* is slightly flattened. Themes of an entreating nature can be powerfully depicted in this raga. Used in operas. Desiya raga. A characteristically evening raga. Compositions in this raga commence on the notes *sa* and *pa*.

The raga *Gamakakriya* which figures as the 53rd mela in the asampurna mela paddhati is the same as this raga. *Purikalyāni* is another name for this raga.

Sanchāra:—

s r g m P m—g m g g r r S—s n s r g r G—m g r a
 g m d m g r S—g m P, m—d p s n r S—s n s r g r G
 —p m g m g g r r S—S s n R S—S s n d p m—p S s n
 d p m—g m p d n d p m g r—g m p d p m g r—d m g r
 —g m p d P p m g r—p m g g r r S—S s n d p—s n r S
 s r g r G—p m g r—g m p m g g r r S ||

Some prominent compositions.

<i>Tāna varna:</i>	<i>Ninnu kori</i>	Ata	Sonti Venkata subbayya.
<i>Kriti:</i>	<i>Paripurna</i>	Rūpaka	Tyagaraaja.
„	<i>Paraloka</i>	Adi	„
„	<i>Minākshi memudam</i>	„	Muttuswamy Dikshitar.
„	<i>Ekāmranātham</i>	„	„
„	<i>Ninnuvināga mari</i>	Misra eka	Syāmā Sāstri.
„	<i>Parama pāvaṇa</i>	Adi	Ramnad Srinivasa Iyengar.
„	<i>Maruva niku</i>	„	Pallavi Seshayyar.
„	<i>O Rāma ni nāma</i>	„	Bhadrāchala Rāmdās.
<i>Nandanār Charitram:</i>	<i>Satre vilagi</i>	Rūpaka	{ Gopālakrishna Bhārati.
<i>Jāvali:</i>	<i>Nimātalemāyenura</i>	Adi	Pattabhi Ramayya.

/15 Kalyani कल्याणि

65th melakarta raga; (to conform to the *katapayādi* formula, the term 'Mecha' was prefixed to the name of this raga); 5th raga in the XI (*Rudra*) chakra; *Rudra-ma*. The most popular and well-known prati-madhyama rāga. A melakarta claiming a large number of janya ragas. In the obsolete nomenclature for the 72 melas, the 65th mela is named *Sānta kalyāni*.

Arohana :—

s r g m p d n s

Avarohana :—

s n d p m g r s

Besides Shadja and Panchama, this raga takes the Chatussruti Rishabha, Antara Gāndhāra, Prati Madhyama, Chatussruti Dhaivata and Kākali Nishāda.

Sampūrna raga. Sarva svara gamaka varika rakti raga. In both the ārohana and avarohana all the svaras are rāga chhāyā svaras. Janta svara prayogas like, **r r g g m m d d**,

g g m m d d n n, **m m d d n n r r** and dātu svara

prayogas like **n g r n d n r n d m**, **g n d m g r** are prominent. Though a prati-madhyama raga, madhyama

varja phrases like **g g d d n n r r** lend beauty to the raga.

Combinations like **d n r g m d n r n d m g r n** where

both the shadja and panchama notes are deleted, add beauty to the raga. Gamakas of the Spuritam and Tripuchcham variety, lend colour to this raga. A majestic raga. One of

the major ragas and affords scope for elaborate ālāpana. Well distributed. Can be sung at all times; but the effect is decidedly better when sung in the evening.

All great composers and minor composers of note have composed in this raga. All types of compositions are represented in this raga. Useful for singing slokas, padyas and viruttams. Figures in operas. Compositions in this raga begin on the notes, *sa, ri, ga, pa* and *ni*. This raga is the *ma* murchhana of Sankarābharana. The scale of Kalyāṇi, (*Yaman* that of Hindusthāni music) is met with in Hungarian music. This is the earliest prati madhyama rāga known to musical history and is the *ga* murchhana of *sa grama*.

Sanchāra :

g m p d n S—s n d P m g r—g m p d n D P m—p d
n S—s n D—d n d g g r r s n D—d n s r s n d P m g r—
g m g n D P m—d d p m G r—n r g m P m g g r r
s n d r S ॥

Some prominent compositions.

<i>Gita :</i>	<i>Kamalajadala</i>	<i>Tripata</i>	—
<i>Varna :</i>	<i>Vanajākshiro</i>	<i>Adi</i>	—
"	<i>Vanajākshi</i>	<i>Ata</i>	<i>Pallavi Gopālayyar.</i>
<i>Kriti :</i>	<i>Nidhi chāla</i>	<i>Chāpu</i>	<i>Tyagaraja.</i>
"	<i>Etāvunara</i>	<i>Adi</i>	"

<i>Kṛiti</i>	<i>Śive Pāhimām</i>	Adi	Tyagaraja.
„	<i>Nammi vacchīna</i>	Rūpaka	„
„	<i>Bhājana sayave</i>	„	„
„	<i>Evāmadugudura</i>	„	„
„	<i>Sundari nī divya</i>	Adi	„
„	<i>Amma rāvamma</i>	Jhampa	„
„	<i>Kamalāmbām</i>	Adi	Muttuswamy Dikshitar.
„	<i>Bhajarere</i>	Chāpu	„
„	<i>Talli ninnu nera</i>	Misra laghu	Syāma Sāstri.
„	{ <i>Birāna varā</i>	Rūpaka	„
„	{ <i>Himādri sute</i>	„	„
„	<i>Ninu vinā gati</i>	Adi	Subbarāya Sastri.
„	<i>Nidu charana</i>	„	Pallavi Gopālayyar.
„	<i>Nija dāsa varada</i>	„	Patnam Subrahmanya Iyer.
„	<i>Sarasvati</i>	Rūpaka	Tiruvottiyur Tyāgayyar.
„	<i>Devi Meenākshi</i>	„	Singarāchārlu.
<i>Pada :</i>	<i>Pārengum</i>	Adi	Ghanam Krishnayyar.
„	<i>Ettaičkandu</i>	Rūpaka	Subbarāmayyar.
„	<i>Taiyale unnai</i>	Adi	„
<i>Jāvali :</i>	<i>Entati kuluke</i>	„	Pattābhirāmayya.

APPENDIX

Janya raḡas.

No.	Name of the raḡa	Serial No. of its melakarta	Arohana—Avarohana.
1	Abheri	22	sgmpns—sndp m grs
2	Abhogi	22	srgmds—sdm grs
3	Abhiri	14	srs g m p d n s—s n D p M g [rs]
4	Amritavāhini	20	srm p d n s—s n d m g r s
5	Amritavarshini	66	sgmpns—snp m gs
6	Anandabhairavi	20	sgrgmp *d ps—s n *d p m g [rs]
7	Andolika	22	srm p n s—s n d m r s
8	Arabhi	29	srm p d s—s n d p m grs
9	Ardradesi	15	srgmp d s n s—s d p m grs
10	Asāveri	8	srm p d s—s n s p d m p r Grs
11	Atāna	29	srm p n s—s n D p m p Grs
12	Bāhudāri	28	sgmp d n s—s n p m gs
13	Balahamsa	28	srm p d s—s n d p m r m gs
14	Bāṅgala	29	srgmp m r p s—s n p m grs

No.	Name	Melakarta No.	Arohana—Avarohana
15	Bauli	15	s r g p d ṣ—ṣ n d p g r s
16	Begada	29	s g r g m p d p ṣ—ṣ N d p M g [r s
17	Behag	29	s g m p n d n ṣ—ṣ n d p m G r s
18	Bhairavam	17	s r g m p d n ṣ—ṣ D p m g r s
19	Bhairavi	20	s r g m p *d n ṣ—ṣ n d p m g r s
20	Bhūpālam	8	s r g p d ṣ—ṣ d p g r s
21	Bhūshāvali	64	s r g m p d ṣ—ṣ n d p m g r s
22	Bilahari	29	s r g p d ṣ—ṣ n d p m g r s
23	Bindumālīni	16	s g r g m p n ṣ—ṣ n s d p g r s
24	Brindāvana- sāranga	22	s r m p n ṣ—ṣ n p m r g s
25	Chandrajyoti	41	s r g m p d ṣ—ṣ d p m g r s
26	Chhāyānāta	34	s r g m p m p ṣ—ṣ n d n p m r s
27	Chhāyātarangini	28	s r m g m p n ṣ—ṣ n d p m g r s
28	Chintāmani	56	s r p m p *d n ṣ—ṣ p d p m g r s
29	Chittaranjani	19	s r g m p d n—n d p m r g r s
30	Darbār	22	s r m p d n ṣ—ṣ N d p m r g g r s
31	Desākshi	28	s r g p d ṣ—ṣ n d p m g r s
32	Desyatodi	8	s g m p d n ṣ—ṣ n d p m g r s

No.	Name	Melakarta No.	Arohana—Avarohana.
33	Devagāndhāri	29	s r m p d s—s n D p M g R s
34	Devakriya	22	s r m p n s—s n d n p m g r s
35	Devamanohari	22	s r m p d n s—s n d n p m r s
36	Devāmrita- varshini	22	s r g m n d n s—s n d p m g r s
37	Dhanyāsi	8	s g m p n s—s n d p m g r s
38	Dilipakam	22	s r g r m p n d n p d n s—s n d [p m g r s]
39	Dipaka	51	s g m p d p s—s n d n p m g r s
40	Dvijāvanti	28	s r m g m p d s—s n d p m g r [g s]
41	Gamakakriya	53	s r g m p d s—s n d p m g m [R s]
42	Gamanakriya	53	s r m p d n s—s n d p m g m r s
43	Gambhiranāta	36	s g m p n s—s n p m g s
44	Gānavāridhi	34	s m r g m p d n s—s d n p m r s
45	Garudadhvani	29	s r g m p d n s—s d p g r s
46	Gaula	15	s r m p n s—s n p m r g m r s
47	Gaulipantu	15	s r m p n s—s n d p m d m g r s
48	Gauri	15	s r m p n s—s n d p m g r s
49	Ghanta	8	s g* r g m p n d n s—s n d p m [g r s]

No.	Name	Melakarta No.	Arohana—Avarohana
50	Gopikāvasantam.	20	s m p n d n d s—s n d p m g s
51	Gopriya	62	s r g m d n s—s n d m g r s
52	Gujjari	15	s r g m p d n s—s d n p m g r s
53	Gumma kambhoji	15	s r g p d n d s—s n d p m g r s
54	Gundakriya	15	s r m p n s—s n p d p m g r s
55	Hamirkalyani	65	s p m p d n s—s n d p g m g r s
56	Hamsadhvani	29	s r g p n s—s n p g r s.
57	Hamsanādam	60	s r m p d n s—s n d n p m r s
58	Hamsānandi	53	s r g m d n s—s n d m g r s
59	Hindolam	20	s m g m d n s—s n d m g s
60	Hindolavasanta	22	s g m p d n d s—s n d m g r g s
61	Hindusthān kāpi	22	s r m p n s—s n d n p m g r s
62	Huseni	22	s R G m p n d n s—s n d p M g [r s]
63	Isamanohari	28	s r g m p d n s—s n d p m r m [g r s]
64	Jaganmohini	15	s g m p n s—s n p m G r s
65	Janaranjani	29	s r g m p d p n s—s d p m r s
66	Janjhūti	28	d s r g m p d n—d p m g r s [n d p d s]
67	Jayamanohari	22	s r g m d s—s n d m r s

No.	Name	Melakarta No.	Arohana—Avarohana
68	Jayanārāyani	22	sr G m p d ṣ—ṣ n d p m g r ṣ
69	Jayantasena	22	sg m p d ṣ—ṣ n d p m g ṣ
70	Jayantasri	20	sg m d n ṣ—ṣ n d m p m g ṣ
71	Jingla	20	srg m p d n d p ṣ—ṣ n d p m [g r ṣ]
72	Jujāhuli	28	sm g m p d n ṣ—ṣ n d p m g ṣ
73	Kaikavasi	60	srg m p d n ṣ—ṣ n p m g r ṣ
74	Kalagada	13	srg p d n ṣ—ṣ n d p g r ṣ
75	Kalānidhi	22	srg m s p m d n ṣ—ṣ n d p m [g r ṣ]
76	Kalāvati	16	sr m p d ṣ—ṣ d p m g ṣ r ṣ
77	Kamalāmanohari	27	sg m p n ṣ—ṣ n d p m g ṣ
78	Kambhoji	28	srg m p d ṣ—ṣ n d p m g r ṣ
79	Kānada	22	srg m D n ṣ—ṣ n ṣ D p m p [G m r ṣ]
80	Kannada	29	sg m p m d n ṣ—ṣ n ṣ D p m [G m r ṣ]
81	Kannadabangila	15	sr m g m p d ṣ—ṣ d p m g r ṣ
82	Kannadagaula	22	srg m p n ṣ—ṣ n d p m g ṣ
83	Kāpinārāyani	28	sr m p d n ṣ—ṣ n d p m g r ṣ
84	Karnātaka byāg	28	srg m p d n ṣ—ṣ n d n p d m [g r g ṣ]

No.	Name	Melakarta No.	Arohana—Avarohana
85	Karnāṭaka kāpi	22	srGmpdn ṣ—ṣndp m g [mrs]
86	Katana kutūhalam	29	sr m D ng p ṣ—ṣndp m grs
87	Kedāragaula	28	sr m p n ṣ—ṣndp m grs
88	Kedāram	29	smgmpn ṣ—ṣnp m grs
89	Khamās	28	smgmpdn ṣ—ṣndp m g [rs]
90	Kiranāvali	21	sr g m p d n ṣ—ṣp m grs
91	Kokilādhvani	28	sr g m d n d ṣ—ṣndnp m grs
92	Kolāhalam	29	spmgmpdn ṣ—ṣndp m grs
93	Krishnaveni	15	sr g m p n ṣ—ṣnp m grs
94	Kuntalavarāli	28	sm p d n d ṣ—ṣndp m s
95	Kuranji	29	sn srgmpd—d p m grs n ṣ
96	Kutūhalam	29	sr m n d p n ṣ—ṣndp m grs
97	Lalita	17	sr g m d n ṣ—ṣndm grs
98	Madhyamāvatī	22	sr m p n ṣ—ṣnp m rs
99	Malahari	15	sr m p d ṣ—ṣd p m grs
100	Mālavasri	22	sgmpndn p d n ṣ—ṣndp [mgs]
101	Mālavī	28	sr g m p n m d n ṣ—ṣndnp [mgmr ṣ]

No.	Name	Melakarta No.	Arohana—Avarohana
102	Malayamārutam	16	s r g p d n s—s n d p g r s
103	Mallikā vasantam	15	s g m p n s—s n d p m g r s
104	Mānd	29	s g m p d s—s n d p m g r s
105	Mandāri	51	s r g m p n s—s n p m g r s
106	Mangalakaisiki	15	s m g m p m d n s—s n d p m [g r s]
107	Manirangu	22	s r m p n s—s n p m G r s
108	Manjari	22	s g r g m p n d n s—s n d p m [g r s]
109	Mānji	20	s r g m p * d n s—s n d p m p g [r s]
110	Manohari	22	s g r g m p d s—s d p m g r s
111	Mārgahindola	22	s r g m p d n s—s n d m g s
112	Meehabauli	15	s r g p d s—s n d p m g r s
113	Mechakāngi	53	s r g m p d p n s—s n p d p m [g r s]
114	Megharanji	15	s r g m n s—s n m g r s
115	Mohana	28	s r g p d s—s d p g r s
116	Mukhāri	22	s r m p n d s—s n d p m g r s
117	Nabhomani	40	s r g r m p s—s n d p m g r s
118	Nādashintāmani	22	s g m p n d n s—s n d p m g r [g s]

No.	Name	Melakarta No.	Arohana—Avarohana
119	Nādanāmakriya	15	s r g m p d n—n d p m g r s n
120	Nādatarangini	22	s p m r g r s—s p n d p m g r s
121	Nāgasvarāvali	28	s g m p d s—s d p m g s
122	Nalinakānti	27	s g r m p n s—s n p m g r s
123	Nārāyanagaula	28	s r m p n d n s—s n d p m g r [g r s]
124	Nārāyani	28	s r m p d s—s n d p m r s
125	Nāta	36	s r g m p d n s—s n p m r s
126	Nātakuranji	28	s r g m d n s—s n d m g s
127	Navarasa kalānidhi	28	s r m p s n s—s d p m g r s
128	Navarasa kannada	28	s g m p s—s n d m g r s
129	Navaroj	29	p d n s r g m p—m g r s [n d p]
130	Nāyaki	22	s r m p d N d p s—s N d p m r [G r s]
131	Nilāmbari	29	s r g m p d p n s—s n p m g r [g s]
132	Pādi	15	s r m p n s—s n p d p m r s
133	Palamanjari	22	s g m d s—s n d p m G m r s
134	Panchama rāga	22	s r d p n s—s n d p m g r s

No.	Name	Melakarta No.	Arohana—Avarohana
135	Pantavarāli	51	s r g m p d n s—s n d p m g r s
136	Paraju	15	s G m p d n s—s n d p m g r s
137	Pratāpa varāli	28	s r m p d p s—s d p m g r s
138	Pravārajoti	28	s r m p d n s—s n d n p m g s
139	Punnāgavarāli	8	n s r g m p d n—n d p m g r s n
140	Pūrnachandrika	29	s r g m p d p s—s n p m r g m [r s]
141	Pūrnalalita	19	s g r m p s—s n d p m g r s
142	Pūrnashadjam	22	s r g m N s—s n p m G r s
143	Pūrvakalyāni	53	s r g m p d p s—s n d p m g r s
144	Pūrvi	15	s r g m p d n d s—s n d p m d [m g r s]
145	Pushpalatikā	22	s r g m p n s—s n p m g r s
146	Rāgapanjaram	28	s r m p d n d s—s n d m r s
147	Ramā manohari	52	s r g m p d n d s—s n d p m g r s
148	Ranjani	59	s r g m d s—s n d m g e r s
149	Rasāvali	4	s r m p d n s—s d p m r s
150	Ravichandrika	28	s r g m d n d s—s n d m g r s
151	Revagupti	15	s r g p d s—s d p g r s
152	Ritigaula	20	s g r g m n d m n n s—s n d m [g m p m g r s]

No.	Name	Melakarta No.	Arohana—Avarohana
153	Rudrapriya	22	s r g m p d n s—s n p m G r s
154	Sahāna	28	s r g m p m D n s—s n d p m [G m R g r s
155	Saindhavi	22	n d n s r g m p d N—d p m g r [s n d n s
156	Sālagabhairavi	22	s r m p d s—s n d p m g r s
157	Sāma	28	s r m p d s—s d p m g r s
158	Sāramati	20	s r g m p d n s—s n d m g s
159	Sāranga	65	s r g m p d n s—s n d p m r g m [r s
160	Sārangānāta	15	s r m p d s—s n s d p m g r s
161	Sarasvati	64	s r m p d s—s n d p m r s
162	Sarasvati manohari	28	s r g m d s—s d n p m g r s
163	Saurāshtram	17	s r g m p d n s—s n D p m g m [R s
164	Sāveri	15	s r m p d s—s n d p m g r s
165	Siddhasena	22	s g r g m p d s—s n d m p m r [g r s
166	Sindhu kannada	28	s m g m r g m p d p s—s n d p [m g r s
167	Sindhu mandāri	29	s r g m p s—s n d p g m d p m [r s

No.	Name	Melakarta No.	Arohana—Avarohana
168	Sindhu rāmakriya	15	sgmpdñs—snpdpmg
169	Srimani	2	sr ^g gpdñs—snpdpgs
170	Sriraga	22	srmpñs—snpdnpmgrs
171	Sriranjani	22	sr ^g gmdñs—sndmg
172	Srutiranjani	61	sr ^g gmpdn—ndpms ^r
173	Suddha bangāla	22	srmpdñs—sdpmgrs
174	Suddha desi	20	srmpdñs—snpdpmgs
175	Suddha dhanyāsi	22	sgmpñps—snpmg
176	Suddha rāga	57	sr ^g gmpñs—snpmg
177	Sudhā tarangini	28	sr ^g gm ^r mpdñds—snpd [mg
178	Suddha sāveri	29	srmpdñs—sdpms
179	Suddha simantini	8	sr ^g gmpdñs—sdpmg
180	Suposhini	2	sr ^s sm ^p pdñs—sdpnmrs
181	Supradipam	17	srmpdñs—snpdpmgrs
182	Surati	28	srmpñs—snpdpmgpmRs
183	Svarabhūshani	22	sgmpdñs—snpdpmrs
184	Svarāvali	28	smgmpdñs—snpdmg [rs
185	Svaravedi	28	smgmpdñs—snpdnp [gs

No	Name	Melakarta No.	Arohana—Avarohana
186	Tivravāhini	46	s r g m p d p n s—s n d p m g [r g m r s]
187	Udayaravi- chandrika	22	s g m p n s—s n p m g s
188	Umābharanam	28	s r g m p d n s—s n p m r g m [r s]
189	Valaji	28	s g p d n s—s n d p g s
190	Vasanta	17	s g m d n s—s n d m g r s
191	Vasantabhairavi	14	s r g m d n s—s n d m p m g r s
192	Vasanta varāli	24	s r m p d n— $\left\{ \begin{array}{l} n D p g r s n \\ n d p m g r s n \end{array} \right.$
193	Vegavāhini	16	s r g m p d n d s—s n d p m g r s
194	Vijayanāgari	58	s r g m p d s—s d p m g r s
195	Vijayasri	41	s g r g m p n s—s n p m g r s
196	Vijayavasanta	54	s m p d n s—s n p m g s
197	Viravasantam	24	s g r m p s—s n d p m g r s
198	Vivardhani	28	s r m p s—s n d p m g r s
199	Yadukula kāmbhoji	28	s r m p d s—s n d p m g r s
200	Yamunākalyāni	65	s r g p m p d s—s d p m p g r s

QUESTIONS

Technical terms :—

1. Explain the following terms :—
 (a) Ghana panchaka, eduppu, svayambhu svaras, pātam, katakam, madhyama sruti.
 (b) Graha, nyāsa and amsa; vādi, samvādi, anuvādi and vivādi.
2. Write short notes on :—
 (1) Trayodasa lakshanas, (2) Shodasāngas, (3) Katapayādi sankhya, (4) Tāla dasa prānas, (5) Group kritis, (6) Svarāksharam, (7) Mani-pravāla sāhitya (8) Trikāla sādhakam.

Melakarta scheme :—

3. Explain the following :—
 (a) Katapayādi sankhya (b) Mela mnemonics
 (c) Asampurna mela (d) Vivādi mela.
4. Mention the three characteristic features of a melakarta.
5. Explain the statement that in the seventy-two melakarta scheme :—
 (a) the pūrvānga notes remain constant within each chakra.
 (b) the uttarānga notes repeat in the same order in the six melas of each chakra.
6. What do you mean by the statement that the note *ma* is the *bisecting line* in the melakarta scheme?
7. Name the chakras wherein both the notes, chatussruti rishabha and sādharana gāndhāra are met with.
8. Name the pūrvānga svaras figuring in the II, V, IX and XII Chakras?
9. Give examples of janya ragas which figure as melas in the asampurna mela paddhati.
10. Name a pūrva mela, whose uttarānga svaras are the same as those of the mela, Nāmanārayani.
11. Name an uttara mela of the *bhu*-type and which takes the *ri* of the IV chakra and the *ga* of the VI chakra.
12. Give the svaras taken by the six melakartas of the X chakra.

13. What are the serial numbers of the melas taking the *suddha ri*, *antara ga* and *prati ma*.
14. Mention the serial numbers of the melas signified by the following phrases:—
 (a) *Netra - bhu* (b) *Disi - pa* (c) *Agni - ma*
 (d) *Veda - sri* (e) *ra gi mi dhi nu*
 (f) *ri gi ma dha na*
15. Find the serial number of the *sha-type* mela of the VI chakra and the *go-type* mela of the X chakra.
16. Give the names of the VI and XI chakras and name the svaras figuring in their *purvāṅga*.
17. Find the serial numbers of the followigg *mela-kartas*:—
 Jhankārādhvani, Nāsikābhushani, Mānavati and Dhavalāmbari. (The application of the *katapa-yādi formula* should be clearly shown).
18. To which chakra does the 58th *melakarta* belong? Name its corresponding *suddha madhyama karta*.
19. Determine the serial number of the mela which takes:—
 (a) the *pūrvāṅga* of Māraranjani and the *uttarāṅga* of Navanitam.
 (b) the *uttarāṅga* of Nāsikābhushani and the *purvāṅga* of Rūpavati.
20. Name the chakra to which the mela, Jalārnavam belongs.
21. Draw a diagram of the Vina finger-board and mark on it the *svrasthānas* for the 62nd *melakarta*.
22. Mention the serial numbers of the *suddha madhyama melakartas* taking the *shatsruti ri* and *kākali ni*.
23. Give the serial numbers of all the *uttara melas* taking the *chatussruti dha* and *kaisiki ni*.
24. Determine the serial number of the mela Dhātuvardhani. Name the *tāla*, the *aksharakāla* value of whose *avarta* is equal to $\frac{1}{3}$ of this number.
25. Name the chakras to which the *uttara melas* of the following melas belong:— Senāvati, Gāyakapriya and Vāgādhisvari.
26. Determine the serial numbers of the *purva melas* of the following:— Pāvani, Nāmanārāyani and Sucharitra.

27. Name the melas from which an audava raga taking besides *sa* and *pa*, the notes antara *ga*, suddha *ma* and chatussruti *dha* can be deemed to be derived.
28. Mention the svaras taken by :—
 (a) the 5th mela in the Veda chakra.
 (b) the 2nd mela in the Rudra chakra.
29. Give the names of two melas, the difference of whose serial numbepts will be equal to the serial number of the mela Gavāmbhodhi.
30. Name two melas, the product of whose serial numbers is equal to the serial number of Nāgānandini.
31. Name the svaras taken by the mela, whose serial number is equal to the root of the serial number of Māraranjani
32. Calculate the serial number of the mela that would result when the *ri* of Gamanasrama is raised a semitone and its *ma* lowered a semitone.
33. Give the names of two melas, the difference of whose serial numbers is equal to the serial number of the mela Salagam.
34. Determine the serial number of the mela that would result when the *ga* and *ma* of Kharaharapriya are raised a semitone.
35. Calculate the serial number of the melakārta in the *Aditya* chakra taking the notes suddha dhaivata and kaisiki nishāda. Name the tala whose aksharakāla - value for an āvarta is equal to one-fourth of this number.
36. What are the possible melas that can be assigned to the audava rāga *sgpdns—smdp gs* and taking the notes, antara gāndhāra, chatussruti dhaivata and kaisiki nishāda.
37. How do you account for the existence of two nomenclatures for the 72 melas ?

Raga :—

38. Classify the janya ragas.
39. Classify the varja ragas.
40. Classify the vakra ragas.
41. Is it possible for a janya raga to take all the seven notes in both the ārohana and avarohana and still

differ from its janaka raga? Discuss. Illustrate your answer with examples.

42. Write short notes on :—
 (a) Vakra raga (b) Sankirna raga (c) Dhaitāitya raga (d) Chhāyāraga raga (e) Rakti raga (f) Dātu svara prayoga (g) Ekānya-svara bhāshānga raga.
43. Give examples of bhāshānga ragas wherein :—
 (1) the kākali nishāda is the accidental.
 (2) the kaisiki nishāda is the accidental.
 (3) the chatussruti dhaivata is the accidental.
44. Point out the accidentals if any, in the following ragas and indicate the sanchāras wherein they occur :
 (a) Bhairavi, (b) Kāmbhoji, (c) Bilahari.
45. Explain the origin of bhāshānga ragas?
46. How do you account for the universal occurrence of the Mohana raga?
47. Enunciate the rules observed in fixing the janaka melas for bhāshānga ragas.
48. Some scholars are of the view that 'janya ragas might be allocated to the earliest possible melas in the scheme of 72'. Examine the soundness of this statement.
49. In addition to the *Janaka-Janya* system, from what other points of view have ragas in general been classified?
50. Give examples for the following kinds of ragas :
 (1) An audava-sampūrṇa raga derived from the 29th mela.
 (2) An upānga raga derived from the 28th mela,
 (3) A raga wherein *karuṇā rasa* is the dominant feeling.
 (4) A raga which has no sanchāra below the mandra sthāyi nishāda.
 (5) An early morning raga.
 (6) An evening raga.
 (7) A mela raga popularised by Tyāgarāja.
 (8) A raga whose individuality is easily revealed by madhyama kāla sanchāras.

51. In the ragas, Bhairavi and Bilahari, give four phrases of your own, containing the accidentals.
52. Write six musical phrases of your own in each of the following ragas :—
 (a) Chakravākam, (b) Mohana, (c) Khamās,
 (d) Sankarābharana, (e) Kedāram (f) Pūrva kalyāni.
53. Give short sanchāras in each of the following ragas and mention a few prominent compositions under each :
 (a) Kāmbhoji, (b) Suddha sāveri, (c) Kalyāni.
54. Give the janaka ragas for the following janya, ragas :
 (a) Mohana, (b) Arabhi, (c) Bilahari.
55. Write the ārohana and avarohana of a sampurna-audava raga, wherein the 4th and 7th notes are deleted.
56. What will be the resulting raga when the *ga* and *ni* of Todi are raised a semitone.
57. What will be the resulting raga when the *ri*, *ma* and *dha* of Mayamalavagaula are raised a semitone.
58. What ragas are useful for being sung at the commencement of concerts and why?
59. Name two janya ragas belonging to the same mela and the ārohana and avarohana of one of which happens to be the avarohana and ārohana of the other.
60. Write the ārohana and avarohana of an audava-shādava raga and wherein the *ga* is deleted in the ārohana and the *ni* is deleted in both the ārohana and avarohana.
61. Name two ragas wherein the gāndhāra happens to be a resting note and around which you can weave an ālāpana.
62. (a) In the ragas Bhairavi and Kambhoji, name the notes on which you can rest and develop an ālāpana. Give a few illustrative sanchāras under each.
 (b) On which svaras do compositions in Bhairavi and Sankarābharana commence?

63. Point out the visesha sanchāras in the following ragas and cite the relevant portions of compositions wherein they occur:—
 (a) Sāṅkarābharana, (b) Purvakalyāni,
 (c) Chakravākam, (d) Kedāram.
64. Give two rakti prayogas for each of the following ragas:—
 (a) Bilahari, (b) Bhairavi, (c) Kedāram.
65. Give an example each for the following:—
 (a) a raga wherein *ga* is both a jiva svara and a nyāsa svara.
 (b) a raga wherein *ga* is not a nyāsa svara.
66. In bhāshāṅga ragas, is it possible for anyā svaras to be nyāsa svaras as well? Explain.

Tala:

67. Explain the terms:—
 (a) Khandā gati, (b) Druta laya, (c) Atita graha,
 (d) Nissabda kriya.
68. Explain how each of the seven principal talas admits of 25 varieties.
69. Are talas other than the 35 sūlādi talas used in Karnātic music? If so, name them.
70. Mention five talas used in Karnātic music, wherein the āvartas consist of seven aksharakālas each.
71. Distinguish between:
 (a) Desādi and Madhyādi talas.
 (b) Tisra Chāpu and Misra Chāpu talas.
72. Name a tala whose aksharakāla-value for an āvarta is equal to the serial number of Kharaharapriya.

Musical form:

73. Give some examples of:
 (1) Instrumental forms.
 (2) Musical forms which contain jatis in their dhātu.
74. Explain the significance of the sāhitya of an ordinary lakshana gita and a rāgāṅga rāga lakshana gita.
75. (a) What are the constituent āngas of a tāna varna?
 (b) Estimate the value of the varna composition as compared with other musical forms.

76. If in a tāna varna, the order of the ettugada svaras is changed and given to you, can you re-arrange them in the order intended by the composer? If you can, how will you proceed?
77. Point out the utility in practising tāna varnas.
78. What do you mean by *technical beauty* in a musical composition? Illustrate your answer with examples.
79. Give the lakshana of a kriti composition and point out how composers have attempted to beautify this type. Illustrate your answer with examples.
80. Point out the extent to which a performer can display his creative talents in kritis and varnas.
81. (a) What is a rāgamālika? Write its lakshana.
 (b) Enunciate the principle, if any, underlying the order of succession of ragas in rāgamālikas.
 (c) Mention the names of some wellknown rāgamālikas. Write short notes on them and also give the names of their composers.
 (d) What is the minimum number of ragas that should be present in a rāgamālika.
82. An unfamiliar rāgamālika composition, conforming in full to the lakshana of the form, is given to you, but with the order of the charanas changed. Can you re-arrange the charanas in the order intended by the composer? If so, outline the procedure that you will adopt.
83. (a) Write short notes on the mātu of a pada, jāvali, pada varna and daru.
 (b) In what compositions do you get the jatis or the tala-solfa (rhythmic) syllables?
84. Mention the names of composers, who :—
 (1) signed their compositions with their own name;
 (2) signed their compositions with names other than their own;
 (3) did not introduce any mudra at all.
85. Comment upon the nature of the sāhitya in the following types of compositions :—
 (a) Pada varna, (b) Pada, (c) Rāgamālika,
 (d) Jāvali, (e) Tillana.

86. Mention a composition having two pallavis.
87. In what types of compositions is the anupallavi a dispensable anga.
88. Mention the names of four prominent composers of (a) kriti, (b) varna, (c) rāgamālika and (d) pada.
89. Explain the following :—
(a) Chitta svara, (b) Ettugada pallavi, (c) Solkattu svara, (d) Svarākshara, (e) Sangati (f) Upānga khanda.
90. Name the forms wherein the sāhityas relate to *nāyaka-nāyaki* theme. Write brief notes on them.
91. Name a form wherein the signature of the composer may occur in the pallavi or anupallavi.
92. Write the lakshana of the forms : Padam, Tillāna and Jāvali. Mention the names of prominent composers of these three forms and point out the signatures adopted by them.
93. Write short notes on :—
(a) Navaratnamālika, (b) Tillāna daru.
(c) Kālahastisa Pancharatnam / (d) Navāvarana kirtana, (e) Svarasthāna padam.
94. Are there instances of tunes having specific names? If so, name them. Give two of those tunes in notation.
95. From the compositions familiar to you, give an example each for the following :—
(a) Where the commencing notes of the pallavi and the anupallavi are an octave apart.
(b) Where the above notes bear the samvādi relationship.
96. Suppose you are given the bare sāhitya of a musical composition, how will you proceed to determine whether it is that of a svarajati, varna, kriti or padam.

Folk music.

97. What are the characteristics of folk-songs and how would you classify them?
98. Mention the ragas and talas figuring in folk songs.

99. Write a short essay on the musical aspect of folk songs.
100. Suppose a gramophone record of a song is played to you, how will you determine whether it is a specimen of art music or folk music?

Musical Instruments :

101. Name the three main heads under which musical instruments are generally classified.
102. Briefly classify the stringed instruments.
103. Briefly classify the wind instruments.
104. Briefly classify the percussion instruments.
105. Classify the bowed and plectral varieties of instruments.
106. Classify the fretted instruments.
107. Name the instruments used in Concert music, Temple music and Martial music.
108. Write short notes on :—
 - (a) Chinna melam. (c) Naubat.
 - (b) Periya melam. (d) Sarva rāga mela vina.
109. Give examples for the following :—
 - (a) A wind instrument without finger-holes.
 - (b) A percussion instrument capable of being tuned.
 - (c) A stringed instrument with two bridges,
 - (d) A stringed instrument provided with guts and metallic strings.
 - (e) A stringed instrument with metallic strings alone.
 - (f) A plectral instrument wherein the playing fingers are not in contact with the strings.
110. Name two plectral instruments used in South Indian concerts.
111. Mention the instruments figuring as accompaniments in concerts of Karnatic music.
112. Is the compass of the Vina or the Violin altered by tuning it in madhyama sruti?
113. Distinguish between monophonous and polyphonous instruments. Give two examples under each.

114. Give two examples for each of the following:—
 (a) A stringed instrument with a plain finger board.
 (b) A fretted instrument of the bowed group.
 (c) An instrument with a compass of more than three octaves.
115. Name the instruments on which one can play simultaneously in two octaves.
116. Mention the names of two sruti vādya.
117. Name the wind instruments used in concerts of Karnatic music.
118. Point out the utility of the *sound post* and the *mute* in the Violin.
119. How do you account for the fact, that when the sārani string of a correctly tuned tambura is plucked, the other sārani string vibrates of its own accord?

General.

120. Explain the different branches of Manodharma sangita?
121. Discuss if Karnatic music has profited by coming into contact with other systems of music.
122. Give examples of South Indian ragas figuring in other systems of music.
123. Mention the important factors that contribute to the excellence of a concert.
124. What is the compass of a well cultivated human voice? Name a concert instrument whose compass is nearly the same as that of a well cultivated human voice.
125. If in his usual pitch, the highest note that a singer can reach is the tara sthāyi madhyama, what is the highest note that he can reach in the madhyama sruti?
126. Point out the requisites of an ideal concert hall.
127. Write a short essay on the utility of the gramophone.
128. A person *A*, driving a motor car along a road, hears the note of the horn of another motor car driven by *B* in the opposite direction, and finds that the note of his motor-horn and that of *B*'s are related

as Shadja and Chatussruti Rishabha respectively. After some distance, *A* hears the note of the horn of another motor-car driven by *C* in the opposite direction and finds that the note of his motor-horn and that of *C*'s are related as Shadja and Antara Gāndhāra respectively. If *B* hears the note of the horn of *C*'s motor-car, how will the note strike him? Explain.

129. In a music school there were three classes in Instrumental Music, teaching Violin, Vina and Sitār. To a visitor, who visited the three classes in succession, the srutis of the three classes impressed him as Shadja, Chatussruti Rishabha and Sādhārana Gāndhāra respectively. If he had visited the classes in the following order, viz, Vina, Sitār and Violin, how will the Sruti notes of the three classes have impressed him? Explain.
130. A Vina specially made, has five strings passing over the finger-board. The four strings are tuned as in the ordinary vina and the fifth string is tuned to the Shadja immediately below the note given by the fourth string. What will be the compass of the instrument? Explain with a diagram.

PASSAGES FOR SIGHT SINGING.

1. Bhairavi — Rupaka.

<u>Ṛ Ṣ , n d p</u>	<u>m p d . n Ṣ</u>
<u>m p d n s r g r s n d p</u>	<u>m n d P ,</u>
<u>N , r s n d p</u>	<u>m g m p m g r s</u>
<u>N d p m n d p m g r s</u>	<u>n d n S ,</u>

2. Purvakalyani — Chapu.

P m g g r r	S n s r g m	P m p d p m	d p s n r S
Š n š r g m	g g r Š s n	R š n d p m	g g r S ;

3. Kedaram — Adi.

P p m G, r	R, s S s n	P p n S s m	G, r S ;
S s m G, m	P, n P, m	G, r R, s	s r r g S ;
P p m G, m	P, n Š ;	Š s m Ġ, r	R, s Š ;
Š s m Ġ, r	R, s s n p m	g m p r Š, n	P, m G, r S

ERRATA.

Page	103	line	12	'and a do not'	to be read as	and a few do not
"	104	"	22	'Manasāvedi'	"	<i>Manasā veritarula dalachaka</i>
"	118	"	16	'after a eay's'	"	after a day's
"	209	"	10	'and not stressed'	"	and are not stressed
"	211	"	8	'raga which is'	"	raga is

OTHER BOOKS OF THE AUTHOR.

IN ENGLISH.

South Indian Music: Books I, II, III & IV.

72 Melakarta janya raga scheme with chart.

Syama Sastri and other famous figures of South Indian Music.

• The Flute

Indian Melodies in Staff Notation: Book I.

Madras as a seat of Musical learning.

South Indian Musical Instruments (Madras Museum Bulletin).

IN TAMIL.

Practical Course in Karnatic Music: Books 1 - 3.

Kirtana Sagaram: Books 1 - 4.

Tyagaraja's Nowka Charitram.

Selections from Tamil Composers.

THE INDIAN MUSIC PUBLISHING HOUSE,

4, Bunder Street, G.T. Madras.