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THE INDIAN MUSICAL SCALE: ITS DEVELOPMENT AND CONTINUITY.

BY

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Many scholars have written on the subct and tried to prove the continuity of the velopment of the Indian Musical Scale. attempting to show this continuity many ve had recourse to arguments drawn from eir imagination; some have tried to ana- e the actual notes used at present in nging *Sama* chants and to record them. t whether the present mode of singing em is a true reproduction of the ancient thod may be questioned in the absence sound and satisfactory evidence. How- er there is a persistent tendency to be- ve that the Indian art of Music is derived m the *Sama Veda*. This statement is animously made by every ancient san- it writer on Music, such as *Bharata* and *angadeva* in their *Natya Sastra* and *San- Ratnakara* respectively. While modern olars have found out all the references usic in the *Vedas* and other Sanskrit ks, which point to various stages in the lution of the art, they have not distin- hed the successive periods so as to show distinctly the continuity of the development nor drawn the lines of demarcation between one period and another. Thus though we have many references from the *Vedas*, *Brahmanas*, *Upanishads* and *Pratisakhyas* and from the ancient works of *Panini*, *Katyayna*, *Patanjali* and *Yajnavalkya* and many references from the works on music proper, no research scholar has properly interpreted them to produce a reliable history of Indian Music. Without any pretensions to finality on the matter I now place before the public my views.

Origin and the first stage of the usage of Musical Sound.

I do not propose to discuss what constitutes a musical sound as that has a universally accepted significance and there is no controversy about it. In *Sangita* we find two words श्रुति and स्वर about which many scholars have been misguided and arrived at wrong conclusions. श्रुति may be applied to any sound heard by the ear, as its root

meaning shows, श्रु, to hear, श्रुति, that which is heard; and स्वर may be applied to a श्रुति (sound) which is heard unchangingly flowing to a certain extent of time. So स्वर is musical sound and श्रुति is musical sound and ordinary sound both. But the ancients have chosen the word श्रुति for स्वर of the later period and used it in the same sense. To denote all possible musical notes in a scale this word is used in a technical sense and out of such settled श्रुतिs a few are chosen to form a *Raga*, only the notes so chosen are named as स्वरs; the rest are श्रुतिs which are not used in the same *raga*. Properly there is no distinction between श्रुति and स्वर as adopted by all classical authors. Out of the definitely settled श्रुतिs those chosen as being essential to form a *raga* are agreeable to the ear, while the others are not, but may play the the same part in any other *raga*. Hence the agreeableness of a set of श्रुतिs in a particular raga is later on described by the word स्वर on account of its contribution to the formation of a *raga* and its pleasant effect on the ear. स्वतः रञ्जयति श्रोतृचित्तं स स्वर उच्यते। (सं. र. १ अ.)

So whenever the word श्रुति occurs in connection with music it is not distinct from स्वर which is simply used with respect to the notes of any particular *raga*.

We can now take up the 1st stage of development. *Vedic* literature is the most ancient authority we can find in order to trace the sources of all kinds of Indian learning. If we look at the hymns of the *Rigveda*, the most ancient of the *Vedas*, we find that there are three different sounds used to recite or sing the *Richas* and ther are named as the उदात्त, अनुदात्त and स्वरित. The middle or fundamental note is स्वरित, the higher is उदात्त and the lower अनुदात्त. Looking to the development of the musical sound, it is not possible to conclude that the authors of the *Richas* originally composed all of them with the rising and falling sounds as at present. The *Rishis* sang the prayers to different Gods of their choice and the composers of the *Richas* felt that when they become more audible and agreeable by reciting in consonance with one fixed note than otherwise and that this fundamental note should be common to all persons who join in the prayer service at the same time. And as the lengths of the syllables in the *Richas* had been definitely classified as ह्रस्व, दीर्घ and प्लुत they were able to perform their services most harmoniously. The effect of this harmony encouraged them to make further investigations into the subject and they fixed on the mode of singing the verses in three different notes as already stated. This system was unanimously accepted by all the *Vedic* writers in the subsequent periods. So we arrive at the following conclusion:—

The first stage of usage of musical notes synchronises with the first period of the *Rigveda* and this period according to the researches of the late Lokamanya Bal Gangadhar Tilak and Pandit V. B. Kelkar is about 4500 B. C. The musical system of this period is described by writers as एकश्रुति गायन or आर्चिकगायन. Vide आश्वलायन श्रौत सूत्र १-१-१. ऐकश्रुत्यम्=एकश्रुतिं मनुब्रूयात्। परःसंनिकर्षः॥ also संगीत रत्नाकर अ. १—आर्चिको गाथिकश्चैव सामिकोऽथस्वरांतरः। आर्चिक=एकस्वरीगायन.

The second stage.

The second stage is गाथिक or the singing of *Richas* in the manner customary at present. The period of this coincides with the completion of the *Rigveda* and is therefore nearly 3500 B. C.

The third stage (सामिक).

The period as proved by the above mentioned scholars falls at about 2500 B. C. because it has been proved that *Taithiriya Samhita* must have been completed by that period. The doubt may arise as to why 2500 B. C. should be taken as the period of the *Sama Veda Samhita* if, as is stated, it marks the completion of the *Taithiriya Samhita*. The reason is this. The verses of the *Sama Veda Samhita* have not been independently composed. Out of the available *Samhita* we see most of the *Richas*, about 1800 have been borrowed from the *Rigveda Samhita* except a few about 75, which have been independently composed. If we take this fact into consideration we may judge that a period required to complete the *Rik Samhita* is sufficient for translating the same into a notation adopted for *Sama* singing. So we arrive at the conclusion that *Taithiriya* and *Sama Samhitas* are of the same period. i. e 2500 B. C.

Sama Gana is distinguished by the addition of new notes to the गाथिक system. Various notes were tried until a certain note was found to combine very agreeably with the fundamental. When this phenomenon of स्वरितभाव was noticed it was used as a measure for fixing the relation of the new notes.

स्वरित is a term used by the later writers, after the scale of 7 notes was fixed. Before that it was termed as चतुःस्वरी or चातुःस्वरी. Evidence for this may be found in *Sangita Ratnakara*.

सामिकोऽथस्वरांतरः—साम्नांतुत्रिस्वरत्वं सप्त स्वरत्वेऽपि मंद्रादिस्थानत्रयविवक्षया etc. Here स्वरांतर means the harmonic chord between the fundamental and the note at the end of the third interval, and सप्तस्वरत्व implies the note coming at the end of the seventh interval, in other words, the octave. From the above quotation it is clear that the *Samic* scale was repeated in three ways—from स, म, प which are the bases for the higher and lower registers or octaves. The repetition of the scale with स, म or प as fundamental with its component notes unaltered in pitch and order gives us three different scales—which is the result of the development of सामगान. Until the phenomenon of the चतुःस्वर was noticed by the ancients they did not term the notes स, म and प as स्वरित. This system might have been current during the period between 3500 and 2500 B. C. In the later period this system was modified and a scale of 7 notes was fixed by means of the measure स्वरांतर or स्वरित.

The usage of the *Sama* scale with methodical progress by means of 7 fixed notes falls between 2500 to 1400 B. C. which is the *Brahmanical* and *Upanishadic* period. We have sufficient evidence from the *Brahmanas* and the *Pratisakhyas* to confirm the above fact. There is a passage in *Tandya Maha Brahmana* (1—1—3) which runs as follows:—

तद्योसौ कुष्टम इव साम्नः स्वरस्तं देवा उपजीवंति, योऽवरेषां प्रथमस्तं मनुष्या, योद्वितीयस्तं गंधर्वाप्सरसो, यस्तृतीयस्तं पशवो, यश्चतुर्थस्तं पितरो ये चांडेषु शेरते, यः पञ्चमस्तमसुररक्षांसि, योऽन्त्यस्तमोषधयो वनस्पतयो यूद्यान्यज्जगत्।

In the above passage the author mentions 7 notes and gives an imaginary description of the inventors of all notes descending from the note, the highest in pitch of the scale. Notes have been mentioned in their respective order and not by their technical names. They are

1st is कृष्टतम which means the highest
2nd is the 1st of the remaining
3rd is the 2nd „ „ „
4th „ 3rd „ „ „
5th „ 4th „ „ „
6th „ 5th „ „ „
7th is अंत्य the last of the Scale.

In the above passage there is no means of proving the relationship existing between the notes. As this passage is a portion of a *Brahmana* composition it falls in the period of about 1000 years (2500-1400 B. C.). Now, progress in experimenting with various notes and building up the *Sama* scale must have been made with some definite process they knew, which unfortunately is not mentioned. The unanimous practice of the *Sama* would be unintelligible unless we assume that there was some reason to terminate the progress by the 7th note. If the number 7 was only a matter of arbitrary choice or individual taste it would not have been so generally accepted by all *Samagas*. We can however prove from the later writings that they had a definite process.

There is a passage in the *Chandogya Upanishad* put into the mouth of a Guru and a Sishya, Dalbhya and Shalavatya respectively which is as follows:

Question. शालावत्य उवाच । का साम्नो गतिः ।

Answer. दाल्भ्य उवाच । स्वर इति होवाच ।

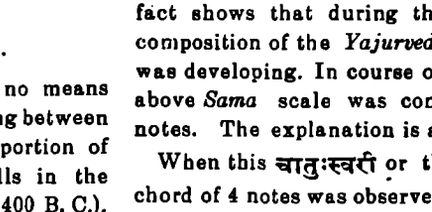
The above question may be translated as: What is the measurement for *Sama*? And the answer is that it is measured by means of a स्वर; in other words सामिक is equivalent to स्वरांतर (सं. र. १-४-३८). This particular interval represents a harmonious relationship and is composed of three intervals between the 4 notes, 3 of the *Gathika* and an additional one. So the scale of 4 to

7 notes is *Samika*. There are some ptional examples *fraises* of *scales* in which take more than 3 notes of the *G* system and more examples of these m found in *Yajurveda* than in *Rigveda*. fact shows that during the time o composition of the *Yajurveda*, *Sama* s was developing. In course of time as above *Sama* scale was completed w notes. The explanation is as under:

When this चातुःस्वरी or the sympa chord of 4 notes was observed it was a unit of measurement of *Udatta* and *datta* limits. So the scale of *Sam* built of two chords the extreme no which bear the ratio of 3:4, one cho rising notes and another of falling in place of *Udatta* and *Anudatta* which approximately equal to the modern or minor tones during the previous peri

When this was fixed, further modi tions in fixing the intermediate notes fo ed in accordance with the principle to b plained below. Previous to explaining further development it is necessary some techincal terms be clearly under The Archika mode "यक्षप्रयोगेष्वृचामेकस्व यत्वात्तत्संबंधादार्चिकः" (कलिनाथ सं. र. ३८) has been explained in the first The गाथिक mode is thus defined गाथा धाद्गाथिको द्विस्वरः। Here द्विस्वर using one other note above or below the fundamental *i.e.*, 2 notes including रित + (उदात्त or अनुदात्त). And *Sam* defined: सामसंबंधात्त्रिस्वरस्थानः सामि 3 tonal scale *i.e.*, 3 notes including fundamental स्वरित+उदात्त+तृतीय or tional higher note or *vice versa* in ca अनुदात्त. When the scale consists of one chord of 4 notes, the extreme being in the relation mathematically presented by the ratio 3:4, it is

सामिकस्वरांतर or चतुःस्वरतान and as stated in the previous para, if 2 such chords are combined the scale will be complete and is called the *Sama saptaka*. The scale may be represented as shown below:—



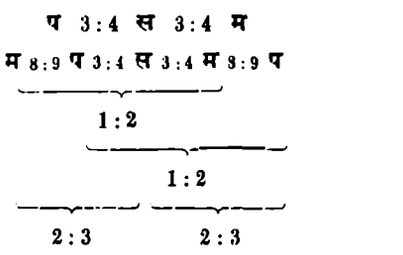
The extreme notes are shown with their ratio with the fundamental or स्वरित. This is supported by कलिनाथ (सं. र. १. ४. ३८).

"चतुस्वरतानस्यैकस्वरादितविधतानमध्यवर्तित्वात्स्वरांतर इति संज्ञा।"

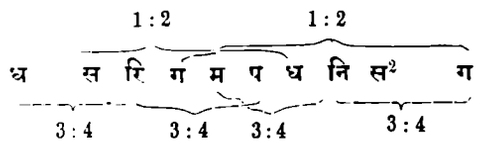
From the above quotation it is clear that the extreme notes were of the same pitch, measured from the fundamental. When this arrangement was completed the ancients naturally observed that the extreme notes म and प wanted the complement of a tone at either end to complete the आवर्त or rotation by the appearance of the other extreme note of twice the pitch or in unison with the initial note. This fact is stated by कलिनाथ in सं. र. १. ४. ३८.

"सामनांतु त्रिस्वरत्वं सप्तस्वरत्वेऽपि मंद्रादिस्थानत्रय विवक्षया।"

The above quotation clearly mentions that this arrangement was purposely adopted to recording the completion of the scale and the recurrence of the same note, twice the pitch of the previous note at every corresponding lower or higher place. This shows that they noticed the phenomenon of the relations of म and प with the fundamental note as represented below:—



The development of the above scale is entirely based on the observation of a natural phenomenon. When they noticed the relationships of the notes म and प with the fundamental note which are now represented by the ratios 3:4 and 2:3 or 2:3 and 3:4 if the relations are taken with the octave of the fundamental and when they saw that these two ratios added together represent the rotation of the sound, they were able to fix the other intermediate notes of the scale as shown below:—



It has been mentioned in the *Rik Pratisakhya* that there are 7 notes in each octave and three octaves at twice the pitch of the corresponding fundamental note and that the very 7 notes of one octave are repeated in the others (provided the pitches of the successive octaves are exactly double at every step). Besides these 7 notes it refers to possible intermediate notes which may be obtained at the interval of a full tone. It shows that they used this scale with different notes as fundamentals—which will become clear as we proceed. From the above explantion it is clear that the Indian musical scale was fixed with 7 notes in exact pitch before 1500 B. C. as is proved by the Brahmanical quotations.

The fourth stage—Aranyaka and Grama gana.

This period falls between 1500 & 500 B.C. The first half *i.e.*, 1500 to 1000, B.C. may be taken as *Aranyaka Ganakala* and the second half i.e. 1000 to 500 B. C. may be taken as *Grama Ganakala* or *Pauranikiya kala.* The *Aranyaka* literature begins immediately after the Brahmana compositions and ends in the *Upanishads* and *Pratishakhyas.* वर्णः स्वरः । मात्रा बलम् । मंद्रेण स्वरेणाधीयते । मंद्रया वाचा प्रातःसवनेशंसेत् । उरसाधीयत इति । (*Rik Prati Bhasya*) etc., these sentences from the *Tait. Upanishads* show that the Upanishads do not merely contain philosophy but that they treat scientific principles of all the subjects enumerated in the *Vedas,* while *Pratishakhyas* mostly deal with details of the technical subjects that are necessary for *Vedic* studies.

त्रीणि मंद्र मध्यममुत्तमं च । स्थानान्याहुः सप्तयमानि वाचः ॥

अनंतरश्चात्र यमोऽविशेषः ॥

सप्तस्वरा ये यमास्ते ॥

पृथग्वा ॥

This example from the *Rik Pratishakhya* supports the fact of the completion of the scale with 7 fixed notes in the Brahmanical period. The progress of this period consists in the usage of 3 voice registers in singing and for different modes of recitations from the *Sama chants.* Another remarkable point of progress is the introduction of additional notes into the large intervals. The scale consists of 7 notes only, but the five full tones in the scale allowed for the introduction of new notes which were substituted for the corresponding ones whenever required. This marks the limit of *Aranyaka Gana.* This fact is justified by Panini and Yajanavalkya who give clearly a refe to scales that were then commonly The following passages have been q from Panini and Yajnavalkya Shiksha

उदात्ते निषादगांधारौ अनुदात्ते ऋषभधैवत स्वरितप्रभवाह्येते षड्जमध्यमपञ्चमाः ॥ पा.

उच्चौ निषादगांधारौ नीचौ ऋषभधैवतौ रोषास्तु स्वरिता ज्ञेयाः षड्जमध्यमपञ्चमाः

Both writers admit that there are 3 notes स, म and प as fundamental which produce three beautiful scale modes. A gradual extension in the fications of the three terms उदात्त, अनु and स्वरित should here be noticed. In beginning the interval represented by *tta* and *Anudatta* was one tone, then it 2 tones, then 3 tones *i.e.*, a *samvada* and mediately before Panini it was one w octave. And *Svarita* was one fixed up to the *Sama* period but later it stood either स, म or प during the *Aran* period. The three voice registers thought of as अनुदात्त (मंद्र), स्वरित (म and उदात्त (तार). It was because knew of the repetition of the same scal different registers that it was possible them to fix only 7 notes in a scale and to adopt 3 different modes by chan the fundamental to म and प which separated from स by an equal distance ing *Samika* period.

Aranyaka gana was limited to the scales हरप्रिय, कांभोजि and भैरवि only.

Grama gana will now be explained in following paragraphs. *Aranyaka gana* part of *Samagana* but instead of using *sama* chants other chants and prose com sitions from the *Upanishads* and similar literature were used. The scale *Samika* only but with the optional use intermediate notes or an admixture.

period in which this custom was popular has already been mentioned. Then comes *Gramagana.* This system was more technical but popular as compositions set to music at the time were free from the stiff language of the *Vedas* and as the new Samskrita language and verses composed in more systematic metres were used.

It is welknown to all Indians that poems and epics like the *Ramayana* and the *Mahabharatha* were sung in those days; that period falls between 1000 to 500 B. C. which is generally considered to be the beginning of the *Sutras,* older epics like the Ramayana and the older *Puranas.* During this period further development was made which will now be described. The Aranyaka period had only the notes स, म and प as fundamental but in the Puranic or the *Grama gana* period each of the 7 notes was taken as the fundamental. So there came in common use 4 more scales or modes starting from रि, ग, ध, नि as fundamentals, and names for these modes were taken from the names of the initial notes of the scales with the word *Grama* affixed to them. So there were 7 *Gramas,* which ware named as the षड्जग्राम etc. There is one instance in the *Hari Vamsa Parva* of the *Mahabharata* —we have there the story of a king who was fond of music and who rewarded his court musician abundantly when he was pleased to hear the *Gandhara Grama* sung by him. This fact illustrates that the mode of singing described above was common and very popular at that time.

Fifth Stage. The Jatigana.

This was systematised by Bharata the originator of musical science. This system was current during the period from the 200 B. C. to 400 A. D.

This stage is very important as the music of this period was raised to the dignity of a fully developed natural science by Bharata in his famous *Natya Sastra.* His observations enabled him to test all the notes of the previous system and notice that it was incomplete and defective. As some of the 13 notes obtained by the seven *Gramas* were not so harmoniously related to the fundamental, he continued the same process of obtaining notes by means of the संवाद-द्वय of स म and स प relations or of the ratios 3 : 4 and 2 : 3 respectively. He accepted म and प just, as the results of the observation of a previous age of natural acoustical phenomena. As more notes than were already obtained could be introduced within the series he continued the two progressions from म and प each until he came to two notes, each the 11th from the start which differed by a very minute interval from just प and म respectively. These last notes were not fit to be used with just प and म so as to make a distinct interval with them nor were they harmonious to the ear if they were substituted in the scale for the natural प and म notes which formed संवाद with स. He thus noticed a natural limit to the progression he had continued and that a further continuation of the same progression made the system impracticable. The series of 11 notes in each of these progressions are very near—the one series to the other. Corresponding notes in the two series are not sufficiently wide to make a distinct interval between one another.

Bharata had these facts before him before he systematised. To suit this basis of observed facts he invented a system of dual *Gramas,* named षड्ज and मध्यम *Gramas* (where, in reference to any one *Grama* only 22 notes were enumerated. In षड्जग्राम the defective प was omitted and in the मध्यम-ग्राम the defective म was omitted. Bharata

has shown admirable constructive genius in introducing these two *Gramas* of 22 *srutis* in each and in providing for the use of all the 23 notes (including स) obtained by the संवादद्वय procedure.) The contrivance of these dual *Gramas* did not have for its object the finding of new scales—which is impossible—but the selection of 7 scales (4 from षड्जग्राम) to replace the 7 *Gramas* of the prior period, which scales were now to be known as 7 *Jatis* bearing the same names as the initial notes of the scales. If we take all the 14 modes from both the *Gramas* we shall notice that the notes in some of these differ from the notes in certain other corresponding modes by hairbreadth differences; and some are distinctly more satisfactory to the ear than the corresponing ones. It was with a view to adopt the more satisfactory of these, to replace the old 7 *Gramas*, that Bharata's *Gramas* were mainly adopted and for not getting new modes. The selection gives us only 7 harmoniously intonated scales; we have 2 scales for each of 7 modes from the *Gramas*, these scales differing in only one note. The difference however being very minute does not make the two scales essentially different; one of the two is more satisfactory than the other. Thus we get 7 good scales.

In this way the old term *Grama* was adopted with a new sense and the old *Gramas* were re-named the *Jatis*. These are the seven *Sudha Jatis* of Bharata. Besides these 7 *Suddha Jatis* or modes each consisting of all the 7 notes in a specified way, he brought many pentatonic and hexatonic modes into practical use and named them as *Sudha Vikrita Jatis* which may be obtained by dropping one or two notes in a specified way, thus arriving at *Shadava* [illegible] *Jatis* respectively. Besides these two sorts, he has introduced two sorts of melodies which he names as *dharana Vikritis* (of 7 notes only varia a few places) and *Samsargaja V* which admit of the addition of a few notes to the 7 principal notes and ends the science of intonation and building. The present system has als founded by him under the name of *sadharana*. If a thorough going attemp made to understand and interpret the nique of Bharata, the result would be what alarming as then I am sure, a *works of subsequent* Sanskrit author those of modern writers would have condemned in the main and the v proved to have entangled the public numerous errors and bad taste. The trustworthy author is Bharata and th reliable work is *Natya Sastra*.

If the whole theory of Bharata is larized there is hope of bringing the needed improvement in our musical s very near as it will help to solve many plexing questions through the light it on current practice. It will revoluti the theory and practice of Indian m and it will give a very perfect and music to the world. It is not possibl give an account of *Natya Sastra* in in this short paper as it will requi separate volume.

The Sixth Stage.

This stage will be that of the *Jati Raga Grama Raga* system; period 400 to 800 *Sangita Ratnakara* of the 1st half of the century gives a description of 30 to these *Ragas*. *Sarngadeva* has classfied formsof *Ragas* as (1) Ancient & (2) Cur He describes these *Grama Ragas* as ancie There are some of such *Ragas* in *Nara* and *Manduki Shikshas* which are [illegible] These [illegible]

[illegible] been deciphered by any scholar. There is a statement in *Sisupalavadha* older than *Sangita Ratnakara* (being probably of the 8th or 9th century) that such *Ragas* were current about the 9th or 10th centuries. The *Raga* mentioned there is *Bhinna Shadja* which has been enumerated in the *Grama Ragas* in *Ratnakara*. The mode of describing these in *Ratnakara* is the same as that of the *Jatis* of *Bharata*. So they have been named *Grama Ragas* or *Jati Ragas*.

The Seventh Stage of Music.

This refers to the classification by *Sarngadeva of Bhasha* etc. In this system 20 *Ragas* have been mentioned in addition to 15 *Janaka Ragas* and to each of these are attached minor melodies called *Bhashas, Vibhashas* and *Antara Bhashas*; the number of these is optional and not fixed by any rule. A special point of this classification is that the names of the *Janaka Ragas* are masculine and those of the remaining three varieties are feminine. The *Janaka Ragas* are mostly the *Grama Ragas* and *Uparagas*. This group of *ragas* also remains in darkness uninterpreted and unapplied.

The Eighth Stage of Music.

This may be said to correspond to the *Raga, Ragini* and *Pariwara* system of classification which prevailed between 1200 to 1500 A. D. This classification was attempted by a class of professional musicians possessing no great literary ability but who wanted a classification for practical purposes. The idea evidently was borrowed from the previously existing *Bhasha* mode of classification where *Janaka ragas* are masculine and *Bhashas, Vibhashas* and *Antara Bhashas* are feminine. A legend constructed on this idea is that Shiva has 5 heads which produced one *raga* each. Parvati added one to them and thus the *six Purusha ragas* came [illegible] Each of these *Ragas* [illegible] admixture of these *Raginis* with a *Purusha raga* 5 *Janya Ragas* or *Raginis* were born to each *Ragini*.

Thus the total number comes to 150 (approximately).

There are still a few illiterate and professional men who believe in this story and who maintain that it is a sin to make any modifications in that idea and practice. Though the story is only imaginary the scheme of this classification has been skillfully formed from practical observations to help the student of music to have some idea of the interrelation of various scales and *ragas* and the scheme has been handed down through many generations through oral tuition. There were 4 similar schemes popular, each had some distinctive mark. But nowadays this very easy and direct method has nearly disappeared with its fine perception of musical form and usage and simplicity of arrangement. The 4 systems are named as the *Krishna mata, Hanuman mata, Shiva mata* and *Bharata mata*. Almost all sanskrit writers on music, who were men of no small literary ability and many musicians famous for composing songs belong to the *Bharata mata*. As stated above the arrangement of this *Raga Pariwara* system was only a practical one and oral and did not allow any discussion as to the correctness or otherwise of many technical points that were involved in it.

So in course of time, being in the hands of unintelligent musicians, it gradually fell into disuse through ignorance of the principles on which it was built. This system has one advantage over the others, viz., that it consists of a limited number of very popular, well appreciated and current *ragas* which have been handed down from generation to generation through tradition; whereas the other systems allow variation [illegible] nomenclature, improvements [illegible]

tions the result of which has been the inclusion of many new *ragas* (and compositions of a monotonous and stiff character) built according to the rules of permutations without any consideration of a melody or the emotional effect on the mind of the audience and the formation of new terminology which obscures the scientific and well considered plan of the originators. North Indian music as it is heard even now bears the features of this *Raga—Ragini—Pariwara* system of the period described as representing the 8th stage of development. The system was prevailing in a flourishing condition up to the end of the 15th century as it had ample patronage from the rulers of the North. After that time, it may be said to have been declining as it was affected by new styles of Persian melodies which corrupted the pure, scientific traditional form of the art. It kept no record of rules and principles or of musical compositions. During the 16th century there was an attempt made to bring all the styles under one scientific method. Pundarika Vithala is an evidence of the fact. He was entertained as a state musician by three eminent rulers of different dynasties and for each of them he wrote a a musical treatise. Besides Pundarika there were other authors like Lochana, Hridaya Narayana, and Srinivasa who attempted to reduce the art into some semblance of a science. About the same time i.e. 1550 A.D. an attempt of a similar sort was made in the Deccan encouraged by the *Rajas* of *Vijayanagara* which will be treated in the next stage of our history.

The Ninth Stage.

This is characterised by the *Mela-Paddhati*. It seems that about 1550 A. D. the old authoritative work, *Sangita Ratnakara*, had become unintelligible and there was no other popular scientific book to keep the art of music from hopeless corruption. It is so

stated in the introduction of *Svara* *Kalanidhi* by Ramamatya who had asked, by the chief minister Rama Vijayanagar, to compose a treatise on with a view to systematise the old and theory and practice of music. Rama has brought nearly 70 *ragas* under 20 cipal scales or *melas*. His *melas* ar perly only 15, the remaining 5 come 5 of them, only differing in having गांधार and च्यु. ध. निषाद for the and *Kakali* notes of the former. The rence in the *melas* is so slight as not distinguished in practice. The other te calities of which he has treated in his are all borrowed from *Sangita Ratna* But as he has misinterpreted them th ignorance or deliberate intention, his has been proved to be of no value by katamakhi who came a century after The chief merit of his work is the int ction of a totally new system of theory practice suggested to him by the an work *Ratnakara*, and the commentary it by Kallinatha. Ramamatya has giv detailed description of the *Vina* as a sta musical instrument both for the pose of demonstrating musical facts an playing. He has given various metho tuning, adjusting and playing it in di ent characters. He refers to the m which was current at his time. He ha an authoritative work of his time. O partly no doubt to the influence of this on the subsequent practice, South Ind Music did not come under the way of Persian style which has had such a mendous influence on the music of North both for good and evil. Ramama has done his best to incorporate the old theory and practice into his own. On whole his work is of considerable imp tance and marks the turning point of mu cal history.

The Tenth Stage of Music.

This refers to the music current since 1680 down to our own day and its outstanding feature is the *Mela Prastara Paddhati* of Venkatamakhi. He has written an important work, the *Chaturdandi Prakasa* and he gives a definite theory for the music of his time. The important work he has done is the *Mela Prastara* which has the mark of Bharata's *Murchana Paddhati*. Out of the 72 *melas* mentioned by him he has described only 19 as current at his time. He describes nearly 55 *Ragas* under the 19 current *melas*. He depends on only 12 notes in a scale and has tried his best to prove that his system was based on the 22 *Sruti* system of Bharata. The *Shuddha mela* or his मुखारी, he proclaims, is just the *Shadja murchana* of the *Shadja grama* of Bharata and *Sarngadeva*—which is an error. This idea has been borrowed from Ramamatya who has named this as *Mukhari* (the present *Kanakangi*) which consists of all the seven *Suddha* notes. It is now known to all that the *Suddha* scale of Bharata was just like the *Karahara-priya* of the present day. The *Suddha* scale of Ramamatya differs in 4 notes रि, ग, ध, नि from that of Bharata while स, म and प only are common to both. The same error has been made by another well-known author, Somanatha of Ragavibodha. Venkatamakhi has written a lengthy criticism, in a chapter specially devoted to it, on *Ramamatya's Kalanidhi*. But he is not justified in his criticism as, we must remember, there was a gap of about 125 years between them during which time musical terminology and nomenclature were changed, as it is quite natural in the evolution of any art or science which are subject to slight variations from time to time according to the taste and patronage of the public. This fact will be understood by comparing the current system with that of Venkatamakhi and it can be proved that there has been a vast change in the names and character of the *Ragas* and also in the terminology of the science and we cannot offer any guarantee that it will remain in the same condition during even the next generation. If we consider all the facts so far mentioned we shall realise how true and unchanged in essentials Bharata's theory stands and we shall be lost in a maze of misconceptions and errors if we overlook the plan and purpose of Bharata's principles. I humbly suggest to all music scholars that we cannot make any real improvement in our music unless we start to work the theory from the base and build a sound system consistent in all its parts and keep the practice from being misdirected and from numerous errors which will otherwise assail it. For this purpose I suggest that a scientific treatise should be got written by the Academy which might be safely followed by all students of music. I have myself made an humble beginning in this direction and written a small treatise in Sanskrit which attempts to construct a regular system of our musical theory and practice. For the present the *Sruti* chapter is complete and ready for the press. It has been kindly undertaken to be translated into English by a friend of mine. This translation will also be ready for the press shortly. I now make an earnest appeal to all lovers of music for help towards the publication of the book. I hope to place before the public the result of my labours—of my study of *Bharata* and *Sarngadeva*. The *Sruti* chapter, the most important in *Sangita Ratnakara* and the succeeding chapters up to the chapter on the *Ragas* have been carefully and consistently interpreted and God willing, I mean to publish the results of the study in instalments for the use of the public.

SVARAMELAKALANIDHI.
(स्वरमेलकलानिधिः)
INTRODUCTION

BY

MR. M. S. RAMASWAMI AIYAR, B. A., B. L., L. T., MADURA.

Svaramêlakalânidhi is one of the standard works, in Sanskrit, on the *Carnatic* Music. The manuscripts of it are found at Bikanir, Baroda, Madras, Tanjore and Ettiyapuram. Its bare text, for aught I know, was printed twice—*first*, at Kumbakonam in 1906, by Mr. S. Narayanaswami Aiyar, and *secondly*, at Bombay, in 1910, by Mr. V. N. Bhatkhandê, though under the pseudonym of Bhâradwâja Sarma. The latter book contained at least a short commentary in Maharati. But a good edition of "*Svaramêlakalânidhi*" containing—as it ought—a full and correct text, a true and free translation, and a historical and critical introduction, has not yet come out and is therefore a desideratum—to supply which, mine is an humble contribution or, at best, a provoker of a better one.

Râmâmâtya, the author of *Svaramêlakalânidhi*, was a native of *Andhradêsa* and lived in or about Bezwada which was not far away from *Kondavîṭi**, in the principality of which he had a fort of his own and in the vicinity of which he enjoyed the over lordship[1] of a large estate of land washed by the eastern sea. He belonged to the Todarmâl family; his father was Thimmâmâtya;[2] and he himself was such an efficient musician-composer that he won the title of nava Bharatacharya."[3]

He was associated with Rama R... Vijayanagar, perhaps as his minister... word *amâtya* indicates. His father to... the same title of '*amatya*' appended... name. But whether the father and th... were ever *real* ministers, who moulde... destinies of Vijayanagar, or were so... only by way of courtesy—we are no... in a position to determine.

Nothing else is known to us of the... than his fatherhood. As for the son, R... mâtya, he exhibited his person, in his... more as a prolific *Vâggêyakâra* th... serious minded politician. All that he... record of himself was:—(1) He had a... the secret of music.[4] (2) He alone, ... others, knew both the theory and ... music.[5] (3) The traditional lore of mus... herited from his grandfather, *Kallapâ*... (evidently, Kallinath, the Commentat... *Sangitaratnâkara*), palpitated in his ... (4) Rama Raja requested him, in prefe... to others, to write a new treatise on ... reconciling the conflicting views that ... then in vogue.[7] And (5) the same Rama...

* Cf. सप्तवसर्वाधिककोण्डवीटप्रधान दुर्गप्रतिपादेन। *Svaramêlakalânidhi.*

1. Cf. पूर्वार्णवेनैव परीतमूर्तेर्विभुत्वमुर्व्यावितताराम्—*Svaramêlakalânidhi.*
2. Cf. श्रीमदभिनवभरताचार्य वाग्गेयकारस्तोर्मल्लतिमामात्यनंदन रामामात्येन निर्मितः स्वरमेलकलानिधिः—*Ibid.*
3. Cf. This means *Modern Bharata.*
4. Cf. अधीत संगीत कलाऽद्वयम्—*Ibid.*
5. Cf. सल्लक्ष्यलक्ष्मोभय सारवेदी संदृश्यतेनेक वानिवान्यः—*Ibi...*
6. Cf. विद्यानिधिः कल्पदेशिकस्ते मातामा... त्तिलवन्महीयत् गांधर्वशास्त्रेषु ततोऽपितानि तत्संप्रदायेन तवस्फुरंति ॥
7. Cf. संगृह्य सल्लक्षण लक्ष्ययुक्तं संगीतशास्त्र ...रसंविधेहि...

gave him, in recognition of his (musical) services, many a valuable present.[1]

This, surely, is not the language of a veritable *minister*, who wielded the mighty Empire of Vijayanagar and who, in the intervals of his state-business, managed to write a musical work also, just as Mr. Gladstone wrote his *Homer* and Vidyâranya, his *Panchadasi*.

Further, a reference to Robert Sewell's *Forgotten Empire* shows that Achyuta succeeded Krishna Râya Dêva in 1530, that Sadâsiva succeeded Achyuta in 1542, and that the latter (Sadâsiva) was virtually a prisoner in the hands of Rama Raja, at first nominally his minister but afterwards independent.[2] By 'independent,' Sewell should have meant that Rama Raja was a *de facto* ruler of Vijayanagar. So he might have been. But the *de jure* ruler was, undoubtedly, Sadâsiva; for, a very large number of inscriptions, ranging from 1542 to 1568, recognise Sadâsiva as the *real* sovereign.[3] Why, Râmâmâtya himself admits that Rama Raja helped Sadâsiva to regain his throne.[4] Hence, it is submitted, Rama Raja should have been, at least when Râmâmâtya wrote his work, only a minister, though the king was a puppet in his hands. How, then, could Râmâmâtya afford to be a minister of a minister?

Further again, Râmâmâtya's description of Rama Raja's pedigree is more fanciful than real and betrays the mentality of a flattering court-poet rather than that of a responsible State-officer.

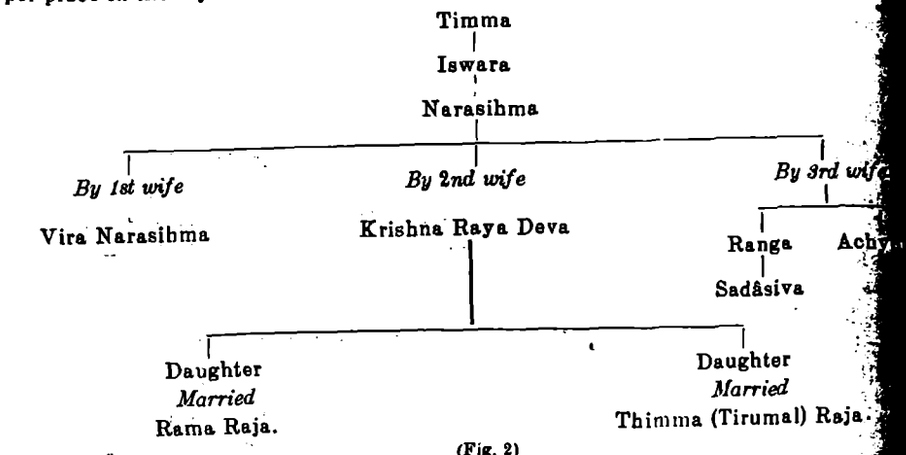
The following Table shows Rama Raja's pedigree, according to Râmâmâtya:—

Vishnu
|
Brahma
|
Athri
|
Moon
|
Budha
|
Puroorava
|
Ayu
|
Nahusha
|
Yayâthi
|
Bharata
|
Sri Ranganath
|
Rama Raja | Thimma Raja | Venkatâdri.

(Fig 1)

1. Cf. जेत्रूरि सिंहासन पट्टणेनयुक्तां सरत्नामिवहारवल्लीं। वितीर्यमे सश्रमवातिराश्मेरधीश तामस्यतुलामतानीत् ॥ प्रयच्छति प्रत्यहमत्युदारां संमाननां सादरमेयमह्यम् ॥ *Ibid.*
2. Vide Sewell's *Forgotten Empire*—page 109.
3. Vide Sewell's *Forgotten Empire*—page 179.
4. Cf. यःखड्गैकसखस्सहानुजयुगो निर्गत्यविद्या पुरात् लब्ध्वागुत्तिगिरौ सदाशिव महीपालं निरालंबनम्। स्वामिद्रोहकृतः प्रतीप नृपतीन्निर्जित्यभद्रा...सने

But Sewell's genealogy[1]. taken from epigraphical records, gives Rama Raja his proper place in the royal line of Vijayanagar :—



(Fig. 2)

It is thus clear that Rama Raja belonged, if at all, to the royal family only by marriage. Râmâmâtya only confirmed it, when he observed: "Krishna Raya gave his daughter in marriage to Rama Raja and thereby enhanced the dignity of the parent-hood of daughters"[2]. History gives us no pedigree of Rama Raja except that he was a son of one Ranga and that he had two brothers, viz. Thimma Raja and Venkatadri[3]. This Thimma Raja is said to have murdered Sadâsiva in 1568 and usurped his throne[4]. But Rama Raja ruled, if at all, only on behalf of his king, Sadâsiva. True, he was a brave soldier;[5] but he was over-ambitious and a little reckless too, with the result that he precipitated the battle of Talikota, in 1565, and brought about his own death.

I digressed, so far, only to emphasis... doubt whether Râmâmâtya was a m... in fact or only by courtesy. I leave... my reader to determine the question... own way.

The exact date of Râmâmâtya ... available. But he, being a contempo... of Râma Raja, should have lived ... *sixteenth century*. He was well vers... Sanskrit and Music; and, in Râma ... opinion, he was the best of the then ... ting musicians. He wrote many m... works, such as, *Râgakadamba*, *Panchal... swara* and so forth.

No wonder, then, that Râma Raja, a... instance of his brother, Venkatâdri, re... ed Râmâmâtya to write a new wor... music. Of this requisition, *Svaramêla...*

कर्णाटे भगवानिवधुवमयं कीर्त्यासहा-
स्थापयत् ॥ *Svaramêlakalânidhi.*

1. Cf. Swell's *Forgotten Empire*—page 180.
2. Cf. कन्याप्रदोऽस्वै स तु कन्यकायः कन्यापि-
...दृत्वं बहुमन्यतेस्म । *Svaramêlakalânidhi.*
3. Vide Sewell's *Forgotten Empire*—page 214.
4. Vide Sewell's *Forgotten Empire*—page 2...
5. Cf. विजित्य सर्वानपि पारदीकान्रणेषु ...
तत्कीर्तिपटचरा...
'अधूय भूयो हरितो चधूटी: विशोभयत्य...

...nidhi was the result. The colophon,[6] at its ...end, clearly shows that Râmâmâtya finish-...ed his work in Saka 1472, Sâdârana Year, Srâvana Month, and the tenth day of Nir-malathara (Sukla) Paksha—all of which correspond to the months of August and September of 1550 A. D.

Now, be it remembered, it was in order to reconcile some conflicting views on music that *Svaramêlakalânidhi* was written, as evi-...enced by Venkatâdri, in his request to his brother Rama Raja: "The science of music ...as, both in theory and practice, degenera-...ted into conflicting views; let Ramamantri (Râmâmâtya), by your command, reconcile all (the conflicting views) and write a (new) science"[1]; and as confirmed by Rama Raja, in his requisition to Ramamatya: "In the science of music, conflicting views have indeed arisen. Bring to a focus all their salient features and write an interest-...ing treatise on music, embodying threin its theory and practice."[2]

About the same time, or within the space of about a decade after the publication of *Svaramêlakalânidhi*, Pundarika Vittala finished his *Sadrâgachandrodaya* in North India. Even in that book, the same note of complaint was sounded that the theory and practice of music did conflict with each other and that, therefore, Burhan Khan asked Vittala to reconcile them.[3] Again, in 1609, the self-same note of complaint was resounded when Somanath declared: "I write *Râgavibôdha* only to reconcile the conflict between science and art of music."[4] Even the recently published *Sangitasudha* contains a similar note of complaint.[5]

A question, therefore, naturally arises, namely, "*Why should the musical views, at all, conflict with one another?*" To put the same question sarcastically, "Why should the *harmonious* music produce *disharmony* amongst its votaries?"

Because, the old order changes, giving place to the new; and, in the transition period, both the *orders* struggle with each other—the one anxious to come in and the other unwilling to go out. But why should 'the old order' change? Here, a truth must be grasped. Into two broad divisions science falls—*exact* and *non-exact*. The rules of an 'exact' science are inflexible and never change with the times. H_2O, for instance, was, is, and shall ever be WATER and never anything else. But as regards a 'non-exact' science, such as for example music, it is always progressive; and *afortiori* its rules do change, from time to time, in order to suit the growing taste of the people. Each age has, there-

6. Cf. शाके नेत्रधराधराब्धि धरणीगण्येचसाधारणे
वर्षे श्रावणमासि निर्मलतरे पक्षे दशम्यां-
तिथौ ।
रामामात्यविनिर्मितः स्वरततेः संगीतरत्ना-
करात्
सोऽयं मेलकलानिधिर्मतिमतामाकल्पमा-
कल्पताम् ॥ *Svaramêlakalânidhi.*

1. संगीतशास्त्रे बहुधा विरोधाः संत्येवलक्ष्येषु
चलक्षणेषु ।
सर्वंसमीकृत्य स राममंत्री तनोतु शास्त्रं वचसा-
... ॥ *Svaramêlakalânidhi.*

2. संगीतशास्त्रेषुमतांतराणि संत्येषु सारांशमु-
पाददानः ।
संगृह्य सल्लक्षण लक्ष्ययुक्तं संगीतशास्त्रं सरसं
विधेहि ॥ *Ibid.*
3. संत्यस्मिन्बहुधा विरोधगतयो लक्ष्येच लक्ष्मोदि-
ते ॥ *Sadrâgachandrodaya.*
4. रागविबोधं विदधे विरोधरोधाय लक्ष्यलक्षण-
योः ॥ *Râgavibodha.*
5. लक्ष्यस्वरूपेहि विचिन्त्यमाने नानाप्रभेदः परि-
दृश्यतेहि ।
नैकोऽपिशास्त्रानुगुणो विभाति.....॥
Sangitasudha.

fore, its own technique of music to which the musicians of that *age* are tied and bound.

No doubt, the emotion of man is a constant factor; and it is now no stronger or deeper than it was hundreds and even thousands of years ago. Vâlmiki and Kâlidâs—when they grew cheerful or miserable, composed or angry, or fell in love or sang of patriotism—were moved as profoundly as any modern poet. Nor were the feelings out of which grew the music of Gopala Naik and Jayadeva any less deep than those of Thiagaraja and Tansen. But, be it noted, in the *expression* of his emotion, the Vâggêyakâra, be he ancient, mediæval, or modern, is tied and bound to the technique of *his* age. Why?

Here, another truth must be grasped. *The various stages of musical progress are not the inventions of the learned few imposed on, and adopted by, the unlearned many; but, rather, a summing-up and organisation by the former of those practices and usages at which the latter had arrived by instinct.* Hence, the technique of music of a particular age means and includes the summary of the music of the preceding age *plus* the conventions engrafted, from time to time, upon the original stock, by the masses, as enabling them to attain an ideal dimly seen in the distance. A real musician cannot therefore afford to ignore the aspirations of the people at large, fly at a tangent, and pooh-pooh the technique of his age which, as suggested above, is the natural growth of years and sometimes of centuries.

It is, however, true that, oft and on, a giant like Thiagaraja arises and gives his countrymen not only a summary of the music of the past but also a programme for the music of the future. In that sense, he may be said to have interfered with, and even changed or modified, the musical technique of his age. Such a rare exception is due to the fact that the particular genius has had the intuition to see and realise that all the possibilities of the code of convention, prevailing in his time, had been exhausted; that the orange, so to speak, had been sucked dry; that the period, in which he happened to live, had come to a natural end; and that he had been impelled to inaugurate a fresh period, in which the new formula of music arose, as it were, from the ashes of the old.

To sum up. The musicians of a particular age stick, under ordinary circumstances, to the technique of that age. Extraordinary circumstances occasionally arise when a new age sets in with a new technique of music. Both the technique—old and new—struggle for a while, after which the old dies and the new flourishes, until a still newer age brings with it its own new technique to supplant it. In all these periods of succession, the struggle between the old and the new techniques lasts only during the transition periods. It is this inevitable struggle that goes by the name of "the conflict of musical views" which, in the nature of things, does arise from time to time.

The same truth Mr. Bhatkhande explained at Lucknow in another way: "Indian music has undergone changes, from time to time, according to the tastes of the different ages. We thus find the system proponded in *Sangitaratnâkara* of Shârngadêv a considerable advance on that described in Bharata's *Nâtya Sâstra*, being more exhaustive, more scientific, and expressive of greater national culture. A mere glance at Lôchana, Pundarika, Hridaya Narayana, Abôbala, and Srinivasa will be enough to show us that the systems of music propounded, in these works, mark a still further advance and that they considerably differ from the systems appearing in *Nâtya Sâstra* and *Ratnâkara*. We ourselves are in the 20th century and the system of music, now in vogue, has left the other systems far behind."[1]

One word of caution is here necessary. The changes, referred to, are in connection with the superstructure of Indian Music, while its foundation or basic principle remains as constant as ever. It is, in fact, this *basic principle* that distinguishes the Indian system from all other systems of music.

We are, at this stage, tempted to inquire whether Râmâmâtya recognised the *progressive* nature of music and whether he enunciated, in his work, any principle of guidance, wherewith he could emphasise the importance of such recognition. A study of *Svaramêlakalânidhi* enables us to answer both the questions in the affirmative. The principle of guidance, spoken of, has been already enunciated though in another connection but can bear repetition; and it runs thus. "The various stages of musical progress are not the inventions of the learned few imposed on, and adopted by, the unlearned many; but, rather, a summing-up and organisation by the former of those practices and usages at which the latter had arrived by instinct."

The idea, conveyed hereby, Shârngadêv first put in his own way, thus:—"The learned men are of opinion that *the Science follows the Art and must respect the current practice*. If any discrepancy arises between the two, the proper procedure is to interpret the science in such a way as it can be reconciled with the practice".[2]

But, unfortunately, he relegated this principle almost to the end—to the sixth chapter—of his work and made it appear as a mere suggestion for any one to take it for what it was worth. Râmâmâtya, however, brought it to the forefront of his book and laid such an *emphatic stress on it* that it developed, in his hands, into a star—like *maxim* for all future writers to follow. Here is what he (Râmâmâtya) wrote on the point: "The *Gândharva*-music is ever employed in conformity with the (inflexible) rules of its theory. But if the violation of those theoretical rules, inflexible though, do not lead to any absurdity, and if, again, the contravention of any of the rules of practice does not give pleasure, but jars, to the ear, then, the *practice* of music shall be preferred to its *theory*. And it is in conformity with the 'practical' rules of music (as opposed to its 'theoretical' ones) that the *Gâna*-music prevails. In his chapter on *instruments*, Shârngadêv, well-versed in music-lore, argued that the practice of music was more important than its theory".[3]

If Shârngadêv originated this principle, which may, for future reference, be called *the principle of Lákshya*, if Râmâmâtya elaborated and developed it into a maxim, Pundarika Vittala chose to condense it into an aphorismic form, namely;—

लक्ष्यप्रधानं खलुशास्त्रम् ।

(*Science only follows Art; isn't it ?*)

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1 *Vide* the Report of the 4th *All India Music Conference of Lucknow*—page 117.

2 यद्वालक्ष्यप्रधानानि शास्त्राण्येतानि मन्वते ।
तस्मालक्ष्यविरुद्धं यत्तच्छास्त्रं नेयमन्यथा ॥
Ratnâkara.

3 Cf. तत्रलक्ष्यानुरोधेन गांधर्वं संप्रयुज्यते ।
यत्रलक्ष्यपरित्यागे प्रत्यवायो न विद्यते ॥
तस्मालक्ष्यप्रधानं तन्नतुलक्ष्मप्रधानकम् ।
परित्यागेऽस्य लक्ष्यस्य रञ्जनं नैव जायते ॥
तस्मालक्ष्यप्रधानेन गानं लोके प्रवर्तते ॥
सर्वसंगीतशास्त्रार्थवेदिना शाङ्गसूरिणा ।
गीते लक्ष्यप्रधानत्वं वाद्याध्यायेनिरूपितम् ॥
Svaramêlakalânidhi.

Let us proceed to see how Râmâmâtya applied the principle of *Lakshya* to the development of his musical system.

Before so doing, we shall first get to know which system of music he took up for modifying and bringing in line with the condition of his own times. Even a cursory glance at his work will show that he referred only to Shârngadêva's system of music and made it clear that he proceeded to modify and bring that system alone in line with the condition of his own times.

The reason is not far to seek. Almost all the musical works that are now coming into prominence—such as, for instance, *Sadrâgachandrôdaya*, *Râgavibôdha*, *Sangitadarpana*, *Sangitasudhâ*, *Chathurdandiprakâsika*-*Sançitapârijata*, *Sangitasârâmrita*, *Nagmrt-e-Aspti*, *Sangitarâgakalpadruma*, and *Lakshyasangitam*—came successively one after another, but (mark!) only *after* the time of *Svaramêlakalânidhi*; and Râmâmâtya had no other work to criticise before him than Shârngadêva's *Sangitaratnâkara*.

No doubt, Bharata's *Nâtya Sâstra* and Narada's *Sangitamakaranda* had been in existence long before *Sangitaratnakara*. But evidently, Râmâmâtya *did* not mind the former and *could* not mind the latter; for, the one lay involved in a debris at Gadwal, till Mrs. Ananthakrishna Sastry discovered it in 1919 and brought it to the light of day; while, the other was a treatise more on dramaturgy than on music.

Could, then, at least Lôchanakavi's *Râgatarangini* have come to his notice? We have no definite answer to give. For, the date of *Râgatarangini* is uncertain, inasmuch as its misleading colophon appears to point to the 12th century, while its reference to Vidyapati points to the 14th century even later. Even assuming that the book before him, we can easily conjecture that should have brushed it aside; for, it was out-and-out North Indian book and with the *Hindustani* music, having *Bha* as its *sudha* scale, as opposed to *Kana* (Mukhâri) which was the *sudha*-scale of Shârngâdêv and Râmâmâtya.

Finally, Râmâmâtya did not choose refer to Matanga's *Brihaddêsi*, as Shârngadêv had already done it. In fact, openly declared that he had no desire unnecessarily tread on the ground, already covered by Shârngadêv.

The first point of conflict between Shârngadêv and Râmâmâtya was with regard to the *Sudha-Vikrita* svaras. At any rate both of them agreed with regard to the *Sudha*-svaras and allocated them, thus:—

तत्रतुर्यः श्रुतौषड्जः सप्तम्यामृषभोमतः।
ततोनवम्यां गांधारस्त्रयोदश्यांतु मध्यमः॥
पञ्चमः सप्तदश्यांतुधैवतो विंशतिश्रुतौ।
द्वाविंश्यांतुनिषादःस्यात् श्रुतिष्वित्थंस्वरोदयः॥

"The svâras arise from the srutis in a way that Shadja *takes the 4th srutis the Vina*, Rishabha *the 7th*, Gandhara *9th*, Madyama *the 13th*, Panchama *17th*, Dhaivata *the 20th, and* Nishâda *22nd"*.

It must here be remarked that the verse quoted above, is that of Râmâmâtya that Shârngadêv has not got in his even a similar, if not the same, one, though in an elliptical way, the latter pointed

गांधर्वमखिलं चापि तत्रैवस्पष्टमीरितम्।
ततएवावगंतव्यं तस्मान्नकथितं मया॥

Svaramelakalanidhi

1. cf. गानोपयोगिनां त्वेतत्प्रबंधानांतु लक्षणम्।
रत्नाकरे शार्ङ्गदेवसूरिणाकथितं स्फुटम्॥

The same *Sudha*-svaras, which were however clearly explained by Kallinâth in his commentary thus:—

षड्जमध्यमपञ्चमानांतुर्या। ऋषभधैवतयोस्तृती
या। आदिशब्देनगांधारनिषादयोर्द्वितीया।

(*Sa, Ma, Pa*, have each 4 *srutis*; *Ri* and *Dha*, each 3; and *Ga* and *Ni*, each 2).

The *Sudha*-svaras, which were common between Shârngadêv and Râmâmâtya, may be tabulated thus:—

Number of Srutis	*Sudha*-Svaras.
1	
2	
3	
4	**Sa**
5	
6	
7	**Ri**
8	
9	**Ga**
10	
11	
12	
13	**Ma**
14	
15	
16	
17	**Pa**
18	
19	
20	**Dha**
21	
22	**Ni**

As regards the *Vikrita*-Svaras, both Shârngadêv and Râmâmâtya differed from each other. While Shârngadêv presented to us so many as 12 *Vikrita* svaras, Râmâmâtya found only 7, *in actual practice*, and therefore recognised only those 7 and left out the remaining 5.

Shârngadêv worked up his 12 *Vikrita*-svaras thus:—

तथ्वविकृतावस्थाद्वादश प्रतिपादिताः।
च्युतोऽच्युतोद्विधाषड्जोद्विश्रुतिर्विकृतोभवेत्।
साधारणे काकलीत्वे निषादस्य च दृश्यते॥
साधारणेश्रुतिर्षाड्जीमृषभः संश्रितोयदा।
चतुःश्रुतित्वमायाति तदैका विकृतोभवेत्॥
साधारणेत्रिश्रुतिःस्यादंतरत्वे चतुःश्रुतिः।
गांधारइतितद्भेदौद्वौनिःशंकेनकीर्तितौ॥
मध्यमःषड्जवद्द्वेधाऽन्तरसाधारणाश्रयात्।
पञ्चमोमध्यमग्रामेति श्रुतिः कैशिके पुनः॥
मध्यमस्यश्रुतिं प्राप्य चतुःश्रुतिरितिद्विधा।
धैवतोमध्यमग्रामेविकृतः स्याच्चतुश्रुतिः॥
कैशिकेकाकलीत्वे च निषादस्त्रिचतुःश्रुतिः।
प्राप्नोतिविकृतौभेदौद्वावितिद्वादशस्मृताः॥

Sangitaratnakara.

On the other hand, Râmâmâtya worked up his 7 *Vikrita*-svaras thus:—"How is it that only seven *Vikrita*-svaras are given here (i. e. in *Svaramêlakalânidhi*), while Shârngadêv mentioned, in his *Ratnâkara* so many as twelve? It is true that, from the theoretical point of view, the number 12 may be desirable. But, *in actual practice* [1], there are only 7 *Vikrita*—svaras different from the 7 *Sudha* ones. If the keynote is taken out of consideration, there does arise a difference in sound, as regards the rejected five *Vikrita*-svaras. Although the theoretical method of taking or leaving the preceding *srutis* points to the said difference, yet, *in practice*, especially when the keynote is taken into account, the said difference disappears. I shall tell you how. *Achyuta-Shadja* does not differ from *Sudha Shadja*; nor does *Achyuta Madhyama* differ from *Sudha Madhyama*. *Vikrita-Rishabha*. does not differ from *Sudha-Rishabha*; nor does *Vikrita-Dhaivata* differ from *Sudha Dhaivata*. *Vikrita—Panchama*, which is taken from *Madhyamaśruti* does not surely differ from the other *Vikrita--Panchama*. Hence, under the category of the abovementioned 14 (*Sudha-Vikrita*) Svaras, no separate mention was made of these five svaras, inasmuch as they had effected

1. That is, according to the *Principle of Lakshya*.

a merger, as indicated above. We shall enunciate the 7 *Vikrita*—svaras by mentioning their names:—(1) *Chyuta Shadja* (2) *Chyuta Madhyama* (2) *Chyuta Panchama* (4) *Sádharana Gándhára* (5) *Antara Gándhára* (6) *Kaisiki Nishada* (7) *Kákali Nishada. Chyuta Shadja* is the name given to that *Shadja* which gives up its own 4th *sruti* and takes the 3rd one. The same rule applies equally to "*Chyuta Madhyama*" and "*Chyuta Panchama.*" When *Sudha-Madhyama* takes the first *Gándhárá* sruti, it is called "*Sádharana Gándh* but when the same *Sudha-Madhyama* the second *Gándhára-sruti* it goes name of "*Antara Gándhára.*" When, *Sudha-Shadja* takes the first *Nishád* it is called (by expert musicians) "*K Nisha a.*" When, however, the same *Shadja* takes the second *Nishada* goes by the name of "*Kákali Ni* Thus, the seven *Vikrita*—Svaras hav described."[1]

1. Cf. ननुरत्नाकरे शार्ङ्गदेवेन विकृताः स्वराः ।
द्वादशोक्ताः कथंतेतुसप्तैवकथितास्त्वया ॥
सत्यंलक्षणतो भेदाद्द्वादशानामपीष्यते ।
शुद्धेभ्यस्तत्रभेदस्तु सप्तानामेवलक्षितः ॥
आधारश्रुतिसंत्यागात् ध्वनिभेदःप्रकीर्तितः ।
पञ्चानांपरिशिष्टानांस्वराणांविकृतात्मनाम् ॥
पूर्वस्वरश्रुतिग्राहाद्वापूर्वश्रुतिवर्जनात् ।
अपिलक्षणतोभेदे पूर्वोक्तश्रुतिसंहृतेः ॥
आधारश्रुतिनिष्ठत्वाल्लक्ष्यभेदो न विद्यते ।
कथं नभेद इति चेत्सलक्ष्यतो निरूप्यते ॥
शुद्धषड्जादच्युतस्तुसंषड्जोनैवभिद्यते ।
अच्युतोमध्यमः शुद्धान्मध्यमान्नभिदांभजेत् ॥
शुद्धर्षभाच्चविकृतोऋषभो न पृथग्भवेत् ।
विकृतोधैवतः शुद्धधैवतान्नातिरिच्यते ॥
मध्यमश्रुत्युपादानाद्विकृतः पञ्चमस्तुयः ।
विकृतपञ्चमाच्चैवनकामप्यश्नुतेभिदाम् ॥
तस्माच्चतुर्दशस्वेषु पूर्वोक्तेष्वेवपंचकः ।
अंतर्भूतोयतस्तस्मान्नपृथक्कथितोमया ॥

सप्तानांविकृतानांतु साद्देशलक्षमचक्ष्महे
च्युतः षड्जश्चयुतोमश्चच्युतः स्यात्पंच
मस्तथा ।
स्यात्साधारणगांधारोऽन्तर गांधारएवच
स्यात्कैशिकनिषादोऽथान्यः काकली-
निषादक ।
हित्वाचतुर्थींस्वाधारश्रुतिं षड्जोयदाश्रि
तृतीयामाश्रयेद्देषच्युतषड्जोऽभिधीयते ।
एवं लक्षणसाम्येन च्युतमध्यमपंचमौ ।
शुद्धस्यमध्यमस्याथगांधारश्रुतिमाश्रितः ।
ससाधारणगांधारोऽन्तरगांधारउच्यते ।
योमध्यमस्यशुद्धस्यश्रुतिद्वयमुपाश्रितः ।
प्रथमांशुद्धषड्जस्यनिषादश्चेच्छ्रुतिश्रितः ।
सकैशिकनिषादाख्यः कथितोगीतवेदिभिः ।
निषादःशुद्धषड्जस्याश्रयतेचेच्छ्रुतिद्वयं ।
सकाकलीनिषादःस्यादेवंसप्तापिलक्षिताः ।

Svaramêlakalanidhi

We closely trod in the footsteps of both Shârngadêv and Râmâmâtya, only to correctly formulate the following table and rightly determine their respective *Sudha Vikrita Svaras*:

1	2	3		4
Number of Srutis	Sudha-Svaras	Vikrita-Svaras		Râmâmâtya's special Nomenclature.
		Shârngadêv.	Râmâmâtya.	
1		Kaisiki *Ni*	Kaisiki *Ni*	Shadsruti *Dha*
2		Kâkali *Ni*	Kâkili *Ni*	
3		Chyuta *Sa*	Chyuta *Sa*	Chyutshadja *Ni*
4	Sa.	Achyuta *Sa*		
5				
6				
7	Ri.	Vikrita *Ri*		
8				
9	Ga.			Panchasruti *Ri*
10		Sâdhârana *Ga*	Sâdhârana *Ga*	Shadsruti *Ri*
11		Antara *Ga*	Antara *Ga*	
12		Chyuta *Ma*	Chyuta *Ma*	Chyutamadhyama *Ga*
13	Ma.	Achyuta *Ma*		
14				
15		Vikrita *Pa*		
16		Kaisiki *Pa*	Chyuta *Pa*	Chyutapanchama *Ma*
17	Pa.			
18				
19				
20	Dha.	Vikrita *Dha*		
21				
22	Ni.			Panchasruti *Dha*

The fourth columa of the above table namely, "Râmâmâtya's special Nomenclature" was drawn with the help of the following verses in the text:—

चतुर्दशस्वरेष्वेषुवक्ष्येलक्ष्यानुसारतः ।
नामांतराणिकेषांचित् व्यवहारप्रसिद्धये ॥
च्युतषड्जस्वरोलक्ष्येनिषादत्वेनकीर्तितः ।
च्युतषड्जनिषादाभिधानंतस्य विधीयते ॥
च्युतस्यमध्यमस्यापिगांधारव्यवहारतः ।
च्युतमध्यमगांधार संज्ञास्यक्रियतेमया ॥
च्युतपंचममाचष्टेलोकोमध्यमसंज्ञया ।
अस्माभिः कथ्यतेसोऽथच्युतपंचममध्यमः ॥
लक्ष्येऽत्रकुत्रचिच्छुद्धगांधारस्थानमाश्रयन् ।
ऋषभः कीर्त्यतेऽस्माभिः पंचश्रुतिऋषभाह्वयः ॥
ससाधारणगांधारस्थानस्थोऋषभोयदि ।
लक्ष्यानुसारतः प्रोक्तस्ततः षट्श्रुतिर्ऋषभः ॥
शुद्धेनिषादे नामा न्यत्स्यात्पंचश्रुतिर्धैवतः ।
स्यात्कैशिकनिषादोऽन्यन्नामाऽष्टश्रुतिर्धैवतः ॥[1]

1. "In fulfilment of a usage, I shall now mention a few different nomenclatures to some of these 14 *Svaras* obtaining elsewhere. On account of its identity with Nishada, Chyuta Shadja is also called *Chyuta Shadja Nishada.* On account of its identity with Gândhâra, Chyuta Madhyama is also called *Chyuta Madhyama Gândhâra.* On account of its identity with Madhyama, Chyuta Panchama is also called *Chyuta Panchama Madhyama.* Inasmuch as Rishabha is, *in practice*, known to identify itself with Sudha Gandhara, the latter is also called *Panchasruti Rishabha.* When however, Rishabha identifies itself with Sâdhârana Gândhâra that (Sadharana Gandhara) is, *in practice*, also called *Shadsruti Rishabha.* Likewise, Sudha Nishada is also called *Panchasruti Dhaivata*, and Kaisiki Nishada is also called *Shadsruti Dhaivata.*"

Having learnt the points of agreement and disagreement between Shârngadèv and Ramamatya with regard to the *Sudha-Vikrita* svaras and having noted that, in all cases of disagreement, Râmâmâtya invariably invoked the help of the principle of *Lakshya*, we shall now proceed to deal with the next question which happens to be five-fold:—

(1) Why were the *Sudha-Vikrita* Svaras so called?

(2) Wherein lay their importance?

(3) Are they extant to-day? If not, why not?

(4) What, if any, are their modern prototypes? and

(5) What part, if at all, do they now play in actual practice?

These five questions we shall take one by one:—

First, *why were the Sudha-Vikrita Svaras so called?* No doubt, the time-honored verse, transmitted to us from author to author *viz*:—

चतुश्चतुश्चतुश्चैवषड्जमध्यमपंचमाः ।
द्वेद्वेनिषादगांधारौत्रिस्त्रीऋषभधैवतौ ॥

1. *Vide*. Fig. 3—page 17. (*Svaramêlakalânidhi.*)

sums up "the Rule of *Sudha*-Svaras," according to which the seven *Sudha* notes were *Sa, Ri, Ga, Ma, Pa, Dha, Ni,* made up —as they were—of 4,3,2, 4,4,3,2 *Srutis* respectively. Or, as Râmâmâtya would have it, out of the 22 *Srutis*, numbers 4, 7, 9, 13, 17, 20, and 22 were alone spoken of as *Sudha*-svaras; and they were techincally called *Sa, Ri, Ga, Ma Pa, Dha, Ni,* respectively.[1]

But the question is: How did those *Svaras* alone come to be called *Sudha*-svaras? One explanation that is put forward, is that those seven notes, which formed, as they even now form, the scale of *Sâmagânam*, were called *Sudha*-svaras, because [illegible] were used in singing the *pure* mu[sic] Sâma-Vèda. Yet another expla[nation] Mr. E. Clements attempted to make, [that] ancient text-books on music took the [Vina] point of view;[2] and almost all the a[ncient] terms, which referred to *Srutis* and [Svaras] were derived from stringed instru[ments] with frets, which gave a series of semi[tones] up to a certain point and, then, a s[eries] tones and semitones. This later s[eries] tones and semitones) was, in the [Vina] position of the frets, known as the [Sudha] scale and the notes it comprise[d] called *Sudha*-svaras.

As between these two explana[tions] truth comes out that a *Svara*, accord[ing] our ancients, was called *Sudha*, [when it] remained in its appointed position, [and] made up of the exact number of [Srutis] assigned to it; that, when it left off [any of] its *srutis* or took any *sruti* from [the] ceding or succeeding note, it bec[ame] *Vikrita*-Svara; and that, sometim[es] *Sudha*-svara, though it retained [its] seat, lost its *sudha*-character and be[came] *a vikrita*, when it lost any of [its] *srutis* and was thus reduced in valu[e].

Secondly, we shall determine the [importance] of the *Sudha*-svaras and of the [resultant] scale formed thereby. I may state [as a] general rule, that just as a tour[ist] entering a new country, finds it conv[enient], nay, necessary to study its languag[e] a view to understand the real nature [of the] country, so too, a music-student, [in] ing any one of our ancient books on [music] finds it convenient, nay, necessary, [to] the *terms* or phraseology employed [in] with a view to understand the real [nature]

1. *Vide* Fig. 3.—page 17.

[illegible] सूत्रयकमेवत्रीणयामस्यार्थस्य निदर्शनम्

Svaramêlakal[ânidhi]

of the *Râga System*,[1] which its author finally built. A mere glance at those texts will show that one and all their authors spoke of their *Rágas* only in terms of *Sudha*—svaras and also employed therein the *Sudha-Vikrita* phraseology. Take, for instance, *Srirága*, of which Râmâmâtya wrote:—"The *Mêla* of *Srirága* consists of these seven *svaras*, namely, *Sudha Sa, Panchasruti Ri, Sâdhârana Ga, Sudha* Ma, *Sudha* Ra, *Panchasruti Dha*, and *Kaisiki* Ni."[2] Surely, none could understand this kind of description without a previous knowledge of the meaning of the terms employed therein. Hence, the "*Sudha-Vikrita Svaras* of our ancient authors formed, as it were, a key to open, and see for ourselves, the rich treasures of their musical systems.

Are those ancient *Sudha-Vikrita Svaras* extant to-day? If not, why not? What, then, are the modern *Sudha-Vikrita Svaras*? And what part do they now play in the actual practice of music?

These questions may be grouped together and discussed as such. Now, the ancient *Sudha-vikrita svaras* are *not* extant to-day. Because, they had been, as already said, look-

1. *Raga* was, as it even now is, the *soul* of Indian Music. The *srutis* the *svaras*, and even the *Melas* form so many *means*, while the *ragas* alone form the *end*. Even the compositions and their various types are so many *Raga—manifestations*, perhaps with the additional elements of rhythm and poetry. Hence the determination of the *Ragas* and their *Lakshanas* forms the main but the sole, portion of our musical system.

2. शुद्धषड्जः पंचश्रुतीऋषभश्चतथापरः ।
स्यात्साधारणगांधारः शुद्धौपंचममध्यमौ ॥
पंचश्रुतिर्धैवतश्चकैशिकाख्य निषादकः ॥
एतैः सप्तस्वरैर्युक्तः श्रीरागस्यचमेलकः ॥

Svaramêlakalânidhi.

ed at only from the Vina-point of view, while their modern prototypes have had an entirely different principle to stand upon. Again, the ancient *Sudha-Vikrita* system was based upon *Bharata Mata* which, according to Mr. Clements and his informer Mushrafkhan, had *Dha* for keynote, while its modern prototype has been based on *Hanumanta Mata* which has, in actual practice, *Sa* for keynote'.[3] Further the *Sudha-Vikrita* system allowed itself to be differently interpreted, while its modern prototype has only one interpretation to view it with.

The last point requires explanation. Three different authors, Râmâmâtya, Ahôbala, and Bhatkhande, chose the same *Sudha*-svaras from the table on page 175 for their *sudha*-scale and, yet, arrived at three different, *ragas viz*, *Mukhari*, *Kâphi*, and *Bilaval* corresponding respectively to *Kanakangi, Kharaharapria* and *Sankarabharanam* of the *Carnatic* Music[4].

A question, at once, arises as to why the self-same *Sudha*-scale, formed out of Sa (4th sruti), *Ri* (7th), *Ga* (9th) *Ma* (13th), *Pa* (17th), *Dha* (20th) and *Ni* (22nd).

3. Whereas, in Bharata Mata, the frets were so arranged as to give, as far as possible, the exact scale required; in *Hanumanta Mata* the increase of tension is one of the chief means of getting the right notes.

4. Cf. सर्वेपुरागमेलेषुमुखारीमेलआदिमः ।
शुद्धैः सप्तस्वरैर्युक्तो मुखारीमेलईरितः ॥
एनयैवव्यवस्थित्याद्युत्पन्नः स्वरमेलकः ।
कनकांगीतिसंप्रोक्तः कर्णाटकीयपंडितैः ॥
तयैवचव्यवस्थित्याशुद्धमेलः सुसाधितः ।
हरप्रियः समाख्यातोह्यहोबलादिपंडितैः ॥
हिंदुस्थानीयपद्धत्यां श्रुतिक्रमविपर्ययात् ।
शंकराभरणाख्यतोमेलः शुद्धः सुनिश्चितः ॥

Lakshya Sangita.

gave rise to three different *Ragas*. Mr. D. K. Joshi made an attempt[1] to answer it and observed: "Suppose a man in Bombay buys a seer of sugar and a man in Poona buys a seer of sugar; they will find that the quantities of sugar, though identical in having the name *seer*, in each case differed in their weight—Bombay *seer* being weighed 28 Tolas and Poona *seer* 76 Tôlas. If the quantities of sugar differed in their value or weight, why should they be indentical in having the same name 'seer'? The answer to this question is sure to satisfy the question suggested in our case. And I think the answer, in both the cases, is one and the same. It is CONVENTION."[1]

Apart from the vibrational values[2] which Mr. Joshi gave each of the *Sudha*—svaras of each of the three authors he selected, *viz*, Râmâmâtya, Ahobala, and Bhatkhande, the analogy that he took, seems to be a little unhappy and does not, I fear, strengthen his position. In the case of *seers*, there is a clear difference, according to Mr. Joshi, of 48 Tôlas between Bombay and Poona. Even in South India, there is a wide difference, in quantity, between the *measures* of Madras and Coimbatore. Whereas, in the seer or measure, there is the sameness only in name but not in quantity; in the *Sudha* scale, on the other hand, there is the sameness not only in name but also in quantity or measurement. For, whether the *Raga* that emanates is *Kanakangi*, *Mayamalagowla*, *Kharaharapriya*, or *Sankarabharanam*, the original stock of the *Sudha* scale gives *Sa*, *Ri*, *Ga*, *Ma*, *Pa*, *Dha*, *Ni*, respectively *srutis* 4, 3, 2, 4, 4, 3, 2. Unless, therefore, the 4th *Sruti*—to take one for example—does not mean only the 4th *Sruti* but also anything above or [illegible] no clue presents itself to explain why different *ragas* are said to emanate from one and the same *Sudha* scale.

In this connection, Mr. Clements [illegible] to the confusion created by Râmâmâ[illegible] Râmâmâtya follows the Bharata Ma[illegible] an endeavour to place his *svaras* amon[illegible] 22 *srutis*. There can be no doubt, fro[illegible] *ragas* he gives, as to what his *svaras* [illegible] We can here put a finger on the o[illegible] error of the Carnatic System. *D*[illegible] *Ri*, in a vain attempt to follow *S*[illegible] *ratnakara* was called a note of thre[illegible] and *Sudha Ga*, a note of two srutis a[illegible] on. It is obvious why the out-of-th[illegible] *Kanakangi* was seized upon. Havin[illegible] founded *Dvisruti Ri*, with *Thrisruti R*[illegible] originator of the modern Carnatic [illegible] looked round for a scale which gave a[illegible] smaller interval between *Ri* and *Ga* a[illegible] upon *Kanakângi*. This is why the [illegible] tute *Ga* and *Ni* of that scale have acqu[illegible] the high-sounding name *Sudha*. Râmâ[illegible] obviously was c mpletely out of touch [illegible] the Bharata Mata; otherwise he [illegible] have known that its terminology co[illegible] be applied haphazard to such a widely [illegible] gent system as that of Hanumanta [illegible] The *Sudha Ga* of the Bharata Mat[illegible] 5 *srutis* from *Sa*; having wrongly [illegible] fied it with the *Ga* of *Kanakângi*, R[illegible] mâtya felt compelled to call that *Kana*[illegible] *Ga*, *Panchasruti Ri*. Modern musi[illegible] who seem to have acquired a prim[illegible] notion of the nature of a four *sruti* [illegible] val, have corrected this term to *Cha*[illegible] Otherwise, Râmâmâtya's erratic techno[illegible] has been accepted without demur by [illegible] succeeding writers."[1]

1. Vide Mr. Joshi's vibrational values, [illegible]

From all standpoints of view, the ancient theory of *Sudha*-scale was given up, as being practically useless for the modern requirements.

To day, there is no scale such as a *Sudha-scale*, unless the first *Mêla* of Venkatamakhi's system counts for such. Even that first *Mêla* (*Kanakângi*), Purandra Das chose to drive out of the field in favour of *Mâyâmâlavagowla*.

Of this "*Mâyâmâlavagowla*," Mr. E. Clements remarked: "I am not in favour of *Sankarabharanam* as the *Sudha* scale. Unscientific writers put *Bihag* in the same family. We do not want any ambiguity in our *Sudha* scale. *Mâyâmâlavagowla* is entirely free from this defect. Further, to adopt the *Mâyâmâlavagowla* scale, as the *Sudha* scale, does no violence to the feelings of the musicians." [1] Here came Mr. A. H. Fox Strangways, as it were, to help Mr. Clements and observed: "*Mâyâmâlavagowla* only developed from *Mukhâri* by way of modal shift of tonic, as in the case of the modern Greek scale."[2] And here, again, Mr. H. A. Popley amplified that the modal shift of tonic was made by one semitone higher and, having illustrated his point by the following diagram—

Mâyâmâlavagowla

B C D♭ E F G A♭ B C

Mukhâri (Kanakângi)

wrote, by way of explanation: "B to B form *Mukhâri* and C to C is *Mâyâmâlavagowla*."[3]

All the three, I fear, overshot the mark, inasmuch as the *Mukhâri* of the above figure points only to *Kharaharapriya*, wherein alone *Ga* (D) and *Ni* (A) are *Kômal* or flat, and surely not to *Kanakângi*, wherein *Ga* and *Ni* are really conspicuous by their absence, though *Ri Tivra* and *Dha Tivra* are made to falsely personate them.

The trend of the modern view is that, while *Bilaval* is the *Sudha* scale of North India, *Mâyâmâlavagowla* is that of South India. But, be it noted, that, as a matter of fact, neither of them is the *Sudha* scale in the sense in which our ancient writers held, viz., that its seven *svaras* had their respective *sruti* numbers 4, 7, 9, 13, 17, 20, 22, but that the elementary songs have been traditionally taught to the children in those *ragas*. Such *traditional* teaching began, at first, as a matter of convenience or inclination; but then, it took root by force of habit.

1. Vide Mr. Clements's *Ragas of Tanjore* p. 15.
2. Vide Mr. Fox Strangways's *Music of Hindustan* p. 120.
3. Vide Mr. Popley's *Music of India* p. 43.

(*To be continued.*)

THE TAMBURA AS A SRUTI-ACCOMPANIMENT IN INDIAN MUSIC

BY

PROF. D. VENKATASWAMY.

Of ancient origin and remarkable tone-quality, the *Tambura* is a four-stringed musical instrument used solely as a *sruti* or tone accompaniment in Indian music. It consists of a hemispherical shell, with a flat top, to which is attached a long hollow shaft, the free end of which carries four keys for the adjustment of the tension. There are two bridges; a massive one at the centre of the flat top which, for reasons explained further on, may be called the active bridge and the other very near the keys. The ends being fastened to the rim end of the flat top, the strings pass through four beads, thence crossing the active bridge, pass on to the other bridge at the end of the shaft and the keys. The beads by slight movement along the length of the strings serve by their pressure against the top to bring about smaller variations of tension too subtle for the keys.

The two middle strings are tuned to the *Sa* or the leading note, the two at the sides giving the *Panchama* and *Shadja* of the lower octave. The instrument is played by plucking the strings one after another beginning with the *Panchama* and ending with lower *Shadja* at about 2/7th of the vibrating portion from the bridge near the keys. A continuous repetition of this process without break constitutes the *sruti*.

The resulting drone which is exceedingly powerful without being harsh, is the outcome of the masterly design of the body combining the essential qualities of large size and extreme lightness consistently with good strength.

Secondly the drone is never monotonous having a peculiar charm of its own, a variety that entertains and a colour that attracts. This characteristic is attributed to the host of clearly discernible harmonics brought into prominence by the aid of "*Jeeva*".

To the artist these harmonics afford continuous guidance for all the notes, in intonation, besides the tonic, the fifth and the octave.

We have to account lastly for the remarkable tone-quality. This is in part due to the great length and extreme thinness of the strings subject to great tensions; but by far the most important factor is the active bridge, which admits of the introduction of the '*Jeeva*,' a device whose action was unknown, till recently, to the world of musical or even the scientific world. The active bridge consists of a bit of hard wood or bone resembling an arch on two pillars whose upper surface is slightly convex in a cylindrical perpendicular to the length of the strings. The upper surface is about 1" along the length of the strings and nearly 2-5" across them. This active bridge was the subject of an enthusiastic study by Sir C. V. Raman, D. Sc. F. R. S. The result of mathematical investigation of the function of '*Jeeva*' as first taken up by K. C. Kar [1] and finally completed by Messrs. D. Gunnaiya and G. Subrahmaniam [2] is summarised in this paper. The peculiarity is that the string rests on the active bridge throughout its entire width of 1-5". The strings are first tuned so that their fundamentals are quite accurate. Then between the surface of the bridge and the string, the '*Jeeva*' which is nothing but a small bit of wool or cotton thread is slipped and moved slowly away from the vibrating side frequently sounding the string and stopped just where a sudden change in tone quality occurs. In this position the string passing over the '*Jeeva*' lightly touches the bridge at a point before leaving the active bridge so that, when vibrating, the string gets, very near the end, a series of impulses with the same period as the string's fundamental.

On this basis the theory worked out by Messrs. Gunnaiya and Subrahmaniam predicts a lowering of the fundamental and a progressive increase in the strength of the harmonics in the natural order.

These results have been carefully verified and have stood the test of experiment thoroughly.

I have to thank Mr. D. Gunnaiya M.A. of the Physics department, Maharajah's College, Vizianagaram, who has been of great help to me in the preparation of this paper. I have also pleasure in acknowledging my indebtedness to a previous contribution entitled, "The *Tambura* and the function of *Jeevali*," published by him in the Maharajah's College Magazine, Vizianagaram.

1. K. C. Kar, Physical Review, 21, 672 (1923).
2. D. Gunnaiya and G. Subrahmaniam, Physical Review January 1925.

MY MUSICAL REMINISCENCES.

BY

MR. T. LAKSHMANA PILLAI.

Before I write on this subject, I would perhaps do well to apologise to the reader for having to use the first person singular often in the course of this article, as the subject matter turns wholly upon my own personal experiences. At the outset, let me make a few observations about Hindu music in general, which has been characterised as *spiritual* by Dr. Clarence Dickinson, Director of Music and eminent organist of New York. He describes music as a "vehicle for man's spiritual response to the Eternal," and in a lecture called particular attention to 'the spiritual power of Hindu music.' "The Hindu *Ragas*" he said, "have spiritual moods." 'Spiritual,' should not be taken here to be the equivalent of "metaphysical," as some Englishmen are apt to do. By the use of the word "metaphysical," they hit at spiritual things only in a negative way, whereas, "spiritual," in the Hindu sense, would have a clear reference to the existence of, or a belief in the existence of, a spiritual world beyond the present, in a positive sense. The spirituality is seen at its height, especially when a Hindu *Raga* is elaborated in an instrument like the Veena. It is so abstract, ethereal and other-worldly, that we seem to be literally transported, in a quiet and unobtrusive way, to a region which is so near and familiar to our soul and yet so distant from its present environments and associations. To sing a *raga* or song in Hindu music, it is enough if a man has for accompaniment the *Tambur* alone which is purchaseable (or can be made) at a moderate cost, or, even a beggar's musical instrument with one string will do, or, he may even sing without the aid of a string, if, to serve as a drone, he asks a friend to hum for him while he sings. Our Carnatic music is thus least expensive and seems to particularly suit the proverbial poverty of the

Hindu. That the Hindu may have an occasional dip into the beatific ocean of sound (சப்தப்ரம்மம்), or a pre-taste of the Eternal spiritual existence, by such simple methods, despite the stark poverty that stares him in the face, would in fact seem to be a compensation providentially arranged for him.

In this connection, I am tempted to refer to the condemnation of the harmonium by some musical organisations. To condemn the harmonium and pass resolutions in paper against it, seems very easy; but then, who will undertake to supply an instrument like the *Tambur* in sufficient numbers, to suit the popular demand for a drone instrument that is sure to arise, if the harmonium is withdrawn? For, it cannot be doubted that in South India particularly, the taste for music has spread much wider among the masses in these days than in the days of the *Tambur* alone, and for this the harmonium and the gramaphone are alone responsible. The harmonium is always ready to hand for purchase, whereas the *Tambur* has almost become a curio. Hence it would be thoughtless to condemn the harmonium before some other suitable drone instrument is made available in sufficient numbers at the market. Of course, as an independent musical instrument, the harmonium has no place in Hindu music, as it is incapable of producing the graces or *gamakas* which form the distinguishing characteristic of that music. Neither can the harmonium act as an accompanime it to Hindu vocal music (*upavadyam*) for the self-same reason.

In describing my reminiscences, I have to traverse a wide field, such as an account of the ways and idiosyncrasies of the musicians to whom I have listened from early youth, and the nature and circumstances of the various musical duels that have taken place, of which I have personal or hearsay knowledge. For instance, the celebrated musical combat between Ma... vaithi Iyer and Raghava Iyer, before H... Aylium Tirunal, Maharajah of Travanco..., the duel between the famous pip... Anayappan of Tinnevelly and Singara... of Kumbakonam, and the encounter betw... the two great violinists Krishna Iyer... Tirukkodikaval and Mahadeva Iyer... Trivandrum, will have to be described. ... famous meeting of Govinda Marar... Travancore and the great Tyagayya... Tiruvadi, between the latter and Vadiv... Nuttuvar, and a glance at the glorious de... of H. H. Swathi Tirunal and H. H. A... um Tirunal, Maharajahs of Travanco... would, I believe, be all matters of interest... the musical public.

Before dealing with these subjects, I m... note down my personal and individu... experiences with some of the musicia... with whom I chanced to come into conta... And first, I may refer to my own *Guru* w... was my first teacher in music, when I w... about eight years of age. He was a Na... by name Pappu Pillai, of Parur. He w... a blind man and a *Bhagavatar* by profe... sion. He commanded an agreeable and... the same time impressive voice, which, ... training and exercise, had become admi... rably adapted for the singing of *Svara*... and *Pallavies*. *The Kirtanams* which he sa... were almost of local origin, as Tyagayy... *Kirtanams* were only just finding their w... into Travancore then under the auspices... his disciple Kannayya Bhagavatar who h... been made a Court musician in the days... H. H. Swathi Tirunal Maharajah. Papp... Pillai was a terror to most of the Bhaga... vatars, inasmuch as, if any one dared ... set himself against him as a rival, he wou... take up his favourite *pallavi* "உபயகாவேரி..., வேதகாவேரி..., வேதபுரீச...

...ச்வர," and by singing it adroitly and in the three *Kalas*, would quickly throw his opponent into such confusion by the very complexity of its phraseology, if not by the brilliance of its melody, that nothing but immediate submission would save him from ignominy and humiliation. This *pallavi*, however, was the last weapon in his armoury and he would not resort to it, except under extreme necessity. The Malayalam and Sanskrit compositions of H. H. Swathi Tirunal and *Ashtapadi slokas* were familiar to him; and excluding *Svarams* and *Pallavies*, these formed the stock music of the day.

The next *Bhagavatar* whom I knew and to whose performance I had constantly listened, while I was in my teens, was the celebrated Vainika, Satthu Bhagavatar of Trivandrum. He was a Brahmin of Suchindram, of fair complexion and handsome of appearance and quiet and gentle ways, who was a court musician of the Trivandrum palace. With a pay of Rs. 12 (which is equal to Rs. 25 of the present day), besides sundry other benefactions, he lived a simple life, with few necessities to trouble his restful mind. The saying, "man wants but little here below", was well exemplified in his life. Once, when a pupil of his, after regular training under him on the Veena for three or four years, brought him a remuneration of Rs. 400, he, with a noble self-denial, declined to receive it, merely adding, "I know your father is not well-to-do and cannot really afford to lose this sum. Take it back." He merely took one rupee as a *Guru Dakshina* in a truly religious spirit. Is not this noble act worthy of imitation by many better-placed men to whom Mammon acts as a God. He used to play on the Veena three or four times a day at fixed hours, was not troubled with any other cares, and opened his hospitable door to whomsoever was inclined to listen. He played very sweetly and was particularly successful, when elaborating *ragas*, in raising the apppropriate atmosphere of emotion. Many a time have I been raised to Elysian heights by his nimble touches on the divine instrument which he "waked to ecstasy." He disliked too much speed, artificiality and excitement, as he felt these to be disturbing elements in the creation and maintenance of the right feeling. He was the founder of a style, if not a school of playing, and had several followers and imitators. He knew very little, and cared to know little, of current politics, and was free from the worries, vexations and disappointments that follow the pursuit of ambitious ends, so characteristic of modern so called civilised life. His life on the other hand was peaceful, serene and contented to the end, and he lived to the grand old age of 85. Through his unalloyed attachment to music and to the Veena, he succeeded in passing through the "cool, sequestered vale of life," on the whole happily, with but one misfortune to darken it, and that was the loss of his only son, a gifted young musician at the early age of twenty-three.

Next, I shall narrate a few of the musical experiences I gathered when I was deputed to Madras as an attachee in the year 1886 to be trained in the British system of accounts. After office work, I used to meet law students of my age, sing songs and listen to songs sung. One day I sang H. H. Swathi Tirunal's composition in *Ketharagowla* (கேதாரகௌளை), beginning "*Devamamayi*", and this simple and beautiful song arrested the attention of the students, and it was asked to be sung over and over again daily. The news of my singing this song was soon whispered into the ears of one Vydianatha Sastri, who was a son-

noisseur in music and who was so looked up to by the students. That gentleman was a staunch lover of music and an intimate friend of the late Professor Seshagiri Sastri M.A., Superintendent of Sanskrit and Vernacular languages, Presidency College, who was a great expert both on the veena and on the violin. When I sang "Devamamayi" to Vydianatha Sastri, he was much taken up with it, and he introduced my name to Mr. Seshagiri Sastri. In two days, I was invited to see the latter gentleman along with Vydianatha Sastri. It was on one afternoon that I met Seshagiri, sitting at his desk and writing some book on philology in which he was a great authority. It was he, I believe, who discovered among the Dravidian languages a law akin to Grimm's law by which allied words may be traced easily from any one of these languages into another. Besides, he was a great sanskrit scholar. As soon as I entered his room, he rose up and offered me a seat and then sat down. Being no better than a student myself, I hardly expected such courtesy being shewn me by so great a scholar and artist. But it proved that he was a man of inborn courtesy and that he had real regard towards the votaries of music, be they great or small. When I said that I came by the introduction of Vydianatha Sastri to listen to his Veena performance, he immediately dropped his pen, took up his Veena, sat down on the floor with me and played for full three hours at a stretch. Many of the musical combinations he produced were splendid and showed that he must have had persistent and life-long practice on the Veena. When at the close I expressed my opinion that I had never before heard Veena performance of such a high order, he was so modest as to decline the compliment and say, "If you had listened to the Veenaist Kalyanakrishna Iyer of your own place, you would not have praised me thus." "Whatever may be the merit of Mr. Kalyanakrishna Iyer," I replied, "there can be no doubt that your performance is wonderful". "Have you ever heard Kalyanakrishna Iyer?" asked he. "I think I have heard him once," I answered, "but that was not long enough to form a correct estimate of his ability." "Then," said Seshagiri, "I would request you to listen to his performance as the first thing you do, when you get back home. I am in that case, you will find that South India with the one exception of Seshanna of Mysore, has not his equal to show on the Veena."

This was a revelation to me. I felt really ashamed that I was not able to guage the merits of so great an artist who lived in my own native town, and then I made up my mind to hear him immediately on my return to Trivandrum. Seshagiri, though short, was big in stature, and one could not view without pleasure the contortions of his face, his constant gasping for breath and the unique movements of his body when his imagination caught fire, for he then threw his heart and soul into the performance. Truly his movements were so constant that by the close of the performance, he managed to transport himself bodily from one end of the room to the opposite end as if by magic. Vydianatha Sastri who was listening to us, then promised me the luxury of another entertainment shorty afterwards, with Seshagiri as violinist and his brother Venkatesa Sastri, the author of a treatise on music, as Veenaist. I thanked him heartily for the further pleasure kept in store for me.

In another three days, this entertainment came off in the same place, exactly as promised. To my utter amazement, Seshagiri played on the violin with even more wonderful facility and skill than he did on the Veena. "How," thought I, "did this man manage to get such mastery over both these instruments, when his whole life time must have been devoted to the study of English, Sanskrit and all the Dravidian languages put together?" It was really an enigma to me. The three hours of this entertainment seemed to raise me to Elysium, into a beautiful, yet unseen emotional world. Such ecstatic joy I tasted for the first time in my life. I thanked the performers for their kindness, but they vigorously declined my thanks, saying that, as a return, I should sing before them another day. This request took away my breath for the time being, as I had been overwhelmed with the feeling of admiration for the magnificent treat I had. I then said, "How can I venture to sing before such great masters of music without feeling nervous and so committing blunders?" But Seshagiri insisted on my singing, adding that any mistakes which I might commit through nervousness would be gladly condoned on account of my youth. So no excuse that I pleaded could save me, and thus I agreed to submit to the ordeal.

On the afternoon of the following Sunday, I sang before the brothers and Vydianatha Sastri. I elaborated the *Raga Bhairavi* recited in that *raga* the verse in *Tevaram* beginning "Gnanapparan-Gnanasambandhan," and sang among other songs the *Ketharagowla* song of H. H. Swathi Tirunal. Seshagiri praised me for the singing, but qualified his praise with the following wholesome advice, "you have excellent aptitude in music and a fine voice capable of producing *ravais* (trills) in abundance but you must understand that *ravais* should find a place in your singing only as diamond in a necklace. Diamonds should be sparingly used, and for artistic effect, they should be set off by gems of other colours in the neighbourhood. If there are too many diamonds close to one another in a jewel, the eye would feel a glut, and therefore their monotony should be relieved by the presence of other gems in their midst. If you can be careful about this point in future, you will become a splendid singer." I took the hint thankfully and felt that it was sound and well-meant. Vydianatha Sastri then told me that there would be a flute and *Katha* performance shortly by the famous young musician, Saraba Sastri at Seshagiri's quarters at which I would be welcomed. Buoyant with the hope of enjoying that performance, I parted company, thanking them all for listening with patience to the music of such a raw singer as myself.

RAGA CLASSIFICATION IN INDIAN MUSIC.

BY

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Every civilised nation in this world has its own system of music and on a careful analysis of *svaras* used in their songs, we can fix the modes or *ragas* used by them. Thus we speak of the major and minor scales in western music. In the music of the oriental nations, where *ragas* play a great part, the subject of classification of *ragas* assumes special importance. In Persian music there is the classification into *mugarws, shobashs* and *goshahs* nearly equivalent to the *raga, ragini, putra* system.

Since in Indian Music we employ a very large number of *ragas*, different systems of classification of these *ragas* have naturally sprung into existence.

The subject of *raga* classification in Indian Music has a four-fold aspect :—

(1) *Raga* classification in the music of the Ancient Tamils (Dravidian Music).

(2) *Raga* classification in the Music of the Pre-Ratnakara period.

(3) *Raga* classification in Hindustani Music.

(4) *Raga* classification in Karnatic Music.

Ancient Dravidian Music.

It is frequently forgotten that the Ancient Tamils had an excellent system of music, highly developed in all its *branches*. The classifications of *ragas* adopted by them have their parallels in the later Aryan Music of India. The word பண் (Pun) denoted a *Melakarta raga*. The Puns were not necessarily *sampoorna* in both the *arohana* and the *avarohana*. It is interesting to note that this conception of a Pun coincides with Venkatamakhi's conception of a *Melakarta raga*. For, according to him even *Sriraga* and *Kedaragowla* which have *Audava arohanas*, but *Sampoorna avarohanas* are *Melakarta ragas*. The பண்ணத்தரி (*Pun Sadari*) which is the same as the modern *Devagandhari raga* is a parallel illustration in the ancient Dravidian Music. The term *Melakarta—raga* as understood at the present day however, denotes that its *arohana* as well as the *avarohona* should be *sampoorna*.

Under each *Pun* were grouped several *Janya ragas*. *Tiram* (திறம்) was the term used for a *Janya raga*.

According to the time of singing, P[illegible] were classified into *Pagal pun* —பகற்பண்—(which should be sung during day time), *Iravu pun*,—இரவுப்பண்—(which should be sung during night time) and *Podu pun*—பொதுப்பண்—(which can be sung at all times). Of the 24 Puns, 12 belonged to the first group, 9 to the second and 3 to the third. In the *Sangita Makaranda* of Na[illegible] we have a similar classification to which reference will be made later. Each pun had a distinct name and its own group of *Janya ragas*. It is mentioned however that Vilaripun, (விளரிப்பண்) had no *Janya ragas*. The poet Adi Vira Rama Pandiar, (ஆதி வீரராம பாண்டியன்) says that Ravana sang Vilaripun when pressed under Mount Kailas and won the Divine Grace.

Pre-Ratnakara Period.

The three principal works of this period are :—

1. *Bharata's Natya Sastra.*
2. *Narada's Sangita Makaranda.*
3. *Naradi Siksha.*

Here we come to the *Grama Murchana* system of classification. The term '*Grama*' literally means a 'village' as opposed to jungle or *Aranya*. *Grama ragas* were the *ragas* used in the music of the village people i.e., civilised people as opposed to aborigines and tribes who lived in forests and mountainous tracts. The term *Grama raga* has been practically applied only to three scales, *viz* :—*Shadja Grama*, *Madhyama Grama* and *Gandhara Grama*. Of these the last is believed to have gone to *Indraloka* at any rate it became obsolete long ago. *Gramas* are collections of *Svaras* definitely related to one another by musical intervals. Of the *Sa Grama* and *Ma Grama*, the latter took a slightly sharpened variety of *Madhyama*.

Murchanas are the different modes got by taking each note of the *Grama* as a tonic note. Thus the *Sa-Grama* gave rise to seven *murchanas* and the *Ma-Grama* to another set of 7 *murchanas*. It must be remembered that the *murchanas* are so given that the initial svaras form a descending series. Thus the first *murchana* of the *Shadja Grama* starts from *sa* of the *Madhya Sthayi*, and the others start from *ni*, *dha*, *pa*, *ma*, *ga* and *ri* of the *Mandra Sthayi*. The first *murchana* of the *Madhyama Grama* starts from *ma* of the *Madhya Sthayi* and the remaining six from *ga*, *ri*, *sa* of the *Madhya Sthayi*, *ni*, *dha*, *pa* of the *Mandra Sthayi*. The names of the 14 *murchanas* are as follow :—

Murchanas of the Shadja Grama.

1. Uttaramandra	starts	from	*sa*
2. Rajani	,,	,,	*ni*
3. Uttarayata	,,	,,	*dha*
4. Suddha Shadja	,,	,,	*pa*
5. Matsarikrita	,,	,,	*ma*
6. Asvakranta	,,	,,	*ga*
7. Abhirudgata	,,	,,	*ri*

Murchanas of the Madhyama Grama.

1. Sauviri	starts	from	*ma*
2. Harinasva	,,	,,	*ga*
3. Kalopanata	,,	,,	*ri*
4. Suddha madhyama	,,	,,	*sa*
5. Margi	,,	,,	*ni*
6. Pauravi	,,	,,	*dha*
7. Hrishyaka	,,	,,	*pa*

Of these 14 *murchanas*, only 7 were in practical use under the name of *Jatis*, species. Of the 7 *jatis*, 4 belonged to the *Shadja Grama* and 3 to the *Madhyama Grama*. The four *jatis* of the *Shadja Grama* were, *Shadji*, *Rishabi*, *Dhaivati* and *Arshabhi*. The three *jatis* of the *Madhyama Grama* were *Gandhari*, *Madhyama*, *Panchama*.

After these *Jatis* come the 1*Grama ragas*, the *generic* melody-types and their descendants, the *ragas* of modern Indian music.

The *Sangita Makaranda* of Narada (written sometime between 550 A. D. to 1210 A. D.) classifies *ragas* (according to the time of singing) into *Morning*, *Noon* and *Evening Ragas*. He also classifies them into *Suryamsam* and *Chandramsam*. *Sandhiprakasa ragas*, another classification found in his work, are those *ragas* which are to be sung during sunrise and sunset.

The *Makaranda* is the earliest work, where the classification into *Purusha (male) ragas*, *Stri (female) ragas* and *Napumsaka (neuter) ragas* is mentioned. For, Bharata's *Natya Sastra* does not make any mention of the *Raga Ragini* system of classification.

Narada in his work divides the *ragas* from another point of view :—

1. *Muktanga Kampita ragas i. e.*, *ragas* which have quivering (shakes) throughout.
2. *Ardha Kampita ragas i.e.*, *ragas* which have partial quivering (shakes).
3. *Kampa Viheena ragas i e.*, *ragas* which are absolutely free from quivering (shakes).

The *Sangita Ratnakara* and other later works do not mention this system of classification.

The author of *Sangita Makaranda* is not the same as the Sage Narada, for the author refers to the sage in the book.

In the *Sangita Ratnakara* Sarangadeva classifies the *ragas* under two main heads :—

1. *Margi Ragas* current before his time and which have since gone to *Svargaloka*.

1 *Grama-raga* is an early name for *melakarta*.

and

2. *Desi Ragas* current in his time.

The *Margi ragas* are classified into:—

1. Grama raga	4. Bhasha
2. Upa raga	5. Vibhasha
3. Raga	6. Antarabhasha

The *Desi ragas* are classified into:—

1. Raganga	3. Bhashanga
2. Upanga	4. Kriyanga

In religious music, scales of one note were called *Archika*; scales of two notes *Gathika*; scales of three notes *Samika*; and scales of four notes *Svarantara*.

Hindustani Music.

The *Raga-Ragini Putra system* of classification is the one in vogue. This system will continue to survive till the genuine attempts of some of the recent distinguished music scholars of Northern India to substitute in its place, a scientific classification of *ragas* grouped under important *Thats*, succeeds. As has already been mentioned, the *Sangita Makaranda* is the earliest work, to make mention of the classification of *ragas* into male *ragas* and female *ragas*. Subsequently four schools arose called after Bharata, Hanuman, Kallinatha and Somesvar. Each school had its own 6 principal *ragas* (Male); each *raga* had 5 *raginis* or wives, and 8 *putras* and 8 *bharyas*, to these 8 *putras*. Thus the number of *ragas* came to 6+30+48+48=132 in all.

The *raginis* were perhaps of a comparatively softer nature.

In addition to these there was also a class of *ragas* known as *Dhuti ragas*.

Karnatic Music.

The *Janaka-Janya system* of classification is the one in vogue here. Lochanakavi's *Raga Tarangini* is the first work to enunciate a systematic classification of *ragas* on the genus—specio basis. He lays down *Janaka melas* or parent *thats*, and groups *janya-ragas* under them. The method of taining *ragas* from the *murchanas* and had become obsolete by his time. Se writers followed Lochanakavi in classi the *ragas* under various *melas*. Bhavab for example in his *Anupasangita Ratn* classified the *ragas* under 20 *melas*.

The classification of *ragas* into *Mela ragas* and *Janya-ragas* is highly scie and is the best system of classificatio human genius can conceive of. Ven makhi formulated the scheme of th *melakartâs* in his epoch-making *Chaturdandi Prakasika* (1660 A. D.). scheme however had already been w out by his father Govinda Dikshitar, in junction with Raghunatha Naik, the ruler of Tanjore.

From the point of view of the numb *svaras* present in the *arohana* and *avar Janya ragas* have been classified into:

1. Shadava-Sampoorna	*e.g.*,	*Kambhoji*
2. Audava-Sampoorna	„	*Bilahari*
3. Sampoorna-Shadava	„	*Bhairavam*
4. Sampoorna-Audava	„	*Garudadhv*
5. Shadava-Shadava	„	*Malayama*
6. Shadava-Audava	„	*Natakura*
7. Audava-Shadava	„	*Malahari*
8. Audava-Audava	„	*Mohana*

There are also *Non-Varja Janya rag Sampoorna Janya ragas e.g., Bhairavi* (a ample for *Non vakra* type) and *Sahan* example for *vakra* type).

The next classification is into *Vakra* where, the *arohana* or the *avarohana* or might be *vakra*. These again admi *Audava Shadava* and *Sampoorna* varieties their combinations.

A very useful system of classificati *Janya ragas* is into *Upanga* and *Bhash*

ragas. While the *Upanga ragas* are strictly pure *ragas* in the sense that they take only the *svaras* taken by their *Janaka raga*, the *Bhashanga ragas*, in addition, take one or more *svaras* foreign to their *Janaka raga*. Some *ragas* like *Bhairavi*, *Kambhoji*, *Bilahari* and *Saranga* are well recognised *Bhashanga ragas*. I would prefer to style these *ragas* as *Poorna Bhashanga ragas* or *Perfect Bhashanga ragas*. In the case of some other *ragas*, one or two of their *svaras* might be sung in a slightly flattened manner, when compared with the frequencies of these *svaras* obtaining in their *Janaka ragas*. For example, the *Gandhara* and the *Nishada* of the *Saveri raga* are very slightly less in frequency compared with the *Antara Gandhara* and the *Kakali Nishada* of the *Mayamalavagowla* scale; but the *svaras* never go so low down by the *Sadharana Gandhara* and *Kaisiki Nishada* as maintained by some. Such *ragas* I would style as *Imperfect Bhashanga ragas*, as a compromise between the Dikshitar-school and the modern school of thought.

Nishadantya (*Nadanamakriya*), *Dhaivatantya* (*Kuranji*), and *Panchamantya* (*Navaroj*), and *Ghana* (*Nata*, *Gaula* etc,), *Naya* or *Rakti* (*Bhairavi*, *Kamboji* etc.), *Desya* (*Khamas*) *Suddha* (*Mayamlavagowla*), *Chayalaga* (*Saranga*), and *Sankeerna* (*Ahiri*), are other systems of *raga*—classification prevalent in *Karnatic* Music.

THE EARLY WRITERS ON MUSIC.

BY

MR. VINJAMURI VARAHA NARASIMHACHARY.

To gain a perfect insight into the subject of Music, and be able to detect the numerous fallacies that have crept into the present day theory thereof, it is highly essential, in a study of its ancient works, that a thorough survey should be made and its history regularly traced. Many attempts had been made to trace the date and indentify the works of the ancient authors. Even with the meagre information gathered here and there in the later-works, some have connected everything concerned with music to the hoary past, while some traced its origin to the *Vedas*. But the views of the Oriental scholars in the West that Indian music must have had its origin in Greece, have been contradicted by many. A careful examination of the *Vedas*, the rites and *Sikshas* thereupon, drives one to the irresistible conclusion that the origin of music lay in certain rites, where the priest and the performer chant, while the wife plays on the *Vina*, and the closing of the sacrifice was enjoyed in the conduct of a peculiar dance. Many instruments of the type of *Pitchola*, *Oudambari*, *Aanaka*, and *Gomukha*, have been mentioned in some places.

The development of music, as a principal science, can be traced to the *Stobhas* in *Sama* chants and later on to the *Pancha-tantra* and *Saivagama* rites, till the royal courts gave a new turn entirely. Though the *Rigveda* admitted of three notes, *Samaveda* had seven *viz. Krishta*, *Prathama*, *Dvitiya* *Tritiya*, *Chaturtha*, *Mandara* and *Atisvara*. All songs (*Gitas*) are divided into five parts as *Prasvara*, *Udgita*, *Pratihara*, *Upadrava* and *Nidhana*. These correspond to the five kinds of *Gitas viz.*, *Suddha*, *Bhinna*, *Gowda*, *Visara* and *Sadharana* mentioned by the later authors. So these are based on *Rhythm* and *Stobhas* and Bharata says accordingly,

"गीतिः सामाख्या ।"—The great Nânyadeva comments on it thus :—

गीतिशब्देन पञ्चांगं मुनिना कथितम् । पञ्चविधा सामरूपा लोके शुद्ध भिन्ना च । गौडी च वेसरा साधारणा चेति नामभिः । प्रस्तारोद्गीथप्रतीहारोपद्रवनिधानरूपाणां साम्नां न भिद्यन्ते ।

Although many have attempted to collect and collate all the works on music available in India, (in all the libraries), both printed books and manuscripts, yet the list given by them is not complete, as it excludes the works of Kohala, Tumburu, Dattila, Yashtilla, Nanyadeva, Matrigupta and a host of others. These and various other early authors have been mentioned by many later writers—from Sarangadeva of the 13th century, up to King Raghunatha the famous author of *Sangeeta Sudha* of the 17th century. Narada in his work *Sangeeta Makaranda*, which was written prior to *Sangeeta Ratnakara*, mentioned the names of writers on music, Hari, Brahma, Matanga, Kasypa, Kamalasya, Chandi, Vyala, Sardula, Nandi, Tumburu, Sankuka, Bhringi, Devendra, Kubera, Kusika, Matrigupta, Ravana, Samudra, Sarasvati, Bali, Yaksha and Vikrama (*Vide.* p. 13 verses 18-21). Sarngadeva had mentioned almost all the above writers in addition to the later writers up to his time, such as Rudra, Nanya Bhupala, Paramardi, Somesa, Tollata Vibhata, Sankuka, Abhinavagupta, Kirtidhara (*vide* p. 6 verses 16-19). In fact Sarangadeva is indebted to Nanyadeva and Abhinavagupta for all the details in his work. The great commentator Kallinatha of the 16th century, quotes many instances from Matanga, Dattila, Kasyapa, Nandikesvara. There are also instances from Kohala, Dattila, Yashtikata, Visvasu, Anjaneya, Tumburu, Kashyapa, Kambala, Asvatara, Umapati, and Gopalanayaka in *Ratnakara*. But works of these authors are not known. Kallinatha did not mention them. He mentions one work *Sangeeta Mer*... Kohala (*vide.* Vol II P. 679). Sarangadeva mentions *Brihaddesi* by Yakshatika (Vol. I. p. 154). Bharata in his *Natya Sastra* mentions Narada (chapter 34th). It is not known who this Narada was. There are three works on music ascribed to Narada *viz.*, (1) *Narada Siksha* (2) *Raga-Nirupana* (3) *Panchanna SaraSamhita*, excluding the above mentioned *Makaranda*. The *Narada Siksha* appears to be an older work. The language is archaic and it treats of *Sadjagana*. It is said that there are many commentators on *Siksha* and the last of them is *Subhankara*. But it is still taxing the brains of the music student to identify the real works of the above authors among the forest of works of unknown authors. Even the recent author of *Sangeeta Sudha*, Raghunatha, has not cleared the road. Like the former writers, he too only quotes Yakshatika, Kasyapa, Dattila, Durga, Bharata, Sardula, Kohala, Nandi, Hanuman and others. He, like his predecessors, also mentions all the early writers including Yashtika and Devaraya who were, perhaps, later writers. From this it is clear that the works of Nandi and others were available till 1620 A. D. when Raghunatha of Tanjore, borrowed many theories from them. But it is painful to note, that many of the works are now either in oblivion or uncertain as to their authors.

Taking the accounts available at present as given in the various works of later authors it is for us to bridge over the gulf of misunder-standing and controversy in regard to the theories of *Srutis*, notes or *Svaras*, *Murchanas*, *Gramas*, *Gamakas*, *Ragas* and the like, and to pave a clear path in our history of music for a perfect insight into the subject. For this purpose it is meet to divide the period into three parts *viz.*, (1). the early period up to the 16th. century, (2) the middle period up to the 19th. century, and (3) the modern period. I now propose to trace the early authors and their works under the 1st heading.

Bharata.

Among the early writers on music, Bharata has been held as the oldest both by the classic and modern exponents of the art. The work of this illustrious author is *Natya Sastra*. Some have termed him Bharata Muni and placed him in the mythic age. He has also been variously assigned to periods ranging from 2nd century B.C. to 2nd century A.D. (Rapson in Art on Indian Drama, in Encyclopedia of Religion and Ethics Vol. V P. 883). The work of Bharata is also known as either '*Sutra*' "षट्त्रिंशकं भरतसूत्रमिदं or षट्सहस्री" meaning 600 (*Granthas*), which was also called Adi Bharatam. "नाट्यवेदाच्च भरताः सारम् ।" But both these seem to have been based upon *Natya Veda*, one of the *Upavedas* extending over 36000 *slokas* by Brahma himself.

"गान्धर्ववेदः षट्त्रिंशत्सहस्र ग्रन्थ सम्मितः ।
यत्र सप्तस्वरोत्पत्तिकथनं परिकीर्त्यते ॥
वीणातन्त्रं कलातन्त्रं रागतन्त्रमनुत्तमम् ।
मिश्रतन्त्रं तालतन्त्रं गीतिका तन्त्रमेवच ॥
लासिकोल्लासिकातन्त्रं मेलतन्त्रं महत्तरम् ।
जातिग्रहलयस्थानं मार्गाङ्गप्रक्रियाक्रिया ॥
कालज्ञानं वाद्यवल्ली विभिन्नाध्याय एव च ।
तुरंग रतिसारङ्ग सिंहलीला विजृम्भणम् ॥
अङ्गहारप्रविक्षेपाध्यायः संक्षोभणक्रिया ।
एवमादीनि गान्धर्ववेदे सन्ति सहस्रशः ॥"

(*Yamalgshtakatantra*).

Abhinava in his commentary on *Natya Sastra* mentions three schools, (1) Brahma (2) Sadasiva and (3) Bharata. The above mentioned *Adi Bharata* might have been the work of Sadasiva, as it is a dialague between Parvati and Siva. There are fragments of *Brahma Bharata* available, (says Pro. Ramakrishnakavi), and it is to be ascertained and studied.

Though there are forty copies of complete *Natya Sastra*, with its commentary by Abhinavagupta available now, yet some of them are incomplete in some passages, while some are of different readings, due to, perhaps, many interpolations and recastings by the later commentators and others. The curious colophon at the end of the *Kayamala* edition designates the latter position of the work as *Nandi Bharatam*. Prof. Price mentions one *Nandi Bharatam* (Mysore and Coorg Catalogue) which, I think, is a later work. But it is not known when Nandi lived. Curiously, we are made to believe in the existence of five Bharatas. In Tamil Udayarka-Nallar, the commentator on *Silappadhikaram*, alludes to *Pancha-Bharatam*, which might have been an epitome of the works of the five Bharatas. Sarangadeva in his *Bhavaprakasika* testified to the existence of the five Bharatas.

नाट्यवेदप्रयोक्तारं भारती सहितोऽस्मरत् ।
स्मृतिमात्रे मुनिः कश्चित् शिष्यैः पञ्चभिरन्वितः ॥

These, perhaps, were Kohala, Bharata, Nandi, Dattila and Matanga. Of these *Dattila* was the earlier, and the last of the five *Bharatas* Matanga, wrote his momentous work known as *Brihaddesi* now available. He was mentioned in *Silappadhikaram* in Tamil, which the Tamil critics assigned to 200 B.C. The works of Kohala and Dattila are not forthcoming. But some hold that *Gandharva Vedasaram* is the work of Dattila and that it existed in 1500 A.D.

Another *Nandisvara Samhita* is known as the largest work written by Nandi and it existed in 1620 A.D., when king Raghunatha borrowed many passages from it. It is held by some that Bharata and Kohala lived in the same century and according to Abhinavagupta, Bharata followed to some extent Kohala.

The text of *Bharata Natyasastra* as it is available, consists of 37 chapters. But some copies of it, mostly those of the south, have only 36 chapters and not 37. Though according to Abhinava it consists of 36 chapters yet he comments on all the 37 chapters. "षट्त्रिंशकं भरतसूत्रमिदम्।" Hence it is to be believed that the 37th chapter might have been an interpolation by one of the *Vartikaras*. It is held by some, such as Mr. S.K. Dey and others, that the text has had gradual interpolations and recastings owing to some reasons. There are (1) independent prose fragments (2) *Anuvamsa slokas* in *Arya* and *Anushtub metres* (3) some portions that are in *Sutra* style (4) passages of the present systematic *Karika* style. Mr. Rey also distinguishes them in their order of development as (1) a stage of prose-treatises (2) a tentative period of *Karika* writing (3) *Sutra Bhasya* stage and (4) the final period of compilation of compendiums which reverts again to *Karika* form."

Bharata again divides the work into 4 sections *Abhinayas viz.*, (1) *Satvika* (2) *Angika* (3) *Vachika* (4) *Aaharya*. The first relates to the rules of delivery and musical accompaniments, the second to gestures including the poses, the third to production of *Bhavam* and *Rasam* in minds of the audience by aproper display feeling, and the last, to the stage-toilet development. The sage deals with *Sa* in the 6th and the 7th chapters, *Angika* 8th to the 13th chapters, *Vachika* in the to 20th. To this fourfold division are ad the chapters on the origin and greatne the theatrics, the forms of the stage and of contraction etc. The 4th and 5th cha treat of *Purvanga*. The postures recomm ed in dancing to please the deities are berless and a selection list of 108 of called *Karanas* and 32 *Angaharams* are cribed in the IVth chapter. Chapters 35 36 are supplementary and deal with qualification and behaviour of the actor actress on the stage.

Bharata's great work was commented as many as nine *viz.*, *Udbhata* (2) *Lol* (3) *Sankuka* (4) *Bhatta Nayaka* (5) *Rah* (6) *Bhattayantra* (7) *Abhinava Gupta* *Keertidhara* (9) *Matriguptacharya*. Abh nava Gupta of the 10th century (1030. A. D. mentioned Lollata, Sankuka and oth who were perhaps of the 8th and centuries. The other great works Nanyadeva, Bhojadeva, Somesvara others are based on *Natyasastra* as cr cisms or otherwise and these will be ta up later on.

(*To be Continued*).

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SANGITA SUDHA.

(*Translation*).

(Continued from P. 148, of the last issue).

227. There are 14 *Jatis*—7 in the *Shadja Grama* and 7 in the *Madhyama*. From them are got 56 *Murchanas* by combining two *Vikriti Ga's* and two *Vikriti Ni's* with the six-note combinations separately.

(228-237). [Then follows a mathematical explanation in detail of the permutations and combinations of the 7 notes for deriving the *Tanas*—both *Suddha* (regular) and *Kuta* (irregular).]

(237½-238). The third *Murchana* of the *Shadja Grama* named *Uttarayata* is the same as the fith in the *Madhyama Grama* known as *Pauravi*. Similarly, there are found other *Tanas* of 6, 5, 4, 3, 2 notes in one note, as being the same in both the *Gramas*.

239. Sometimes, there are three *Murchanas* of the same type. Hence it may be seen that there are really 4031 complete *Tanas* of 7 notes in all (omitting the repeated *Tanas*).

(240-4). If you eliminate the twice repeated *Tanas*, the rest are either *Tanas* with notes in regular succession or irregular (from the point of view of pitch). These number in all 3,71,139. I shall now describe the method of arriving at the same.

(242-56). [There follows a detailed description of the method of permutation and combination of 7 notes taken either 1, 2, 3, 4, 5, 6, or 7 at a time. (This is of course a question of mathematics). Factorial 2, 3, 4, 5, 6 and 7 are 2, 6, 24, 120, 720 and 5040 respectively as may be clearly seen.]

257. I have indicated these *Tanas* as a model in order to explain the nature of permutation and combination of notes. I shall now proceed to describe the *Khanda Meru*.

(258-268). The following figure is what is known as *Khandameru* representing the combinations of 1 to 7 notes taken 1 to 7 at a time in a series.

1	2	3	4	5	6	7
1	2	6	24	120	720	5040
	4	12	48	340	1440	
		18	72	360	2160	
			96	480	2880	
				600	3600	
					4320	

(*The Khanda-Meru*).

In the figure the heading shows the number of notes taken. The second line shows the number of combinations we could have. (This is a figure familiar to the Indian Mathematicians).

(*To be continued*).

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॥ रघुनाथभूपविरचिता ॥

॥ संगीतसुधा ॥

(*Continued from page 141*).

ततश्चतुर्थ्यर्थगताङ्क संख्यां हत्वा चतुष्कं गतिरत्रलब्धा ।
द्वितीयपंक्तेस्तु चतुर्थकोष्टे लब्धाङ्क संख्यां विनिवेशयेच्च ॥ २७२ ॥

तामेव संख्यां द्विगुणं विधाय तृतीयपंक्तौ विलिखेत्तृतीये ।
तस्यां चतुर्विंशतिमेलनेन द्वासप्ततिस्तुर्य गतद्वितीये ॥ २७३ ॥

पुनश्चतुर्विंशतिमेलनेन षड्डुत्तरं स्यान्नवतिस्ततोऽथ ।
सा पञ्चमस्यादिमकोष्टसंख्या द्वितीयपंक्तेरथ पञ्चमे स्यात् ॥ २७४ ॥

शतं तु विंशत्यधिकं निविष्टं द्वैगुण्ययुक्तं विलिखेदधस्तात् ।
अत्रापि विंशत्यधिकं शतं च संयोज्य तस्मिन्विलिखेत्ततोऽधः ॥२७५ ॥

शतत्रयीं षष्टियुताञ्च लब्धां शतेन विंशत्यधिकेन युक्ताम् ।
द्वितीयके पञ्चमपंक्तिकायामशीतियुक्तञ्च चतुरशतञ्च ॥ २७६ ॥

ताञ्चापि संख्यां विलिखेदधस्ताच्छतेन विंशत्यधिकेनयुक्ताम् ।
तां षट्छतिप्राप्य पुनश्चसम्यक् षट्पंक्तिनिष्ठादिमकोष्टसंख्या ॥२७७ ॥

संयोज्य सर्वा विलिखेत्समग्रं द्वितीय पंक्त्यन्तिमकोष्टदेशे ।
सविंशतिं सप्तशतीं च लब्धां संख्यामिमांञ्च द्विगुणां विधाय ॥ २७८ ॥

तृतीयपंक्त्यन्तिमकोष्टदेशे सहस्रमेकं च चतुरशतीञ्च ।
द्वे विंशती चापि विलिख्य सम्यक्सविंशतिं सप्तशतीं प्रयोज्य॥ २७९ ॥

लब्ध्वा सहस्रद्वितयं शतञ्च षष्टिं च संख्या तदधोविलिख्य ।
सविंशतिं सप्तशतीं च तस्यां संयोज्य पश्चात्तदधो विलेख्यः ॥ २८० ॥

लिखेत्सहस्रद्वितयं तथाष्टशतीमशीत्या मिलितां क्रमेण ।
सविंशतिं सप्तशतीं पुनश्च संयोज्य तस्यां विलिखेत्ततोऽधः ॥ २८१ ॥

लब्धं सहस्रत्रितयं तथा षट्छतीयुतं संविलिखेदधस्तात् ।
सविंशतिं सप्तशतीं पुनश्च संयोज्य तस्यां विलिखेदधस्तात् ॥ २८२ ॥

चतुस्सहस्राणि शतत्रयञ्च तस्यां लिखेद्विंशतिसंयुतञ्च ।
ताः सप्तपंक्त्यादिमकोष्टसंख्या द्वेविंशती पञ्चसहस्रिकाच ॥ २८३ ॥

गान्धर्वशास्त्रे निपुणः कदाचिदुक्तेषु तानेषु विलिख्य कञ्चित् ।
एतस्य संख्या कतमेति पृच्छेत्तस्योत्तरं तावदुदीरयामः ॥ २८४ ॥

उद्दिष्टशब्देन तदेवचोक्तं तस्याप्युपायः कथितो मुनीन्द्रैः ।
सगौ रिमौ चापि विलिख्य पृष्टः सरी गमौ चापि विलिख्यचोर्ध्वम् ॥

अथाद्यपंक्त्याः सकलेऽपि कोष्टे निधाय लोष्टानि यथाक्रमेण ।
मूलक्रमात्तस्य पुनःस्वरस्य पृष्टोऽन्तिमस्यापि तथैकभावात् ॥ २८६ ॥

नचालयेदन्तिमकोष्टलोष्टं तल्लोपनञ्चापि तथैवकार्यम् ।
कृते तु लोपे सरिगेर्तिं मूलक्रमेस्थितस्त्रिस्वरमात्रशिष्टः ॥ २८७ ॥

निर्दिष्टतानः सगरीति सिद्धस्तस्मिन्पुनर्लोष्टविचालनंस्यात् ।
मूलस्थगान्धारकतो द्वितीय उद्दिष्टतानान्त्यगतो यतो रिः ।
द्वितीयकोष्टे चलिते ह लोष्टे स्याद्द्वित्वसंख्या खलु तेन लब्धा॥ २८८॥

उद्दिष्टमूलक्रमयोः स गत्वा तत्रापि लोष्टं न विचालनीयम् ।
अद्याद्यकोष्टस्थितमेकमंकं द्वित्वेन संयोज्य पुनस्त्रिसंख्या ॥ २८९ ॥

सगौरिमौ चेति तृतीयभेदं गृहाणचेत्युत्तरमत्रवाच्यम् ।
मगौ सरी चापि विलिख्य तानं मूलक्रमात्तत्र विलिख्यचोर्ध्वम् ॥२९०॥

उद्दिष्टतानान्तगतर्षभस्य मूलक्रमान्त्यस्य च मध्यमस्य ।
तृतीयभावेन तृतीयकोष्टे लोप्टागते द्वादशकाङ्कलाभः ॥ २९१ ॥

त्यक्तर्षभं चाप्युभयत्र शिष्टान्स्वरांल्लिखेत्त्रीनुभयत्र साधु।
उद्दिष्टतानान्तिमषड्जको हि मूलक्रमान्त्यस्वरतस्तृतीयः ॥ २९२ ॥

तस्मात्पुनर्लोष्टविचालनं स्यात्तृतीयकोष्टे चतुरङ्कयुक्ते ।
षड्जस्य लोपेऽप्युभयत्रजाते शिष्टावुभौ तत्र गमौ गमौच ।
उद्दिष्टतानान्तिमगः च मूलक्रमान्तिमान्मध्यमगाद्वितीया ॥ २९३ ॥

द्वितीयकोष्टे खलुतेन कार्यं त्वेके पुनर्लोष्टविचालनं च ।
आद्याद्यकोष्टे खलु लोष्टयुक्ते चैकाङ्कमादाय च योजयेत्तम् ॥ २९४ ॥

तल्लोष्टयुक्तोऽष्टगताङ्कयोगादष्टादशोऽयं काश्येतस्तुतानः ।
उक्तेषु तानेषु चतुः स्वरेषु त्वष्टादशं तानमधो विलिख्य ॥ २९५ ॥

प्रदर्शय त्वं यदि शास्त्रवक्तेत्युक्ते विलिख्याऽत्रनिरूपयामः ।
तदेव 'मष्टादश' मामनन्ति वक्ष्येऽधुनाष्टादशतानरूपम् ॥ २९६ ॥
तत्राद्यपंक्तेरपि कोष्टकेषु चतुर्षु लोष्टानि निधायपूर्वम् ।
अत्राद्यपंक्तेस्तु चतुर्थकोष्टे विन्द्वङ्किते स्थापितमत्र लोष्टम् ॥ २९७ ॥
तस्याप्यधस्तात्तु षडङ्कयुक्तं विहायकोष्टं तदधो नयेत्तत् ।
द्वितीयकोष्टे तु तृतीयपंक्तेरादित्यसंख्याकसमन्विते च ॥ २९८ ॥
तत्रैव लोष्टं च निधाय पश्चाल्लोष्टान्तरस्याप्यथ चालनं स्यात् ।
तृतीयकोष्टे विनिविष्टलोष्टं द्वितीयपंक्ते द्वितयाङ्कयुक्तम् ॥ २९९ ॥
द्वितीयकोष्टं प्रविहाय तस्मात्तृतीयपंक्तेः प्रथमेतु कोष्टे ।
लोष्टं निदध्याच्चतुरङ्कयुक्ते त्वाद्यद्वितीयस्थितलोष्टकं तु ॥ ३०० ॥
द्वितीयपंक्तेः प्रथमेतुकोष्टे नीत्वाङ्कयुक्तेऽपि ततोनिदध्यात् ।
विचाल्यकोष्टे (*) लोष्टकानि मौलिस्थलोष्टं न विचालनीयम् ॥ ३०१ ॥
सलोष्टकोऽष्टाङ्कसमन्वयेन भवेदिहाष्टादशतैव संख्या ।
एवं च संख्यावगमे च सिद्धे तानस्वरूपं प्रतिपादयामः ॥ ३०२ ॥
सरी गमौ चापि विलिख्य मूलक्रमं त्वधस्तस्य विलेखनीयः ।
यतस्तृतीये निहनंस्तु लोष्टं ततस्तदन्ते त्वृषभो विलेख्यः ॥ ३०३ ॥
ततो रिलोपे सगमेति मूलं त्रिभिः स्वरैः शिष्यत एव सद्यः ।
तृतीयकोष्टे यतएव लोष्टं भवेत्तृतीयो हि समध्यमात्सः ॥ ३०४ ॥
लब्धर्षभोपान्त्यतमो विलेख्यः षड्जस्य लोपः खलु मूलतः स्यात् ।
ततो द्वितीयाङ्कित कोष्टलोष्ट द्वितीयकोष्टे विनिवेशनेन ॥ ३०५ ॥
गान्धार एवात्र भवेद्द्वितीयः षड्जानुपूर्वं विनिवेशयेत्तम् ।
शिष्टं तु तं मध्यममादिभूतं विधायताने विनिवेशयेत्तु ॥ ३०६ ॥
ततस्तु तानो समगर्यभिख्यो विलिख्य सम्यक् परिदर्शनीयः ।
कृत्स्नस्यतानस्य निरूपणेतु ग्रन्थस्य भूयानिह विस्तरः स्यात् ॥ ३०७ ॥
कुशाग्रबुद्धेः कुशलस्य चैतत्सन्दर्शनेनाखिलतानबोधः ।

— कूटतानाः —

मौलिस्थितैकाङ्कपरिग्रहेण त्वेकस्वरः स्यादयमेक एव ॥ ३०८ ॥

पंक्तिद्वयं चैकविमिश्रणेन द्वौ सम्मतौ द्विस्वरकूटतानौ ।
तृतीयपंक्त्यादिचतुष्टयेन प्राक् पंक्तिकैकैकविमिश्रितस्य ॥ ३०९ ॥
षडेव ते त्रिस्वरकूटतानाः क्रमेण चैवं प्रतिबोधनीयम् ।
चतुर्थपंक्त्यादिमकोष्टदिव्यदष्टादशत्वाङ्कविमिश्रणेन ॥ ३१० ॥
उक्ताङ्कजालस्य चतुःस्वराणां तानाश्चतुर्विंशतिरत्रवेद्याः ।
तथैव तत्पञ्चमपंक्तिकादौ षडुत्तराया नवतेस्तु योगात् ॥ ३११ ॥
प्राक्पंक्तिजाद्यङ्क दण्डितस्य पञ्चस्वरा विंशतियुक्छतं स्युः ।
षष्ठाद्यकोष्टे स्थितषट्छतेन प्राक्पंक्तिकाद्याङ्कविमिश्रणेन ॥ ३१२ ॥
सविंशतिः सप्तशतीति वेद्या भवन्त्यमी षट्स्वरकूटतानाः ।
तथाऽन्त्य पंक्त्यादिमकोष्टदेशे चतुः सहस्रीच शतत्रयी च ॥ ३१३ ॥
ततः च विंशत्यधिकं मिलित्वा षट्पंक्तिकाद्यांककदंबकेन ।
भवन्ति सप्तस्वरकूटताना द्वे विंशती पञ्च सहस्रिका च ॥ ३१४ ॥
एवंच सर्वास्वपि मूर्छनासु प्रत्येकमेवं किल कूटतानाः ।
यदृच्छयाऽप्युत्क्रमतोऽभिगीताः स्वरा मतास्ते खलु कूटतानाः ॥

— षाडवशुद्धतानाः —

पञ्चाशतः षट्सहितस्य तासामनन्ततानप्रकृतित्वमुक्तम् ।
आरोहणेचाप्यवरोहणेच स्वरक्रमेणैव हि शुद्धतानाः ॥ ३१६ ॥
चतुर्युताशीतिक शुद्धतान नामानि वक्ष्ये श्रुतिसम्मतानि ।
संस्थासु सप्तस्वपि चादिमोऽग्निष्टोमस्तथैव प्रथमस्तुतानः ॥ ३१७ ॥
द्वितीयतानस्त्वतिपूर्वकोऽग्निष्टोमस्तृतीयः खलु वाजपेयः ।
स्यात्षोडशी तत्र मतश्चतुर्थः स्यात्पञ्चमस्तत्र हि पौण्डरीकः ॥ ३१८ ॥
षष्ठोऽश्वमेधः कथितस्तु तेषु स्यात्सप्तमस्तत्र च राजसूयः ।
षड्जेन हीना इति तेषु षड्जग्रामोद्भवाः षाडवशुद्धतानाः ॥ ३१९ ॥

आद्यो भवेत्स्विष्टकृदाह्वयोऽसौ सुवर्णकः स्याद्वहुपूर्वकोऽन्यः ।
स्याद्गोसवस्तत्र मखस्तृतीयो महाव्रताख्यस्तु भवेच्चतुर्थः ॥ ३२० ॥

स्यात्पञ्चमोविश्वजिदाह्वयोऽसौ स्याद्ब्रह्मयज्ञः कथितोऽत्र षष्ठः ।
ततः प्रजापत्यधिदेवताकयागाभिधः सप्तमएषतानः ॥ ३२१ ॥
एते क्रमेणर्षभहीनषड्जग्रामोद्भवाः षाडवशुद्धतानाः ।

आद्योमुनीन्द्रैः परिकीर्तितोऽश्वक्रान्तो रथक्रान्त इति द्वितीयः ॥ ३२२ ॥
तृतीयतुर्याविपि विष्णुसूर्यक्रान्ताभिधानौ कथितौ मुनीन्द्रैः ।
ततो गजक्रान्त इति स्मृतोऽन्यः षष्ठस्ततः स्याद्बलभित्समाख्यः ॥
स्यात्सप्तमस्तत्र च नागयज्ञः षाड्जे मताः पञ्चमहीनतानाः ।

आद्योमुनीन्द्रैः कथितोऽत्र चातुर्मास्याऽथ संस्थाख्य इति द्वितीयः ॥
शस्त्रोक्थसंज्ञौ तु तृतीयतुर्यौ सौत्रामणिः पञ्चमशुद्धतानः ।
चित्राह्वयस्तत्र च षष्ठतानश्चोद्भित्समाख्यस्तु च सप्तमः स्यात् ॥ ३२५ ॥
निषादहीनाः खलु तत्र षड्जग्रामोद्भवास्तत्र हि कूटतानाः ।

सावित्र्यभिख्यः प्रथमोऽर्धसावित्राख्यो द्वितीयस्तु ततस्तृतीयः ॥३२६॥
स्यात्सर्वतोभद्र इति प्रसिद्धस्त्वादित्यकानामयनश्चतुर्थः ।
अन्यो गवामप्ययनो मतः स्यात्स्यात्सर्पकाणामयनस्तु षष्ठः ॥ ३२७ ॥
स्यात्सप्तमस्तत्रच कौण्डपायनाख्यो मुनीन्द्रैः परिकीर्तितोऽयम् ।
ते मध्यमग्रामिकषड्जहीनाः प्रवर्तिताः षाडवशुद्धतानाः ॥ ३२८ ॥

आद्योऽग्निचित्तत्र मतो द्वितीयः स्याद्द्वादशाहोऽथतृतीयतुर्यौ ।
उपांशुसोमौ कथितौ परोऽश्वप्रतिग्रहो बर्हिरितीह षष्ठः ॥ ३२९ ॥
स्यात्सप्तमः चाभ्युदयाख्य एते हीनर्षभा मध्यमशुद्धतानाः ।

आद्यस्तु सर्वस्वकदक्षिणा स्याद्दीक्षा द्वितीयस्त्वपरोऽपि सोमः ॥ ३३० ॥
समिच्चतुर्थस्त्वथ पञ्चमोऽपि स्वाहाकृतिर्नाम भजेत सोऽयम् ।
तनूनपात्षष्ठ इति प्रसिद्धो गोदोहनाह्वोऽपि च सप्तमः स्यात् ॥ ३३१ ॥
गान्धारहीना इति मध्यमाख्यग्रामोद्भवाः षाडवशुद्धतानाः ।

— औडवशुद्धतानाः —

वक्ष्यामहेऽथौडवशुद्धताननामानि (षाड्जानि) निरूपितानि ॥ ३३२ ॥
आद्यस्त्विडाख्यः पुरुषादिमस्तु मेधो द्वितीयोऽथ मतस्तृतीयः ।
श्येनः चतुर्थोऽपि च वज्रनामा भवेदिषुः पञ्चमतान एषः ॥ ३३३ ॥
षष्ठोऽङ्गिरास्सप्तम एष कङ्क एते हि षड्जेन च पञ्चमेन ।
रिक्ता मुनीन्द्रै रुदितास्तु षड्जग्रामोद्भवा स्त्वौडव शुद्धतानाः ॥३३४॥
ज्योतिर्युतस्तोम इहादिमः स्याद्दर्शो द्वितीयस्त्वपरस्तुतानः ।
स्यात्पौर्णमासस्त्वपरो मतोऽश्वप्रतिग्रहः पञ्चम ऐषतानः ॥ ३३५ ॥
रात्रिस्तु षष्ठोऽपि च सौमरस्तु स्यात्सप्तमश्चेति मताः क्रमेण ।
निषादगान्धारवियुक्तषड्जग्रामोद्भवा स्त्वौडवशुद्धतानाः ॥ ३३६ ॥
सौभाग्यकृत्स्यात्प्रथमोऽथ कारीर्यसौ द्वितीयस्त्वथ शान्तिकृच्च ।
मतस्तृतीयोऽथ तु पुष्टिकृत्स्यात्तुर्यः परः स्यादथ वैनतेयः ॥ ३३७ ॥
उच्चाटनस्तत्र भवेत्तु षष्ठो वशीकृतिः सप्तमइत्युपात्तः ।
एते रिपाभ्यां रहितास्तु षड्जग्रामोद्भवास्त्वौडवशुद्धतानाः ॥ ३३८ ॥

त्रैलोक्यपूर्वोऽपि च मोहनः स्यादाद्यो द्वितीयस्त्वथ वीरसंज्ञः ।
कन्दर्पपूर्वो बलशातनः स्यादन्यः चतुर्थस्त्वथ शंखचूडः ॥३३९॥
अन्यो गजच्छायतया प्रसिद्धो रौद्राभिधेयोऽपि च षष्ठतानः ।
विष्णुक्रम .... ॥ ३४० ॥
स्याद्भैरवः प्राथमिको द्वितीयः स्यात्कामदः चावभृथस्तृतीयः ।
अष्टाकपालश्चमसः चतुर्थः स्यात्पञ्चमः स्विष्टकृदाह्वयः च ॥ ३४१ ॥
षष्ठो वषट्कार इति प्रतीतः स्यात्सप्तमो मोक्षदनामधेयः ।
रिक्तानिगाभ्यामिति मध्यमाख्यग्रामोद्भवस्त्वौडव शुद्धतानाः॥ ३४२ ॥

नकेवलं मोदकरा जनानां ताना इमेऽभीष्टफलप्रदाः च ।
यद्यज्ञनामा भवतीह तानस्तत्तत्फलं साधयतीह सम्यक् ॥ ३४३ ॥
गानोपयुक्ताः खलु कूटतानाः संमूर्छनास्ते त्वथ शुद्धतानाः ।
औद्गात्रके कर्मणि चापिगाने ह्यथोपयुक्ता इति शास्त्रसिद्धाः ॥ ३४४ ॥

निरूपिताः सम्यगिति क्रमेण ग्रामौ तथा मूर्छनिकाक्रमाः च ।
ते शुद्धताना अपि कूटतानाः नामानि तेषामपि कीर्तितानि ॥ ३४५ ॥
स्वरस्वरूपं किल सप्रपञ्चं निरूपितं रागविभागसिद्ध्यै ।

— साधारणविषयः —

प्रयोगभेदाद्विकृतिस्वराणां विचित्रितां गानसमानतां च ॥ ३४६ ॥
रागेषु संदर्शयितुं विविच्य साधारणं साधु निरूपयामः ।
स्वरैश्च जात्याश्च विशेषितं तत्साधारणं तत्र भवेद्द्विरूपम् ॥ ३४७ ॥

— स्वरसाधारणम् —

समस्तरागैकनिदानभूतः स्वरादिसाधारणमाद्यमुक्तम् ।
चतुष्टयं काकलिकान्तराभ्यां षड्जेन योगादपि मध्यमेन ॥ ३४८ ॥
षड्जश्रुतिद्वन्द्वमवाप्त एषः प्रोक्तो निषादः किल काकलीति ।
स्वरद्वयस्याश्रयणादिसाम्यात्तदेव साधारणमामनन्ति ॥ ३४९ ॥
श्रुतिद्वयं चेदथ मध्यमस्य स्यादान्धारकोऽसौ लभते तदानीम् ।
स्यादन्तराख्यः कथितस्तदेव साधारणं द्विस्वरसाम्ययोगात् ॥ ३५० ॥
मन्द्रो निषादस्तु समीपवर्तिमध्यस्थ षड्ज श्रुतिमाश्रयेत ।
त्यक्त्वा निजान्त्यश्रुतिमेष षड्जश्चोपान्त्यभूतां श्रुतिमाश्रयेत ॥ ३५१ ॥
तदन्तिकस्थोऽप्यृषभस्तदानीं गृह्णाति षड्जश्रुतिमन्तिमां चेत् ।
स्यात्षड्जसाधारणमेतदेव स्वरद्वयस्यापि समानभावात् ॥ ३५२ ॥
गान्धारकश्चेदथ मध्यमस्य त्वाद्यां तथान्त्यामपि पञ्चमश्चेत् ।
श्रुतिं प्रगृह्णाति यदा तदैष साधारणं तत्खलु मध्यमस्य ॥ ३५३ ॥

— जातिसाधारणम् —

एकस्वरांशासु भवेद्यदेकग्रामासु जातिष्वपि यत्समानम् ।
गानं तदेव प्रवदन्ति जातिसाधारणं गीतिविधानदक्षाः ॥ ३५४ ॥

अन्येऽपि केचित्प्रवदन्ति रागांस्ताञ्जातिसाधारणमित्यभिज्ञाः ।

एवंच साधारणभेद उक्तो निरूपितो यो निगयोः प्रयोगः ॥ ३५५ ॥
विघातकत्वादितरस्वराणां निषादगान्धारकयोः प्रयोगः ।
उच्चार्य षड्जं प्रथमं तु मध्ये तां काकलीं धैवतकं तदन्ते ॥ ३५६ ॥
गायेत्प्रयोगे पुनरीदृशी स्यान्नरक्तिहानिं न च रागदोषः ।
केचित्तु पक्षान्तरमानयन्ति स्याद्धैवतस्थानगतोऽत्र षड्जः ॥ ३५७ ॥
यद्वा समुच्चार्य तु षड्जमादौ संस्पृश्य तां काकलिकां च मध्ये ।
विहाय षड्जंत्वथ धैवतं च शिष्टस्वरेष्वन्यतमंच गायेत् ॥ ३५८ ॥
इतीरितः काकलिका निषादप्रयोगभेदोऽपि निरूपितोऽथ ।
उच्चार्य तन्मध्यममेव पूर्वं संस्पृश्य गान्धारकभेदरीत्या ॥ ३५९ ॥
गान्धारकस्यान्तर संज्ञकस्य प्रयोग भेदोऽपि निरूपितोऽथ ।
उच्चार्य तन्मध्यममेव पूर्वं संस्पृश्य गान्धारकमन्तराख्यम् ॥ ३६० ॥
गायेत्तदश्चर्षभमेव चान्ते यद्वा पुनर्मध्यममेव गायेत् ।
तदुत्तरेष्वन्यतमस्वरं वा गायेत्तदा नैव च रतिहानिः ॥ ३६१ ॥

— वर्णाः —

निरूप्य साधारणमत्र सम्यगथोच्यते वर्णगतस्वरूपम् ।
गानक्रिया स्यादथ वर्णसंज्ञा चतुर्विधः सोऽपि निगद्यतेऽत्र ॥ २६२ ॥
स्थायी तथाऽरोह्यवरोहिणौ च तथैव सञ्चार्यपि वर्णभेदाः ।
स्थायी तु गाने कथितो विलम्ब्य विलम्ब्य चैकस्य मुहुः स्वरस्य॥ ३६३॥
यथा निरुक्ते स-सं-से ति षड्जे स मध्यमे स्यान्म-म-मेति गाने ।
आरोहणं यत्र भवेत्स्वराणामारोहिवर्णः कथितः स एव ॥ ३६४ ॥
यत्रस्वराणामवरोहणं स्यात्तमेव विद्यादवरोहिवर्णम् ।
आरोहिणश्चाप्यवरोहिणश्च सञ्चारिवर्णस्तु विमिश्रणे स्यात् ॥ ३६५ ॥

— अलङ्काराः —

वर्णप्रभेदं प्रतिपाद्य चात्रालङ्कारलक्ष्म प्रतिपादयामः ।
ताटंकहारप्रमुखै र्यथाऽलंकारं नितान्तै वनिता समिन्धे ॥ ३६६ ॥

उल्लासितान्तैरिह वर्णपंक्तिस्तथा प्रसन्नादिमुखैस्त्रिषष्ट्या ।
तं वर्णसन्दर्भविशेषमेव अलंकारमाहुर्मुनयोऽपि षष्टिम् ॥ ३६७ ॥

— स्था यि ग ता लं का रा : —

तस्य त्रिषष्टिः कथिताः प्रभेदास्तत्राऽपि च स्थायिगतान्वदामः ।
आद्यन्तयोः स्यात्स्वर एक एव येषां हि ते स्थायिगता भवन्ति ॥३६८॥
एतादृशाः स्थायिगताः किलालंकाराः पुनः सप्तविधा भवन्ति ।
आद्यः प्रसन्नादिरिह प्रतीतो भवेत्प्रसन्नान्त इति द्वितीयः ॥ ३६९ ॥
ततस्तृतीयः कथितः प्रसन्नाद्यन्ताभिधानश्च ततश्चतुर्थः ।
प्रसन्नमध्यः क्रमरेचितस्तु स्यात्पञ्चमस्तत्प्रभवेत्तुषष्टः ॥ ३७० ॥
प्रस्तारनामा प्रथितः प्रसादः स्यात्सप्तमः स्थायिगताः किलैते ।
अत्र ह्यलङ्कारनिरूपणे तु यो मूर्छनायाः प्रथमः स्वरः स्यात् ॥ ३७१ ॥
मन्द्रः स उक्तो द्विगुणः स एव तारोऽथवा स्यादिह पूर्वपूर्वः ।
मन्द्रोऽथ तारस्तु परः परःस्यान्मन्द्रः प्रसन्नश्च मृदुः समर्थः ॥ ३७२ ॥
तारश्च दीप्तश्च तथा समर्थौ मन्द्रं लिखेद्बिन्दु शिरस्कमत्र ।
तथोर्ध्वरेखा शिरसस्तु तारस्वर स्त्रिरुच्चारणतः प्लुतःस्यात् ॥ ३७३ ॥
मन्द्रे द्विरुच्चार्य सकृत्तु तारे गीते प्रसन्नादिमुदाहरन्ति ।

यथा,— स-स-सं ।

तारं द्विरुच्चार्य सकृत्तु मन्द्रे गीते प्रसन्नान्तमुदाहरन्ति ॥ ३७४ ॥

यथा,— सं-सं-स ।

गीत्वा तु मन्द्रं प्रथमं ततस्तु तारं च गायेत्पुनरेव मन्द्रम् ।
यस्मिन्नलङ्कारममुं प्रसन्नाद्यन्तं त्वलङ्कारविदो वदन्ति ॥ ३७५ ॥

यथा,—स-सं-स ।

तारं समुच्चार्य ततस्तु मन्द्रमन्ते च तारं पुनरेव गायेत् ।
प्रसन्नमध्यं तमुदाहरन्ति सर्वेऽप्यलङ्कारविदो मुनीन्द्राः ॥ ३७६ ॥

यथा,—सं-स-सं ।

कालत्रयाख्यः क्रमरेचितः स्यात्कालस्वरूपं प्रतिपादयामः ।
आद्यन्तयो र्मूर्छनिकादिगथेत्तदन्तराले यदिमध्यमौ स्तः ॥ ३७७ ॥
तन्मध्यगः पञ्चम एव षष्टः स सप्तमः तत्क्रमरेचितस्तृतीयः ।

यथा,—स रि सं, स-ग-म-सं, स-प-ध-नि-सं ।

कालत्रयेऽस्मिन्यदि तारकोऽन्ते प्रस्तारमेतं प्रवदन्ति सन्तः ॥ ३७८ ॥

यथा,—स रि सं स ग म सं स-प-ध-नि-सं ।

आद्यः कलानां यदि तारकः स्यादन्त्यश्च मन्द्रस्तिसृणाममूषाम् ।
प्रसादनामा स भवेदितीहालङ्कारकाः स्थायिगता निरुक्ताः ॥ ३७९ ॥

यथा,—सं रि स, सं-ग-म-स, सं-प-ध-नि-स ।

— आरोहिगतालङ्काराः —

यथावदारोहिगतानथालङ्कारान्ब्रुवे द्वादशभिन्नभेदान् ।
विस्तीर्णसंज्ञः प्रथमो द्वितीयो निष्कर्षको बिन्दुरत स्तृतीयः ॥ ३८० ॥
अत्युच्चयोऽन्यो हसिताभिधानः स्यात्पञ्चमः प्रेङ्खितकस्तु षष्टः ।
आक्षिप्तकं सप्तममत्र सन्धिः प्रच्छादनाख्यः पुनरष्टमः स्यात् ॥ ३८१ ॥
उद्गीथनामा नवमस्ततः स्यादुद्वाहिताख्यो दशमस्तु वेद्यः ।
त्रिवर्ण एकादश इत्युदीरितः स्याद्द्वादशो बर्हिरिति प्रसिद्धः ॥ ३८२ ॥
एषां पुनर्लक्षणमत्र वक्ष्ये यथाक्रमं गायकबोधहेतोः ।
स्वरं समारभ्य तु मूर्छनाद्यं दीर्घान्स्वरान्यत्र मुहुर्विलम्ब्युः ॥ ३८३ ॥
आरोहयन्गायति चेत्क्रमेण विस्तीर्णनामा कथितः स एषः ।

यथा, सा-री-गा-मा-पा-धा-नि ।

ह्रस्वान्स्वरान्सप्तच यत्र गायेदारुह्यच द्वन्द्वमथैकमेकम् ॥ ३८४ ॥
निष्कर्ष एष त्रिरथो चतुर्वा गाने स्वराणामिह गातृवर्णैः ।
निष्कर्षभेदाः प्रवदन्ति केचिदेतौद्विधोक्तावपि गातृवर्णौ ॥ ३८५ ॥

यथा, सस रिरि गग मम पप धध निनि ।
सस रिरिरि गगग ममम पपप धधध निनिनि ।
ससस रिरिरिरि गगगग मममम पपपप धधधध निनिनिनि ॥

त्रिरादिमन्द्रंच सकृद्द्वितीयंत्रिर्वै तृतीयंच सकृच्चतुर्थम् ।
त्रिः पञ्चमं षष्ठमथो सकृच्च त्रिः सप्तमं गायतिचेत्सबिन्दुः ॥ ३८७ ॥

यथा, ससस रि गगग म पपप ध निनिनि ।

आद्यं तृतीयं पुरतः प्रगायेत् द्वितीयतुर्यौ च ततस्तृतीयम् ।
सप्तमं किल तुरीयषष्ठौ ततः परं पञ्चमसप्तमौ च ॥ ३८८ ॥

षष्ठंञ्च गायेत्क्रमशो यदा तमत्युच्चयाख्यं मुनयो वदन्ति ।
यथा, सग-रिम-गप-मध-पनि ।
आद्यं सकृद्द्विश्च ततोद्वितीयं त्रिश्चेत्तृतीयञ्च चतुर्थतुर्यम् ॥ ३८९ ॥
तं पञ्चधा पञ्चममत्र पोढा षष्ठं ततोऽन्त्यं किल सप्तकृत्वः ।
आरुह्य गायेद्धसिताभिधानालङ्कारमेतं प्रवदन्ति सन्तः ॥ ३९० ॥
यथा,
स, रिरि, गगग, मममम, पपपपप, धधधधधध,
निनिनिनिनिनिनि ।
आद्यं द्वितीयौ तदनु द्वितीयतृतीयकौ किञ्च तृतीयतुर्यौ ।
ततस्तुरीयं सहपञ्चमेन समन्वितं पञ्चमतश्च षष्टः ॥ ३९१ ॥
षष्ठं यदागायति सप्तमेन स प्रेङ्खितस्तं क्रममाहुरेके ।
यथा, सरि रिग गम मप पध धनि ।
आद्यं तृतीयञ्च ततस्तृतीयं सपञ्चमं पञ्चमसप्तमौच ।
आरुह्य गायेत्क्रमशो यदा तमाक्षिप्तसंज्ञं मुनयो वदन्ति ॥ ३९२ ॥
यथा, सग, गप, पनि ।
स्यात्त्रिस्वराद्या तु कला तदन्त्यं स्वरं समारुह्य भवेद्द्वितीया ।
तदन्त्यमारभ्य पराच सन्धिःप्रच्छादनोऽतस्त्रिकलान्वितः स्यात् ॥
यथा, सरिग, गमप, पधनि ।

कालत्रये त्रिस्वरभाजि यस्मिन्नावर्त्तित स्त्रिः प्रथमस्वरस्तु ।
संगीयते चेत्क्रमशस्तमेनं मुद्गीथनामानमुशन्ति सन्तः ॥ ३९४ ॥
यथा, ससस सरिग । मम मपध ।
स्वरत्रयी भाजित(त)त्त्रयेऽस्मिन्नावर्त्तितो मध्यगतः स्वरस्त्रिः ।
संगीयते यत्र किल क्रमात्तमुद्गाहिताख्यं प्रवदन्ति सन्तः ॥ ३९५ ॥
यथा, सरिरिरिग, मपपपध ।
अन्त्यस्वरे यत्र कलाद्वये त्रिरावर्त्तितः स्यात्सभवेत्त्रिवर्णः ।
यथा सरिगगग, मपधधध ।
स्वरद्वयं यत्र कलाद्वये त्रिरावर्त्यते वेणिमसुंवदन्ति ॥ ३९६ ॥
यथा, ससस, रिरिरि, गगग, ममम, पपप, धधध,
उद्गीथ उद्गाहितके त्रिवर्णे वेण्यां निषादो नकदापि गेयः ।
उक्तास्तथारोहिणि वर्णकेऽलङ्काराः पुनर्द्वादश ते विचित्र्य ॥ ३९७ ॥

एतेऽवरोहक्रमतो मताश्चावरोह्यलङ्कारगताः प्रगीताः ।
यथा, विस्तीर्णालङ्कारे, निधपमगरिस ।

— सञ्चारिगतालङ्काराः —

एवं किलारोह्यवरोहिभेदालङ्कारजालानि निरूपितानि ।
अतः परं गायकबोधहेतोः सञ्चार्यलङ्कारभिदां वदामः ॥ ३९८ ॥

मन्द्रादिराद्यो भवतीह मन्द्रमध्यो द्वितीयस्तु ततस्तृतीयः ।
मन्द्रान्तिमः किञ्च भवेच्चतुर्थः प्रस्तारनामाथ परः प्रसादः ॥ ३९९ ॥

व्यावर्तकोऽन्यत्स्खलितः परःस्यात्ततोऽष्टमोऽसौ परिवर्तसंज्ञः ।
आक्षेपकोऽन्यो दशमस्तु विन्दुरुद्गाहितोऽन्योऽथ पुनः किलोर्मिः ॥

त्रयोदशश्चापि समस्ततोऽन्यः प्रेङ्खश्च निष्कूजितकःपरः स्यात् ।
इत्येनः परः सप्तदशः क्रमःस्यादुद्घाटितोऽष्टादशकस्तथैव ॥ ४०० ॥

स्याद्रञ्जितोऽन्योऽप्यथ सन्निवृत्त प्रवर्त्तको विंशतिमः प्रतीतः ।
वेणुः परः स्याल्ललितस्वरो द्वाविंशोऽथ हुङ्कार इति प्रतीतः ॥ ४०१ ॥

भवेच्चतुर्विंशतमः प्रतीतः सल्लादमानस्त्ववलोकितोऽन्त्यः ।
पञ्चाधिका विंशतिरेवमेते सञ्चार्यलङ्कारतया प्रसिद्धाः ॥ ४०२ ॥

अथो यथोद्देशमुदीरितानामाचक्ष्महे लक्षणमप्यमीषाम् ।
आद्यं तृतीयञ्च ततो द्वितीयं गीत्वा कलायां पुनरादिमायाम् ॥ ४०३ ॥
द्वितीयतुर्यौ च ततस्तृतीयं तृतीयकं पञ्चमकं चतुर्थम् ।
तुरीयषष्ठावपि पञ्चमञ्च सपञ्चमं सप्तमतश्च षष्ठम् ॥ ४०४ ॥
एवं भवे यत्रगानकलासु मन्द्रादिरयं प्रदिष्टः ।
यथा, सगरि, रिमग, गपम, मधप, पनिध ।
तृतीयमाद्यञ्च ततो द्वितीयं तुर्यं द्वितीयञ्च ततस्तृतीयम् ।
तं पञ्चमञ्चापि तृतीयतुर्यौ षष्ठं चतुर्थं त्वथ पञ्चमञ्च ॥ ४०५ ॥
तं सप्तमं पञ्चमषष्ठकौच गायेत्कलासु तु स मन्द्र मध्यः ।

यथा, गसरि, मरिग, पगम, धमप, निपध ।
गायेद्द्वितीयं तु ततस्तृतीयमाद्यं ततःतत्र तृतीयतुर्यौ ॥ ४०६ ॥
अथ द्वितीयञ्च ततश्चतुर्थं तं पञ्चमञ्चापि पुनस्तृतीयम् ।
तं पञ्चमं षष्ठमथो चतुर्थं षष्ठं तथा सप्तमपञ्चमौ च ॥ ४०७ ॥
एवं विधं यत्र कलासु गानं भवेत्स मन्द्रान्त इति प्रतीतः ।
यथा, रिगस, गमरि, मपग, पधम, धनिप ।
आद्यं तृतीयञ्च ततो द्वितीयं तुर्यौ तृतीयं त्वथ पञ्चमञ्च ।
चतुर्थषष्ठं त्वथ पञ्चमञ्च तं सप्तमं गायति चेत्कलासु ॥ ४०८ ॥
स्वरद्वयेनैव युतासु तासु प्रस्तारनामा प्रथितः स एषः ।
यथा, सग, रिम, गप, मध, पनि ।
आद्यद्वितीयौ पुनरेव चान्त्यं ततो द्वितीयं च पुनस्तृतीयः ॥ ४०९ ॥
पुनर्द्वितीयञ्च तृतीयतुर्यौ पुनस्तृतीयञ्च ततश्चतुर्थम् ।
तं पञ्चमं प्राप्य पुनश्चतुर्थं तं पञ्चमं षष्ठकपञ्चमौ च ॥ ४१० ॥
षष्ठं पुनः सप्तमषष्ठकौ च गायेत्क्रमाद्यत्र स तु प्रसादः ।
यथा, सरिस, रिगरि, गमग, मपम, पधप, धनिध ॥ ४११ ॥
चतुःस्वरास्तत्र कलामिदध्याद्गत्वा तृतीयं तदनुद्वितीयात् ।
तुर्यं ततश्चादिममेव गायेत्ततो द्वितीयाच्च पुनश्चतुर्थम् ॥ ४१२ ॥
तृतीयकात्पञ्चमकं पुनश्च गायेद्द्वितीयं तु कलाद्वितीया ।
अथोतृतीयादपि पञ्चमञ्च पुनश्चतुर्थादपि षष्ठमेव ॥ ४१३ ॥
पुनस्तृतीयं तु कलातृतीया तुर्या च षष्ठं त्वथ पञ्चमाच्च ।
तं सप्तमञ्चापि पुनश्चतुर्थं व्यावर्तसंज्ञं तमुदाहरन्ति ॥ ४१४ ॥
यथा, सगरिमस, रिमगपरि, गपमधग, मधपनिम ।
आद्यं तृतीयंतदनु द्वितीयं द्विस्तुर्यकं किञ्च ततो द्वितीयम् ।
तृतीयमाद्यञ्च पुनश्च गायेदष्टस्वरासौ प्रथमाकलेष्टा ॥ ४१५ ॥
द्वितीयतुर्यौ तु ततस्तृतीयं तं पञ्चमं द्विश्च तृतीयतुर्यौ ।
गायेद्द्वितीयञ्च यदा द्वितीया कलेयमष्टस्वरमेलनेन ॥ ४१६ ॥
तृतीयमादावपि पञ्चमञ्च तुर्यं पुनः षष्ठमनन्तरं द्विः ।
तुर्यं पुनः पञ्चमकं तृतीयं भवेत्कलाष्टस्वरपुत्कृतीयम् ॥ ४१७ ॥

तुरीयषष्ठावथ पञ्चमञ्च द्विसप्तमं पञ्चमषष्ठतुर्यान् ।
गायेद्यदेयंतु कला चतुर्थी तं पञ्चमं सप्तमषष्ठकौ च ॥ ४१८ ॥
द्विरेदिमं षष्ठकसप्तमौच तं पञ्चमं गायति सा कलान्त्या ।
एवं विधाः पञ्चकलाश्च यत्रालङ्कार एष स्खलिताभिधानः ॥ ४१९ ॥
यथा, सगरिम मरिगस रिगमप पगमरि गपमध धमपग
मधपनि निपधम पनिधस सधनिप ।
आद्यं तृतीयञ्च ततश्चतुर्थं गायेद्यदासा प्रथमा कलास्यात् ।
द्वितीयतुर्यावथ पञ्चमञ्च गायेद्द्वितीया तु मता कलेयम् ॥ ४२० ॥
तृतीयमादावथ पञ्चमञ्च षष्ठञ्च गायेत्तु कलातृतीया ।
तौ तुर्यषष्ठावथ सप्तमञ्च गायेद्यदासा त्रिकला चतुर्थी ॥ ४२१ ॥
तं पञ्चमं सप्तममादिमञ्च स्वरं यदा गायति पञ्चमीयम् ।
एवं कलाः पञ्च भवन्ति यत्रालङ्कार उक्तः परिवर्त एषः ॥ ४२२ ॥
यथा, सगम, रिमप, गपध, मधनि, पनिस ।
आद्यस्वराणां त्रितयं कलाद्यां स्वरेषु सप्तस्वपिच क्रमेण ।
द्वितीयमारभ्य भवेत्तृतीया तृतीयमारभ्य ततस्तृतीया ॥ ४२३ ॥
चतुर्थमारभ्य ततश्चतुर्थी स्यात्पञ्चमाद्या किल पञ्चमीसा ।
षष्ठं समारभ्य तथादिमान्ता षष्ठीकलेयं गदिता मुनीन्द्रैः ॥ ४२४ ॥
तास्त्रिस्वरा यत्रकलाः षडेवाक्षेपाभिधानं तमुदीरयन्ति ।
यथा, सरिग, रिगम, गमप, मपध, पधनि, धनिस ।
गीत्वा त्रिराद्यं तदनु द्वितीयं स्पृष्ट्वात्रिवद्गायति चादिमञ्चेत्॥ ४२५ ॥
साद्या कला त्रिस्तदनु द्वितीयं स्पृष्ट्वातृतीयं तु पुनर्द्वितीयम् ।
गायेद्यदा साहि कलाद्वितीया गायेत्तृतीयं त्रिरथो चतुर्थम् ॥ ४२६ ॥
स्पृष्ट्वा पुनर्गायति चेत्तृतीयमेषा तृतीयातु कलाप्रदिष्टा ।
त्रिस्तुर्यमुद्गायति पञ्चमन्तु स्पृष्ट्वाथतुर्यं यदि सा चतुर्थी ॥ ४२७ ॥
त्रिः पञ्चमं गायति षष्ठकन्तु स्पृष्ट्वा पुनः पञ्चममेव सान्या ।
त्रिः षष्ठमादावथ सप्तमञ्च स्पृष्ट्वा पुनर्गायति यत्र षष्ठम् ॥ ४२८ ॥
षष्ठी कलास्यादथ सप्तमं त्रिराद्यन्तु संस्पृश्य तु सप्तमञ्च ।
पुनश्च गायेद्यदि सप्तमी सा प्रोक्ता कला यत्र हि विन्दुरेषः ॥ ४२९ ॥

यथा, सससससरि रिरिरि रिग, गगग गम, ममम मप,

पपप पध, धधध धनि, निनिनि निस ।

गीत्वा स्वरांस्त्रीन्क्रमतोऽवरुह्य द्वितीयकं गायति चेत्कलाद्या ।

अथ द्वितीयं च तृतीयतुर्यौ गायेद्द्वितीयं यदिसाद्वितीया ॥ ४३० ॥

तृतीयतुर्यावथ पञ्चमञ्च तुर्यं पुनर्गायति सा चतुर्थी ।

तं पञ्चमं षट्कसप्तमौच्च षष्ठं यदा गायति पञ्चमीयम् ॥ ४३१ ॥

षष्ठं यदा सप्तममादिमञ्चेत्तं सप्तमं गायति साऽत्र षष्ठी ।

ताः षट्कला यत्र भवन्ति सोऽयमुद्वाद्विताख्यः कथितो मुनीन्द्रैः ॥

यथा, सरिगरि, रिगमग, गमपम , मपधप, पधनिध, धनिसनि ।

SANGITA SUDHA.

(Translation).

(Continued from P. 195.)

(269-283) [The process of multiplication involved is explained in the orthodox mathematical style in these verses.]

(284-302) [The explanation of 18 in the 3rd row, in the third column is seen in these verses].

(303-308) [The number of combinations of 4 notes, taken 4 at a time is arrived at in the manner shown in these slokas].

The Kuta-Tanas.

(308½-314). Two *Tanas* are derived by taking 2 notes, 2 at a time. Six *Tanas* are got from 3 notes, taken 3 at a time. And this added with 18 (more combinations) gives 24 —of 4 notes, taken 4 at a time.

In the same manner, the combinations of 5 notes, taken 5 at a time, are 120; those of 6, taken 6 at a time, are 720; and those of 7, taken 7 at a time, are 5040.

315. And every *Murchana* has the same number of various combinations as shown above. A combination of notes containing an irregular series of notes and sung at random is known as '*Kuta-Tana*'.

Shadava-(Six-note)-Suddha-Tanas.

(316-342). It has been shown that there are 56 *Murchanas* which are the *Prakritis* (Sources) of all these *Tanas*; wherein, the notes proceed in a regular order of ascent and descent in pitch. This regularity is the characteristic of a *Suddha-Tana* (as opposed to *Kuta-Tana*).

The following are the lists of *Shadava* (Six note) and *Audava* (Five note) *Suddha-Tanas*, in the *Shadja Grama* and the *Madhyama Grama*:—

Shadja Grama.

Shadava Tanas.
(with Sa omitted).

(1) Agnishtoma
(2) Atyagnishtoma
(3) Vajapeya
(4) Shodasin
(5) Paundarika
(6) Asvamedha
(7) Rajasuya

Shadava Tanas.
(with Pa omitted).

(1) Asvakranta
(2) Rathakranta
(3) Vishnukranta
(4) Suryakranta
(5) Gajakranta
(6) Valabhit
(7) Nagayajna

Shadava-Tanas.
(with Ri omitted).

(1) Svishtakrt
(2) Bahusuvarnaka
(3) Gosava
(4) Mahavrata
(5) Visvajit
(6) Brahmayajna
(7) Prajapatya-yaga

Shadava Tanas.
(with Ni omitted).

(1) Chatur-Masya
(2) Samstha
(3) Sastra
(4) Uktha
(5) Sautramani
(6) Chitra

Madhyama Grama.

Shadava Tanas. (With Sa omitted).	*Shadava Tanas.* (With Ri omitted).	*Shadava Tanas.* (With Ga omitted).
(1) Savitri	(1) Agnichit	(1) Sarvasvaka Dakshina
(2) Ardha Savitri	(2) Dvadasaha	(2) Diksha
(3) Sarvato-Bhadre	(3) Upamsu	(3) Somai
(4) Aditya Ayana	(4) Soma	(4) Samit
(5) Gavam Ayana	(5) Asva Pratigraha	(5) Svahakrti
(6) Sarpaka Ayana	(6) Barhis	(6) Tanunapat
(7) Kaundapam Ayana	(7) Abhyudaya	(7) Go Dohana

Audava (Five Note) Tanas.

Shadja-Grama.

Audava Tanas. (With Sa, Pa omitted).	*Audava Tanas.* (With Ga, Ni omitted).	*Audava Tanas.* (With Ri, Pa omitted)
(1) Ida	(1) Jyotistoma	(1) Saubhagya Krt
(2) Purushamedha	(2) Darsa	(2) Kariri
(3) Syena	(3) Paurnamasa	(3) Santikrt
(4) Vajpe	(4) Asva Pratigraha	(4) Pushtikrt
(5) Ishu	(5) Aisha	(5) Vainateya
(6) Angirasa	(6) Ratri	(6) Uchchatana
(7) Kanka	(7) Saubhara	(7) Vasikrt

Madhyama Grama.

Audava. (With Sa, Pa omitted.)	*Audava.* (With Ga, Ni omitted.)
(1) Trailokya Mohana	(1) Bhairava
(2) Vira	(2) Kamada
(3) Kandarpa-Vala Satana	(3) Avabhrtha
(4) Sankha Chuda	(4) Ashtakapala chamasa
(5) Gaja-chhaya	(5) Svishtakrt
(6) Raudra	(6) Vashatkara
(7) Vishnukrama*	(7) Mokshada

(343) These *Tanas* are found not only pleasant to the ear, but also capable of bestowing what we desire. Every *Tana* produces the effect of the *Yajna* whose name it bears.

(344) All the *Kuta Tanas* are used in (secular) music, while the *Murchanas* (*Suddha Tanas*) are used in chanting the *Sama-Veda* by the *udgatr* (priest) at sacrifices according to *Sastra*.

(345-345½). We have so far explained what the *Gramas* and the *Murchanas* are what the *Suddha Tanas* and the *Kuta Tanas* are—their names have also been noted. And these further have a direct connection with the classification of the *Ragas* to be detailed hereafter.

(To be continued).

* This omission was found out on comparison with the other Sangita Sastra works.

213.

ஸ்ரீ புரந்தரதாஸர் சரித்திரம்.

பிரும்மஸ்ரீ பாகவதர் ஸௌந்தரராஜ அய்யங்கார்.

தொடர்ச்சி—153 பக்கம்.

முற்கூறியவாறு, இவரது கீர்த்தனங்களிலுள்ள, சில விசேஷங்களே மாத்திரம் இங்கு ஆராய்வோம். ஸ்ரீ த்யாகராஜ ஸ்வாமிகளது கீர்த்தனங்களில் அர்த்த புஷ்டியும் ராகபாவங்களும், ஸமயத்தை அனுஸரித்த பலவிதமாகிய ஸங்கதிகளும் ஞானபக்திவைராக்ய உபதேசங்களும் காணப்படுகின்றன. அவ்வாறு அநேகம் ஸங்கதிகள் அமைவதற்கு ஸாஹித்யங்களில் சுர்வக்ஷரங்கள் (நெடிலாகிய எழுத்துகள்) உபயோகிக்கப்படுவதே முதற் காரணமாகும். இம்மஹானது கீர்த்தனங்களிலும் அத்தகைய தீர்க்காக்ஷரப்பிரயோகங்கள் காணப்பட்டாலும் அவை வெகுவாகயிராது. தனிர, ஸாஹித்யத்திலும் தாளக்கபரிலுமே இவருக்கு முக்யமாக நோக்கம். ஸ்ரீ த்யாகராஜ ஸ்வாமிகளுக்கோவெனில், எல்லாவற்றிலும் நோக்கம் உண்டு. இதற்கு அவ்வக்காலங்களில் இருந்த ஸங்கீத நடையே ஆதாரமாக நிற்கும். இது போன்ற கீர்த்தனங்களினுலாகிய ரஸபுஷ்டி, இவ்வுலகில் அவதரிக்கும் முன்புள்ளகாலத்தில் ஸம்ஸ்கிருத பாஷையிலுள்ள, சில வ்ருத்த ஸ்லோகங்களைத் தானே தாளத்தில் அமைத்துப் பாடி வந்தார்கள். இந்த விஷயம் ஸங்கீத ரத்னாகரத்தில் அநேக இடங்களிற் காணப்படுகின்றதன்றே. ஸ்ரீ பத்ராசல ராமதாஸ் ஸ்வாமிகள் கீர்த்தனமும் ஸாஹித்யத்தை முக்யோத்தேசமாகக் கொண்டதாகவே தெரிகிறது. இவைகள் இவ்வையகத்தில் பரவி விளங்குவதற்கு அந்தந்த மஹான்களின் சிஷ்யர்களே காரணமானார்கள். அதிலும் த்யாகராஜ ஸ்வாமிகளேயாசிரியனுனர். மத தக்ஷிண தேச ஸங்கீதமே காலஞ் சென்ற ஸ்ரீமான் மஹா வைத்யநாதய்யரவர்களாலும், ஸ்ரீமான் பட்டணம் ஸுப்ரம்மண்ய அய்யரவர்களாலுமே மெருகு பெற்றதென்று பலருக்கு அபிப்ராயமும் உண்டு. புனவிலிருந்து, ஸுமார் 100 வருஷங்களுக்குமுன் தஞ்சாவூர் ஸமஸ்தானத்திற்கு விஜயம் செய்தவரும், மஹாராஷ்ட்ர பாஷையில் ஹரிகதை செய்வதில் அதிதாரணபாண்டித்யம் வாய்ந்தவரும், கானத்தைக் கேட்டவர் அனைவரும் இது கந்தர்வகானமே என்று புகழத் தகுந்த சரீரம் வாய்ந்தவருமாகிய, ஸ்ரீ ஆத்மா ராம்பாவாஜீ ஸ்வாமிகளின் ஸாங்கத்யத்தினுலேயே, தஞ்சாவூர் ஸமஸ்தானம் உயர்ந்த ஸங்கீதக் ஞானமும் பாடும் திறமையும் பெற்றதென்று எனது நண்பரும் குருவுமாகிய ஸ்ரீமான் கண்டா ஸுப்ரமண்ய அய்யர் அவர்கள் சொல்லக் கேள்விப்பட்டிருக்கிறேன். மேற்படி ஸ்வாமிகளின் குமாரர்களே தஞ்சையில் நிகரற்று விளங்கிய ஸ்ரீமான் கிருஷ்ணபாகவதர் அவர்கள் காலத்தில் தஞ்சைக்கு விஜயம் செய்த ஸ்ரீமான்கள் மேர்க்கர்பாவா, விஷ்ணுபாவா ஸ்வாமிகள் ஆவர் என்றும் கேள்வியுண்டு. இவர்களில் ஒருவர் அபரிமிதமாகிய ப்ரவசன சக்தி வாய்ந்தவர். மற்றவர் தகப்பனுர்போல் நல்ல சரீரத்துடன் பாடப் பட்டவர். இவர்களுடைய காலக்ஷேபத்தைக் கேட்டேதான் ஸாகி, திண்டி, ஒவி முதலியவை கதாப் பாட கற்றுக்கொண்டதாக, மேற்கூறிய ஸ்ரீமான் கிருஷ்ணபாகவதர் அவர்கள், அடிக்கடி காலக்ஷேபத்தியில் கூறுவது முண்டு

ஸங்கீதமாகிய தேசியகானமாகும். வர்த்தமானத்தில் நமது தக்ஷிணபாரத பூமியில் ஸங்கீதம் எவ்வாறு நடைபெறுகின்றது என்பதையும் நாம் அறிந்தேயிருக்கிறோம். இப்படியே இன்னும் சிலகாலம் சென்றால் சுத்தமாகிய காவடிச் சிந்து ஸங்கீதம்தான் நிகழும் என்று நன்கு புலப்படுகின்றது. இது கிடக்க, ஸ்ரீ புரந்தரதாஸ் ஸ்வாமிகள் அநேக நூற்பமாகிய ஜன்ய ராகங்களில் கீர்த்தனம் அருளியிருக்கிறார்கள். அவைகளில் ஒன்றை மாத்திரம் இங்கு விவரிப்போம்.

ராகம் கவுளிபந்து, ஆதிதாளம்.

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விட்டலன நெனயி ரோ. (காலி)

கருத்துரை.

புருஷார்த்தம் இன்னதென்றுணர வழியில்லாமல், லோகஸுகங்களிலே மூழ்கிக்கிடக்கும் ஜனங்களிடத்தில் உள்ள போன்பினால் அவர்களையும் தன்யர்களாக்குவதற்காக இம்மஹனீயருடைய திருவாக்கினின்றும் அவதரித்த கீர்த்தனமிது. இந்த ராகம் 15வது மேளகர்த்தாவாகிய மாயாமாளவகௌள என்கிற ராகத்தில் ஜனித்தது. இதற்கு ஆரோஹணஸ்வரம், 'ஸரிகரி மப நிஸா.' அவரோஹணஸ்வரம், 'ஸநிப தப மகரிஸா' என்று தெரிகிறது. இதில், சில ஸ்வரம், ப்ரதிமத்யமஸ்வரத்தையும் கலந்து பாடுகிற ஸம்ப்ரதாயம் ஸ்ரீமான் நீலகண்டரின் சிஷ்ய பரம்பரையில் காணப்படுகின்றது. அவர்கள் வைணிகர்களாகையால் இந்தமாறுபாடு ஏற்பட்டிருக்குமோ வென்று என் கருத்து. தற்காலத்தில் இந்த ராகத்தை ப்ரதிமத்யமராகமாகவே கருதி பாடப்பட்ட பெரிய வித்வான்களிலும் சிலர் இருக்கவே இருக்கிறார்கள். அதை அனுஸரித்து, அந்தரகாந்தாரஸ்வரம் கூட உருக்குலைந்து, ஸாதாரண காந்தாரமாகத் திரிந்து, முடிவில் 45வது கர்த்தாவில் ஜனித்த விஜய ஸ்ரீ என்கிற ராகமாக உலாவத் தொடங்கிவிட்டது. காலஞ் சென்ற ஸ்ரீமான் [illegible] வரவித்வான், மதுரை பொன்னுஸாமி பிள்ளை இந்த ராகத்தை வாசிக்கக் கேட்டிருக்கிறேன். தற்கால நிலைமை மேற்படி ராகம்

विनायकं प्रकुर्वाणः आञ्जनेयमकारयत् ।

(விநாயகம் ப்ரகுர்வாண: ஆஞ்சநேயமகாரயத்), என்றவழியில் ஆகிவிட்டது. இது என்னுடைய கற்பனையல்ல. வாசகர்கள் என்னை சிற்றமடையாதிருப்பார்களாக. யான் சென்னைமாநகரம் வந்தபிறகு கேட்ட ஸங்கீத விசித்திரங்களில் இஃதொன்று. மிகவும் பிரபலம் பெற்ற ஓர் ஸங்கீதஸபையில் பரிகணிதமாகிய வித்வானுடைய கச்சேரியொன்றில் கேட்க நேர்ந்தது. அதற்கு நானும் சென்றிருந்தேன். தன்னேயல்லால் ஸங்கீத உலகமேயில்லை என்னும் நினைக்கும் அநேகம் பிரபுக்களும் அங்கு காணப்பட்டார்கள். கச்சேரி ஆரம்பமாயிற்று. இரண்டு கீர்த்தனமும் பாடப்பட்டது. பாடினவர் நமது கவுளி பந்துவைப் பாடினார். பிடில் வித்வானும் இதையே அனுஸரித்தது. நானும் இந்த விஜயஸ்ரீ ராகமே 'வராளி' என்ற கீர்த்தனம் பாடப் போகிறார்கள் என்றெண்ணினேன். என் பக்கத்தில் இருந்த சில ரஸிகர்களும் அவ்வாறே கருதினார்கள். ராகம் பாடி முடிந்தது, 'தொரயகராதா,' என்ற கீர்த்தனம் ஆரம்பிக்கப்பட்டது. பிடில் வாசிப்பவர் பழுவேற்காரர் வழியைச் சேர்ந்தவராகையால் [illegible]

நூல் முகத்தைச் சுளித்து என்னைப்பார்த்தார். நான் அவரைப்பார்த்தேன். ஸபையில் இருந்த ஒருவர் கவுளிபந்து ராகமா இந்தப் பாடப்பட்டதென்று மெள்ளச் சொன்னார். யார் என்ன சொன்னாலென்ன. யார் யாரைப்பார்த்தால் என்ன. ரூபாய் 150 வித்வான் பங்கு. "ஆஹா! பாழும் உலகமே," என்று வருந்த வேண்டியதைத் தவிர வேறென்ன இருக்கிறது. இது காலக் கொடுமையல்லாமல் மற்றென்ன. प्रकृतमनुसरामः। (ப்ரக்ருத மனுஸராம:). இந்த கீர்த்தனத்தைக் காலஞ் சென்ற தஞ்சாவூர் ஸ்ரீமான் கிருஷ்ண பாகவதர் அவர்கள் அடிக்கடி பாடக்கேட்டிருக்கிறேன். அவருடைய கதையில் உள்ள ஸங்கீத ரஸத்தைப்பற்றி நான் சொல்ல வேண்டியது அனவஸரம். அதை யனுபவித்தவர்கள் இன்னமும் அநேகம் பேர் இருக்கின்றனர். ஆனல் இந்தக் கீர்த்தனம் பாடுவதில் அவரிடத்திலும் ஓர் விசேஷமுண்டு. அதாவது, இந்தக் கீர்த்தனத்தில் கீண்ட ஒரு சிட்டா ஸ்வரமொன்று அவரால் பாடப்பட்டு வந்தது. அது ஸ்வரக்ரமத்தில் உள்ளது. வெகு அழகான அமைப்புள்ளது. அவருக்குப் பின்பாடகராக இருந்த தஞ்சை ஸ்ரீமான் பஞ்சாபகேசய்யரவர்களும் வெகு நாள் பாடிக்கொண்டிருந்தார்கள். அந்த சிட்டாஸ்வரம் எனக்கும் பாடமுண்டு. நானும் அதை கதானுகதிகமாய் பாடிக் கொண்டுதானிருக்கிறேன். இதைப்பற்றி நான் கிருஷ்ண பாகவதர் அவர்களைக் கேட்டதற்கு "அது தவறுதான். ஆனல் ஸ்வர அமைப்பின் அழகைப்பற்றி அதைப் பாடிவருகிறோம். லக்ஷணிகர்களேயன்றி மற்ற யாவரும் இதை அறிவது துஸ்ஸாத்யம். என் காலத்தை இப்படியே பாடித்தள்ளிவிடுகிறேன்," என்று பதில் மொழிந்தார். நான் கேட்டதைப்பற்றி மன்னிக்கும்படி கேட்டுக் கொண்டேன். இந்தக் கீர்த்தனம் அனேக பாகவதோத்தமர்கள் மனிதர்களுக்கும் இக்காலத்தில் யாராகிலும் பாடுவார்களோ என்று தேடிப்பார்த்தும் கேட்பது துர்லபமாகிவிட்டது காலஞ்சென்ற ஸ்ரீமான் பஞ்சாபகேச சாஸ்திரிகள் மாத்திரம் இரண்டொரு தடவை பாடக்கேட்டதுண்டு. ஸ்ரீமன் மத்வமதஸ்தர்களாகிய சில ஹரிதாஸர்கள் இந்தக் கீர்த்தனத்தை லாவணியாகப் பாடிவருகிறார்கள். அது காதில் ஏறுவது கொஞ்சம் கஷ்டமாகவே இருக்கிறது. இந்த கீர்த்தனம் விஷமஸ்தானத்தில் எடுப்புள்ளது. ஸ்ரீ த்யர்கராஜ ஸ்வாமிகளின் 'கத்தனுவாரிகி' என்ற கீர்த்தனம்போன்ற எடுப்புவாய்ந்தது. ஸ்ரீ தாஸர்வர்கள் இந்தக் கீர்த்தனத்தை ஆரம்பிக்கும் போதே பழமொழி யொன்றை வெகு அந்தமாய் இதில் உபயோகித்திருக்கிறார்கள். 'காற்றுள்ள போதே தூற்றிக்கொள்,' என்பதன்றே உலக வழக்கச்சொல். இத்தகைய பழமொழிகளே அடிக்கடி ஸாஹித்யங்களில் உபயோகித் திருப்பதாலன்றே நமது தக்ஷிண பாரத பூமியில் அருணசலக் கவிராயருடைய ராமாயணப்பதமும், வேதநாயகம் பிள்ளையவர்களின் ஸர்வஸமய ஸமரஸ கீர்த்தனங்களும், கவிகுஞ்சர பாரதியாரின் கீர்த்தனங்களும், ஸுப்பராமய்யர் பதங்களும் மேன்மை பெறலாயின. இந்த உபதேசத்தினல் ஜனங்களே கோக்கி, "ஹே ஜனங்களே! பூர்வபுண்ய விசேஷத்தினல் உங்களுக்கு ஸர்வகரியஸாதனமாகிய இந்த சரீரம் கிடைத்திருக்கிறது. நற்காற்று வரும்போது நெல்லைத் தூற்றி பதர் நெல்லை அகற்றி, சுத்தானியத்தை கைப்பற்றிக் களிப்பதுபோல் அமூல்யமாகிய இந்த சரீர ஸாதனத்தைக் கொண்டு பிறவிக்கு ஹேதுவாகிய பாபத்தை அகற்றி, புண்யம் பெற்று, ஸ்ரீ ஸர்வோத்தமனுகிய ஸ்ரீ ஹரியின் சரண ஸரோஜங்களைப்பற்றி விரைவாய் புருஷார்த்தமடையுங்கள்," என்று கூறுவதாகக் காணப்படுகின்றது. பரமப்ரார்த்தியைக் கோருவதால் ஸ்வாமிகளின் மனோநியமும் இத்தகைய தென்று ஏற்படுகின்றது.

(தொடரும்).

THE EXPERTS' CONFERENCE, APRIL 1930.

The experts' conference organised by the Music Academy Madras, held its session at the Mani Iyer Hall, Triplicane, from Friday the 18th, to Monday the 21st April 1930. In addition to the members of the Expert Committee, invitations had been sent to several gentlemen interested in music. Among those present were Dr. U. Rama Rao, Messrs. S. Satyamurty Iyer, W. Doraiswamy Iyengar, T. S. Sabhesa Iyer, Tiger Varadachariar, Hulugur Krishnachariar, P. S. Sundaram Iyer, Pandit Subramania Sastriar, M. S. Ramaswamy Iyer, P. Sambamurty Iyer, Vinjamury Varaha Narasimhacharlu, T. Lakshmana Pillai, Mr. and Mrs. Narayana Nair, Shermadevi Subramania Sastry, Madura Subramania Iyer, Palladam Sanjiva Rao, Marur Subramania Iyer, Nemam Natesa Iyer, C. S. Iyer, M. A. Srinivasa Iyengar, T. L. Venkatarama Iyer, Dr. Srinivasa Raghavan, R. Kuppuswamy Iyer, Jalatarangam Ramaniah Chettiar, V. Appa Rao, K. S. Viswanatha Sastriar, T. S. Rajagopala Iyer, K. Narayanaswamy Iyer, Mrs. Kalyasundari Sitaram, E. Krishna Iyer, S. Rajagopalachariar, and T. V Subba Rao.

The proceedings commenced at 5 p.m. on Friday the 18th April 1930. Dr. U. Rama Rao, President of the Music Academy, in welcoming the delegates and the invitees spoke as follows:—

"Members of the Expert Committee of the Music Academy, Ladies and Gentlemen, It gives me great pleasure and satisfaction to see you assembled here, in such large numbers, who are experts in music and have taken all the trouble of coming here at great personal sacrifice, and I welcome you all on behalf of the Music Academy and the music-loving-public of the city of Madras in particular, and of this presidency in general. The regular Annual Music Conference of the Music Academy has been postponed to December, owing to the clouded political atmosphere of the country at present. The music-loving public of this presidency are very proud of you, who are members of the Expert Committee, and due to your exertion and co-operation, that during the first Music Conference in Madras, during the last Congress in this city, we were able to take stock of our position in the Music world and were able to start the Music Academy in Madras with your advice and co-operation. The objects of the Academy are known to you. I need not therefore elaborate on their usefulness. One of the objects of this Conference of the members of the Expert Committee is to investigate and standardise the questions relating to *Srutis* and *Ragalakshanas* and remedy certain defects in South Indian Music.

Ladies and Gentlemen, there is an urgent need for standardising the Music in South India. There is a difference of opinion among the musicians themselves. Though there are a number of musicians who sing remarkably well to the general satisfaction of the public, the theory of music is not properly and easily studied. There is a great demand for teachers in music who can handle both theory and practice. Institutions for imparting correct knowledge of theory as well as practice, hardly exist in this presidency, except the one just started at Chidambaram by the great philanthropist, Raja Sir Annamalai Chettiar. The need for more such institutions is very urgent. Demand for music teachers is very great. There are few books on music which can satisfactorily serve as text books in the music schools and colleges. So it is left to you to sit together and standardise music and bring out books on theory and practice of music.

You have raised the Academy to its present position of influence and respect by your association with it. It is left to you to make it a more useful and greater power in the musical world. The Academy is to a great extent instrumental in introducing music in the University of Madras for the B.A, and the Intermediate courses and the School Final classes. The introduction of this subject as part of the educational course makes it necessary for you to see that proper and scientific instruction is imparted to the students. Want of good teachers is keenly felt. To develop the theoretical and scientific side of music, the Academy has started a journal which is the first of its kind in India, with an editorial committee, of which, Mr. T. V. Subba Rao is the Editor-in-chief, who is now chosen to preside over the deliberations of this Conference. The journal cannot serve its purpose without your help and co-operation. We expect you to take a deep interest and contribute articles on different subjects and keep up the high standard which it is aiming at. Already appreciation has been expressed for the journal from all parts of the world.

Ladies and Gentlemen, We, the members of the Academy, represent merely the hands of a clock, of which, you are the internal and intricate mechanism. The hands cannot point out the exact time without the working of the internal mechanism.

I am afraid I have taken up much of your time. I am not an expert to lead you on to the subjects to be discussed by you. I only represent the music-loving public. So I call upon you to elect your President to carry on the deliberations for which you have met here."

Mr. Satyamurty in proposing Mr. T. V. Subba Rao to the chair, said that though music was a sweet thing to hear, discussions relating to it were discordant. For guiding them in their deliberations they could not think of another, who combined within himself in such delightful degree, ability, tact and patience.

Mr. E. Krishna Iyer, in seconding the proposition, observed that Mr. T. V. Subba Rao is a great asset to the Academy.

The proposition being carried, Mr. T. V. Subba Rao occupied the chair and delivered his Presidential address as follows:—

"On behalf of the Music Academy, Madras, I tender to you a hearty welcome and hope that the discussions of this committee will prove useful to the scholar and the musician alike.

I do not know if it is necessary for me to justify the step we have taken in convening a meeting of this Committee. It is true, we some-times come across a remark, that music is a thing only for singing or playing and not a matter to talk about. But you will perceive that under no circumstance is it meant that talking about music should take the place of singing. We talk about music so that the artist may sing well and truly. You have probably heard the statement often made, that music should be pleasant to the ear, no matter whether it is scientific or not. Though I am free to confess that music should please the ear first, yet, I feel bound to ask, "Whose ear?" It is undoubtedly the ear of a trained and cultivated person. Music lovers have to be instructed in the correct standards of taste and appreciation before they could derive the highest satisfaction obtainable from one of the greatest sources of human happiness. Even assuming that music is a thing of art only and

that there is no room in it either for intellectual appreciation or spiritual ecstasy, still there is one aspect of it, which is far more important than the charm of the sense, namely, the emotional effect. The characteristic excellence of Indian Music as distinguished from the Western system of music, lies in the fact that it makes a much stronger appeal to the heart than to the ear. It is quite possible for a person endowed with a good ear and a good voice to reproduce fine music. But his efforts will amount only to a faithful imitation. Creative faculty cannot be developed without a study of the fundamental principles which alone will enable a musician to have a correct and intelligent appreciation of the best models of our great artists. Even Thygaraja is said to have derived considerable benefit by the study of *Svararnava*. And so did other eminent singers study the theory with profit. I hope our musicians will not refuse to have access to that enlightenment, which the greatest of their ancestors, eagerly sought to possess. No one can be sure of always expressing the true *Bhava* of a *Raga* without a correct understanding of the precise *Srutis* that form the basis thereof. If you rely on the *Svaras* in terms of their twelve *Sthanas* only, you will have a succession of sweet notes, just a frame-work or skeleton without the beauty of a living form. I shall give a simple illustration. Take the *Hamsadhvani Raga*; you will find it stated as a *Janya raga* of *Sankarabharana*. Carefully observe the note *Kakali Nishada* as used in both the *ragas*. You will find the *Nishada* of *Hamsadhvani* much sharper than that of *Sankarabharana*. Take again *Kakali Nishada* as used in certain *sancharas* of *Begada*. You will find it less than that of *Sankarabharana*. It is the failure to understand that there can be a variety of notes in a *Svarasthana*, that has occasioned the more frequent use of *Kakali Nishada* in *Begada*. I am not for a moment suggesting that we should not use *Kakali Nishada* in *Begada*. I am just explaining how changes creep in through confusion. I still maintain, however, that *Begada* cannot be properly sung without at least occasional use of the flat variety of *Kakali Nishada*. Thus you will see that the proper expression of the spirit of a *Raga*, a study of the *srutis* is all important. On the *srutis* depend the *Svara Prastara* and the characteristic *Gamakas* which together make up the *Rupa* of a *Raga*. You have heard how our ancestors by a thorough grasp of the *srutis* were able to make not only man but nature also responsive to their music. I therefore earnestly beseech our musicians to study the *sruti* problem. Let them not be scared away by the use of mathematical ratios which are, after all, only symbols for the various tones.

In the next place I would point out that the task of formulating the *Lakshanas* of various *Ragas* and of liberalising the theory consistently with the fundamentals, so as to relate to current practice at its best, can be done only in the hands of a learned and representative gathering of experts. Just as in conformity with the spirit of the times, the evolution of social and political order, is made to lie not in a single pair of hands but upon representative public opinion, so in the sphere of music the function of ameliorative codification which was formerly exercised by such great individuals as Bharata, Pundarika Vittala, Rama Matya and Venkata Makhi, now devolves upon you. Even as grammar and lexicon help one to express one's own ideas clearly as well as understand those of others, the *Lakshana granthas* of music help one to embody and realise the true beauty of emotions. I cannot conceive of a musician ignorant of correct theory, succeed in making a direct appeal to our hearts, any more than I can of an author, ignorant of the rules of grammar, in producing a work of literary merit. I do regard, therefore, that the study of the science is essential for the practice of the art. But the present practice, as is quite natural and common, has largely outgrown the limits indicated in the previous *Lakshana-granthas*. In fact it is now much more than a century since any work of authority appeared. The volumes of Subbarama Dikshitar and Singracharlu, which were published in the beginning of the present century, mostly deal with songs in notation, and wherever an exposition of the theory is given, it is either a meagre summary of the views of certain previous writers, or an attempt to give currency to their favourite ideas. With all respect, I must venture to submit that neither of these writers can be accepted as an authority. The former deliberately overlooks tradition and history and gives a system of names and descriptions of the *Lakshanas* of certain *ragas* that do not appear to have been current at any time. Singracharlu's works too are not free from the taint of bias. Without in the least belittling the signal services that these writers have rendered to the world of music, by the open and unstinted publication of numerous songs which were exclusive in their keeping, I may be permitted to say, that some of their views on theory, have no bearing either on the past or contemporary or present practice. I need not refer to other works, as none of them professed to make an authoritative exposition of principles. You will therefore agree with me that the need for enunciating the *Lakshanas* of our present *Sangeeta* is all the greater in the absence of a satisfactory work of modern times. No body of men is better fitted to undertake that task than you. I am aware that it is a long and arduous business and that much cannot be expected in a short session of 2 or 3 days. But I should rest content, if we shall have made a decent beginning, and then follow it up steadily in our subsequent sessions. If with your kind co-operation the Academy is able to achieve even a fair measure of success in this direction, you will have played no mean part in the making of the history of the development of Indian Music. The generations yet to come, will look up to you for light in the same spirit of reverence with which you look up to the sages of old.

May I here crave your leave to utter one word of caution! In an assembly of such vigorous and independent thinkers as those assembled before me, absolute unanimity of views cannot be expected. No real progress is indeed possible with a dull uniformity of ideas all round. Whereas it is the birth-right of every person to express his own views freely, he may not treat the opposite point of view with contumely. You ought not to condemn any view for the simple reason, it is opposed to received notions. Every point of view requires our careful and dispassionate attention. In fact the history of the world of thought and culture is replete with examples of lasting benefits that have resulted from the spirit of revolt, rather than from a meek and unthinking submission to outworn creeds and dogmas. In one sense Buddha and Jesus Christ, Socrates and Galileo were rebels, whose record of service to humanity can never be outshone. The sage who condemned the *Gandharagrama*, the pioneers who introduced the *Antara*, *Kakali svaras*, were all rebels in the same sense. The founder of every school of thought was a rebel against the established order. We ought not to reject any proposition merely because

it is new. Let me say that in expressing these sentiments, I am not actuated by anything except an anxiety, that the deliberations of this committee, should be conducted in a spirit of tolerance, amity and good will.

With regard to the actual work before us the questionaire circulated for eliciting opinion indicates the points on which the discussions should centre. You will remember in 1928 a committee was appointed to go into certain questions ralating to *Srutis* and *Ragas*. The local members of the committee met in October and November last and with the object of obtaining the considered opinion of the members of the committee on the matters referred to, the questionaire was framed and sent round. The response to it, however, was not adequate. Some members suggested that it would be better if the members met and personally discussed these matters. The acceptance of that suggestion occasions the present meeting of the Committee. As it is, I propose to take the points contained in the questionaire one after another and dispose of them. In this connection I would request you to illustrate your view-points by ample references to high-class compositions, so as to lead the way for a critical study of the pieces. I believe such a study will considerably help our musicians in acquiring the true conception of the *Raga* they embody. Further, such of you as are desirous of reading a paper on any relevant subject may do so and discussions may also follow. We may consider, in addition, any matter which we think should be placed before the ensuing Conference in December. I invite your suggestions with regard to the future work of the Academy.

I sincerely trust, that before the end of the present session, you will have the satisfaction of having laid the foundations for the work of reconciling theory and pra[ctice] so as to ensure for Indian Music a fu[ture] no less glorious than its brilliant past.

The President then announced that discussions on the points raised by questionaire would be taken up in ord[er] 11 a.m. on the following day. A few delegates expressed the view that there should be a slight change in the order that *Ragas* should be discussed [before] *Srutis*.

The President desired to ascertain the wish of the house and called upon delegates to speak on the order of bus[iness].

Messrs. P. S. S. Iyer, T. L. Venkata[rama] Iyer, M. S. Ramaswamy Iyer, R. Ku[ppu]swamy Iyer and others took part in the discussion. The President then ruled that *Srutis* would be dealt with first. The conference was then adjourned. The delegates had some informal discussion and exchange of views on the subject raised by the questionaire and then dispersed to meet on the following day.

The Proceedings on the 2nd day.

On the 2nd day, the 19th April 1930, the conference continued the deliberations with Mr. T. V. Subba Rao in the chair. The discussions were lively and lasted from 11 a.m. to 5 p.m. The practical manner in which the questions were discussed and dealt with, and the frequent demonstrations given to elucidate the various points at view, render the task of conveying a [full] idea of the usefulness of the work of the conference by a report of its proceedings extremely difficult. Only those who attended the session could form a true estimate of the work done. The discussions were free and full. What is reported here, however, is just the conclusion of the debate on each point prefaced by a few remarks from the Chair. The opinion of the conference on each question as stated by the President was, where it was not unanimous, always supported by a large majority.

Mr. C. S. Iyer circulated among the members of the expert committee his pamphlet, 'A Note on the Srutis in Carnatic (South Indian) Music.'

The President then read out the questionaire set out below :—

Srutis.

(1) Do you think, that the needs of the Carnatic Music at the present day will be met by 22 *srutis*? If not, do you suggest more?

(2) What in your opinion is the VIBRATION VALUE of the various *srutis* and how would you name them?

(3) Will you indicate in what *Ragas* the various *Srutis* occur, quoting illustrations from the musical compositions?

Raga Lakshana.

(1) With reference to the following *ragas*, will you give the correct AROHANA and AVAROHANA with VISITING NOTES, if any, (specifying their *Srutis* and illustrating the same by relevent *Sancharas*)?

1. Asaveri	8. Bhairavi	15. Nilambari
2. Punnagavarali	9. Ananda Bhairavi	16. Atana
3. Abiri	10. Mukhari	17. Bilahari
4. Saveri	11. Huseni	18. Begada
5. Nadanamakriya	12. Kambhoji.	19. Devagandhari
6. Gaulipantu	13. Sahana	20. Saranga
7. Sowrashtra	14. Edukula Kambhoji	

The President then said :—

"Taking up the first question, I wish to remind you, that the All India Music Conference 1927, has already decided that the Indian scale of music according to Bharata and Sarangadeva consists of 22 *srutis*. What you have now to consider is whether these 22 *srutis* are sufficient for the Carnatic Music as it prevails to-day. Any discussion whether the *srutis* are less than 22 will be ruled out."

Mr. P. S. Sundaram Iyer:—"The Veena has 12 fixed frets and our *Sastras* mention 22 *srutis* for expressing our music. The Veena with 12 fixed frets came into existence at the time of Raghunatha Naick."

Mr. P. Sambamurty :—"Veena with frets existed even before Raghunatha Naick."

Mr. P. S. Sundaram Iyer:—"Yes, but the frets were not fixed then. They were fixed in Raghunatha's time. This circumstance also gives rise to 72 *Mela Ragas*. Of the 12 half notes, 10 excluding *Sa* and *Pa* gave rise to 20 *Srutis*, which, along with *Sa* and *Pa* make 22. Out of this 22 *Ahobila* omitted 10. These 22 *srutis* are necessary as well as enough for our music. More *srutis* are unnecessary."

Mr. C. S. Iyer:—"Is there any limit to the pulling of the strings of the Veena?"

Mr. P. S. Sundaram Iyer:—"In Veena the 2nd fret ordinarily produces the *Trisruti Rishabha* (10/9) and the same fret is used for producing the note 32/27 also."

Mr. C. S. Iyer:—"I do not agree. The strings could be pulled to produce more notes than two."

The President:—"The limit to pulling the string is determined by the tension of the string and the ordinary physical laws will apply."

Mr. Varaha Narasimhachariar:—"Confusion would be avoided if Mr. C. S. Iyer uses the word *srutis* instead of notes."

Mr. T. S. Sabhesa Iyer:—"If the number of *srutis* is increased beyond 22, it may not be possible to distinguish the new *srutis* from some of the 22."

Mr. C. S. Iyer:—"Some of the frets of the Veena are roughly fixed. More *srutis* than 22 should be recognised."

Mr. T.L. Venkatarama Iyer:—"The question is whether 22 *srutis* are enough for all practical purposes. There is a possibility of introducing more than 22 *srutis* as we can distinguish them."

Mr. Venkatarama Iyer quoted from Kallinatha in support of his views.

Mr. P. S. Sundaram Iyer:—"Mr. Venkatarama Iyer quotes authority like a lawyer. But he will find that *Matanga*, upon whom Kallinatha was relying for his views, actually says lower down in the passage, that though *srutis* are theoretically infinite, yet for all practical purposes only 22 *srutis* should be recognised. The origin of music could be traced to olden days. In the great *yagas* which were elaborately performed for one full year, persons well-versed in *Samaganas* were employed to please the guests. It was here that music first began as an art. The musicians composed their own songs. From that period the 22 *srutis* have been in existenco. From the point of view of culture I do not believe that we are better than our ancestors. I am of opinion that to extend *srutis* beyond 22 is wrong. T[illegible] 22 are actually used and they are sufficie[nt]

Mr. Hulugur Krishnachariar:—"22 [*srutis*] are quite enough for all practical purpo[ses]. They are easy to produce and manipul[ate]. But Sarangadeva however accepted onl[y] out of the 22. It is not desirable to incr[ease] the number of *srutis* beyond 22."

In support of his views Mr. H. Kri[shna]acharya read a small note from which [the] following are extracts:—

Discussion about *srutis* has been a [very] old one. The 22 *srutis* have been selected [as] they were best from several points of vi[ew]. Regard was had to these points:

(1) *Srutis* must not be highly complica[ted]. (2) They should be capable of being obtai[ned] without nice calculations of measurem[ents]. (3) They should be suitable for a fret[ted] instrument like the Veena. (4) When a sc[ale] is repeated, all the 7 *svaras* of the 7 *murchan*[as] must fall within the original system [of] *srutis*. (5) Each *svarasthana* must easily give rise to *srutis*. (6) The *srutis* should leave enough scope and margin for *gamakas* to be played. (7) The *srutis* must be harmonious and sweet to the ear even if prolonged.

Mr. Lakshmana Pillai:—"I have [not] studied *sastraic* authorities. I can speak only from my experience. There is a good deal of difference of opinion in this matter. *Kharaharapriya* was a standard *raga*. Its *svaras* however are not clearly defined. The ancients did not know the vibration value in those days. 22 *srutis* were a sort of convention for working purposes. I am in favour of 22 *srutis*."

Mr. M. S. Ramaswamy Iyer:—"If any one should demonstrate that there are more than 22 *srutis*, then we cay say that *srutis* are more than 22. Till then, we must accept only 22 *srutis*."

Mr. Varaha Narasimhachariar:—"We can hear from the voice more than 22 *srutis* in 7 *ragas*. But these occurrences should be treated as rare. We must ordinarily confine ourselves to 22 *srutis*. The other varieties should be treated as *gamaka* variations and not as *srutis*."

Mr. Tiger Varadachariar:—"I am in favour of 22 *srutis* only."

Mr. T. S. Sabhesa Iyer:—"*Sastras* say *srutis* are 22. In practice we recognise only 12 notes. If all the subtle modulations are recognised as *srutis*, the number will be very large. I am personally in favour of 12 notes only."

The President:—"The point before us is whether the *srutis* are 22 or more. Any discussion as to whether the number is less would be irrelevent. If questions which are concluded are reopened it is impossible to get on with the work. Therefore the speakers will kindly confine their remarks to the question whether the srutis are more than 22."

Mr. Sermadevi Veena Subramanya Sastry:—"*Gamakas* cannot be treated as *srutis*. 22 *srutis* are indispensable."

Dr. Srinivasa Raghavan:—"The whole question requires careful investigation. I am myself not decided about it. I should be thankful for any enlightenment I may get from this conference."

Mr. Nemam Nataraja Bhagavatar:—"22 *srutis* are predominant in our music, though in practice, we refer only to 12 notes."

Mr. Sermadevi Subramania Sastriar played upon the Veena and gave certain demonstrations. It was noticed that the characteristic *Gandhara* of to day was always produced by the tension at the 2nd fret or the *Chatusruti Rishabhasthana*. By using the 3rd fret or the *Sadharana Gandharasthana*, the *Bhava* of the *Raga* was lost. Again the *Gandhara* and *Nishada* of *Kalyani* were observed to be respectively higher than the *Gandhara* and *Nishada* of *Sankarabharana*.

The President:—"Before stating the conclusion let me summarise the views of the speakers. In discussing the question of *srutis* one thing which is usually lost sight of has to be remembered. Originally the *srutis* were only intervals or measures for obtaining the *suddha svaras*. The use of all the intervals as tones is a later development. The 10 *srutis* in addition to the 12 standard ones, have only the difference of a comma from the corresponding 10 out of the 12 standard notes, *i.e.*, those omitting *Sa* and *Pa*. If the difference of a comma is sufficient to enable you to differentiate one tone from another, then there is no point in restricting the number to 22 on the ground of indistinguishability, because several notes in addition to the 22 could be produced with the difference of a comma between them. Further it could also be demonstrated, if we have an instrument which automatically records the frequency of notes as and when they are formed, that a larger number of tones than 22 is used in music as it prevails to-day.

But in deciding the present question, it is not abstract reason and logic nor the changing and unstable elements of contemporary practice that should prevail with you. Regard must be had, not only to the limits of practicability, but to the permanent values of the tones which have been employed in our music from time immemorial. It is from these points of view that a scheme of 22 *srutis* has been evolved as being not only practical but eminently ideal and suited for all time to come. The 22 *srutis* are able to satisfy numerous scientific tests and are well supported by tradition, history and usage. The classic 22 *srutis* alone are

best able to reconcile science and practice. *It is therefore necessary to restrict the number of srutis to 22 only.*

With regard to the first part of the second question *i.e.*, regarding the vibration values of the various *srutis*, you will find that in the address that I delivered as President of the Conference on 2nd April 1929, the frequency ratios of the *srutis* to the fundamental are given by me. I find that most of those who have worked at these figures are in substantial agreement with me. If there is no objection, the table of values given by me may be adopted."

There being no objection, frequency ratios of the 22 *Srutis* as contained in the aforesaid Presidential address were adopted as substantially correct.

Then with regard to the 2nd part of the same question, the President invited discussion.

Mr. Hulugur Krishnacharya :—"In devising a set of names for the *srutis* we must have regard to the *Suddha svaras*. I cannot avoid mentioning that in the earlier period of *Bharata*, *Sriraga* or *KharaharaPriya* had the *Suddha svaras*. But Ramamatya and others without carefully studying *Natya Sastra* and *Ratnakara*, through mere confusion stated *Mukhari* or *Kanakangi* to be the *Suddha Mela*. Of course this error was perpetuated by Venkatamakhi. But later writers felt a doubt and were inclined to adopt once again *Kharahara Priya* or *Bhairavi* as *Suddha Mela*, and consequently brought the *Mukhari Raga* under either of these *Melas*. The existing nomenclature of these *svaras* and *srutis* should take note of these changes."

Mr. P. Sambamurty :—"Can you suggest names for the vibration values of the *srutis*?"

Mr. Hulugur Krishnacharya:—"They may be named *Prathama* etc."

Mr. P. S. Sundaram Iyer :—"The system of names as found in most of the Sanskrit works may be adopted. A special Veena must also be constructed for demonstration. I have myself constructed a harmonium and a Veena for this purpose."

Mr. Sambamurty :—"My suggestion is in favour of the new names rather than the old orthodox names. My reason is the names should be expressive in the first instance."

Mr. T. L. Venkatarama Iyer :—"In my humble opinion the suggestion of Mr. Sambamurty is correct. There will not be much difficulty in giving new names."

Mr. Narasimhachariar :—"I agree with Mr. P. S. S. Iyer for the adoption of names."

Mr. Tiger Varadachariar:—"I am in favour of the old names."

The President :—"From the discussion I find better opinion seems to be in favour of adopting classical names. I rule accordingly. The names will be:—

1.	Shadja	S
2.	Ekasruti Rishabha	R1
3.	Dvisruti Rishabha	R2
4.	Trisruti Rishabha ...	R3
5.	Chatusruti Rishabha ...	R4
6.	Suddha Gandhara ...	G1
7.	Sadharana Gandhara ...	G2
8.	Antara Gandhara ...	G3
9.	Teevra Gandhara or Chyuta Madhyama Gandhara ...	G4
10.	Suddha Madhyama ...	M1
11.	Teevra Madhyama ...	M2
12.	Prati Madhyama	M3
13.	Chyuta Panchama	M4
14.	Panchama	P
15.	Ekasruti Dhaivata	D1
16.	Dvisruti Dhaivata	D2
17.	Trisruti Dhaivata	D3
18.	Chatusruti Dhaivata	D4
19.	Suddha Nishada ...	N1
20.	Kaisiki Nishada	N2
21.	Kakali Nishada	N3
22.	Chyuta Shadja Nishada	N4

Here the discussions on the 2nd day came to a close. In the evening at 5 P. M. there was a A JALATARANGAM PERFORMANCE BY VENKATARAMA IYER OF SIVAGANGA which was well appreciated. Mr. Ramaniah Chetty, Jalatarangam Vidvan, praised the per-former and thanked him on behalf of the Academy.

The proceedings on the 3rd day.

On the 3rd day the proceedings commenced at 11 A. M.

The President :—"We now proceed to discuss the 3rd question. It is not necessary for our present purpose that we should name all or as many *ragas* as we can, to indicate the occurrence of each *sruti*. It should be enough if you specify one or two *ragas* where the occurrence of a particular *sruti* is unmistakable. We take the *srutis* in the order."

"EKASRUTI RISHABHA."

Mr. P. S. S. Iyer:—"In the Veena the first fret gives the *Dvisruti Rishabha*. The *Ekasruti Rishabha* is therefore played from the *Shadjasthana*. For instance in *Poorva Kalyani* the *Rishabha* is produced in the *Shadjasthana*. It therefore takes the *Ekasruti Rishabha*."

Mr. Subramania Sastriar agreed with the above view.

Mr. Hulugur Krishnacharya :—"The *Antara Gandhara* can come in only with *Ekasruti Rishabha*. It can never be used after *Dvisruti Rishabha* because the interval is a foreign one. Where *Dvisruti Rishabha* is used the *Gandhara* will be *Teevra*."

Mr. P. S. S. Iyer :—"Probably Mr. Krishnacharya is referring to Northern *Ragas*. My experience of South Indian system is somewhat different. Several *ragas* are sung without relation to the interval of succeeding notes. The *Rishabha* is independently pronounced. So also *Ga*, *Ma*, and *Ma*, *Ga*. There are no fixed laws in these cases."

"DVISRUTI RISHABHA."

Mr. P. S. S. Iyer :—"*Mayamalavagaula*. This *sruti* in *Mayamalavagaula* is not perfect. It is perfect in *Todi*".

Mr. P. Sambamurty :—"*Vasanta*."

Mr. Narasimhachariar:—"*Mayamalavagaula* and *Todi*".

"TRISRUTI RISHABHA."

Mr. P. S. S. Iyer :—"*Kedaragaula*."

Mr. C. S. Iyer :—"In certain *Sancharas* of *Asaveri* and *Varali*."

Mr. P. S. Sastry:—"*Bhairavi* and *Sri Raga*."

Mr. C. S. Iyer :—"The *Trisruti Rishabha* does not occur in *Bhairavi*."

Mr. Sermadevi Subramania Sastry played *Bhairavi* on the Veena and maintained he was using only *Chatusruti Rishabha* in *Bhairavi*."

Mr. Hulugur Krishnacharya :—"I think the *Trisruti Rishabha* occurs in *Kharaharapriya* and the note used in *Bhairavi* is *Chatusruti Rishabha*."

The President :—"I am afraid Mr. Krishnacharya has regard to history and not to current practice."

"CHATUSRUTI RISHABHA."

Mr. H. Krishnacharya :—"It is used in *Bhairavi* and also in *Kambhoji*."

Mr. Narasimhachariar:—"*Bhairavi*, *Kharaharapriya* and *Ananda Bhairavi*."

There was however no difference on the point of *Chatusruti Rishabha* occuring in *Kalyani.*

"SUDDHA GANDHARA."

A large body of opinion was in favour of *Bhairavi* as illustrated in the use of *Suddha Gandhara.*

" ANTARA GANDHARA."

Opinion was unanimous that *Kambhoji* and *Sankarabharana* took *Antara Gandhara.*

"TEEVRA GANDHARA OR CHYUTA MADHYAMA GANDHARA."

There is no dispute regarding the occurence of this note in *Kalyani,* though at present the *raga* as sung adopts *Antara* frequently.

"TEEVRA MADHYAMA."

Mr. P. S. S. Iyer:—"It occurs in *Madhyamavati.*"

Mr. H. Krishnacharya :—"*Bhairavi.*"

Mr. T. L. Venkatarama Iyer:—"*Begada* and *Gauli-pantu.*"

Mr. Narasimhachariar :—"I do not agree that the note occurs in *Begada.*"

Mr. Sambamurty:—"It occurs in *Begada.*"

Mr. Pandit Subramania Sastry:—"I am of opinion that this note does not occur in *Begada.* Only *Suddha Madhyama* occurs in *Begada.*"

The President:—"That is a long way down from *Pratimadhyama* which was your former *sruti* in *Begada*".

"PRATIMADHYAMA."

Mr. C. S. Iyer:—" *Saranga*".

„ P. S. S. Iyer:—" *Poorva Kalyani*".

"CHYUTA PANCHAMA."

Mr. S. Subramania Sastry:—" *Varali* and *Ramapriya*".

"EKASRUTI DHAIVATA."

Mr. P. S. S. Iyer:—" *Dhanyasi*".

„ Subramania Sastry:—" Not in *Dhanyasi* but in *Saveri*".

Mr. C. S. Iyer : —"Not in *Saveri* but in *Bhairavi*".

Mr. Sabhesa Iyer:—" In *Bhairavi* when the *prayoga* is *pa dha pa*, the *dhaivata* is little flat. Elsewhere in the *Raga*, when *Suddha Dhaivata* is used, it is D2".

Mr. H. Krishnacharya:—" *Ekasruti Dhaivata* occurs in *Saveri*".

Mr. Sambamurty:—" I agree with Mr. Sabhesa Iyer".

Mr. Doraiswamy Iyengar:—" *Bhairavi*".

„ Narasimhachariar:—" *Saveri.*"

Dr. Srinivasa Raghavan:—" *Bhairavi*".

Mr. Nemam Nataraja Bhagavatar:—"I agree with Mr. Sabhesa Iyer".

" DVISRUTI DHAIVATA."

Mr. P.S.S. Iyer:—" *Mayamalavagaula* and *Todi*".

Mr. S. S. Sastry:—" *Todi*".

Dr. Srinivasa Raghavan:—" *Todi* and *Dhanyasi*".

Mr. Subramania Sastry:—" *Mayamalavagaula* and *Dhanyasi*".

Mr. H. Krishnacharya:—" *Todi*".

„ Sambamurty:—" Also in *Malahari*".

„ Lakshmana Pillai:—" *Dhanyasi* and *Todi*".

"TRISRUTI DHAIVATA."

Mr. C. S. Iyer:—" *Kambhoji*".

„ P. S. S. Iyer:—" *Sankarabharana*".

„ S. S. Sastry—*Kambhoji*".

„ H. Krishnacharya:—" *Kambhoji*".

„ Lakshmana Pillai:—" *Kambhoji*".

Mr. Sambamurty:—"do."

Narasimhachariar:—"do."

"CHATUSRUTI DHAIVATA."

Mr. P. S. S. Iyer:—" *Kalyani*".

C. S. Iyer:—" *Kalyani*".

"SUDDHA NISHADA."

Mr. P. S. S. Iyer:—" *Kambhoji*".

Pandit Subramania Sastry:—" *Bhairavi* and *Kambhoji*".

Mr. Sermadevi Subramania Sastry:—"*Bhairavi*".

Mr. H. Krishnacharya:—" *Kharaharapriya*".

Mr. Narasimhachariar :—" *Bhairavi, Kharaharapriya* and *Kambhoji*".

Mr. M.A. Srinivasa Iyengar.—" *Sahana*".

"KAISIKI NISHADA."

Mr. P. S. S. Iyer:—" *Kharaharapriya.*"

Dr. Srinivasaraghavan:—"*Kharaharapriya*".

Mr. S. Subramania Sastry:—" *Kharaharapriya*".

Mr. Subramania Sastry:—" *Kharaharapriya*".

Mr. Lakshmana Pillai:—" *Chakravakam* and *Vachaspati*".

Mr. H. Krishnacharya:—" *Todi*".

Sambamurty:—" *Kharaharapriya*".

Mr. Narasimhachariar:—"*Kharaharapriya and Todi.*"

Mr. Ramaswamy Iyer:—"*Harikambhoji.*"

" KAKALI NISHADA."

Mr. P. S. S. Iyer:—"*Sankarabharana and Mayamalavagaula*".

Mr. H. Krishnacharya :—" *Sankarabharana and Mayamalavagaula*".

Mr. Narasimhachariar:—" *Sankarabharana and Mayamalavagaula*".

" CHYUTA SHADJA NISHADA."

Mr. P. S. S. Iyer:—" *Kalyani*".

„ C. S. Iyer:—" Also *Kambhoji and Kuranji*".

The President :—" Our object in the discussion immediately forgoing is not to exhaust all the *ragas* in which the particular *srutis* occur; but it is only to illustrate the occurrence of particular *srutis* in typical *ragas.* While I am glad to notice a fair measure of agreement with regard to a few *srutis* in certain well known *ragas*, it is at the same time very disappointing to note that even with regard to common *ragas* there should be considerable disagreement in the matter of their characteristic *srutis.* I therefore propose to specify as the President of this Conference, only such *ragas* with regard to which there is the greatest agreement or rather least disagreement".

Shadja. In all ragas.
R1. Gaula.
R2. Mayamalavagaula.
R3. Kambhoji and Bhairavi.
R4. Kalyani.
G1. Bhairavi and Todi.
G2. Kharaharapriya.
G3. Sankarabharana and Kambhoji.
G4. Kalyani.

M1. Ordinarily in most of the Suddha madhyama ragas.
M2. Begade.
M3. Poorva Kalyani.
M4. Varali and Ramapriya.
P. In all ragas where Panchamam is not *varja.*
D1. Saveri.
D2. Mayamalavagaula and Todi.

D3. Kambhoji.
D4. Kalyani.
N1. Kambhoji and Bhairavi.
N2. Kharaharapriya.
N3. Sankarabharana and Ma[illegible] malavagaula.
N4. Kalyani Kuranji.

The President:—"We have finished the discussions with regard to the *Srutis*. The next part that we should deal with is *Raga lakshana*. There are twenty *ragas* set out in the questionaire. Each *Raga* will be taken up for consideration and its main characteristic such as *Arohana* and the *Avarohana*, the particular variety of notes, special or characteristic *Sancharas* and other peculiarities may be considered".

Mr. H. Krishnacharya: "I should suggest that we take the 10 *Lakshanas* enumerated in the classical works and deal with each *raga* in the light of these *Lakshanas*".

The President:—"Such a discussion would be elaborate and I am afaid very little can be done that way in the present session. We can therefore deal with only such main characteristics as I have indicated".

Then there was a brief discussion whether it was necessary in all cases to mention the *Janaka ragas* in cases of what are sometimes known as *Janya ragas*.

It was pointed out that most of the *Janaka ragas* were merely theoretical and what are classed as *Janya ragas* of those *Janaka ragas*, have been in existence for a long time, and can in no sense be regarded as having sprung from the *Janaka ragas* or having come into existence subsequent to the formation of the scheme of 72 *Melakartas*. It was however admitted that it will be more convenient to follow the current practice of mentioning the *Janaka ragas* as it indicates at once the *svarasthanas* of the *raga* though it gives no clue to the exact [illegible] is employed.

The President after discussion ruled [illegible] the present practice be adopted, though [illegible] should be understood that such a state[illegible] makes the *Janya ragas* neither posterior [illegible] nor actually derived from *Janaka ragas*.

Here the proceedings of the 3rd day [illegible] cluded. At 5 p. m. there was A VOCAL [illegible] FORMANCE BY MR. RAMAMURTI [illegible] which was well appreciated by all. Dr. Sr[illegible] vasa Ragavan in an eloquent speech pa[illegible] high compliment to the musician [illegible] wished him success.

The Proceedings on the 4th day.

The proceedings commenced on the fou[illegible] day at 11 a.m.

The President:—"We take up the raga[illegible] order".

"ASAVERI."

Mr, P. S. S. Iyer: "I suggest that [illegible] deal with *Sancharas* first and then [illegible] *Arohana* and *Avarohana*. The *raga* [illegible] accidental notes. It may however be [illegible] garded as the *Janya of Todi*".

Mr. C. S. Iyer:—"*Janya of Todi*. [illegible] *Arohana* and *Avarohana* of the notes are

Sa ri ma pa dha sa

Sa ni sa pa dha ma ga ri sa".

Mr. P.S.S. Iyer:—"I should like to know whether there is such a group as *pa dha ni* and if there is, I should like to know there is any authority".

Mr. Narasimhachariar:—"The *raga* take such a group as *ri ga ri sa*".

Mr. Subramania Sastry:—"In the descent it is *sa ni sa* and there is no *pa dha ni*".

Mr. Lakshmana Pillai:—"In the descent it takes *sa dha ni sa pa dha ma pa ri ga ri sa*".

Mr. Sabhesa Iyer:—"*Sa ni dha pa ma ga ri sa*".

Mr. Nataraja Bhagavatar:—"*Sa ni dha pa ma ga ri sa* is not uncommon. See '*Lekand*'."

Mr. T. L. Venkatarama Iyer:—"The use of R3 is occasional and slight".

The President:—"The *raga* will come under the 8th *melakarta*".

Arohana:—"*Sa ri ma pa dha sa*".

Avarohana:—"*Sa ni sa pa dha ni dha pa ma ga* (long) *ri sa*".

"The *raga* takes certain *vakra sancharas* occasionally taking the foreign note R3. But the use of this foreign note is so slight that we need not regard *the raga as Bhashanga*".

"PUNNAGA VARALI."

Mr. Sabhesa Iyer:—"*Ni sa ri ga ma pa dha ni.*

Ni dha pa ma ga ri sa ni".

Mr. Sanjeeva Rao:—"There is a *prayoga* like *Pa ma ga ri ga sa*. I should treat it as the *Janya of Ratnangi*."

Messrs. Pandit Subramania Sastry, T. L. Venkatarama Iyer and Narasimhachariar agreed with Mr. Sabhesa Iyer.

The President:—"The *raga* belongs to the 8th *Mela*.

The Arohana:—*Ni sa ri ga ma pa dha ni.*
The Avarohana:—*Ni dha pa ma ga ri sa ni.*

Here again as in *Asaveri* the use of R3 is very occasional and slight. It need not be classed as a *ruga* taking a foreign note."

"AHIRI."

Mr. Sabhesa Iyer:—"The *Mela* is the 14th. It takes *Sa ri sa ma ga ma pa dha ni sa, Sa ni dha pa ma ga ma ga ri sa*".

Mr. Subramania Sastry:—"I agree".

Messrs. T. L. Venkatarama Iyer, Cermadevi Subramania Sastry and Narasimhachariar preferred to treat it as the *Janya raga of Todi*, where the *Gandhara* is Sadharana.

Mr. T. L. Venkatarama Iyer desired that before stating the *Melakarta raga* of this *raga* from the chair, the individual opinion of each expert must be definitely asked and noted. He thought the majority were in his favour. The President though he did not favour such a proceedure, yet as a special case, asked each expert for his opinion. There was a decided and substantial majority in favour of fixing the 14th *mela* as the parent of that *raga*.

The President:—"The *Melakarta* of the *raga* is the 14th.

Arohana is: *Sa ri sa ma ga ma pa dha ni sa.*

Avarohana is: *Sa ni dha* (long) *pa ma ga ma ga ri* (long) *sa.*

Though in certain compositions we do hear *Sadharana Gandhara* occasionally, *Antara Gandhara* is always used when the *raga* alone is sung. Therefore there is no doubt that this is not a *Bhashanga raga*".

"SAVERI."

Mr. Sabhesa Iyer:—"*Sa ri ma pa dha sa. Arohanam Sampurnam.* The *mela* is the 15th or *Mayamalavagaula*. There is no foreign note. *Prayogas* like *ma ga ma, sa ri sa* are not according to *Sampradayams*".

Mr. Sanjeeva Rao.—"*Prayogas* like *Sa ni sa* cannot be regarded as improper. You will find that such a *prayoga* occure just in the beginning of Muthuswamy Dikshitar's well known *keertana* '*Sri Rajagopala*'."

Mr. Sabhesa Iyer:—"That does not appear to be the correct method of singing. It ought to be sung as *Pa dha ri sa ni dha dha.*"

The President:—"We discussed the *raga* at great length during the last year's conference. It is beyond doubt a *Janya raga* of *Mayamalavagaula*. The use of

Sadharana Gandhara or *Kaisikinishada* is improper. The *raga* is not *Bhashanga*. The *Arohana* is: *Sa ri ma pa dha sa*. The *Avarohana* is: *Sa ni dha pa ma ga ri sa.*"

"*NADANAMAKRIYA.*"

The President:—"There seems to be no dispute about this *raga*. It comes under the 15th *mela*. The *Arohana* is: *Ni sa ri ga ma pa dha ni*. The *Avarohana* is: *Ni dha pa ma ga ri sa ni.*"

"There is no foreign note *i. e.*, *Kaisiki Nishada.*"

"*GOULIPANTU.*"

The President:—"This *raga* comes under the 15th *mela*.

The *Arohana* is: *Sa ri ma pa ni sa.*

The *Avarohana* is: *Sa ni dha pa ma pa dha ma ga ri sa.*

The use of *Pratimadhyama* is not proper."

"*SOWRASHTRA.*"

Mr. T.S. Sabhesa Iyer:—"The *Mela* is the 17th.

Arohana is: *Sa ri ga ma pa dha ni sa.*

Avarohana is: *Sa ni sa dha pa ma ga pa ma ga ri sa.*"

Mr. Veena Subramania Sastriar:—"The *Arohana* and the *Avarohana* are both *sampoorna* and regular and the *Nishada* is *Kaisiki.*"

Mr. Sambamurty:—"Its *mela* is the 17th."

Mr. Narasimhachariar:—"Its *mela* is the 15th. *Mayamalavagaula.*"

Mr. Sanjeeva Rao:—"It does not take *Kaisiki Nishada.*"

Messrs. T. L. Venkatarama Iyer, Lakshmana Pillai, Subramania Sastry, Dr. Srinivasa Raghavan were of opinion that *Kaisiki Nishada* occurs in the *raga*.

The President:—"I think that this *raga* should be treated as the *Janya raga* of the 17th *mela*. The *Arohanam* is: *Sa ri ga ma pa dha ni*. The *Avarohanam* is: *Sa ni sa dha* (long) *ma ga pa ma ga ri sa.*

In several compositions the *Kaisiki Nishada* occurs. But *Kaisiki Nishada* is not necessary to produce the correct *Bhava* of the *raga* and may be avoided."

"*BHAIRAVI.*"

The President:—"This *raga* was fully discussed during the last year's conference and I do not think that anything useful could be added to it."

"*ANANDA BHAIRAVI.*"

The President:—"*Arohana: Sa ga ri ma pa dha pa sa.*

Avarohana: Sa ni dha pa ma ga ri sa.

It should be classed under the 20th *Mela*. D3 *Trisruti Dhaivata* occurs in such *Sancharas* as *pa dha pa*. *Pa ni sa* is not permissible."

"*MUKHARI.*"

The President:—"It is a *Janya* of the 22nd *Mela*.

Arohana is: *Sa ri ma pa ni dha sa.*

Avarohana is: *Sa ni dha pa ma ga ri sa.*

In the *Arohana* ordinarily *Chatusruti Dhaivata* occurs and in the *Avarohana Suddha Dhaivata*. *Prayoga* like *pa dha pa* is quite common."

"*HUSENI.*"

The President:—"It is a *Janya* of the 22nd *Mela*. Though it is common to describe the *Arohana* and the *Avarohana* as *Sampoorna* and regular, yet it would be better to state the *Arohana*, having regard to the peculiar *vakra sancharas*, as follows.

Arohana is: *Sa ni dha pa ma pa ma ga ri sa.*

The use of *Suddha Dhaivata* is permissible."

Conclusion.

The President:—"We now bring the proceedings of the present session to a close. I am unable to express how thankful I feel for the valuable help you have rendered to the Academy and to the world of music. It is indeed your co-operation that, on the technical side, brings high prestige to the Academy. Your labours in the present session have laid the foundations of the great task of bringing about a reconciliation between theory and practice. I hope you will continue to give your kind help and co-operation to the Academy and make the coming conference in December a great success. I must thank you for the kindness and courtesy you have shown me as your president."

The Hon'ble Dr. U. Rama Rao:—"I take this opportunity of thanking one and all of you for the efforts you have put forth during these 4 days. You have been sitting daily from 11 A.M. to 5 P.M. and have done a good deal of work. This is only a preliminary conference and we are having another conference in the month of December. You have been able to come to certain definite conclusions on important and difficult questions on the agenda. Mr. T. V. Subba Rao, who is your President, takes great interest in the art and science of music and with his guidance the conference has been a success. Though I have not much knowledge of music, yet, I am in a position to state that South Indian Music is certainly the best. In my estimation Mr. Subba Rao with that keen insight and judgment that become a lawyer, was able to manage the [illegible] efficiently with the co-operation of the Vidwans assembled here. Without your co-operation and assistance we cannot achieve anything. Music has been introduced in many schools in this presidency, and there is a music college at Chidambaram. It seems difficult to get suitable teachers. You will help us in our efforts to provide good and able teachers for these various institutions. Gentlemen, I thank you once again for the interest you have taken. May Mr. Subba Rao live long to serve the Academy and the cause of music!"

Mr. P. S. S. Iyer:—"In olden days there existed a sort of Association at Tanjore for the purpose of improving music but it long ago ceased to exist. I am glad that the Academy has come into existence to maintain the prestige of Indian Music. During these 4 days of our deliberations our worthy President has evinced a good deal of interest, and by his ability, patience and keen judgment, we have been able to do tangible work. We are very grateful to Mr. Subba Rao. Our thanks are also due to Dr. U. Rama Rao."

Mr. Varaha Narasimhachariar (Cocanada):—"I endorse the remarks of the previous speaker. I must express my high admiration for the ability and learning with which our President conducted the deliberations".

Mr. Sabhesa Iyer:—"I first hesitated to join the Academy because I thought a professional and a practical musician had no place in it. I thought the Academy was interested merely in theory. But I am glad to find it is dealing with the art and other matters which are very practical. I thought that our President's accomplishments were merely theoretical. It is a pleasure to me to know that his acquaintance with the practical side of the matter is vast and intimate. I wish that other musicians and artists do co-operate and render all help to make the Academy stronger. I wish the Academy all success".

Mr. W. Doraiswamy Iyengar:—"Every body is speaking in praise of the President. But I am going to say something which I think is a defect in Mr. Subba Rao. He has not till now let us know how well up he is both in theory and practice. It is wrong of him to have concealed all his knowledge".

Other speakers followed and thanked the President for his work.

Mr. E. Krishna Iyer:—"This is only a preliminary Experts' Conference convened to facilitate the work of the ensuing conference in December with regard to such intricate questions as are on the agenda. I hope that all the musicians and scholars will come forward and help the Academy and promote its objects. I thank the authorities of this Hall for allowing us the use of it and for other help which they have rendered to us."

The conference of the Experts was concluded with three cheers to the President and the Experts assembled there.

Notes and Comments.

We are glad to record here that the Academy, as the Premier Institution in Music, very appropriately celebrated the Krishna Jayanti Day, the Day of the Lord of Brindavan who enchanted the entire Universe with the ambrosial strains of His Venu Gana. May His Grace be upon Our Academy! Mr. T. L. Venkatarama Iyer, Advocate, High Court, Madras, an ardent Member of our Academy, was kind enough to entertain the audience on the occasion, with vocal Music (attended with suitable accompaniments) which was very greatly appreciated. The function came to a close with the distribution of sandal, fruits, sugar-candy and pan-supari to the audience. We are glad to further announce the resolution of the Academy to celebrate the Dikshitar Day this year.

Our energetic Secretary and Manager, Mr. E. Krishna Iyer, Advocate, High Court, Madras, has been incarcerated for his political activities. As one of the pioneers in the building up of our Academy, Mr. Krishna Iyer devoted a good deal of his valuable time in making the Academy a living force in this Presidency. By his enforced absence, the Academy has been very greatly handicapped in its activities and the histrionic world, wherein Mr. Krishna Iyer had made a name, has had a sudden gloom cast over. It is however some consolation to us to learn that the Government of Madras has thought fit to recommend him to be placed in the "A" class, and that he will be back amidst us in November.

We have very great pleasure in announcing that the Academy has this year been able to institute two competitions in Instrumental Music for amateur ladies, one in Veena and the other in Violin. The successful candidate in each will be awarded a gold medal of about 3 sovereigns in weight. We are greatly indebted for this competition to the generosity of our talented donor Mr. N. V. Raghavan, Rtd., Accountant General, Madras, and we take this opportunity of tendering to him our grateful thanks. We hope that others will very soon follow his example and help the Academy in instituting many more such competitions. It is a great pleasure for us to learn that such competitions as we have had, have already borne fruit in that they have kindled the right spirit in the amateurs and bestirred them to take to correct and proper methods in the practice of this sacred art of Music.

The late Mr. Sakharama Rao:—It is with painful regret that we have to record the passing away of the great Vidvan Sakharama Rao of Tiruvidamarudur. He really belonged to that galaxy of Musicians who shone resplendent on the South Indian Musical firmament two decades ago. Following the foot steps of his talented father, the late Mr. Srinivasa Rao, he showed to an all-admiring world the boundless possibilities of Gotuvadyam as a musical instrument. His playing on that instrument was superbly unique. His dexterous fingers unfolded the beauties of many a rare *keertana* and even very minor ragas resonated under his magic touch with a lustre all their own and a wealth of symphony not easily to be met with.

For some time past, he had not been giving public performances, though many a votary did go to him to enjoy his sweet music. He has left behind him a son Mr. Srinivasa Rao who, we are glad to note, promises to bring up the traditions of his talented father. We offer him and the members of his family our sincerest co

The Summer School of Music:—We are glad to notice that the summer school of Music has been endeavouring to meet a real want in South Indian Music. With the spread of Music the demand for a number of trained competent teachers is naturally on the increase. It is highly desirable that a diploma course under proper guidance and supervision should be instituted. While we are therefore in sympathy with the object of this institution, we are extremely anxious, that in any eagerness for a speedy realisation thereof, there shall not be any lowering of the standards in music and we will set ourselves very strongly against any such attempts, even though such may be actuated by a laudable desire to spread music far and wide. It is our firm conviction that an intensely good quality is really more essential in the practice of musical arts, than a mere shallow extension thereof. No course extending over a short period of 3 months can ever be expected to achieve any good results in quality and it is not surprising that the level attained by the diploma-holders from the summer School of Music is not as high as one would wish it to be. The system requires a radical change and a course extending over at least one full year should be instituted and diplomas granted only to such as show a high standard of knowledge and skill.

We congratulate the Syndicate of the Madras University on their proposal to start a Diploma course in Music. The syllabus, we understand, will be a little higher than that for the Intermediate and a little lower than that for the B. A. We heartily appreciate the recent appointment by the University of Madras of a Research Scholar in Music.

We take this opportunity of suggesting to the University authorities the extreme desirability of consulting before-hand such academic institutions in the country as the Madras Music Academy etc., in any choice of professors they may finally make with regard to their newly schemed Diploma Course in Music and we will assure them that thereby they will be securing unto this course that measure of popular support that is justly due unto it.

This Year's Conference :- The Academy has resolved to hold this year's Conference in December during the Xmas week. Papers are being called for from renowned scholars and musicians to be read and discussed at the conference. The task of settling the Ragalakshanas of the various ragas so well begun in the Easter C... ference of Experts has to be proceeded w... It is really gratifying to note that ... efforts during the Easter Conference ha... borne fruit in setting up a sister institut... *viz.* Raja Sir Annamalai Music Coll... at Chidambaram to constitute a commit... of scholars for the self-same purpos... settling the Ragalakshanas which, as poin... ted out above, has already been begun ... trodden half way.

The conference proposes to arrange fo... series of Musical concerts by renow... Musicians of the Presidency. Great orc... is due to the Academy for arranging ... Conference in the Xmas week and th... making it possible for all Music lovers of th... Presidency to take advantage of its sessio...

(OCTOBER).

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