I dwell not in Vaikuntha, nor in the hearts of Yogins nor in the Sun; (but) where my Bhaktas sing, there be I, Narada!
"I dwell not in Vaikuntha, nor in the hearts of Yogins,
nor in the Sun; (but) where my Bhaktas sing, there
be I, Narada!"

EDITED BY
V. RAGHAVAN, M.A., Ph.D.
1978

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NOTICE

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All manuscripts should be legibly written or preferably typewritten (double spaced—one side of the paper only) and should be signed by the writer (giving his address in full).

The Editor of the Journal is not responsible for the views expressed by individual contributors.

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THE XLVIIIth MADRAS MUSIC CONFERENCE
OFFICIAL REPORT

The Opening Day
21st December, 1974

The XLVIIIth Annual Conference of the Music Academy, Madras, was held in the T. T. Krishnamaehari Auditorium in the premises of the Academy, 115-E, Mowbray's Road, Madras-600 014, from 21st December, 1974 to 1st January 1975. The Conference was presided over by Sri Rallapalli Anantakrishna Sarma of Mysore.

The Hon'ble Sri C. Subramaniam, Union Minister of Finance, inaugurated the Conference.

On his arrival at the premises of the Academy Sri C. Subramaniam was received by Sri T. S. Rajam, President of the Academy, and the Secretaries, and introduced to the President of the Conference and Members of the Executive and Experts' Committee of the Academy. There was then a group-photo with him and the President and the Members of the Executive and Experts' Committees. The distinguished guest was then taken to the auditorium of the Academy where the inaugural function began with the singing of prayer by Smt. R. Vedavalli.

Messages

Sri T. V. Rajagopalan, Secretary, then read the following messages received for the success of the 48th Conference:

Dr. S. Radhakrishnan, former President of India, sent his best wishes. Sri V. V. Giri, former President of India, wished the function every success.

Prime Minister Smt. Indira Gandhi said in her message that the Music Academy, Madras, had rendered valuable service to the conservation and propagation of Karnatic music tradition.

The Vice-President of India, Mr. B. D. Jatti, sent his best wishes and said that the Music Academy had earned the admiration and gratitude of music lovers.
The following Governors of different States had sent their good wishes for the success of the function:

Governor of Tamilnadu, Governor of Karnataka, Governor of Orissa, Governor of Bihar, Governor of Uttar Pradesh, Governor of Rajasthan, and the Lt. Governor of Pondicherry.

The following Ministers of Union Government had sent their messages for the success of the Conference:


Sri Kamaraj had sent his best wishes.

Hon'ble Sri K. Veeraswamy, Chief Justice of Madras and Dr. P. V. Rajamannar, former Chief Justice, had sent their best wishes. Dr. P. V. Rajamannar said that the Annual Conference of the Music Academy was an event of great importance to all music-lovers and great importance was attached to the discussions of Experts in the morning sessions.

The following Ministers of Tamilnadu had sent their messages for the success of the Conference:


The following Chief Ministers of other States sent their greetings and good wishes for the success of the Conference: of Bengal, Kerala, Karnataka, Uttar Pradesh and Rajasthan.

The following regional Academies of Music, Dance and Drama and institutions have sent their greetings:

Tamil Nadu Iyal Isai Nataka Sangam, Karnataka State Sangita Nataka Akademi, Rajasthan State Sangita Natak Akademi, and the Andhra Pradesh Federation of Sabhas.

The Indian Musicological Society, Baroda expressed their appreciation of the Academy's efforts to further the cause of Musicology in India. Sri Shanker Lall Institute of Music, University of Delhi had sent its greetings.

Dr. Thakur Jaidev Singh, Musicologist of Banaras, paid tributes to the work of the Academy. Sri C. R. Pattabhiraman, former Minister for Information and Broadcasting, Sri N. Selvaraman and S. S. Ramachandra Raja of the Madras Cements also sent their greetings.
Messages had been received from Dr. V. K. Narayana Menon of the National Centre for Performing Arts, and Sri T. S. Swaminathan of the Cultural Division of the Ministry of Education.

Vidvans Venkataramanujam of the Banaras Hindu University, Sri Emani Sankara Sastry, Namagiripettai Sri Krishnan, Sri Annavarapu Ramaswamy, Sri Ramalinga Bhagavatar, Prof. V. V. Sathagopan, and Sathur Subramaniam had also sent their messages for the success of the Conference.

The President of the Academy, Sri T. S. Rajam, then welcomed the distinguished guests and Members of the Academy and the public. In his address Sri Rajam said:

Ladies & Gentlemen,

It gives me great pleasure, as President of the Music Academy, to welcome you all—members of the Academy, musicians of the Experts' Committee and other guests—to this the 48th Conference of the Academy.

As you all know, the Conference of this Academy is a significant annual event in the cultural life of this part of the country. In recent years, its influence has been felt in other parts of India as well and it is my earnest hope that by the time we have our 50th Conference, the influence will permeate throughout this land of ours; for culture is the silken thread that unites all parts of this country. Though in our day to day lives, we may be pre-occupied with economics and politics, the sustaining and nourishing power of any civilization stems from its culture.

The Annual Conference consists, as usual, of meetings of experts which will make explorations in depth, and also the festival of music and dance intended for a wider audience. It is appropriate for me here to express my thanks to the Secretaries, the Conveners and other members of the Executive Board for making a success of each year's Conference and keeping up the tempo year after year.

I consider this year's Conference of special significance as it will be presided over by Sri Rallapalli Ananthakrishna Sarma, who has distinguished himself in the field of vocal music and as a violinist. He studied music under the late Bidaram Krishnappa. He has many publications to his credit, notable among them being the Telugu version of Subbarama Dikshita's Sangita Sampradaya Pradarsini, which is being published under his general editorship by the Andhra Pradesh...
Sangeeta Natak Akademy. Born in Andhra Pradesh, Sri Rallapalli Ananthakrishna Sarma has settled down in Karnataka and represents a confluence of the rich heritage of the South. I am grateful to him for having agreed to preside over this year's Conference.

I am very glad that it has been possible for us to have with us the Hon'ble Sri C. Subramaniam, Minister for Finance. It is needless for me to dwell at length to a Madras audience over the accomplishments of Sri C. Subramaniam. He is undoubtedly one of the most dynamic political leaders of the South, and I would like to mention very briefly a few highlights of his career. He has held the portfolios of Finance, Education and Law in Tamil Nadu till 1962. Subsequently he held the office of Union Minister for Steel and Heavy Industries, Food and Agriculture, and led the Indian Delegation to the FAO Regional Conference at Manila in 1964 and Rome in 1965. In short, his political career embraces practically every form of nation-building activity and, in my view, it is fitting that at this crucial hour when the country is passing through an economic crisis, there cannot be a better person than Sri C. Subramaniam to handle the nation's finance. Sri C. Subramaniam and myself are good friends but let me assure you, Ladies and Gentlemen, that I am not making this statement with the objective of praising a friend of mine. I am sure, before long, the results will prove my statement beyond all doubt, and I take this opportunity of wishing him all good fortune in putting this country's economy on a sound footing. I am grateful to Sri C. Subramaniam for having consented to inaugurate the Academy's Conference this year, despite the arduous nature of the responsibility he is shouldering as Union Minister for Finance. I have great pleasure in extending him a warm welcome in our midst this evening.

Last year, I mentioned about the Academic Block to be built on the eastern side of the auditorium. I am glad to say that we have received the Corporation sanction for our project, and hope to commence the work by Sankranti next year. Our mid-year series of concerts for young and promising Vidwans, which was started on an experimental basis, has met with good response, and will be given formal shape and established on a sound foundation. I am glad to say that the project for extending financial aid to indigent musicians is being continued. More and more prizes are being awarded to young Vidwans as a token of appreciation and encouragement. The Academy has decided to commence Veena classes, for various stages, and this will be an additional activity of the Academy. As you will have observed the Academy is expanding the scope of its activities year after year, thanks to the continuing interest shown by all classes of people interested in
culture—senior Vidwans, young and promising Vidwans, the critics, the interested and discriminating audience and the public at large. I do hope that the Academy will be able to render greater service in the years to come in preserving the cultural traditions and fine arts of this country.

I do not wish to take much more of your time, except to say again that I have great pleasure in welcoming you this evening. I now request Dr. V. Raghavan, Secretary of the Academy, to present the Welcome Address to our distinguished guest.

Thank you.

Welcome Address

Dr. Raghavan, Secretary, then presented to Hon. C. Subramaniam the Welcome Address in the course of which he said:

"Dear Sir,

We must thank you for acceding to our request to you to inaugurate this, our 48th Conference. We know it is difficult in the present tempo and posture of events to take off from official work, but we had also a feeling that, being more or less one of us, you will not say 'no' to us. We welcome you most cordially and hope you will have with us, for however short a time, some pleasing relaxation from stress and strain.

You will, like us, Sir, miss on this occasion, one loved and respected by all of us, one with whom you had worked, Sri T. T. Krishnamachari. As a token of our esteem and gratitude to him we have named this Hall after him as the Sri T. T. Krishnamachari Auditorium. The Conference you are inaugurating today is the first Conference to be held in the Hall with this name.

Coming in succession to him and before him to Mathai and R. K. S., you are the fourth from this part of the country to hold the key portfolio of Finance. You had held the same reins in your home State also and we are sure success will attend your efforts to pull the country out of the difficulties which it is passing through.

The Music Academy, Madras, is quite familiar to you. You had formerly, as Minister in Madras, presided over our Sadas. You are now to declare open our Conference which we have conducted for forty-seven years now. This has gone on not only without any break but with each succeeding year registering further success. Ours is the most sought-after Auditorium. Musicians may sing here, there and
everywhere but performance at the Academy is still the feather on their cap. Our Conference of Experts is accepted on all hands as the only real music Conference in all India; nay, it has, for several years now become an internationally known forum for musicians and musicologists in foreign countries interested in Indian music and dance. We have published more works than any other organisation in this field and our Journal maintains a unique record for continuity, substance and standard and comprehension and coverage.

We are now poised for a fresh leap towards greater academic development. The emergence of the academic annexe of our building will be the starting point of our further developments in teaching and training, in the expansion of our College and Library, in research and publication. In exploring and bringing to light rising talent, we have launched our programme of monthly concerts and mid-year concert-series which are now getting stabilised. We may mention, Sir, that to all these performances, we admit the public free Our Sunday morning Hari Kathas have become popular; Hari Katha is not only an integral part of our musical art, but it is also an effective instrument of our cultural well-being and religious and spiritual rehabilitation; a course for training Hari Katha-performers has a place of priority in our development programme.

We do not rest on our oars. In our continuing endeavours we require the guidance and help of all those like you, Sir, who know well our work and standing and who understand and believe that the country's development is a total phenomenon and economy cannot flourish alone in a spiritual recession and slump in the higher values.

Karnatic music is a medium of unity of the whole of South India. Our artistes, our Experts and the Presidents of our Conferences come from all parts of South India, all of them votaries of the precious common cultural and artistic heritage. We have thus in our work a significant message and mission.

We now request you, Sir, to declare open our 48th Conference and the connected festival of music and dance.

We remain Sir,

Your friends of

21th December, 1974

THE MUSIC ACADEMY, MADRAS.
Inaugural Address

The Hon'ble Sri C. Subramanian then delivered his Inaugural Address in Tamil.

After thanking the Executive of the Academy for inviting him to inaugurate the 48th Conference Sri C. Subramaniam referred to the music festivals in Madras in the month of Margasirsha in high spirit, justifying the statement of the Bhagavad Gita that Margasirsha is the best of all months. Apart from the concerts a lot of research was also being presented and in addition to the participants from India, there were also participants from outside countries at the conference. The Music Academy, Madras stands foremost in this activity.

Karnatic Music and Bharata Natya, although the specialities of South India, were now spread all over the country and it was not difficult to listen to and enjoy these arts in centres in North India. In this they had become the national arts and contributed to the integration of the country. In this connection he said he would congratulate them for the opportunities being arranged for the performances of Hindustani music and North Indian dances in South India.

The immortal compositions of the Music Trinity enjoyed the foremost place in the festival of the Academy and the artistes gave them expositions of the greatness of these compositions. The songs of Svati Tirunal, Purandaradasa and others were also sung in these concerts. For safeguarding the treasury of these compositions, the services of the Academy could not be forgotten and he said he would express his own felicitations to the Academy on this.

The Minister then said that on this occasion, he would like to mention, with great satisfaction, that the Music Academy had been mainly responsible for the appreciation of music and dance in the Western countries, particularly in America. Many in the West are now learning these arts. Our musicians were also going there to teach with great devotion the American students in the traditional Indian manner. We were all pleased to know that a few years back Smt. M. S. Subbulakshmi was invited to perform on the occasion of the Silver Jubilee of the UNO. in New York.

The Minister then said that he felt it his duty to mention certain facts on that occasion and express his ideas on them. In Madras they were having many new music Sabhas. He had an occasion to see the statistical position regarding the performances in these Sabhas. He found that Drama is the most frequently arranged entertainment
and next to it came dance. They were not against these two arts but they had to direct their attention also to the way in which interest in Karnatic music was declining. Even in music, he found that there was more interest in 'Light Music'.

Wherever they went, their ears were being torn by Gramophone records,—whether it was marriage or public meeting. In none of these did they find even an iota of good Karnatic music. Why? They should think about this also.

In this respect he said that they should look at the younger generation and find out the reasons as to why they were neglecting Karnatic Music and becoming attracted by other kinds of the art. It was the younger generation that should safeguard our arts. It was not enough if the elders alone showed devotion to these arts. The first duty for them therefore was to make this younger generation understand the importance of their heritage in this art. There was no use of criticizing them in general and in an off-hand manner. They should go into the causes of the situation deeply and understand and if they found there were difficulties, they should be remedied.

At this juncture the Minister said that he was reminded of what their national poet Subramania Bharati had said. Bharatiar observed: “To whatever town you go, or to whatever music Sabha you go, there are about fifty songs which the Vidvans would go on singing again and again. It appears as though the ears of the Tamilians had become hard. Those with normal ears cannot tolerate this situation”. After several years these words of criticism of Bharatiar still appeared to be true to some extent. It was not as if Bharatiar did not know the high merits of these Kritis. But he did not agree that music should cease to be a flowing river and become a stagnant pool. If the flowing spring dried up, the richness would also vanish and would become dull. This was what Bharatiar had emphasized.

Within the past and the present there had been great changes in society. The past was a time when courts were strongly entrenched and wealth and influence were concentrated in a few and it was under that patronage of a few that the art had grown. But these were days of the peoples in power and it was desirable to make the general public interested in whatever activity we undertook. To the extent the public participated or were made to participate, to that extent the art could be developed. If they looked at it from that point of view, they would realize that the art should be developed in such a way that they would touch the hearts of the people at large. This would not mean a
lowering of the standard or the quality of the art. Music should stand at its highest standard for all times. It should never be diminished.

There was also something else which they should bear in mind. Theirs was a scientific age.

Thanks to the scientific advancements, they had now facilities for the propagation of our arts. The Radio, the Film and the Television had today made thousands of people witness and enjoy our arts. Naturally because of these mass media ‘Light Music’ and other entertainment type of dances had captured the hearts of the common people. Therefore there were many competitors now for classical music. It was therefore incumbent on them to find out the means for the further development of music in such a way as to attract the attention of the masses. Otherwise there was the danger of the number of enjoyers of classical music going down and a situation could come when there would be no support to the classical arts.

In this connection he said he was reminded of another observation of Bharatiar, namely, that normally, in an audience which largely comprised Tamilians, songs were being sung in languages other than Tamil. The Minister said he was not himself saying this but it was what Bharatiar said. The poet added if that condition was allowed to continue they would have to face the danger of losing their music. Bharatiar was a far-sighted person. Even before Independence he was able to foresee it and celebrate it in his song. We should therefore remind ourselves of his warning and act accordingly. The real time of test had come for their music. It was with this view that elders like Rajaji had taken much trouble to suggest changes in the field of our music. ‘Music was beyond words; the question of language should not be thrust into music’. The Minister said he knew that there were people who took that view. There might be truth in such an argument but there was also the question whether music today should be enjoyed only by the experts or whether it should be for the enjoyment of the people at large. For example, they might take science. The highest scientific matters were understood only by a select few. But the fruits of science were being enjoyed by crores and crores of people whose lives were being bettered thereby. Because of this extensive benefit that science bestowed on the people that science was being supported more and more and it had been growing. It was only in that way that music too could grow and spread.

After Independence they were taking many steps to abolish poverty and make life richer. For the improvement of the economy several projects were being adopted. Man could not live without food but
at the same time he could not also make his life worthwhile or enjoyable merely through food. Many arts were necessary to make his life happy. Arts were the very life and breath of man. Wealth and art alone however could not achieve the aim of life. Their ancients had shown them the way of the spiritual basis of life; that was real life and they had exemplified it by their own lives. While science was necessary, the arts were also necessary and even so spiritual wisdom. It was by the equal development of all these three that they could reduce their shortcomings and show a way out for the bewildered people in suffering.

They here were engaged in the cause of developing the arts. The Minister said co-operative effort was needed in this task. The Music Academy and the Tamil Isai Sangham should put forth their efforts together. The time had come to end the feeling that they were rival organisations. We should think that the task of safeguarding our great art had a joint responsibility. The co-operation of everybody was necessary in this. It was clear that only in this way could the arts grow further.

Music festivals were now taking place only in the metropolis. It was necessary that such a festival should also be organised in each district. Efforts should be made to have it in Madurai, Tiruchi, Thanjavur, Salem and Coimbatore. All Sabhas in the city of Madras should come forward to co-operate in this work. The Music Academy should take the lead in the matter to implement this as early as possible. The District festivals could be conducted successively in different months, taking advantage of such special festivals as Pongal, Dipavali and Navaratri.

Their ancestors has bequeathed to them an incomparable heritage in the arts. The world was wondering at this and several countries were endeavouring to adopt it, and make it part of their own cultural wealth. They knew they had now some foreign musicians giving Carnatic concerts and such numbers are greater in the field of Bharata Natyam. We recently witnessed also a ballet troupe from Russia giving an excellent performance of the Ramayana.

The wealth called art would never diminish however much it was shared. On the other hand it would grow more. That was the nature of art. Let our younger generation show more inclination towards our art and make it flourish more and more and let us all induce them to do so.

Thank you.
TAMIL TEXT OF THE MINISTER’S
INAUGURAL ADDRESS

இந்த வாரசையில் என் அதிகாரமையும் கோஷியராலியும் கீழில் புதுக்கால் ஆக்கிரமித்து. இந்தப் போட்டில் நான் ஸ்டார்வாய் சேர்மத்தின் வெல்லியின் விளக்கத்தைப் பெற்று விளக்கினை விளக்கினை.
உலகில் வெளியேற்றும் புரோமோந்த நீதிக்காத நிறைந்து. மேலும் பார்வையியலாளர் புரோமோந்த நீதிக்காத நிறைந்து. இதில் ஒரு காலத்தான் பகிர்ந்த மற்றும் அன்று அடையும் குறுக்கல். முன்னால் தன்னையலாளர் பெரும் மற்றும் அன்று அடையும் குறுக்கல். எனவே மேலும் புரோமோந்த நீதிக்காத நிறைந்து செயல்பட்டு உள்ளது. மேலும் செயல்பட்டு உள்ளது அடையும் குறுக்கல்.

அதன் பின்னர், மேலும் அடையும் புரோமோந்த நீதிக்காத நிறைந்து செயல்பட்டு உள்ளது. எனவே மேலும் புரோமோந்த நீதிக்காத நிறைந்து செயல்பட்டு உள்ளது. அந்த பின்னர், மேலும் அடையும் குறுக்கல்.

உலகில் வெளியேற்றும் புரோமோந்த நீதிக்காத நிறைந்து. இதில் ஒரு காலத்தான் பார்வையியலாளர் புரோமோந்த நீதிக்காத நிறைந்து. எனவே மேலும் புரோமோந்த நீதிக்காத நிறைந்து செயல்பட்டு உள்ளது. மேலும் செயல்பட்டு உள்ளது அடையும் குறுக்கல்.
பாதுகாப்புத்துறை வித்தலின் விலை வர்த்தக வழித்துறைத் தொன்மை வித்திலியம் வந்துள்ளது. பாதுகாப்பு வித்தலின் விலை வர்த்தக வழித்துறை வேலை வித்திலியம் வந்துள்ளது. பாதுகாப்பு வித்தலின் விலை வர்த்தக வழித்துறை வேலை வித்திலியம் வந்துள்ளது. பாதுகாப்பு வித்தலின் விலை வர்த்தக வழித்துறை வேலை வித்திலியம் வந்துள்ளது. பாதுகாப்பு வித்தலின் விலை வர்த்தக வழித்துறை வேலை வித்திலியம் வந்துள்ளது.
பின்னர் என்னுடைய செய்திகளால் வாழ்க்கையிலுள்ள இருபது அருங்கள் கொண்டு கடந்த அது என்னுடைய நாளிலுள்ள வாழ்க்கையைச் செய்யும் மறுக்கும் நுட்ப கணிதப் படிப்பு வரையறை வெளிப்படுத்தும்.

"என்னுடைய குறுக்கு மாறும் விளையாட்டுவிளையாட்டு புரட்சி நிலையில் சூழ்வில் வருகின்றது", என்று என்னுடைய விளக்கம் போன்று வருகிறது. என்னுடைய குறுக்கு மாறும் விளையாட்டு விளையாட்டு சூழ்வில் சூழ்வில் வருகிறது.

என்னுடைய குறுக்கு மாறும் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு சூழ்வில் சூழ்வில் சூழ்வில் வருகிறது. என்னுடைய குறுக்கு மாறும் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு சூழ்வில் சூழ்வில் சூழ்வில் சூழ்வில் வருகிறது. என்னுடைய குறுக்கு மாறும் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு சூழ்வில் சூழ்வில் சூழ்வில் சூழ்வில் வருகிறது.

என்னுடைய குறுக்கு மாறும் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு சூழ்வில் சூழ்வில் சூழ்வில் வருகிறது. என்னுடைய குறுக்கு மாறும் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு சூழ்வில் சூழ்வில் சூழ்வில் சூழ்வில் வருகிறது.
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நான் ஏற்றக்கலன் சிறுவும் வாழ்வு மற்றும் இல்லாது அகழியும் நான் மா என்று பிரிக்கும் வடிவில் வேண்டும். குறிப்பிட்டு கோள் நீதியால் எழுந்தியும் கோள். கலந்தாம் பிரம். வரலாற்று பிரம். உண்மை தொடர்பான கூற்றில் அனைத்தும் போது குறிப்பிட்டு வரும் தவறு உண்மையானது குறிப்பிட்டு வரும் தவறானது காணப்படும்.

மேற்கு சொல்வதிற்கு பார்வை மாற்றுவது மண்டலம் ஏற்றுக்காட். குழந்தை கையாள மன்னரை குழந்தை வைத்திருக்கும் வாழ்வு குற்றுக்காத குற்றாகும். குறிப்பிட்டு கீழ்முக வரை போகும் வாழ்வு குற்றுக்காத குற்றாகும். குறிப்பிட்டு கீழ்முக வரை போகும் வாழ்வு குற்றுக்காத குற்றாகும். குறிப்பிட்டு நீதிகள் குற்றுக்காத குற்றாகும். குறிப்பிட்டு நீதிகள் குற்றுக்காத குற்றாகும். குறிப்பிட்டு நீதிகள் குற்றுக்காத குற்றாகும். குறிப்பிட்டு நீதிகள் குற்றுக்காத குற்றாகும்.

சாத்து செய்யும் எண்ணிற்கு பார்வை மண்டலம் ஏற்றுக்காட். உண்மைகள் எழுந்திருக்கும் போது வேண்டும் வாழ்வு குற்றுக்காத குற்றாகும். போகும் வாழ்வு குற்றுக்காத குற்றாகும். போகும் வாழ்வு குற்றுக்காத குற்றாகும். போகும் வாழ்வு குற்றுக்காத குற்றாகும். போகும் வாழ்வு குற்றுக்காத குற்றாகும். போகும் வாழ்வு குற்றுக்காத குற்றாகும். போகும் வாழ்வு குற்றுக்காத குற்றாகும். போகும் வாழ்வு குற்றுக்காத குற்றாகும்.

மட்டு பல்வேளை வீட்டு குறுகிலத்திற்கு மண்டலம் ஏற்றுக்காட். ஆக செய்யும் எண்ணில் உண்மை அமையக்கூடாது. ஆக செய்யும் எண்ணில் உண்மை அமையக்கூடாது. ஆக செய்யும் எண்ணில் உண்மை அமையக்கூடாது. மன்னர் குறிப்பிட்டு கீழ்முக வரை போகும் வாழ்வு குற்றுக்காத குற்றாகும். மன்னர் குறிப்பிட்டு கீழ்முக வரை போகும் வாழ்வு குற்றுக்காத குற்றாகும். மன்னர் குறிப்பிட்டு கீழ்முக வரை போகும் வாழ்வு குற்றுக்காத குற்றாகும். மன்னர் குறிப்பிட்டு கீழ்முக வரை போகும் வாழ்வு குற்றுக்காத குற்றாகும்.

செய்து வருவது பார்வை கூற்றுக்கிளையும் மண்டலம். எனது வருவது வெளியும் வாழ்வு. எனது விளக்கம். எனது விளக்கம் எனது விளக்கம் எனது விளக்கம் எனது விளக்கம் எனது விளக்கம் எனது விளக்கம் எனது விளக்கம் எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம். எனது விளக்கம்.
Vote of Thanks

Sri V. K. Ramaswami Mudaliar, Trustee, proposed a vote of thanks.

Election of the President

Sangita Kalanidhi Semmangudi Sri R. Srinivasa Iyer then proposed Sri Rallapalle Anantakrishna Sarma to be the President of the 48th Conference. The proposal was seconded and supported by Vidvan Titte Krishna Iyengar and Sri Sandhyavandanam Srinivasa Rao. Sri Anantakrishna Sarma then delivered his Presidential Address.

PRESIDENTIAL ADDRESS

OF

Sri R. Ananthakrishna Sarma

Honourable Minister for Finance Sri C. Subramanyam, esteemed President of the Madras Music Academy Sri. T. S. Rajam, Dr. V. Raghavan and other Secretaries of the Academy and learned ladies and gentlemen of this august assembly, to you all, I offer my obeisance.

You have honoured me by this most unexpected elevation to the Presidency. The joy is all yours. My share of the joy and my sense of fulfilment consists in bowing down my head in obedience to your generous decision. The Madras Music Academy has the singular distinction of having served the cause of Karnatak Music for forty-eight years. No other institution has this record of selfless and great service. There is no alternative to a man like me except to obey its directive. Only through devotion and obedience can I exhibit my deserts.
The Hindusthani system is only a different form, a Rupa-visesha, of the Karnatak musical art. They differ somewhat superficially, but the inner core is the same for both. The Karnatak system has got its name from having developed extensively and deeply in the Karnataka empire. It is a gift of history. It is not the exclusive contribution of the Kannadigas to others. Nor is the Hindusthani system prevalent all over Hindusthan. The expression Karnatak music suffers from the fallacy of “under-extension” and the expression Hindusthani, from “over-extension.” It is significant that our ancient Lakshanikas did not notice this difference. This is characteristic of Indian art.

Karnatak music is the greatest of the arts contributed by India to the world. Music and poetry have been developing in Bharata-khanda from time immemorial. In the opinion of some scholars these two are the original contributions of India to humanity. We may be able to cast the horoscopes of these arts when we know for certain the age of the Vedas. It is possible for us to trace the development in an ascending fashion of our musical art from “Swara-jnana” to “Sruti-jnana.” The depth of the investigation of our Seers of the primordial nature of Nada and Laya make one wonder whether it is ever possible for any one to go any deeper than this! The people of this Punya-bhumi and Karma-Bhumi of Bharata-khanda have both taken part incessantly in the birth and development of this great art. As a consequence it has spread far and wide into Indian culture. It has reigned supreme without distinctions of age and sex and in widely disparate situations involving Subha-Asubha, Peace-War, Rakti-Virakti, Ekanta as well as Goshthi. All our deities have submitted to its influence. This is not all. The high position given to it even in the land of Rakshasas and Vanaras has been immortalised by Kavikokila Valmiki. Not content with this, the great Sahridaya-Sage has derived satisfaction from describing the inanimate forests, mountains and rivers as full of music. While there are a few who have commented that there is some emotionality in the contention of Nissanka Sarngadeva that “Dharmartha-kama-mokshanam idameva ikadhasanam,” I have yet to see any one who has denied it completely. Even the English imperialists who attempted to create neglect and faithlessness among our people towards the Indian arts and sciences utterly failed in regard to Indian music. This is sufficient testimony for its inherent strength and appeal. There, indeed, was no default in their efforts; but it is our good fortune that their rule has ended. Our own country apart, there are many today in the Western countries who recognise the greatness of our art, enjoy it and learn it with diligence.
This art has had a spiritual growth in this country. Its greatness derives from this fact. It is necessary to interpret this word 'spiritual' carefully. It is customary to use this word to refer to something which is beyond the scope of human beings and which exists at a height or depth which is inaccessible to man. As far as Music is concerned, we need not go that far. Every one has an 'Atma', though no one has yet been able to describe its true nature. We could take it that it functions at the three levels of the Mind, Intellect and Heart. We comprehend a thing by our mind, analyse its merits and defects by the Intellect and experience it with the Heart. During the extensive life of man, the mind and the intellect are and should be, subservient to the Heart. In this sense, Music is spiritual. It is this experience of the heart that is called 'Bhava'. The Mind and the intellect between them comprehend Sruti, Laya, Kala, Language, meaningless “pata-sabdas” analyse them and make them over to the Heart, which in its turn reverberates. This reverberation is 'Bhava'. It does not have a circumscribed form. Poetry, Dance and other related Arts only try to assist in providing some form to this Bhava and in bringing it out.

This 'Bhava' is the real ‘life’ in musical expression. Our elders have, long ago, enunciated the principle and given expression to it. The secret of this, they claimed, is contained in the very name of the propagator of this art, sage Bharata—‘Bha’ standing for Bhava, ‘Ra’ for Raga, and ‘Ta’ for Tala. The suggestion is that Tala should be subservient to Raga and Raga to Bhava. I quote below this interpretation of Sarvatantra Swatantra Sri Vedantacharya of the 13th century A.D.

उपेदिवैदिदारधि: सनामश्रंतस्वीकिताभवारागानाल्ब्धिः
युधदाहरति सा लोकपत्प्ये...... ||
(Samkalpa Suryodaya-Prastavana)

In essence it means that Raga-vistara, which is ‘Swara-samvadamaya’ should have priority over ‘Tala-prastara’, which is arithmetical in character. Both these, severally and jointly, should contribute to ‘Bhava’.

Music is said to be a language; it is true to some extent. But it is a language without meaning. Singers and instrumentalists convey ‘something’ to us. We receive it and experience it. But neither they nor we ‘know’ what it is. The reason is that the symbolism and mutual agreement which characterise a language, are absent in music. The primary ‘material components’ of music are Swara, Sruti, Alankara
Tala, Laya, Arithmetic, Samvada, Vivada, Anuvada etc. They mean just that and no more. The tendency to explain the inexplicable seems to be a natural desire of the human intellect. Accordingly many of our Darsanikas attempted to associate Jati, Guna, Kriya, Rasa, Bhava, Artha, Kala, Vesha, Bhashana and other material forms with the musical art. Many painters attempted to convey these through beautiful painting. But to us whose hearts have tasted the attraction of the spiritual form, these “superficials” have appeared insipid. We have lost taste and faith in them. They are somewhat more prevalent in the North than in the South.

Music, no doubt, has enabled many to earn their bread. But even those who used it for their livelihood have always succumbed to spiritual influence. Neither my elderly preceptor Vidwans, nor the young Vidwans who are my friends have learnt or taught music as a mere bread-winning art. Doubtless some have attempted to please Maharajas and wealthy patrons and have earned, according to their skill and opportunities, considerable money and honour. But their service to music, in a large measure, was rendered through Bhajanas either at home or at temple-festivals. This I say from my personal experience. They earned to live; they did not live to earn. It is because of this that in ancient Indian society, people young and old alike, had developed sincere devotion to music, pure and delicate tastes and experiences in music. Music—vocal or instrumental—could have been unsophisticated and hence simple and delicate or it could have been civilised and hence extensive and deep; but the basic force which guided it was spiritual in character. But times have changed. Our human family has been running fast as an arrow, as though the ties between the past and the present have been snapped. Freedom has struck its first blow and has liquidated monarchy. There are wealthy people, no doubt; but for them endless amassing of wealth seems to be the only abiding purpose in life. There are, of course, temples; but they are more interested in money and superficial splendour than in the preservation of tradition. In all fields, the individual has been losing his identity and strength and the group is gaining in power. The individual has a soul and a heart; the group has none of these. It is guided by excitement and blind impulse. This is the state of affairs prevailing in all democratic countries and in all matters, not merely in ours. It is now an international problem.

As a consequence of these, our music which has had a history of spiritual development seems to have no alternative except to turn mundane. It has, therefore left the home, the temple and the Goshthi and has begun seeking the protection of the people. The people who
used to spend time learning music for self-satisfaction have been dwindling in numbers. Only those who wish to exhibit their skill on the platform practise music at home now. The temples have discontinued their music-service. In the few cases where it is still in vogue, it has become a dry formality. A congregation of people, an audience, is like a market-fair. It is open to all, young and old, educated and uneducated, to any one who can pay the price. They differ vastly in their interest, experiences and culture. The present-day musician has to provide a fare which can attract, and please all of them. How arduous this task is, needs no elucidation. If the listeners are displeased, they do not patronise that kind of music again. The Music Sabhas suffer financial loss and may have to close down. This will affect the livelihood of the musician. Hence they have to examine carefully the tastes of the multitude primarily and preserve their market-value. With rare exceptions this is the position of the music-vidwans to-day. In place of the growth of a spiritual culture among the people, there is a gradual deterioration of it among the artistes. When tastes are not being developed by cleansing and experiences are losing depth, there arises a craze for novelty. Yesterday’s appears flat to-day and to­day’s becomes insipid tomorrow. The novel, however small, is enough to provide excitement and entertainment for the time being.

Therefore, the ordinary man of to-day finds Karnatak music unattractive. Music-lovers and critics have started complaining, with an air of indifference, that music kutcheries have become repetitive and devoid of interest. There is, obviously, some truth in this complaint; but music-lovers who desire the welfare of society should not, with indifference, dismiss it as the inevitable result of changing times. Such an attitude is contrary to Manava-dharma. Time will be continuously causing many unbearable ugly changes in politics, morality, religion, philosophy and many other human affairs. And people have been eternally putting forth efforts to investigate and correct them to the best of their abilities. Of the four Purusharthas - Dharma, Artha, Kama and Moksha—Moksha has been described by our ancient philosophers as the Purushartha par excellence. And for the attainment of Moksha, be it of any kind, the chief paths are concentration of mind and mental peace. The arts are the chief aids for the attainment of these. Among the arts the one which can provide peace to men’s hearts is Music. To neglect it is suicidal.

It is my conviction that the persons who have to correct this situation and restore the greatness of music are the music-vidwans themselves. They have the responsibility of transforming the hearts of the
listeners through their own attainments, experience and demonstration. Let me place before you a few ideas which have occurred to me in this regard. As in all the other arts, in Karnataka music too, the life-giving principle is Laya. It can develop concentration of mind; can remove hatred and establish poise in the mind and intellect. In this art, the principle of Laya flows mainly in three paths, namely, Bhava, Raga, and Tala. The study of music is a Tapas which should lead to the attainment of its Sadhana in all these three Layas.

That Tala-laya is exemplified in Suddha-gati and accurate arithmetic is clear. When Gati goes on in a Vilamba fashion, it is called Tattva by our elders. The Vilamba-gati is like Tattva or Truth, difficult to demonstrate and difficult to master. Hence it gets the name Tattva. The fast-moving Druta-gati has been named Ogha. Ogha means a rapid stream. It is difficult to contain a rapid stream, for it has no stability; hence its contribution to experience is small. The Gati which is in between these two extremes, the Madhya-gati, is named as Ghana in ancient usage. In this movement, sruti, swara, sabda, artha, movement and arithmetic could be within the reach of the listener’s experience. This Madhya-laya should be supported more by Vilamba and less by Druta. Only then, in songs and Alapanas, creative expression will be fruitful and pleasing. The compositions of all the founders of our music establish this fact.

Raga-laya is more powerful and delicate than Tala-laya. It acts as the primary force in the purity of tones, their inter-harmony, delicacy, solidity, Raga personality etc. in all the three octaves and causes Rakti. It will use Tala-laya according to necessity and discard it when not required; and by functioning in an independent and free manner transforms music into a unique medium of communication. This medium with its Svara and Tala accompaniments can attract the mental faculties of the listeners even more effectively than ordinary language involving words and meaning.

Both these Layas should merge with the third, the Bhava-laya. Otherwise, they run the danger of becoming mechanical. Musical expressions become mere acrobatics of strange Talas, confusing calculations, erratic Svara-kalpanas and unpleasing Ragas. This should not happen. The efforts of those who have accomplished wonderful miracles are, no doubt, great and praise-worthy. But from the point of view of Rasa, they are small deeds and cheap goods. They cannot touch the divine part of man’s being, his heart.

People with average culture cannot appreciate music which is Bhava-pradhana. Therefore, from very early times we have been
associating Sangita with Sahitya. Even though in literature also the
tendency to perform stunts by manipulation of words and meaning
prevail extensively, the great writers have made it very explicit that the
ultimate purpose of Sahitya is Bhava, which alone can move men’s
hearts. In this respect Sangita and Sahitya are identical. But there is
an important difference. Literature can create and offer an extraneous
form through the symbolism of language which has a structure and
meaning. Music can offer only its own form which has no specific
meaning. Hence the service of Sahitya in Sangita is only Decorative,
not Interpretative. Ragalapana Tana-vistara, Svara-prastara and
other musical expressions which our gayakas dwell extensively on,
exemplify the above truth. This question simply does not arise in
Instrumental music which is totally free from language. And yet, I am one
of those who believe that singers and instrumentalists derive immense
benefit from the study of great literature. It is needless to emphasise
how much the study of the works of great poets help in providing
emotional training and refinement of the hearts. Since the same is the
ideal of music, literary culture can be of great help in musical training.

The tendency to imitate the style of others and to aspire for fame
and status though such imitation seems to be a common fault in all the
arts. The reason, perhaps, is that very few possess the ability for inde­
dependent creativity. The defect is found among musical artists also.
Music, however, is an eternally changing art. It does not have a
permanent form like the other arts. Musical forms, reduced to writing
or acquired by repetition, turn out to be mere skeletons. The same
musical phrase will sound differently when repeated. Alapana, Neraval,
Svara-elaboration and others do not submit themselves either to
writing or memorising. Therefore, imitating another vocalist or instru­
mentalists, no matter how great he may be, cannot contribute to the
development of this art. To the musical artist self-reliance is the only
support. It is the beauty of creation that individuals differ widely in
their qualities of physique, voice and intellect. Hence musical art,
whose very essence is bhava, cannot become dependent. It should
not be allowed to become so. Even the norms of Sastra cannot bind
this art.

Our musical art has a long heritage of Sastra. Sastra can describe
an art, can perhaps correct it but it cannot order its growth. Science
can only analyse; it cannot synthesise. Synthesis is the work of art.
The authors of our texts of Sangita-sastra have analysed the various
topics of music into their minute, minuter and minutest elements. Much
of it is useful only for delivering lectures and dispensing advice.
Artists who are Lakshya-oriented have therefore always winked at the prescriptions of Sastra. Consequently many old Ragas, Talas and Prabandhas have largely gone out of currency. Some have lost their complex forms and have survived having acquired simpler forms. The Lakshya-prespective has asserted itself so far that the authors of the Sastras themselves had to admit that Sangita was Layshya-pradhana and assert लक्ष्यविरूद्ध यत् तच्छास्त्र नायमन्यथा. The critical comments and reviews of our Nadopasana by modern pundits of Western Physics are apt to share the same fate. Some of the Vidwans of Karnatak music of today have mistaken the 72 Melās of Venkatamakhin for Ragas and have started singing them elaborately. Some are trying to bring back to currency Talas which had seen their grave long ago and are teaching them as though they are great musical secrets. The tastes of the present progressive generation seem to run the risk of pollution by such developments. All this has resulted from a superstitious belief in the supremacy of Sastra. This should not be taken as a condemnation of Sastra. A science which analyses the various aspects of an art is necessary for all arts and at all times. And the scientist responsible for such analysis deserves the respect of all. My only submission is that Sastra should not become a ‘Sastra’ for the life and development of an art.

Submission to tradition is very much like submission to Sastra. Take, for instance, the practice that a Varna must be sung only as a preface to a kutcheri. There are many many Varna compositions of great beauty. Would it not contribute to Rakti, if in a kutcheri one or two Varnas are rendered in two or three Kalas and with independent manodharma, vocally or instrumentally at a state of poise? Similarly, does Mangala mean only the singing of the Kriti “Nee nama rupamulaku?” Why should we not sing Ashtapadis and Kshetrayya padas fully with all the charanas and such other extra-ordinary compositions in the middle of a kutcheri, trying to bring out their meaning and feeling? Are they like the Svarajatis merely svara-structures? Do not they possess great poetic and musical qualities? Should not singers bring out their excellent qualities? If instead of elaborating the Pallavi in a variety of ways in all the three Kalas the singer reproduces parrot-like in tisra, khanda and misra gatis a previously mugged up piece, whom will it please? Is it not unfair to create the impression through practice and demonstration that Pallavi-singing is meant only for exhibiting clever acrobatics of Tala? Why should we avoid the Mandra and Madhya sthayis which are most suited for Madhurya and Prasanti and over-exert ourselves by Raga elaborations in the Tara-sthayi? Why should we, in attempting to make singing in Tara-sthayi easier, reduce the basic Sruti and render Nada weak and tasteless in the Mandra
and Madhya sthayis? No wonder the common man is losing his interest in Karnatak music because of these indiscretions! Music vidwans who lead on the platform should examine these problems themselves and make necessary reforms.

Ladies and gentlemen, I have submitted before you a few thoughts that occurred to me. I am aware that they contain elements which are bitter and biting. I beseech you to pardon me with the plea that it is my great devotion and respect for the greatness, depth and extension of Karnatak Music which have prompted me to say them. I conclude by offering, once again, my grateful thanks for the great honour you have done me.

ॐ तेजस्विनाब्धितमस्तु

Conference Souvenir

The Souvenir of the 48th Conference which was brought out on the opening day carried the usual annotated programmes of the whole Conference and the concerts, the usual illustrated supplement and an account of the Academy and its activities. In addition, it also carried the following articles: a sketch of Dr. R Anantakrishna Sarma by Vidvan N. Chennakesaviah; The Songs of Gosvami Tulsidas by Sri S. Jagannarayanan; King Shahaji’s Contributions to Music and Dance by Dr. V. Raghavan; Tyagaraja and the Ramayanas other than Valmiki’s by Dr. V. Raghavan; and a sketch of Iluppur Panchami, the renowned Tavil artiste, by Tanjavur Sri B. M. Sundaram, and also the Presidential Address of Sri R. Anantakrishna Sarma.

Agenda of the Conference

The following was the Agenda of the Experts’ Committee meetings of the 48th Conference:

I. The President’s Demonstrations:
   1. Annamacharya’s Compositions
   2. His own Compositions

II. Ragas - Talks and Demonstrations:
   1. Some Rare Ragas: Vidvan Nori Nagabhushanam Pantulu (with Violin)
   2. Some Aspects of Raga: Prof. V. V. Sadagopan, University of Delhi
   3. Time Theory of Raga singing: V. V. Narasimhachariar
III. Presentation of Compositions:

1. Compositions of Maharaja Jaya Chamaraja Wadiyar: Vidvan N. Channakeshaviah
2. Purandaradasa’s Bhagavatgita-sara: Mrs. Indira Srinivas, Bangalore
3. Annamacharya’s compositions: Vidvan Aripirala Satyanarayana Murty (with Violin)
4. Sri Swati Tirunal’s Chowka Varnas: Dr. T. S. Ramakrishnan
5. Muthia Bhagavatara’s Compositions: Sangita Kalanidhi Budaloor Krishnamurti Sastrigal

IV. Papers and Illustrated Talks:

1. Contribution of the Maharajahs of Mysore to music: Vidvan Titte Krishna Iyengar
2. Sahityapushti in Tyagaraja kritis: I. Kameswara Rao, Nellore
3. Contributions to Music by King Shahaji and his contemporaries: Dr. S. Sita, University of Madras
4. Annamacharya’s Compositions: T. G. Anantasubrahmaniam, Tirupati
5. Researches on acoustics: Dr. B. C. Deva, S. N. Akademi and Gurubax Singh, Delhi, Vidvan S. Ramanathan and Dr. Modak, Poona
6. Mrs. Dr. E. te Nijenhuis of Netherlands:
   i. Western Parallels of $\text{i'allavi}$ Techniques and
   ii. The Change of Tone system in Indian music

V. Instruments:

1. Kurunghuzal of Kerala: L. S. Rajagopalan and party, Trichur
2. Nanthuny of Kerala: Chummar Choondal and party, Trichur
3. Sri Gurbax Singh and Dr. H. V. Modak, Poona: Newly invented Sruti Harmonium and Sruti Vina

VI. Pallavi Demonstration: Vidvan Sri Manakkal Rangarajan
VII. Folk-songs: R. Aiyasami and party

VIII. Tala: Navasandhi Talas: Vidvan K. C. Thiagarajan

IX. Dr. V. Raghavan Shastriyabapurti Endowment Lecture

X. Book Release (i) Palani Subrahmanya Bhagavat's compositions
   (ii) Dr. V. Raghavan's book on Bharata Natya

XI. Any other subject that may be taken up with the permission of the President

THE FIRST DAY
22nd December 1974

The proceedings of the Experts' Committee of the 48th Conference of the Music Academy, Madras began today. After Devotional Music-Devaram - sung by Sangita Bhushanam M. K. Punyakoti, the President of the Conference Vidvan R. Anantakrishna Sarma, recited a Vedic prayer and appealed to all the members to co-operate and contribute to the work of the Experts' Committee.

Svati Tirunal's Chowka Varnas

Dr. T. S. Ramakrishnan, member, Experts' Committee of the Academy, opened the year's conference with his paper and demonstration on the Chowka Varnas of Maharaja Svati Tirunal. After referring to the court-musicians of the Maharaja, particularly to the dance master and composer Vadivelu of the Tanjore Quartette, the speaker dwelt on the characteristics of Chowka Varna (Pada Varna) which was used in Bharata Natya and its different parts. In Svati Tirunal's Chowka Varna, Raga-names always occurred through slesha, as in Dikshitar's compositions. There were svarakshara-passages and there were at least four charanas with Muktayi svaras. Another point to be noted was that many of them had Tamil and Telugu counterparts by the Tanjore Quartette. Referring to the structural characteristics which had a bearing on the Varnamettu, the speaker mentioned that in the recent efforts to popularise Svati Tirunal's compositions the setting of some pieces had been changed by distinguished musicians. The speaker selected six Chowka Varnas and four of them were demonstrated by him with his daughters, Smt. Kesari (Voice) and Smt. Mangalam (Veena); the Varnas presented were: Sadhu vibhata magataye - Bhupala (Adi); Sarasmi rividu pada- Kambhoji (Adi); Saveriha tanuja - Saveri (Adi); Sarasijanabha kim maya - Athana (Adi); Dr. S. Venkatasubramonia Iyer of Trivandrum mentioned that the Bhupala Varna was being played on Nagasvaram in the Padmanabha Swami
temple and that in a few Varnas, instead of the usual love-theme, the Maharaja had only Bhakti, whereby these Varnas had come to be called Stava Varnas. Thanking the speaker and his daughters, the President of the Conference paid a tribute to Sri Svati Tirunal. On the question of changing the setting of a song, he mentioned that this had occurred even in the case of some Tyagaraja Kritis.

Shahaji Maharaja's Contributions

Dr. S. Sita of the Music Department of the University of Madras, then read a paper on the contributions to music by King Shahaji of the Tanjore Maratha dynasty and his court-musicians. She referred to Dr. Raghavan's article on the subject in the Conference's Souvenir and also those in the Academy's Journal, and dealt with the Natakas, Yakshaganas, Kirtanas and Padas of King Shahaji, as also those of his court-composers Giriraja, Vasudeva, Rama Bharati, Kasinatha and others. Dr. Sita sang some of the compositions to show the Sahitya-aspect and structural characteristics. The important part of her paper relating to the manuscripts dealing with Raga Lakshana by Shahaji will be taken up on 23rd. Dr. Raghavan complimented the author on her work on the rich manuscript materials on music in the Sarasvati Mahal Library in Tanjore.

Newly Discovered Songs of Svati Tirunal

Dr. Raghavan then introduced Dr. S. Venkatasubramonia Iyer as one who had done special work on Svati Tirunal and his compositions and who had many papers on this subject published in the Journal of the Academy. Dr. Venkatasubramonia Iyer referred to his having come across recently quite a few new compositions of the Maharaja not so far brought to light and these included two which were available with Svara-notations, one in Devamanohari and another in Suddha Lalita. In the Pancaraga svarajati, Todi was used without Pa and Surati without Ga; the piece in Suddha Lalita showed a Lalita somewhat different from what was handled by Sri Dikshitar. These newly discovered songs were then rendered by Smt. Sarasvati and Kum. Bhagyalakshmi from Trivandrum assisted by Sri Sitaraman on the Violin and Trivandrum Subramaniam on the Mridangam.

THE SECOND DAY

23rd December 1974

At the 2nd day's Meeting of the Experts' Committee convened in connection with the 48th Conference of the Academy, there was first a rendering of Divyaprabandham by Vidyan M. N. Venkatavaradan.
A Folk Instrument of Kerala

Then Dr. V. Raghavan introduced Sri Chummar Choondal, Lecturer in Sanskrit and Malayalam, St. Thomas College, Trichur. Sri Choondal read a Paper on an old musical instrument in vogue among Mannars (Vannar in Tamil) - the Washerian community. It was used as a Tala and Sruti accompaniment for the recital of songs on Bhagavati. The instrument is of 4½ feet hollow wooden body, with two fibre strings and played with a plectrum made of horn. Although it has five frets, only the middle and lower ones are pressed. The fibre strings produce two or three notes and the sruti provided is approximately one kattai. Nanthuny seems to be a corruption for Nan-dhvani meaning 'good sound'. It is in vogue chiefly in Central and North Kerala among Mannar, Velaan and Perummanan communities during Bhagavati worship and other rituals. There were references to this instrument in Malayalam works of the end of the 14th century. Three Talas are used in playing it, Muttalam equivalent to Khanda chapu; Nalam Talam equivalent to Adi and Eru talam equal to Eka, Tisra Nadai. Oomanattu Sankunni, a traditional player of this instrument, 76 years old, sang Bhagavati pattu and played the instrument. To a question from Vidvan K. C. Thiagarajan, Mr. Choondal said that the Nanthuny had a further accompanying instrument, a drum called Izhara. Dr. Raghavan thanked the participants.

Mysore Royal House and Music

Dr. Raghavan then requested Vidvan Titte Krishna Iyengar to give his talk and demonstration on the contribution to music of the Maharajas of Mysore. During the course of his detailed talk and exposition, Vidvan Krishna Iyengar said that the first Maharaja of Mysore who started the Navaratri Festival for which Mysore became famous, was Raja Wodiyar (1578-1670). The next Maharaja to be remembered was Chikka Devaraja Wadiyar (1673-1704). He played the Kalavati Veena and composed the musical poem Gita Gopala on the style of Gita Govinda, in two parts, the first devoted to love and the second to Moksha. Between 1799-1868, Mummudi Krishnaraja Wadiyar patronised a number of musicians like Tyagaraja's guru Sonti Venkataramiah and Adippayya, author of the famous Viriboni Varna. The Maharajah became greatly attached to Venkataramiah. There was also Mysore Sadasiva Rao, among whose disciples were Veena Seshanna and Veena Subbanna. Some of his songs including a Tillana in Poorvikalyani were sung by the speaker. There was then Lalgudi Rama Iyer, a pupil of Tyagaraja, and an ancestor of Lalgudi Jayaraman, well-known violinist of today. Other musicians of the court were Tillaistanam Rama Iyengar and Titte Rangachari, grand-father of the
speaker. Chamaraja Wadiyar (1858-1894) extended his patronage to Patnam Subrahmanya Iyer, Maha Vaidyanatha Iyer, Paramesvara Bhagavatar, Iswara Bhagavatar, Ghanam Raghaviah, Tirukkodikaval Krishna Iyer and Flute Sarabha Sastrigal. Veena Seshanna composed several Tillanas of which the one in Chenjurutti was well-known. The great patronage during the rule of the enlightened Krishnaraja Wadiyar (1895-1940) was too well-known to need any detailed description. Most of the distinguished musicians of the past generation were patronised by him. Sri Jayachamaraja Wadiyar (1940-74) was a scholar and composer who continued the patronage extended by Mysore Court. About his own compositions, there will be a special talk and demonstration by Vidvan N. Chennakesaviah, on the 24th. Titte Krishna Iyengar rendered several compositions of the musicians patronised by the different Maharajahs mentioned by him.

At the end of his talk Titte Krishna Iyengar presented to the Music Academy a manuscript of the work Svarachoodamani composed by Krishnaraja Wadiyar III (1799-1868) and preserved in a manuscript in the family of the speaker. Dr. Raghavan accepted the same and thanked the vidvan and said that the same would be edited and published by the Academy.

Thanking Vidvan Krishna Iyengar, the President, Sri Ananta-krishna Sarma referred to Sri Krishna Iyengar, as the son of Narayana Iyengar from Titte, near Kanchipuram, who was doing obscure paricaraka service in Mysore. The then Maharajah discovered the musician in him and made him an Asthana Vidvan. Incidentally the President also referred to another Telugu composer Srinivasa Kavi, who too was a paricharaka, two of whose compositions were found in Sampradayapradarsini. He also referred to the visit of Veena Kuppier to Mysore and his two songs on Chamundesvari, Paradevi and Intaparakelamma.

Ragas in Shahaji's Time

Dr. Sita then continued her paper of the previous day on the contribution of Shahaji, and particularly the Shahaji Ragalakshnam Mss. preserved in the Sarasvati Mahal, Tanjore. Shahaji dealt with 20 Melas and 112 Janya Ragas under them, the 20 Melas being the same as those followed by the Saramrita with the addition of Velavali, the 21st. The Ragas were described in the Shahaji mss. in an elaborate manner. The classification Ghana, Naya (Rakti) and Desya Ragas, was found in the mss. and it was noteworthy that under Ghana nearly 50 ragas were recognised, whereas in the Trinity and later periods, we had only a mitelid number of Ragas under this head. For bringing out the full
forms of Ragas, the Shahaji manuscripts gave the Chaturdandi Prayaga (Gita, Prabandha, Thaya and Alapa), Udgraha and Ayitta, Tana, Nyasas, Katakaprayogas and compositions like Pada, Daru, Sloka-Varna and Namavali. It was clear that the Saramrita derived considerably from Shahaji’s Ragalakshana; while the Ragalakshana is written mostly in Telugu with an admixture of Sanskrit, the Saramrita is wholly in Sanskrit. Shahaji’s work occupies an important place in the development of the Raga theory in the period between Venkatamakhin and the Trinity.

Dr. Raghavan referred to the different nomenclature for the Svarasthanas adopted by Shahaji and asked the speaker to explain the same to the meeting. Dr. Sita then explained how Shahaji did not adopt the terminology of Venkatamakhin but was using those of Ramamatya, like the Chyuta Pancama Madhyama, Chyuta Shadja Nishada etc. She explained in detail the scheme adopted by Shahaji for his Melas.

In thanking the speaker, the President of the Conference Sri Anantakrishna Sarma observed that Suddha Madhyama Gandhara, Chyuta Pancama Madhyama, and Chyuta Shadja Nishada, these names were attempts at catching and indicating some place between Madhyama and Gandhara. These had no fixed position. One could dwell on them in the form of Gamakas. The musicians used those subtle notes, but they could never give them a fixed position. After the prevalence of Gamakas, even broad notes like Antara Gandhara, Kakali Nishada and so on, were subjected to the Gamaka, so that in the Karnataka system the so-called purity of notes had lost its expressive value. The Karnatic system had tried to raise above this purity value. He believed that therein lay the greatness and expressiveness of Karnatic music. It was futile to indicate them by the nomenclature of seven. All the subtle possibilities have note values.

THE THIRD DAY
24th December 1974

At the meeting of the Experts’ Committee held on the 3rd morning in connection with the 48th Conference of the Music Academy, with the President Sri Anantakrishna Sarma in the Chair, there was first a musical rendering of Sankaracharya’s Saundaryalahari by Smt. Sakuntala Srinivasan.

Bhagavadgitasara of Purandaradasa

Dr. V. Raghavan then mentioned the rare composition of Purandaradasa giving an epitome of the Bhagavadgita and said that this
would be presented by Mrs. Indira Srinivas of Bangalore. Mrs. Srinivas then, assisted by two of her students, gave a recital in ragamalika of the Bhagavadgitasara of Purandaradasa along with explanation of the meaning of each part of it.

The President Sri Anantakrishna Sarma, complimented Mrs. Srinivas for the presentation of this rare composition. He then requested Vidvan N. Channakeshaviah to give his talk and demonstration on the compositions of Maharaja Jaya Chamaraja Wadiyar.

Jayachamaraja Wadiyar’s Compositions

In the course of his talk, Vidvan Channakeshaviah dwelt on the attainments of the Maharajah in the different fields, particularly in Vedanta, Indian aesthetics and music. The Maharajah had regular schooling under some distinguished pandits. Among his scholarly works were Dattatreya, Gita and Indian Culture, Man and Religion, Atman and Brahman and Some Aspects of Indian Aesthetics and among his unpublished works were one on Indian Aesthetics and one on Indian Forests. The speaker mentioned especially the Maharaja’s world lecture tours. The Maharaja was proficient in Western music having taken a Diploma in the same; he was also elected Honorary Member of the Trinity College of Music, and he possessed one of the largest libraries of records of Western music. His chief Guru in Karnatic music was Vasudevacharya. As a patron during his regime as Maharajah of Mysore and later as Chairman of the Sangeet Natak Akademi, he had always been devoted to music and the encouragement of musicians. Like all of our great composers, the Maharajah was also one of deep devotion, especially to Devi and was an upasaka in Sri Vidya. The speaker had learnt through his Guru Vasudevacharya 94 compositions of the Maharajah. In 1964, he had given a talk and demonstration of the kritis of the Maharajah in the Academy's Conference. The speaker then gave an analysis of the compositions of Maharajah, the rare Ragas used by him, some of them employing Vivadisvaras and the general style of his kritis which followed Muthuswami Dikshitar to a great extent. The compositions showed a proper sense of laya. Then Sri S. Seshadri and Sri M. K. Channakeshaviah, accompanied by Sri M. S. Govindaswamy on the Violin and Sri R. Ramachandran on the Mridangam, rendered the following eight compositions of Maharajah:—Pahi Sri Raja Rajeswari-Bhogavasanta (Chatusra Triputa); Swaminatha-Charukesi (Khandajati Triputa); Sankari Sadananda Lahari-Malavi (Caturasra Triputa); Vimalambike: Vijayavasanta (54th Mela: $SMPDNS-SNPMGS$); Sri Vidyamodini-Kokila Bhashini – (29th Mela: $SRGMPDNS-SNPMGRS$); Balakrishnam-Neelaveni (20th Mela: $SRGMPDNDS-$
Dr. Raghavan, on behalf of the Academy and himself, paid a tribute to the Maharajah and his scholarship in Sanskrit and contribution to music. The Maharajah was associated with the Academy having opened its new Auditorium and also inaugurated one of the Conferences of the Academy. Dr. Raghavan referred to some incidents which revealed the Maharajah’s intimate knowledge of Western music and his discernment and critical judgment in matters of Karnatic music. Dr. Raghavan mentioned also the resolution of the Executive Committee of the Academy to bring out a volume of the Maharajah’s kritis with Svara-notations and appealed to Vidvan Sri Channakeshaviah to co-operate in the project.

**Tyagaraja’s Sahityas**

Dr. Raghavan then introduced Sri I. Kameswara Rao, Lecturer in Telugu, Nellore, who came from a family of traditional Bhagavatas. His brother Dr. Panduranga Rao then spoke on Sahitya Pushthi in Tyagaraja’s kritis and citing and singing portions of a number of songs, showed how, apart from depth of meaning, Tyagaraja's compositions showed the mutual appropriateness between the sense of the Sahitya and the musical setting.

Complimenting the speaker, the President Sri Anantakrishna Sarma said that Tyagaraja’s Sahitya represented a highlight of Telugu composition and in kritis like Koluvaiyunnade in Devagandhari, one could enjoy the dual excellence of Sangita and Sahitya.

**Prize for a Research Paper**

Dr. Raghavan then announced that in appreciation of the research paper presented by Dr. Sita on the contributions of the Maharajah Shahaji of Tanjore, a member of the audience Sri S. Rangarajan had given a present to her, and requested the Conference President to give her the present, a carved jewel box. The President gave the casket to Dr. Sita and complimented her on her researches.

**THE FOURTH DAY**

*25th December 1974*

At the 4th day's meeting of the Experts' Committee held in connection with the 48th Conference with Vidvan Sri R. Anantakrishna Sarma, President in the Chair, there was first a recital of Tiruppavai by Vidvan B. Krishnamurthi accompanied by Dwaram Satyanarayana (Violin) and Vidvan V. Sundara Raghavan (Mridangam). 
Pallavi

Dr. Raghavan then requested Vidvan Manakkal Rangarajan to give his demonstration of the new Pallavi he had prepared. Sri Rangarajan performed the pallavi, accompanied on Mridangam by his son Master Sriram. In this Pallavi, he handled two kālas Tisra, third kāla Khanda and Madhya kala for Tisra and so on. Vidvan Tinnyiam Venkatarama Iyer complimented the Vidvan for the performance and emphasised the importance of Pallavi singing.

Western Parallels of Pallavi Technique

The annual Dr. Raghavan Shashtyabdapurti Endowment Lecture was then delivered by Dr. E te Nijehhuis of the University of Utrecht, Holland. The President Sri R. Anantakrishna Sarma referred to Dr. Raghavan's many-sided scholarship and his long services to the Academy. Sri. T.V. Rajgopalan introduced the lecturer and referred to her work on Sanskrit music literature in which Dr. Raghavan had helped her and also her participation in the previous Conferences of the Academy. Dr. Nijenhuis referred to Dr. Raghavan's papers and publications on the history of Indian music, dance and aesthetics which had found recognition in India and abroad and his encouragement to Western musicologists interested in Indian music to participate in the Academy's Conferences and also furthering their research projects in Indian music. She hoped that such fruitful co-operation would continue in future. In the course of her talk which was illustrated with tape-recordings of examples of Western music of different periods and of different composers, Dr. Nijenhuis brought out different forms of variations and improvisations adopted by Western composers and in types of compositions comparable to Sangatis, Niraval, rhythm-variation and Anuloma and Pratiloma. In the older European music there was an age when musicians practised the art of improvisation like the Indian musicians. But the freedom of the performing artists was gradually restricted when the individual emotinal expressions of particular composers became the important thing and changes on the melodic pattern were not favoured. Still there were a number of works of 16th and 17th century on theory which discussed improvisation. They emphasised the need for improvisation and ornamentation. In Polyphonic composition this was possible when individual parts were sung. Ornamentation of a melody consisted of filling up of the time of longer notes, and of larger intervals by neighpouring notes, grace notes etc. Some examples were played by the speaker from theoretical works of the 16th and 17th century. The instrumentalists practised improvisation to a greater extent and were able to add their own ornamentation. By the end of the 17th century true improvisation disappeared from Western
music, but it entered into the art of composition itself, the improvisation patterns having more or less been standardised. Thus the compositions of Bach were examples of the synthesis of the older and contemporary styles and embodied the older improvisation. Bach handled what is more or less equal to the Karnatic Sangatis. The words remained the same and the melody was given variation. The speaker played examples of this. There were also examples comparable to Niraval in Bach. But real parallels to Niraval were to be seen in the 14th century music, particularly the polyphonic religious Mass, Motet etc. based on the isorhythmic principle. The technique was called Talea. There were also parallels to the Anuloma and Viloma of an actual Pallavi performance in Karnatic music, the rhythmic diminution and augmentation followed by Pallavi singing and she illustrated this aspect also from polyphonic compositions and the works of Bach and the art of Fugue. Ragamalika and Talamalika also could be illustrated from poly-metric Church modes and structure of the older compositions.

Sri T.V. Rajagopalan, Secretary, thanked the Lecturer and announced that the speaker had donated back the honorarium for the lecture to the Experts' Committee fund of the Music Academy.

**Dr. Nijenhuis’s Donation**

Dr. Raghavan then announced that Dr. Nijenhuis would assign the royalty of her new book ‘Indian Music, History and Structure’ to the Experts’ Committee Fund of the Academy.

**THE FIFTH DAY**

26th December 1974

On the 5th day of Experts’ Committee Meeting, convened in connection with the 48th Conference, with the President Sri R. Anantakrishna Sarma in the Chair, there was first a recital of Tiruvempavai by M. K. Punyakoti, accompanied by Sitapati on the Violin.

**Navasandhi Talas**

Vidvan K. C. Thiagarajan then gave a talk and demonstration of the talas used in the Navasandhi ritual which included dances, performed in temples at the Flag-staff. Accompanied by Sri Ganapati on the Flute, Sri K. M. Vaidyanathan on the Mridangam and Sri Palghat Sundaram on the Ghatam, Sri Thiagarajan sang the following songs of the respective sandhis and in their respective talas. He mentioned also the angas of each of these rare talas.

1. Brahmasandhi — Neelambari — Brahmatalam
2. Indirasandhi — Navaroz — Šamatalam
3. Agnisandhi — Navaroz — Mattavāranam  
4. Yamasandhi — Bhairavi — Bhringitālam  
5. Nirrutisandhi — Gambhiranata — Nirrutitālam  
6. Varunasandhi — Nandanamakriya — Navatālam  
7. Vayusandhi — Kambhoji — Balitālam  
8. Kuberanjasandhi — Kambhoji — Kottaritālam  
9. Isānasandhi — Ahiri — Dakkiritālam

The President complimented the Vidvan and his efforts to unearth these rare materials and present them in an attractive manner, with his knowledge of music, Tamil literature and the temple traditions.

President's Compositions

Dr. Raghavan then requested Sri R. Anantakrishna Sarma to present his own compositions. Sri Sarma briefly referred to his efforts to compose some Kirtanas, as also pieces in a few of the other types of composition. The compositions were in Sanskrit. Accompanied by him on the Violin, his daughter Smt. Harini Srinivasan then sang eight pieces:

1. Jagadagadankarani — Ārabhi — Rupakam  
2. Kalasajaladhi-jatam — Kalyani — Adi  
3. Amba visvalamba — Bilahari — Adi  
4. Mahadevi — Hindolam — Adi  
5. Harini hari-ramani — Kambhoji — Chapu  
6. Abhayam yāche — Purvikalyani — Chapu  
7. Navanita-lola — Kapi — Adi  
8. Vaidehi-ramanam — Umabharanam — Adi

On behalf of the Experts' Committee, Sri Embar Vijayaraghava-chariar thanked Sri Sarma and referred to his accomplishment on the literary as well as the musical side.

Dr. Raghavan then referred to a valuable music note book written 94 years ago and containing a variety of compositions; it was written by Sri B. Ramamurti Iyer, father of Sri B. Subba Rao, Member of the Experts' Committee of the Academy. Mrs. Lalitabai Shamanna presented the note-book to the Academy and Dr. Raghavan accepted it and thanked her for the gift.

THE SIXTH DAY  
27th December 1974

The 6th day's proceedings of the Experts' Committee of the Music Academy meeting in connection with the 48th Conference, under the
presidentship of Sri. R. Anantakrishna Sarma, began with the Sanskrit hymns of Kapali Sastri on Sri Aurobindo and Divine Mother sung by Smt. Manonmani accompanied by Sri Sitarama Sarma on Violin.

Folk Songs

Dr. Raghavan then introduced Sri R. Aiyaswamy, formerly of the All-India Radio, and his Programme of Folk Songs of South India. The songs were sung by Jayasri, Sarojini Pattabhi, Hamsarajan and Madurai Ramamurthi, the accompanying instruments being Dolki, Udukkai, Tambattam, Pambai, and Kuzhal. The songs were in all the four languages of South India and represented different activities of the people. Some of them were recorded in situ, like the songs of the fishermen on the Triplicane beach which were actually recorded, going along with them on the Katamaran into the sea. Speaking in appreciation of the presentation of the programme, Sri K. C. Thiagarajan who was associated with Sri Aiyaswamy for over three decades in the All-India Radio, referred to the efforts taken by both of them in the Radio Station, Tiruchi, for contacting the rural folk in different avocations and making them sing their songs. They were able to record over 2000 songs. The tunes in which the songs were sung by the participants followed the original folk tunes. In these songs the mettu was important and not the Raga. The rhythm was found to be mostly Tisra and Chaturasra. President Sri Sarma said that in any part of the country, it is only a fraction of the folk songs that had been collected and most of the published collections were only of texts and had no tunes. The efforts taken by Sri Aiyaswamy and Sri K. C. Thiagarajan were therefore praiseworthy as they had collected the tunes also. Sri Sarma observed that four or five Svaras occurred in these tunes Ni, Sa, Ri, Ga, Ma, and Ni had a special place, although it could not be said whether it was Kakali or Kaisiki. It had a place of importance not to be found in classical music.

Annamacharya

The President Sri Anantakrishna Sarma, then presented a programme of songs of Tallappakkam Annamacharya of the 15th century, who was a predecessor of Purandaradasa as well as of Kshetrajna. He sung mostly on Sri Venkatesvvara in Tirupati and having visited Vijayanagaram and Ahobilam, sang some compositions on the deities there also. His songs which were more than 30000 fell into two classes, the devotional and spiritual songs (Adhyatma) and the love songs (Srngara pads). The T. T. D. had printed only a part of these two classes of his compositions. Only about 15,000 songs of his had been found on copper-plates. It is said that copper-plates with his songs were also in Ahobilam, Simchachalam and Srirangam. The initial work on them was
done by Sri Veturi Parbhakara Sastri. Sri Sarma had edited a few songs of Annamacharya in Andhra Patrika whereupon the T. T. D. invited him to edit these songs. Sri Sarma had edited 108 songs in two volumes for the T. T. D. He had dealt with only the songs of which the Ragas were well known and not those whose Ragas were not in vogue like Mukharipantu; and even in the case of Ragas like Desakshi and Lalita, he had been guided by the compositions in those Ragas in the Sampradayapradarsini. Sri Sarma observed in conclusion that the music of these songs as given by Annamacharya was no longer available in any tradition although there were descendants of his still attached to the Tirupathi Temple and what were now being given were their own versions of the old songs. Then Dr. Radha Vakula accompanied by Sri Sarma on the Violin, rendered on the Vina and sang the following five compositions of Annamacharya:

1. Lankelu oodute labhamu — (Nata)
2. Ençagani neeça gâni — (Bauli)
3. Indukorake — (Malavi)
4. Yela raçamama — (Kambhoji)
5. Teppagâ marraku meeda — (Lalita)

Sangita Kalanidhi Semmangudi Sri R. Srinivasa Iyer, thanking Sri Sarma on behalf of the Experts’ Committee, referred to the great pains he had taken in editing the songs of Annamacharya and the care with which he had made his versions, as for example, the Kirtana in Lalita.

**THE SEVENTH DAY**

28th December 1974

At the 7th day’s meeting of the Experts’ Committee of the Music Academy as part of its 48th Conference, with Sri R. Anantakrishna Sarma in the Chair, Smt. R. Vedavalli first gave a musical rendering of Subrahmanyabhujanga of Sankaracharya, accompanied by Sri Sitarama Sarma on the Violin.

**Rare Ragas**

Dr. Raghavan then requested Vidvan Nori Nagabhushanam Pantulu to give his talk and demonstration on some Rare Ragas. The Vidvan dealt with Ahiri, Janya of Todi but of Vakulabharana according to some and played the same on the Violin and rendered the Varna of Patnam Subrahmanyabujanga Iyer in that Raga. He then played Janjhoti and Dikshitar kriti ‘Ganesakumara mam pahi’; then Chintamanvi, 56th mela according to many but 7th according to Samgraha-
chudamani and few other texts and Syama Sastri kriti in the same were then played by the Vidvan. The Vidvan then dealt with Bindumalini (16th) and rendered ‘Enta muddo’ of Tyagaraja. The next Raga and piece to be rendered were Jayantasri (20th) and ‘Marukelara’. Svaravali an intricate Raga (28th) and the Kriti ‘Parahdha’ and lastly Punnagavarali and ‘Tava dasoham’ in it were played by the Vidvan. The President paid a compliment to the Vidvan on his demonstration and said that it was a difficult thing to define precisely a Raga, although they must have a definite conception of them. He referred also to Vidvan Nori Nagabhushanam Pantulu as having prepared the press copy for the new Telugu edition of the Sangita Sampradaya pradarsini of Subbarama Dikshitar which was to be brought out by the Andhra Pradesh Sangeet Natak Akademi.

Concept of Raga

Prof. V. V. Sadagopan of Delhi University then dwelt on some aspects of Raga and the concept of Sruti and Svara and factors which qualified them, namely glides, graces, intonation etc., all of which played a great role in the rendering of Raga. Vidvan Sadagopan then explained the ancient names of recitals involving one note and two notes and then the Saman-recital involving three notes and then the manifestation of a Raga with five or more notes. He explained the inter-relation of notes in terms of consonance (Samvada), dissonance (Vivada) etc. He illustrated the same by singing Pantuvarali. Other factors in the figuring out of a Raga were alpatva and kampa. The President praised Vidvan Sadagopan for his exposition of the essentials of Raga and Ragabhava.

Release of Book on Dance

Sri T. V. Rajagopalan, Secretary, then requested Sri K. Chandrasekharan to speak on the book on Dance in Tamil by Dr. V Raghavan and the President of the Conference to release the same. Sri K. Chandrasekharan referred to the extensive researches and publications of Dr. Raghavan and reviewed the contents of the present book on Dance written by him. He referred to Dr. Raghavan’s earlier work on the same subject written in collaboration with Smt. Balasarasvati. In the present work Dr. Raghavan had traced the origin and development of Dance with its early religious and ritual background; the extensive literature in Sanskrit and Tamil on Indian Dance; the different aspects of Bharata sastra; Tandava and Karanas as described in texts and seen in sculptures in Chidambaram, Tanjore and Sarangapani Temples in Kumbhakonam, in Ellora, Aurangabad, and in temples in different parts of India; different forms of Nataraja and the various dance traditions in different parts of India; the evolution of Sadir or Bharatanatyam, its relation
to music and different forms of compositions figuring in Bharatanatyam; Padas of Kshetragna and Abhinaya. He had also drawn attention in the book to the shortcomings and wrong developments in the art as practised now and suggested many corrections and improvements. The book carried a number of illustrations and was a store-house of information on the art of Indian Dance and students and teachers could profit by it.

Releasing the book, the President of the Conference Sri Anantakrishna Sarma, mentioned Dr. Raghavan’s edition of the very important treatise on Indian dance, the Nritta Ratnavali of Jaya Senapati, of the Kakatiya Court, on which he had worked for a number of years and to which he had written a very long and scholarly introduction. In token of releasing the present book, the President gave a copy to the Author of the book, to the Academy, to Smt. Priyamvada Shankar of the Balasarasvati Bharatanatyam School, Sri K. P. Sivanandam of the Tanjore Dance Quartette family and others. The book had been brought out by the Kalaimagal Publications, Mylapore.

THE EIGHTH DAY
29th December 1974

The 8th day’s programme of the Experts’ Committee meeting of the 48th Conference of the Academy held under the presidency of Sri R. Anantakrishna Sarma, began with the recital of the Vachanas of Basavesvara and Akka Mahadevi of Karnataka Veera Saiva Sampradaya rendered by Sri Ramamurthi Rao in tunes set by him. He was accompanied by Mrs. Lila Siva Rao on Harmonium and Sri V. S. R. Mani on Tabla.

Annamacharya’s Compositions

Vidvan Aripirala Satyanarayanamurthy then gave a talk in Telugu on the compositions of Annamacharya, some of which he sang and explained, pointing out their parallels in Tyagaraja kritis. He was accompanied by Smt. Lalita Raghavan on the Violin and Sri Narayana Raju on the Mridangam. The President expressed his appreciation of the Vidvan who, he said, had written several works in Telugu on South Indian music.

Tone-System

Dr. Nijenhuis of Holland then read a paper on the Changes in the Tone-system in Indian music. This was necessarily based on Sanskrit texts and not on music practice as there were no samples of old music available. She referred to the archaic period when a scale
of equi-distant notes was in vogue and the ancient *Gandharagrama* might have been in such a scale. This scale was also prevalent in South-East Asia. In the later Vedic and the Natya Sastra period, the music was performed in *Shadja* and *Madhyama gramas* based on 22 *srutis*. But after the 7th century when the harp type of Veena was replaced by a new type of Veena, the ancient *Sruti* system fell into disuse. This was more marked after the 11th century when more strings and frets were added. The temperament in Ramamatya of the 16th century bore comparison with the Pythagorean and Arabic based on cycles of fifths. It might have developed from the *Svayambhu* relationship between notes mentioned by Ramamatya. This system of twelve unequal half-tones was further developed of Pundarika Vitthala and Somanatha in the North and South. Ahobala’s system was determined by the accurate measurement of the divisions of strings and most of these were still used in modern Indian music. It was clear that in Indian music intervals had never been absolutely fixed and even in the same *Raga*, it might differ from one performer to the other. At the same time there was need to interpret and understand the development of the Indian tone-system. The speaker then dealt with each of the notes, both *Suddha* and *Vikrita*, and its struti value in cents. In trying to understand the change in the tone-system, the speaker suggested that from Sarngadeva’s time onwards there might have been influence of the Arabic temperament.

Dr. B. C. Deva pointed out that a distinction should be made between acoustic laws and music practice. The first dealt with the basic sound material out of which the latter was created. Musical practice varied in time and space and could be explained in terms of acoustical laws. *Srutis* dealt with acoustic laws. Their definite number was possible only with the steady tone as in harp. But frets produced moving tones which have a different approach of continuous movement. Both Dr. Deva and Dr. S. Ramanathan mentioned that they would be dealing with the subject at the next day’s demonstration (30th) on their acoustical research project. Dr. Raghavan pointed out that the possible Arabic influence from the time of Sarngadeva onwards which the speaker suggested was to be examined further as alternate explanations of indigenous factors could not be ruled out and that there were the folk music and instruments and the earlier change of the *Gandharva* or *Marga* to *Ghana* and *Desi* which showed the direction along which changes were taking place, all of which was pre-Arabic.

**Katya Kalakshepa**

Dr. Raghavan then requested Sri Embar Vijayaraghavachariar to give his talk on Harikatha. Sri Embar emphasised the importance of
this art as an integral part of music and the debt they owed to the Maharashtriyans and their Kirtana Paddhati in the growth of this art. He mentioned that there were three main parts, the preliminary prayer songs and then the burden of the teaching, Nāmasiddhānta, and then the main part, the illustrative story. It was Krishna Bhagavatar of Tanjore who adapted the Maharashtra Paddhati and started performing the Kalakshepas in Tamil. Composers like Gopalakrishna Bharati further adapted the musical forms of the Maharashtra Paddhati to Tamil compositions in continuous stories which they composed like the 'Nandan Charitram'. Similar service was done by Ramaswami Sivan, Kavikunjara Bharati, Arunachala Kavi, Mazhavarayanendal Chidambarama Bharati etc. All this gave them ample repertoire in Tamil and a large number of stories like those of Tamil saints, Skandapurāṇa, etc. He mentioned noteworthy performers of this art like Soolamangatatti Vaidyanatha Bhagavatar, Panchapakesa Bhagavatar, Mangudi Chidambaram Bhagavatar, Palani Subramanya Bhagavatar, Sarasvathi Bai and his own father Chidambaram Srirangachariar. He expressed gratitude of the votaries of this art to the Music Academy which had recently begun to give fillip to this art and had proposed to train performers in this art. He for his part offered his services to train some qualified youngsters whom he might take as apprentices under him.

Thanking the speaker, the President Sri Anantakrishna Sarma mentioned that in Andhra the two well-known leaders of this art were Adibhatla Narayanadasa of Vizianagaram and Anantaramachar, distantly related to himself, some of whose songs used to be sung in his own family. In Mysore, he mentioned Ramadasar of the Madhva Sampradaya who was a highly qualified performer, and whose harikathās lasted for over six hours.

THE NINTH DAY

30th December 1974

At the ninth day's meeting of the Experts' Committee of the 48th Conference of the Music Academy, Madras, with the President, Sri R. Anantakrishna Sarma in the Chair, Smt. Bala Meera Chandra first rendered Marathi Abhangs.

Research in Srutis

Dr. B. C. Deva of the Central Sangeet Natak Akademi then presented a symposium on the work of the acoustical research project conducted under the auspices of the Sangeet Natak Akademi. The
participants were Sri Gurbux Singh, Delhi, Sri P. Ravindra, Bombay, Sri S. Ramanathan, Tiruchi, Dr. S. Ramanathan, Madurai and Dr. H. V. Modak, Poona. The series of talks and demonstrations related to 22 śrūtis and their demonstration on the newly devised Sruti Harmonium and Sruti Vina; there was also an elaborate apparatus which reproduced music so as to provide an automatic accompaniment and had also an additional equipment to provide notation. Introducing the speakers of the subject, Dr. B. C. Deva pointed out the necessity for a scientific approach to the problems of śruti and the enormous difficulties in unravelling the knotty questions connected with it. Four scholars aided by the Akademi had been pursuing this matter with experiments. Sri Gurbux Singh, New Delhi, worked on the basis of shadja-panchama and shadja-madhyama bhava and showed how the series fitted into twenty-two śrūtis with the help of the specially tuned harmonium. P. Ravindra, Bombay, demonstrated a harmonium tuned both to tempered scale and to the Indian śrūtis. With Dr. Deva singing on the voice, Sri Ravindra demonstrated the śrūtis on this harmonium. Sri S. Ramanathan of Tiruchi and Dr. S. Ramanathan of Madurai gave a demonstration on the Sruti Vina constructed by the former. Dr. Ramanathan explained the Shadja grama of Bharata and the ancient palai of Tamil music corresponding to Harikambhoji mela. Both of them, on the request of Experts, demonstrated the 22 śrūtis on the Sruti Vina with and without vocal demonstration.

Lastly Dr. H. V. Modak, Professor of Physics, Poona, exhibited an automatic electrical instrument capable of resonating the tones of the Raga sung or played and providing an immediate accompaniment and an additional equipment of electric lamps and a running film giving an automatic notation of the music rendered.

The President Sri Anantakrishna Sarma expressed his appreciation of the pains taken by these research scholars and said that these researches were not for the general public who listened to music, but for specialists who worked on the scientific aspects of music. He mentioned that in Mysore, the famous painter Venkatagiriappa made a Sruti Vina and in Andhra one Venkatasubramanya Sastri also constructed a Sruti Vina and the brother of Chowdiah, Lingappa also prepared the 22 Sruti Harmonium. Personally he was of the view that these devices were more useful for Hindustani in which musicians stayed in Svaras but not for Karnatic music, in which they oscillated the Svaras. Dr. Raghavan said that the matter bristled with questions; when the findings of these experts were published in the Journal of the Music Academy or in the reports of the Central Akademi, they could be fully understood.
Dr. Raghavan then requested Sri L. S. Rajagopalan to speak on the Kurungkuzhal of Kerala. In the course of his paper Sri Rajagopalan mentioned the traditional temple background of this instrument which was a diminutive Nagasvaram or Mukhavina. He described its construction and its five holes, the notes played on each of them. The earliest references of this instrument in Malayalam literature was in Rāmakathā Pattu of the 14th century. The instrument was played generally by Nairs and thus had military association also. The speaker traced its connection with Madhukari described in Sangitaratnakara and several forms of it current in different parts of India. The holes of Kurungkuzhal corresponded to the Harikhamboji Mela. In the temples the instrument was used in the early morning for the deities' rising up and the Ragas sung at that time were Bhupala, Desakshi, Bilahari and so on. It was used also for taking round the processional deity. They also played what is called Pattu, akin to the rendering of a Pallavi, along with a percussion player. Unfortunately the instrument had been superceded by the Nāgasvaram of the Tamil districts and there were very few players of this instrument today. The instrument was also used in the Sanskrit drama Koodiyāṭṭam. In the demonstration that followed Ragas Desakshi, Kānakkurunji, a rare Raga of Kerala, and Kambhoji were played. There was also a display of the Kurungkuzhal as a Tala-vādyya. The Kurungkuzhal was played by Manathanath Narayana Nair and Chenda accompaniment was provided by Annamanada Parameswara Marar. The President thanked the speaker and the artists for their demonstration.

THE TENTH DAY
31st December 1974

The tenth day's proceedings of the Experts' Committee of the 48th Conference of the Music Academy, Madras, with the President Vidvan Sri R. Anantakrishna Sarma in the Chair, began with the recital of Tiruppugazh by Sri. T. S. Vasudevan and party.

D. V. Gundappa’s Songs

Dr. Raghavan then referred to the eminent Kannada writer and publicist, D. V. Gundappa who had composed some songs on the beautiful sculptures of dancing figures in the Belur Temple called Antahpura Gite and he requested Sri B. V. K. Sastrī to give his talk on these songs and the demonstration arranged for the same by the students of the Music Department of the Bangalore University under the direction of Vina Vidvan Mysore Doraiswami Iyengar. In the
course of his talk Sri Sastri gave an account of the Chennakesava Temple at Belur built by Vishnuyardhana of the 12th century and its rich sculpture, particularly the bracket figures representing several dance poses, which were world famous pieces of work of art. The Queen Shantala Devi herself was a great dancer of her time. The speaker then gave an account of the works of Sri D. V. Gundappa and the background and nature of the set of songs called Antahpura Gitâ on the Madanika sculptures of Belur. The songs were set in well-known Karnatak Ragas. Each of these sculptures was given an attractive name according to its character, Mukura Mugdhe (Lady with Mirror), Sukabhâshini (chatting with the parrot), and so on. The speaker then read out the Kannada text of these songs and they were sung by the students of the Bangalore University Music Department, accompanied by Anoor Sri Ramakrishna on the Violin and Sri M. L. Veerabadriah, on the Mridangam. Sri B. V. K. Sastri projected also slides depicting some of these beautiful sculptures. Thanking the participants, the president Sri Anatakrishna Sarma paid a tribute to the literary eminence of Sri D. V. Gundappa.

**Time Theory of Ragas**

The President then requested Sri V. V. Narasimhachariar to give his paper on Time Theory of Ragas. In his paper Sri Narasimhachariar set forth the Lakshanas of the Ragas and the times suitable for the same as mentioned in the series of Sanskrit texts in the chronological order. Thanking him Dr. Raghavan said that the rules regulating certain Ragas as fit for certain parts of the day dominated North Indian music and not Karnatic music. Although there was unmistakable relationship between certain Ragas and certain parts of the day like Bhupala and dawn and Nilambari and night, it was very difficult to specify parts of the day for the whole body of the Ragas. According to him this theory was a hang-over from the employment of Ragas for specific parts of the story of a drama and their timings, as dealt with by Bharata.

**Annamacharya**

Dr. Raghavan then introduced Sri Anantasubramanyam who had formerly worked under his guidance on the music manuscripts in Sarasvathi Mahal Library under the scheme of the Madras State Sangita Nataka Sangam, to give his paper on Annamacharya and his work. In the course of his paper Sri T. G. Anantasubramanyam dealt with the details of the life of Sri Annamacharya, his conversion to Vaishnavism, the shrines visited by him, the enormous number of his songs (32,000), the different categories of compositions which included probably a play, which he wrote, the themes and ideas which he had brought out in his
songs, the literary aspects of the compositions and some parallels between Annamacharya and Tyagaraja. The speaker hoped that the T. T. D. would now take up the further publication and propagation of the works of Annamacharya.

THE ELEVENTH DAY

1st January, 1975

The Surbahar

The proceedings opened with a talk and demonstration on the rare north Indian instrument Surbahar. Dr. V. Raghavan introduced Mrs. Nilaufar Khan as one of the few artistes who had taken to this rare instrument and as the niece of the celebrated Ustad Vilayat Khan. Mrs. Nilaufar Khan said that the Surbahar was played in the temples as part of the Suprabhatam rituals by the pujaris. Originally it was never public or popular but in her own family it had a tradition of 300 years. As a music instrument it might be described as an off-spring of the Bin and the Sitar but it had its own marked individuality. Although it was now practically defunct, it was being revived. Its fingering technique was different from that of the Sitar. The four-finger playing on the Surbahar was inherited from the Bin. Surbahar had a broader key-board and the whole octave could be pulled on one fret. As this instrument was intended for awakening the Lord in the temple in the early morning, only Alap, Jod and Jhala were played on this. Although there was no compositions set to a Tala, there was an innate rhythm inherent in it. The general ethos reflected the slow awakening of the Lord in slumber. There was no specific Raga even, only some Bols were played. The playing was characterised by maximum pulling and slow Alap. It would be clear from the above details that hard work and complete dedication were necessary. The artiste played and quietly laid down the instrument and then the money from the King was distributed to the poor people around. The musician was usually a Fakir.

From the purely technical point of view, she explained that the Panchama played on Surbahar had different effects. Although the same note was taken, in different Ragas it took on different aspects: e.g. Ga and Dha in Darbari. Citing Jonpuri and Bahar, she showed how the change of the degree of the same note changed the Raga. She also referred to her father Imrat Khan, his contribution to music and how, in a single stroke, he could bring out the whole octave. Mrs. Nilaufar Khan, apart from the snatches of ragas played as illustrations in her talk, concluded with the recital on Surbahar of Nata Bhairavi.
Book - Release

Dr. V. Raghavan then announced that the Music Academy had brought out a new publication giving with notation a selection of the compositions of Pazhani Subramanya Bhagavatar. In the 45th Conference, some of these songs were rendered by Smt. Kalpagam Subramaniam, the grand-daughter of the composer's brother. It was then decided that a selection of the songs might be brought out with notation by the Music Academy, Madras. Sri P. S. Subramaniam, whose wife had rendered the songs at the 45th Annual Conference, had undertaken to prepare the volume with the help of Smt. Coimbatore Nagaratnammam, mother of his wife, Kalpagam Subramaniam. Pazhani Subramania Bhagavatar was born in 1869 and died in 1937. He was a well-known musician and exponent of Harikatha. He composed in Telugu and Tamil over 150 pieces. His Mudra was 'Sivagirisa'. Some musicians who knew him were still happily with them. The President of the Conference then released the publication and commended the work of the Academy in bringing out collections of such rare compositions. As a token of release, he gave the first copy to Smt. Kalpagam Subramaniam.

Gottu Vadyam

Sangita Kalanidhi Budaloor Krishnamurthi Sastrigal then gave a recital on his Gottu Vadyam and played the following pieces composed by his Guru Sangita Kalanidhi Dr. L. Muthiah Bhagavatar: (1) Sakti-ganapatim Bhaje-Nata (2). Jagadguro dayanidhe-Athana (3). Ninnu namminanu-Abhogi (4). Ni padamula (on Goddess Kantimati) - Bhairavi and concluded with Madhyamavati (Sri Rama Jaya Rama).

The President of the Conference than complimented the Vidvan for his equipment in vocal and instrumental music. He paid a tribute to Dr. L. Muthiah Bhagavatar who was a prolific composer. He himself had contacts with Muthiah Bhagavatar during his stay in Mysore court where he composed a series of 108 pieces on Chamundesvari at the instance of the Maharaja. Those Kritis in Kannada language were unique and he mentioned particularly his Kriti in Amritavarshini, "Sudhamayi", which had become immediately popular.

A Paper on Tala

Dr. V. Raghavan then mentioned the paper on 'Tala Dasapranas in Jatis' submitted to the conference by Sri. R. Venkatarathnam, B. A., (Hons), a disciple of Vidvan Tinniyam Venkatarama Iyer. The author was unable to be present to read it. It is published elsewhere in this Journal.
Concluding Function

Condoleses

Dr. V. Raghavan then placed before the assembly a condolence resolution expressing their grief and the sense of loss sustained by the Academy and the music world in the death of the following musicians and patrons of music who had helped in the development of the Music Academy: Sri T. T. Krishnamachari, Maharaja Jayachamarajendra Wadiyar, Smt. C. Saraswati Bai, the pioneer and doyen of lady Harikatha performers, Sangita Kalânidhi Chembai Vaidyanatha Bhagavat-tar, Dandayudapani Pillai, Dance Master, V. Nagayya, Pandit S. N. Ratanjankar, a distinguished musician and scholar who had participated many times in the Academy’s annual conferences and Vidvan Parur Sundaram Iyer, a member of the Academy’s Experts’ Committee.

Felicitations

Dr. V. Raghavan then mentioned that during the year the following Vidvans who had been closely associated with the Academy and its performances, Sri M. D. Ramanathan, Sri T. N. Krishnan, and K. P. Kittappa had received distinctions and awards and the Academy conveyed to them its felicitations and best wishes for further success in their career.

President’s Concluding Remarks

The President of the Conference, Sri R. Anantakrishna Sarma then thanked all the Members of the Experts’ Committee and those who had participated in the meetings of the committee for their co-operation. He made special mention of the North Indian musicians and scholars whose contribution had enriched the Conference. The discussions, of course, were always the most important features of the Academy’s Conferences. He would, in his concluding remarks, emphasise that Raga was the essence of their music and its Svarupā was the thing that should be correctly understood and presented. Each Raga had a personality of its own. Its Ārohana and Āvarohana or its Mela are only indications. There was, in addition, its individuality. The real aim of the Sastra was not merely a skeletal indication. Even the Samvadi–Vivadi must be understood in a larger sense and not exactly according to the interval, because a Svara could not be used as it was and there were so many subtle points in the use of Svara like Alpatva and Bahutva. Mechanical Raga-prastāra could not become Raga Alapa. Sastra was not enough; books were only for students; Anubhava was the most essential thing. Personally he could say that he had himself be-
nected considerably by the conferences of the Academy which he used to attend some years back regularly when he was in Tirupati.

**Vote of Thanks**

Dr. Raghavan then spoke thanking all those responsible for the conduct and success of the 48th Conference. He first thanked Sri R. Anantakrishna Sarma for accepting the Presidency of the Conference and his contribution to its proceedings and then the Hon. C. Subramaniam, Union Minister, for inaugurating the Conference; the Central Sangeet Natak Akademi for continuing its financial assistance to different programmes of the Academy, particularly its research and publication work under which the conference was being conducted. Dr. Raghavan referred to the enthusiastic participation of Vidvans and Vidushis of the Experts' Committee who had all contributed to the success of the Experts' Committee meetings and the festival of concerts. He also thanked the donors of the different prizes to be given to the successful candidates. There were also Members of the Experts' Committee who acted as Judges in the several competitions and the Junior and Senior concerts for the several prizes to be awarded. He made special mention of the Hindustani Vidvans and the North Indian scholars and the University of Delhi for their co-operation in sending delegates.

He then made special mention of Dr. E. te Nijenhuis of the University of Utrecht, Holland who had been regularly attending the Academy's conferences in the recent years. She had made a handsome donation to the Academy by assigning to the Academy the royalty of her latest book on Indian Music which was a sign of the impact which the Academy's Conference and academic work had made in the world of music, in the West in particular.

He also thanked the Members of the Academy, the public, the Press, the Union and State Governments, the Corporation of Madras, the volunteers of the Friends Unit, the Academy's Office-bearers, the President, Treasurer, Secretaries and Members of the Executive Committee, all of whom had their share in the success of the Conference.

**The Sadas**

The *Sadas* (Convocation) of the 48th Conference of the Academy was held in the auditorium of the Academy on 1st January, 1975 at 4-00 p.m. with Hon. Sri T. A. Pai, Union Minister, in the Chair.

There was a distinguished audience of members of the Academy,
music lovers, musicians, music scholars, and experts. The Proceedings began with prayer by Vidvan D. K. Jayaraman.

The Sadas was convoked by Sri S. Natarajan, Secretary. Sri R. Ranganathan, Secretary, then read the following additional messages received for the success of the Conference and the Sadas.

The President and Vice-President of India had sent their best wishes for the success of the Conference. The Governor of Madhya Pradesh had sent his best wishes. The Minister for Law, Justice and Company Affairs Sri R. Ganesh had sent his best wishes for the success of the Conference. The Chief Ministers of Bihar, Andhra Pradesh and Maharashtra had sent their good wishes. Mr Sadiq Phasha, Minister, Government of Tamilnadu, commended the role played by the Music Academy in the promotion of music.

The Andhra Pradesh Sangeet Natak Akademi had sent its best wishes to the Conference and its President, Sri R. Anantakrishna Sarma. Dr. R. Simon, California State Polytechnic University, who was formerly doing research in Bhajan music under the auspices of the Academy, sent his warmest greetings.

The President of the Academy Sri T. S. Rajam then welcomed the Sadasyas and the Hon. T. A. Pai. He said:

"I have great pleasure in extending a warm welcome to all of you to this important function of our Academy, viz. the Sadas. The word Sadas means a concourse of learned scholars and, so to say, this function can be considered the Annual Convocation of the Music Academy. We are gathered here to honour the President of the 48th Conference, Vidwan Sri R. Ananthakrishna Sarma who, on the opening day of the Conference, set us thinking in his Presidential address. He has, to my mind, raised several very relevant questions to which we should all give our attention. At this Sadas we also honour musicians who have distinguished themselves, as well as award prizes to younger musicians whose performances were considered impressive and successful. This year we are honouring with the award of our Certificate of Merit an instrumentalist, a musicologist and a Harikatha performer. The honouring of a Harikatha performer is significant in that the Academy is keen on encouraging this art-form and plans are afoot for our starting a course to train performers in this field."
As I indicated on the first day, this year there have been some new prizes. I would like to make a special mention of the prize instituted by one of the old members of the Academy, Mrs. Yogam Nagaswamy, carrying an award of over Rs. 1,000/-. I would also like to mention that with a view to encouraging musicians who sing in the mid year series, an award has been instituted by the Hon. Justice Sri V. R. Krishna Iyer in the name of his wife. This year the morning sessions were extremely interesting. A number of research papers were read and the discussions in the Experts’ Committee were, as usual, very valuable. It would appear that this part of the Conference is gaining more and more support from all interested visitors, members and others. I may mention that one of the foreign participants from Holland who participated this year, Dr. Nijenhuis, has announced a spontaneous donation towards the Experts’ Committee Fund. I must make special mention of our senior scholarly Secretary, Dr. V. Raghavan, for organising and steering this Experts’ Committee work, which of course, he has done for a few decades now.

The coming year will be dedicated to the memory of Sri Muthuswamy Dikshitar since it will be the year of the Bi-centenary of his birth. The Academy proposes to have a year long celebration of this unique event beginning from the middle of March. I wish to take this opportunity to make a special request to all members, musicians and others to give us their cooperation in making this celebration a grand success. You will agree that Sri Muthuswamy Dikshitar’s Bi-centenary should be observed in a fitting manner by the premier institution for music in this part of the country. The Academy has already awarded two scholarships to young musicians to enlarge their stock of Dikshitar Kritis.

As you are aware, the Academy has embarked on a programme to help indigent musicians. A beginning had already been made and it is proposed to create a fund of Rupees One lakh, from the proceeds of which assistance could be extended to more such musicians.

It is customary for the Academy to request a leading personality in the cultural, educational and administrative fields to preside over this function which is organised like a convocation. We have, for this year’s Sadas, invited the Hon. T. A. Pai, Union Minister, and I am grateful to him for having agreed to preside over the Sadas, despite his heavy pre-occupation with Government and official work. I take this to be an index of his deep interest in the arts and his regard for the Music Academy as an outstanding institution. I now request him to preside over the function and conduct the proceedings of the Sadas.
Then the President of the Conference, Sri R. Anantakrishna Sarma, was presented by the Academy's President Sri T. S. Rajam to the President of the Sadas.

VIDVAN R. ANANTAKRISHNA SARMA

Born on 23rd January 1893 of Alamelu Ammal and K. Krishnamacharya at Rellapalle; studied Alamkara and Vyakarana in Maharajah's Sanskrit College, Mysore; studied vocal music under Karigirirayar, Chikka Rama Rao and Bidaram Krishnappa; practised also on the Violin; served as Telugu teacher in the Maharajah's College, Mysore, for 38 years; was Reader in music in S. V. Oriental Institute, Tirupati, where he edited in notation 108 songs of Tallapakam Annamacharya; has rendered into Telugu 47 padas of Purandaradasa; translated Jayappa's Nrittatratvadvati into Telugu for the Andhra Pradesh Sangeet Natak Akademi, of which he was Vice-President for a time; has published books in Telugu and Kannada on music; has been honoured as a Telugu writer and as a musician by several bodies; was elected Fellow of the Sangeet Natak Akademi and conferred the Hony. Degree of D. Litt. by the S. V. University, Tirupati.
The President of the Sadas, Hon. T. A. Pai then conferred the title of Sangita Kalanidhi on Sri Aanatakrishna Sarma and presented him the Sanad and insignia of the title.

Certificate of Merit

As usual the Academy had selected a few senior experts who had done long service in the field of music for the award of the Certificate of Merit.

Vidvan N. Chennakesaviah of Mysore, one of the seniormost members of the Experts’ Committee, presented Dr. T. S. Ramakrishnan, Member of the Experts’ Committee for the award of the Certificate of Merit.

Dr. T. S. RAMAKRISHNAN

Comes of a Smarta Pudur Dravida family of scholars and musicians, his remote ancestors having been in Mysore and Poona courts where they were honoured with the title “Sarasvati” which then became their family surname; born in August 1902; his father and grand-father were scholars in Sanskrit and Vainikas, the family having been attached to the Venkatagiri Samsthanam; learnt music and Vina from his father Srinivasamurti and made a special study of “Sangita Sampradaya Pradarsini” and the Tyagaraja’s kritis and other compositions in A. M. Chinnaswami Mudaliar’s “The Oriental Music in European Notation”, his own father having helped in the preparation
of that work; had come into contact with the Dikshitar tradition through Ambi Dikshitar; as an L. M. P. served in Ceylon and in the Madras Corporation till 1975; his first participation in the Academy's Conference was in 1932 and for several years more recently, as a Member of the Experts' Committee, has been participating every year in the Committee's work.

Sri T. V. Rajagopalan, Secretary, presented the Mridangam Vidvan from Andhra, Sri Kolanka Venkataraju.

Sri. KOLANKA VENKATA RAJU

Born in 1908 in a family of musicians, his father Sri Peda Ramaswamy and his uncle Sri Chinna Ramaswamy as well as his grandfather Sri Venkayya having been reputed Mridanga Vidvans; came early under the influence of Vina Vidvan Sangameswara Sastry; had his training under his father and then under Muramalla Gopalaswamy of Kakinada; started accompanying Prof. Dwaram Venkataswamy Naidu; taught Mridangam at the Music College of Vizianagaram for eleven years, and then at the Government College, Hyderabad; has had a number of disciples who had become well-known Mridanga Vidvans; has served as a member of the Audition Board, AIR., and as a member of the A. P. Sangeeta Nataka Academy; has accompanied many leading artistes and received several honours from the public and institutions in A. P.

Smt. Indira Ramadurai, Member of the Executive Committee of the Academy, then presented Smt. Banni Bai, the senior-most living lady performer of the art of Katha Kalakshepan.
Born in 1912 in a family devoted to music and dance; started her music training when she was seven under Balu Pillai and dance training under Kanchipuram Tiruvenkatam Pillai; from her twelfth year, started her training in Harikatha in the Maharashtra-tradition under Kuppiah Bhagavatar, Vijaya Bhagavatar, Tanjavur Chitrakavi Sivarama Bhagavatar, and later, under T. P. Kalyanarama Sastri, trained herself in the style of Tiruppayanam Panchapagesa Sastrigal; enriched her music and knowledge of compositions in different languages under several well-known musicians and pandits; has been blessed by Swami Sivananda and honoured by the Madras State Sangita Nataka Sangham; has enjoyed a continuous career as a Harikatha performer for five decades.

The President of the Sadas Sri T. A. Pai then gave the Certificates of Merit to Dr. T. S. Ramakrishnan, Sri Kolanka Venkataramu and Smt. Banni Bai.

Sri K. Chandrasekharan and Embar Sri S. Vijayaraghavachariar then spoke offering felicitations to the recipients of the awards at the Sadas.

The President of the Conference and others who had received the title and awards at the Sadas then acknowledged the honour done to them and thanked the Academy.
Dr. V. Raghavan then introduced the musicians who figured in different concerts of the season and had been adjudged as deserving of diverse special Awards and requested the President of the Sadas to present them the Awards. (See list below). The President gave away the Awards.

Competition

Sri P. S. Ramachandran, Member of the Executive Committee, then introduced the winners in various music competitions held during the Conference. The President gave away the prizes to the successful candidates (See list below).

Teachers' College of Music

Dr. V. Raghavan, Correspondent of the College, then introduced the students who had passed out successfully in the examinations and requested the President to give away, the Diplomas and Prizes to them (See list below). The President presented the Diplomas and Prizes to them.

President's Speech

ADDRESS OF SRI T. A. PAI

Delivering his address as the Sada; President, the Hon, Sri T. A. Pai said he was aware that this institution had its beginning in the 20's and came to grow from year to year. This great institution had been doing signal service to the cause of music and had his best wishes for its continued and ever more successful contribution to the preservation and growth of a great art.

Music was the very essence of life and was in-born in man. The Vedas were sung to tune and music was used as an instrument for drawing divine grace by singing the glories of the Lord. Narada was the Maharishi who excelled in music and utilized it for singing the glories of the Lord and obtaining His vision. In later times, Mira Bai, Kabir, Surdas and others in Northern India, Kanakadas, Purandaradasa, Thyagaraja and others in the South were great devotees of the Lord and sang in praise of Him. The master-pieces in Indian music had all been composed by great devotees of the Lord. Music has never remained detached from bhakti.
When the cultural history of India came to be written properly, the migration of small but very active groups from one linguistic area to another would be seen to have exercised a very remarkable influence. The handful of Telugus settled in the Tamil country provided a focus of excitement hovering like a spirit on the troubled waters of the Carnatic in the 18th century. Troubled by the invader, the remains of the Chola Empire yet maintained their integrity and were, in fact, pulsating with a new life. Bodhendra and Sridhara Venkatesa were the Sun and the Moon of the firmament of which Tyagaraja was the pole star.

That was, however, only one side of the story. We could not possibly ignore the sociological character of the growth of music over the ages. Although originating in the temple, music made its excursions in the wide world outside. A musician of those days was a man of noble calling performing his duties for the king and the court. He was initiated into this art by some accomplished pundit or musician and learnt to please those who knew its mysteries. He had a distinguished place in the royal court and also among the intellectuals and scholars of society. The modern musician, on the other hand, had to live in a society with so many maladjustments and faced by numerous economical problems. Music was no more a calling but at best a profession. With the exception of a few, the majority of the musicians had not the means to sustain a decent economic existence. Aristocracy which was once the custodian of good taste and judgement had become largely bankrupt and spiritually dehydrated. It was unfortunate that this so-called aristocracy pandered to vulgarity in life, taste and art. The interest of the middle-class in music was largely academic although its enthusiasm for it was tremendous. The poorer classes had very little to do with classical art and music since the severities of economic survival had impoverished them, emotionally and spiritually. The Indian musician was primarily a wage-earner today and the prosperous segment of society which used to patronise him in the past had been succeeded by a capitalistic society which offered him no security. The profession of a musician was extremely insecure and he did not understand what their society was going to do for the majority of the musicians who had been called to this art either on their own or by force of circumstances.

The amateur musician might not be counted among the first-rate men of music but he was, by and large, more successful. The
professional orthodox musician wedded to his tradition, shunned innovation and was unable to adjust himself to new conditions. On the other hand, the amateur musician could manage his business skillfully, leaving the professional traditionalist out in the cold. He believed these were all occupational hazards of one sort or other, but if academies and sabhas could do something to relieve the distress of the poor professional musicians, they would have done really a great service to the cause of music.

It had been said that men who had no music in them or remained unmoved by music were fit for treasons, stratagems and spoils. He wondered whether any musician who aspired to become first rate and be acknowledged as such by the discerning intellectual society, could do so without judiciously resorting to these very methods of treasons and stratagems! Perhaps he was exaggerating the situation but he could not help feeling that the average musician was subjected to a great deal of compromise in dignity in the pursuit of his avocation. It was the responsibility of the sabhas and academies devoted to fostering the musical art to ensure that the musicians' place in society was restored to its former dignity. Unfortunately, pinchbeck celebrities with a smattering of the musical idiom occasionally presided over the destinies and fortunes of the professionals and it was only the conscience of society that could correct this situation.

Vote of Thanks

Sri. T. V. Viswanatha Aiyar, Trustee, thanked the Hon. Minister for accepting their request to preside over the Sadas and all the musicians, patrons, donors, members and office-bearers of the Academy who had contributed to the success of Conference.
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6. Tamil Songs
   The 'Amarar' Kalki's Tambura Prize
   Endowed by Sri T. Sadasivan
   I Prize-Vijayalakshmi Krishnamurthi
   II Prize-Sudha Venkataraman

7. Maharaja Svati Tirunal Compositions
   Murthi Memorial Prize
   Endowed by the R. K. Murthi Memorial Committee.
   I Prize-Gita Raja
   II Prize-B. Latha

8. Purandaradas Padas
   Endowed by V. S. S. K., Tobaconist, Jaffna.
   I Prize-R. N. Srilatha
   II Prize-Sudha Venkataraman

9. Pallavi Singing
   Dr. Sankaranarayana Iyer Prize
   Endowed by S. S. Krishnan.
   R. N. Srilatha

10. Sanskrit Compositions
    Dr. V. Raghavan Prize
    Awarded by Smt Priyamvada Sankar
    T. V. Sundaravalli

11. Divya Prabandham & Tevaram
    Sri Vijayaraghavalu Naidu Memorial Prize
    Awarded by Vijayaraghavalu Memorial Religious and Charitable Trust,
    Edamanal, Sirkali, C/o V. Ramachandran,
    Bheemanna Mudali Street, Madras.
    I Prize-N. Sarasvati

12. Tulasidas Bhajans
    Smt. Rajalakshmi Jagannarayanan Prize
    Endowed by S. Jagannarayanan
    I Prize-Malati Anantachari
    II Prize-Kala Rao
### Competitions

**Concerts:**

- **Sri K. R. Sundaram Iyer Shashty-abdapurti Prize for the Sub-Senior Musician**
- **Violinist Naum Lichtenbarg Memorial Prize for the Sub-Senior Violinist.**
- **Dr. Henry Cowell's Prize for the Junior Mridangist**
- **Sri T. V. Subba Rao Prize for the Junior Musician**
- **Semmangudi Narayanaswami Iyer Prize for the Junior Violinist**
- **V. R. Sambasiva Iyer Prize for the Junior Violinist**
- **Veenai Shanmugavadivu Prize for young Veena Player**
- **D. K. Pattammal Prize for a Lady Vocalist**
- **Yogam Nagaswami Prize for a Senior Vocalist**
- **Sarada Krishna Iyer Prize for a Musician in the concerts during the year.**

**College:**

- **Raja Sir Annamalai Chettiar Prize for the best student in Practical and R. N. Sarma Prize in Theory.**

### Donors

**Awarded by Sri K. R. Sundaram Iyer Shashtyabdupurti Trust**

- **Endowed by his sister Dr. Johanna Spector**
- **Endowment out of the Royalties of his Madras Symphony**
- **Awarded by the Executive Committee of the Music Academy, Madras.**
- **Awarded by Sri A. Panchapakesan**
- **Awarded by Sri S. Nataraian**
- **Endowed by Smt. M. S. S. Ladies Felicitations Committee**
- **Endowed by D. K. P. Ladies Felicitation Committee**
- **Endowed by Mrs Yogam Nagaswami**
- **Endowed by Justice V. R. Krishna Iyer**

### Winners

- **G. S. Mani**
- **Master Nagarajan**
- **R. Ramdoss**
- **T. G. Badrinarayanan**
- **T. V. Parthasarathy**
- **Jaya Sarangapani**
- **Padma Varadan**
- **Jayalakshmi Santhanam**
- **D. K. Jayaraman**
- **Salem Chellam Iyengar**
- **G. V. Jayalakshmi**
MAHĀRĀJA SVĀTI TIRUNĀL
and his Chauka Varṇa Compositions

Dr. T. S. RAMAKRISHNAN

First my respects to Sri Subbarama Dikshitar, the author of "Sangīta Sampradāya Pradarśini" whom I consider as my Parama-Guru.

The royal Vāggeyakāra Sri Svāti Tirunāl (Kulaśekhara Perumal) (1813–1846 A.D.) is quite well known as one of the greatest figures in the history and development of our classical Carnatic music. Svāti Tirunāl was a great bhakta, poet, a master vāggeyakāra and a patron of all the famous scholars, musicians and other artistes of his period. As an able ruler he has been described as the "Dakshiṇa Bhoja". Considering his valuable contributions to the cause and development of classical Carnatic music he deserves to be ranked with the Musical Trinity. This I see has been done by the Music Academy. Svāti Tirunāl's portrait is seen here placed with the portraits of the Musical Trinity and Purandara Dāsa (the Pitāmaha of Carnatic music).

Precocious as a child, bala praudha, with extreme passion for music, Svāti Tirunāl became even at the young age of 16 a great scholar and a vāggeyakāra and at the same age took up the administration of the state. He had mastered several languages—Sanskrit, English, Telugu, Marāṭhi, Kannada, Hindi, Persian, besides Malayālam his native tongue.

Among the master musicians who adorned Svāti Tirunāl’s court special mention must be made of the famous Tanjore Quartette Brothers, the great nritya vidvāns who had refined and perfected the nritya art into the form of the Bharata Nāṭya of the present day. Vaḍīvelu, the youngest of the Quartette brothers, a master violinist besides, became a permanent and highly esteemed vidvān in Svāti Tirunāl’s court. Through contact with these brothers, who were direct disciples of the great Muthuswāmi Dikshitar, Maharaja Svāti Tirunāl developed great passion for the Bharata Nāṭya art and also learnt in detail about Venkaṭamakhi’s Sampradāya—the true and genuine system of the modern phase of classical Carnatic music.

Being a prolific composer, even during his brief span of life of thirty-three years only, Svāti Tirunāl is said to have composed more than 300 compositions which include several musical forms. Most of his compositions are in Sanskrit, considered by him as a divine
language, some in Malayalam, Telugu, Hindi, Marathi, Kannada and one or two in Tamil. Being a great devotee of Śrī Padmanābha, his family deity, he signed his sāhityas not with his own name, but with the anākita “Padmanābha” or its synonyms.

In the rachana of his compositions Svātī Tirunal appears to have followed mostly the styles of the several vāggeyakaras of the pre-Trinity period, especially that of Margadarśi Sesha Iyengar, whom he deemed as a model composer. But it must be admitted that he ultimately developed a style of his own. Among his compositions there are several similar in style to that of Muthuswāmi Dikshitar, showing his deep knowledge of Venkaṭamakhi’s tradition. Among his compositions about 80 pieces pertain to musical forms suited for Bharata Nāṭya. These include Chauka (Pada) Varga, Tāna Varga, Jatisvaras, Svarajatis, Padas, Javalis, Tillānas, Rāgamālikas and the like.

**The Chauka (Pada) Varna**

The Chauka Varga is the most difficult, and it forms the main item in a Bharata Nāṭya programme. In this the artiste has to display her full mastery of the art and her skill by detailed performance of Šabda-Artha-Abhinaya along with the basic nritta in detailed and difficult patterns as required.

The main body of the Chauka Varga is in all respects identical with the “Pada” musical form which is intended to be rendered in Chauka kāla (slow tempo) and having all the three angas of the Pada, viz., the Pallavi, the Anupallavi and a Charaṇa. This musical form is therefore called both a “Chauka Varṇa” and a “Pada Varṇa”. This musical form is also a Varga since it has the musical form of a Varga 1. A Muktāyi Svara (often with Sāhitya) to be rendered both at the end of Anupallavi and Charaṇa, thereby leading to the Pallavi for conclusion of the piece; 2. “Svaras” (also often with Sāhitya) usually four in number, the first in Chauka kāla and the rest increasing in their number of Āvarṭas (twice that of the previous svara), all rendered one after the other each leading to the first pāda (Awgha) of the Charaṇa, whereafter the Charaṇa is continued and rendered with its remaining pādas for concluding the piece after the Muktāyi svara leading to the Pallavi.

The Tāna Varṇa though exactly similar in structure to the Chauka varṇa having a main body of Pallavi, Anupallavi and Charaṇa plus the “Muktāyi Svara” leading to the Pallavi at the ends of Anupallavi and Charaṇa plus the “Svaras” leading to the first pāda of the Charaṇa—is
to be rendered in medium tempo (Madhyama kāla) and has long passages of vowel extensions of the comparatively few Sahitya aksharas provided.

Some of the later and all recent composers of Varṇas (both Pada and Tana varṇas) have only one Āvarta Pada as a Charapa which is to be followed by its “Svaras” one after the other and the piece concluded with such a truncated Charapa without reaching the Pallavi. But in such Varṇas with incomplete Charaṇas it is expected that at least the sense of the theme of the piece from the Pallavi and Anupallavi onwards is continued into the matu of the short Charaṇa and is complete despite the irregular conclusion of the piece.

Special mention must be made of three important features of beauty in the rachana occurring in Svāti Tirunal’s compositions, particularly in his Chauka Varṇas—

1. The Rāga-names of the compositions occur cleverly interwoven in the Sahitya in most of the pieces as seen in Dikshitar’s compositions.

2. There occur quite a large number of Dhatu Svarakshara passages, especially in the Svara sāhityas of the Chauka Varṇas, enhancing the rachana beauty of the piece.

3. Most of the Chauka (Pada) Varṇas satisfy the rachana rules for this musical form by having a full charaṇa of atleast 4 pādas to be followed by the muktāyī svara leading to the Pallavi for conclusion of the piece.

The Tanjore Quartette brothers have also Chauka Varṇas with the same Dhatu (main body and svaras) as those of Svāti Tirunal, with Telugu words. Some of these Telugu version compositions have become very popular and are handled in Bharata Nāṭya programmes at the present day.

In was in the year 1932 that I happened to come across for the first time a book containing solely the compositions of Svāti Tirunal. It was “Balāmritam” (Govt. Press, Trivandrum, 1917), edited by S. Ranganātha Iyer, Court vidvān. The compositions, 125 in number, all presented in clear Svara notation, were said to be given in their original dhatu versions as composed by Svāti Tirunal. This created in me a great interest in Maharaja Svāti Tirunal’s compositions and in a short time I made myself quite familiar with all the 125 pieces as given in the book. There were—6 Jati svaras, 2 Tana Varṇas, 12 Chauka Varnas, (out of the 18 said to have been composed), all the 6 ṇavaraṇṭra Kirtanas, 3 Mangalāms, 11 Utsava Prabandha Kirtanas, 6
compositions with Hindi words, 1 with Kannada words, an incomplete Tīlāṇa, the famous Rāgamalika Padam “Pannagendra Sayana” in eight Rāgas and the famous Rāmāyaṇa Kirtana in Sāvērī Rāga and Jampa Tāḷā.

Books published after “Bālamritam” containing only Svāti Tirunāl’s compositions worth mentioning are — (besides the already published book “Musical Compositions of H. H. Svāti Tirunāl” by K. Chidambara Vāṭādyār—1516—containing 312 compositions)

1. “Mahārāja Svāti Tirunāl Kritikal” by Gayaka Śikhamani Sangita Kalanidhi Śrī Dr. L. Muthiah Bhagavatīr—contains 101 compositions including a few Varṇas (both Chauka and Tana);


In these books the compositions are found presented with their Dhātus changed (improved!), in greater or lesser degree, in several cases completely from their Dhātus as given in “Bālamritam”.

Svāti Tirunāl’s Rāmāyaṇa Kirtana, “Bhāvayāmi Raghurāmam” is given in Bālamritam in its original Dhātu form in Sāvērī Rāga, Jampa Tāḷa with the svara notation for the whole piece; the Pallavi, Anupallavi and the first Balakanda Champa—the remaining 5 Charanas for the five other Kāṇḍas meant to be rendered in the same Dhātu given for the first Charana—the Matu for all the angas to commence in 1½ Aksharakāla Anāgata Graha. Śrī Semmangudi Śrīnivāsa Iyer has changed and converted this original highly beautiful set-up of the piece into the form of a Rāgamalikā in a different tāḷa—Rūpaka, —very popular and often heard in concerts at the present day. Svāti Tirunāl’s original Dhātus are very beautiful in their structural form in Jampa Tāḷa and may be continued for the rest of the five Charanas set in their extra new Rāgas.

At this juncture I wish to mention about an important factor among the rachana rules in composing musical settings (Dhātu) consisting of svaras varying in their durational values (Māṭrās) to the sāhitya syllables occurring in the words of the Matu.

Generally the Hrasva (short) and the Dirgha (long) syllables of a word (pada) should respectively sound in the Dhātu under
svaras of Laghu and Guru (or even Pluta) mātra durational values. However the last Hrasva syllable of a word may occur sounding long under a Guru durational svara especially when it occurs as a Pāda-garbha syllable or as an end syllable of an Āvarta or of a Pāda. Also Hrasva syllables preceding a samyuktākshara or followed by an anusvāra or a visarga becomes a Guru. A first Dīrga syllable of a word may lose its length of duration and sound short under a Laghu svara in the Dhātu when the syllable occurs in Anāgata Graha.

These details of rachana rule—are given under “Varṇa Mātrā Nirūpānam” in Venkaṭamakhi’s “Chaturdānī Prakāśika” under the chapter on Prabandha Daṇḍi. These rachana rules of musical forms have been strictly followed by all the famous Vāggēyakāras. Some of the recent and present-day composers do not seem to consider these rules seriously.

Out of the 12 Chauka Varṇas given in “Bālamritam” I have selected 6 pieces for demonstration and the 6 pieces left out are—

1. “Dani Samajendra Gaṇmini” in Tōdi Rāga, Ādi Taḷa. Well known, popular and often heard. Only one Pāda, the first, of the Charaṇa given - Rāga-name not seen in the Sāhitya.

2. “Paramakula Hridayam” in Saurāśṭra Rāga, Ādi Taḷa. Not heard-though the words for the complete Charaṇa are given, the Dhātu is given only for the first Pāda; name of the Rāga occurs in the last (4th) Pāda of the Charaṇa as “Saurāśṭa”;

3. “Suma Sayaka” in Kāpi (Rudrapriya) Rāga, Rūpaka Taḷa—well known, popular, often heard. Muktāyī svara and Svaras leading to Charaṇa have no words - the last of these (4th) svara is a Rāgamālikā with extra four ragas; charaṇa consists of only one Pāda.

4. “Sāmi Ninnē Nammiti” in Yerukala Kambhoji Rāga, Ādi Taḷa. The Sāhitya for this piece is in Telugu; Rāga-name not seen interwoven ; Charaṇa has only one Pāda; Piece well known and popular. A version of this piece is presented in his “Bālaśīkṣa” by Śri Subbarāma Dikshitar.

5. “Śāvamā rashā” in Kamās Rāga, Ādi Taḷa-piece, well known, popular and often heard; has a full Charaṇa of four Pādas ; Rāga name occurs as “Khamāja” in the last (4th) Pāda of Charaṇa.
6. “Saturā Kamini” in Kalyāṇi Rāga, Ādi Taḷa. A heavy piece—not heard—has only one Pāda charaṇa; Rāga name not seen.

Among the above six Chauka Vargṇas the first, third, fourth and fifth pieces are given in slightly changed Dhātu-forms in “Mahārāja Svātī Tirunāl Kritikal” by Dr. L. Mūthiah Bhagavatī. The other two pieces and the six pieces I have chosen for today’s demonstration, in all eight pieces are not heard and perhaps very few artists are familiar with them.

The six Chauka Vargṇas selected for my demonstration assisted by my two daughters Smt. S. R. Kesari (voice) and Smt. S. R. Mangalam (Veena) - adhering strictly to their Dhātu - forms as given in “Bālamritam” are—

1. “Sadhu Vībhāta mā gatayē” in Bhūpāla Rāga, Ādi Taḷa - with a full (4 Pāda) Charaṇa - Rāga-name occurs in 3rd Pāda of the Charaṇa. The Pallavi Dhātu reminds one of the kriti “Sadāchalēswaram”, one of the Tiruvārūr Panchalinga Kritis by Mūthuswāmī Dīkshitar. Bhūpāla Rāga is rendered now-a-days as Rēvāgupti using Antara Gandhāra instead of the correct Sadārāga Gandhāra.

2. “Sāveriha Tānūja” in Sāveri Rāga, Ādi Taḷa - with a full (4 Pādas) Charaṇa - Rāga-name occurs in the very beginning of the Pallavi. In this piece also the Dhātu of the Pallavi reminds one of the kriti “Śrī Rājagopāla” in Sāveri Rāga by Mūthuswāmī Dīkshitar; The rendering of Sāveri Rāga at the present day has more a picture of the Upānga Rāgas Sarangā, Nāṭa and Malahari than its true Bhashāṅga Rāga picture as per Sampradāya.

3. “Sārasa Mridu Pāda” in Kāmbhōji Rāga, Ādi Taḷa - has a full (4 Pāda) Charaṇa Rāga - name occurs as “Kāmōdi” in the last of the Charaṇa.

4. “Sarasijanābha kim mayā” in Aṭhāṇa Rāga, Ādi Taḷa has a full (4 Pāda) Charaṇa - Rāga-name occurs as “Aṭhāṇa” in the 3rd Pāda of Charaṇa;

5. “Sārasa Śara Sundara” in Nīlāmbari Rāga, Ādi Taḷa; has a full (4 Pāda) Charaṇa - Rāga name occurs in the 3rd Pāda of the Charaṇa;

6. “Palaya mām dēva” in Pūrṇachandrika Rāga, Rūpaka Taḷa, only the first Pāda presented with its Dhātu and only words given
for the remaining three Pādas of the Charana; Rāga-name occurs in the first Pāda of the Charaṇa.

In “Bālamritam” the Tāla for this piece is mentioned as Ādi Tāla- and each Pāda is given with 3 Tāla Āvartas; the truncated Charaṇa is presented in an incomplete 1½ Ādi Tāla Āvarta; Sri Muthiah Bhāgavatār in his “Mahārāja Svāti Tirunāl Kritikal” has given this piece in Ādi Tāla with Tīra Gati.

The Dhatu for this piece is identical in all its details with that of his Chaukā Varṇa “Ela Nannēchēvu” with Telugu words composed by Rāmaswāmi Dīkshitar. Svātī Tirunal fascinated with that composition, has composed the piece with Sanskrit words of his own in the same Dhatu as set by Rāmaswāmi Dīkshitar.

I wish and pray that the above rare and beautiful eight Chaukā Varṇas not heard at the present day are also learnt by musicians and nāṭya artistes so as to make them well known and popular in concerts and nāṭya programmes.
CONTRIBUTION OF SAHAJI MAHARAJA OF TANJORE TO MUSIC AND DANCE

Dr. S. SITA

The glorious Nayak rule over Tanjore, lasting nearly for a hundred years with its unique cultural traditions dating back to the period of the imperial Cholas, was in fact an excellent prelude to the enlightened reign of Sahaji Maharaja, the most illustrious of the Maratha rulers, who was hailed as the Abhinava-Bhoja. The period immediately preceding Sahaji's advent was marked by exuberant musical, literary and dance activity, and the Court of Tanjore known famously at that time as 'Vijayabhavana' was immortalised in many a song and poem of that age as a literary paradise, the home of pada-kavita and abode of nāṭya-sangita. The era of Telugu learning and literature inaugurated by King Raghunātha Nayaka (1600-1633), was given fresh impetus during the period of Vijayarāghava Nayak (1634-1673). This consequently resulted in the rich output of pada and yaksṣaghana literature which forms the most alluring part of the Nayak legacies. Kshetrayya who visited the court of Tanjore during the reigns of Raghunātha and Vijayarāghava had praised in his padams this literary and musical efflorescence. And it was in the latter's reign that the great composer composed a thousand padas in Tanjore and five padas collectively referred to as the 'Vijayarāghava pancharatna' in honour of Vijayarāghava Nayak. These bhāvabhinaya padas, full of imagination and subtle feelings, couched in kaṅkī riti, and with a highly erotic theme, saturated with rāga bhāva, attained great popularity in and around Tanjore and served as exquisite models for all subsequent and contemporary composers.

It was in this remarkably melodic atmosphere, scintillating with the bhāva-pradhāna music of the padas, which gave immense scope for rāga and aśhīnaya-variations, that Sahaji was brought up. He ascended the throne of Tanjore in 1684 A.D.

Sahaji rightly occupies an honoured place in the galaxy of royal patrons, musicologists and composers. Proficient in several languages Telugu, Sanskrit, Marathi, Persian and Hindi, he was a versatile scholar in Sangita and Sāhitya. Not only does he have claim over several works, but he is also the theme of many works of song and

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1. See 'Vedukatonadachukonna'.
poetry of his times. The sūtradhāra-vacana in Draupadi Kalyāṇa Yakṣagāna speaks of the accomplishments of the author and the assembly of scholars.

The literary output in Sanskrit during Sahaji’s period, its nature and variety have been exhaustively treated in the informative and illuminating introduction by Dr. V. Raghavan to Sāhendravilāsa¹ - a fine kavya by the saintly soul, Śridhara Ayyāval, in praise of his patron, Sahaji, who, it is said, took up the saintly order towards the close of his life.

A perusal of the works and the musical compositions of Sahaji himself and that of his court vidwans and scholars, is found to throw useful light on the music of the age.

We can assess the musical greatness of Sahaji on the basis of the following evidence. The literary and musical plays such as the yakṣagānas, produced by the contemporary poets, composers and scholars contain realistic descriptions of the accomplished life of the king and also point out the following references to the talents of the king in sangita and sahitya—

Sāhaji’s writings and compositions fall under three categories, viz.

(a) The dramatic and poetic works—the yakṣagāna plays.

(b) The musical compositions, mainly padas, darus and rāgamālikās in praise of his family-deity, Śri Tyāgarāja of Tiruvārūr and

(c) The work dealing with the science of music, the Rāgalakṣaṇa manuscript.

As a profound scholar, as a great devotee of Lord Tyāgarāja of Tiruvarur, his family-deity, as a multi-linguist, as a composer of outstanding merit, as a patron and above all a sahṛdaya, Sahaji stands unique. Not only did he continue Telugu as the court language, but

¹ Sāhendravilāsa - Ed. by Dr. V. Raghavan - T.M.S.S.M. Library Series 4.
also fostered the cultural and musical traditions of the Nayaks. He himself composed padas and yakshagānas in Telugu and also patronised Telugu scribes. The following is a list of the literary cum musical plays, the yakshagānas¹ written by Śahaji:—

1. Śaṅkarakājinaṭana-samvāda nāṭakam or Tyāgarajavinoda chitra prabandha.
2. Bhaktavatsalavilāsa nāṭakamu.
3. Saçıpurandara nāṭaka.
4. Śrī Krishnavilāsa nāṭaka.
5. Pārvatipariṇāyaya.
6. Ratikalyāṇa.
7. Vīṣṇupallakīsevā prabandham.
8. Śankarapallakīsevā prabandham.
10. Śāntakalyāṇa.
11. Rāmapattābhisheka.
12. Vighneśvarakalyāṇa.
13. Sāti-dānāśūramu
14. Sātipati-dānavilāsamu
15. Sarasvatikalyāṇamu.
17. Kirātavilāsamu.
20. Jalakrīḍalu
21. Draupadi-kalyāṇamu,
22. Chandraśekharavilāsa nāṭaka
23. Panchabhashāvilāsa.

The yakshagānas produced during the Maratha period have more scope for musical expression. The ardchandrika, shaṭpadī and the dandaṃaka styles are replaced at this stage by more musical metres like khaṇḍa and dvipada. More scope for musical and dance element is given. The benedictory śloka or verse at the commencement is replaced by Todayami or Jaya which is set mostly in Nāṭa raga. The introduction of Todaya and mangalam songs at the commencement of yakshagānas stems from the Tālapākkam sankirtana tradition.

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The following are some instances of the Toḍaya and Maṅgala in plays:

*Candraśekharavilāsa Nāṭaka*:

Nāṭa — Toḍayam

- Jaya Paramārtha
- Jaya Pavanārtha
- Jaya Surañcatra
- Jaya Deinaartha
- Jaya Abhinavārtha
- Jaya Anartha
- Jaya Anusārtha
- Jaya Durlasam

*Goula — Śarāṇu*

- śarāṇu śrīśuddevandana
- śarāṇu jagnanandana
- śarāṇu jāraṇaśatnandana
- śarāṇu suṣrūtandana

*Gummakāmbhoji — Maṅgalam*

- maṅgalaśāmśuddhāy maṅgala
- maṅgalaśāmśuddhāy maṅgala

Many darus in attractive rakti ragas and deśya ragas were introduced and the yakshāgasānas became more musical and lyrical in nature.

(a) A brief description of the following yakshāgasānas is given on account of their distinction.

*Tyāgarājarvinoda-chitraprabandha*:

(D. 530, D. 534 — Cat. of Tel. Mss.)

It is a maṇipravāla nāṭaka in Sanskrit, Telugu, Marathi and Tamil and is in six acts. It is a kind of chitra prabandha and Śahaji refers to himself as an adept in all the four kinds of poetic art viz., Aśu, Chitra, Madhura and Vistara. This nāṭaka is full of intellectual feats coupled with a variety of novel art forms in music and dance. Fine poetry in Marathi and Sanskrit exhibits the wide range of Śahaji’s knowledge and his profound scholarship. The yakshāgasāna is full of plenty of musical and dance score. The work has been dedicated to Śrī Tyāgeśa, conceived as the Lord of dance by the composer, for His Vinoda or Delight. It is also called Sankarakalinaṭanasamvāda-maṅgalaṇāṭaka.

1. These have been printed serially in the Journal of the Sarasvati Mahal Library (Ed.)
It has a simple story-content. Bhadrakāli is very proud of her extraordinary talents in the art of dance and throws a challenge to Lord Tyāgeśa, the presiding deity of Śvetāraṇya kshetra, who in the form of Lord Naṭarāja curbs Her pride and marries Her finally. The nature of Deva Nāṭya, Rāja nāṭya and Deśa nāṭya (heavenly, court and popular dances) forms one of the topics of the interesting debate that ensues between Śri Tyāgeśa and Kāli. Herein figure rare types of musical forms such as:

(a) Sapta sāgara (sālagal) sūlādi prabandha lilā daru, in Marathi using the sūlādi saptarūlas and the seven ragas, the raga names ending in Gaula viz. Nārāyaṇa gaula, Kannada gaula, Mālava gaula, Purva gaula, Chāyā gaula and Kedāra gaula. Each section is set in a raga and tala with the rāga, tāla and nāyaka mudrā incorporated in the sahitya. It is a sapta rāga tāla-mālikā in fact.

Among the list of Viprakīrṇa prabandhas (Ch. IV, p. 311), Sarṅgadeva describes the following five viz., Śrīranga Prabandha, a composition in 4 ragas and 4 talas, Śrīvīlāsa prabandha in 5 ragas and 5 talas, Panchabhangi and Panchānana in 5 ragas and 5 talas; in the former tenaka figures at the end while pāṭa occurs in the last section in the latter. Umātilaka Prabandha is in three ragas and three tālas.

It is interesting that Śāhaji has retained the earlier name prabandha along with the contemporary term ‘daru’ for the piece. Ramaswamy Dikshitār composed the 108 ṛgatałamālikā later, with the opening sahitya ‘Nāṭakādi Vidyālaya’.

(b) Sapta-tāla-gita-sudhānāinthdi is a composition in Surati rāga, set in the sapta tālas and contains chittasvaram known during the author’s time as the gitasvaram and sahitya also for the gitasvaram. It is refreshing to note that pieces with svara-sahitya were composed even before the period of the Trinity.

(c) Panchatāla prabandham in five mārga talas using the jatis born from the five faces of Lord Śiva. The song opens with jatis, with a few lines of sahitya in the middle and ends with jati like the Sabda composition.

(d) Chaturdaśa - bhuvanānrūga - ṛgamaṇīlāki daru: A rāga-mālikā in 14 ragas. Each line of sahitya in a section is composed in a different rāga and the rāga mudrā is introduced. It is to be noted that Sri Muthuswamy Dikshitar later composed the Chaturdasa rāgamālikā in 14 ragas beginning with the words “Śri Viśvanātham bhoje‘ham chaturdaśa bhuvanarūpa rāgamālikā.”
(e) *Māṇḍaprabhāvalīlā* in Nāyaki *Kānada* raga in Telugu, Tamil and Marathi.

(f) *Shaṭabhūsha bhinna charana līlā* in Begada raga, Ata tala in Kannada, Tamil, Sanskrit, Marathi, Hindi and Telugu.

(g) *Savyāpasavyāsama pāda līlā* daru in Revagupti - Adi, Ramaswamy Dikshitar composed a similar type of composition later and it is published in *Sangītā samprādāya pradākṣiṇi*. In another daru called *the sangītā sāhitya prāyāsā trīkāla daru* in Todi raga, three sections of the piece are in the three degrees of speed viz. Vilambita, madhya and para (druta), which is highly remarkable.

**Trīkāla daru in Todi-Adi**

\[
\begin{align*}
\text{Vilambita} & : & \text{Madhya} & : & \text{Para} \\
\text{Vilambita} & : & \text{Madhya} & : & \text{Para} \\
\end{align*}
\]

\[
\begin{align*}
\text{Vilambita} & : & \text{druta} \\
\end{align*}
\]

In the history of South Indian and *Sravya Dṛṣṭya Rūpakas* the period of Sahaji represents an important land-mark. Sahaji brought the tradition of literary prabandhas and the yakshagāna tradition together and created a synthesis of the two in his wonderful dṛṣṭya-kāvyas. A harmonious blending of Sanskrit and Telugu is witnessed in the fine sāhitya. His yakshagānas give plenty of scope for dance, both in its nṛtya and nṛtta aspects. Sahaji has an extraor-

   Sarasanayana sarasa /
   Sara tara ra ta ra sa /
ordinary skill in weaving words and his language is majestic, his imagery polished, his sentiments fine and his touch delicate. The four musical plays namely Šankarapallakisevā, Vishnupallakisevā, Pancharatna and Tyāgarājavinoda-citrarabandha represent excellent operas in which the dramatic, literary, musical and dance elements find a happy co-ordination. In Šankarapallaki, all the darus contain the mudrā of Sahaji. The Vishnupallakisevā is addressed to Sri Vishnu. Lakṣmi is nayaki here; Manjubhāshini and Priyamvāda her sakhīs, who carry the message of Lakṣmi requesting Lord Vishnu to come to her. Finding Adiśesha and Nārada to be untrustworthy, the sakhīs straightaway approach Vishnu, who gets into the palanquin and reaches the resort of Lakṣmi. The opera consists of Šobhana, Pavvalimpu, darus, dhvalāmpu, dvipada melukolupu. Further, Mayūragati ragāde, Vṛityanuprasa, Muktapadagrasta, Chekānuprāsa and Lāsānuprāsa are used. Sahaji’s other titles, Makarandabhūpa and Makarandajusha are found in this opera. In the court of Vishnu, Sahaji refers to the singing of Nammālvar’s Tiruvāymozhi by the Ālvārs. The Tamil word Konḍādi is used as such. The song in which the sakhīs praise Nārada and Adiśesha, is directed to be sung like the popular sahitya ‘Rāma hare Bhigu Rāma hare’. Likewise the raga for some songs is not given but indications are given to follow the tune of a popular song. For instance, ‘Mā manavi thelupa vaiya’ is to be sung like Emēmo mohanāngi. The Mayūragati ragāde in Kedāragoula is to be sung like the ashtapadi “Dhirasamire yamunātīre”. Deśākshi, Malahari and Devagāndhari have been used as morning ragas for melukolupu songs. The mudrā found in this is Tyāgēśabhūpa, Tyāgāsauri, Tyāgamurārī. The music of this work is not available and the text is published along with Šankarapallakisevā prabandha.

The Pancharatna prabandha has wonderful dance and musical sequence. The theme of the play is that a band of five artists consisting of two dancing girls, a nattuvānār named Navasiddhi yogi reciting jatis, and chenchu kuravas and a servant belonging to the court of Sahaji perform excellent dances before Lord Siva who, pleased with their performance, blesses them and their patron Sahaji. This work has unique characteristics and consists mainly of dance score, jatis and korvai in different talas, Ganapati Kavitvam and daru. Technical forms like Mohra and Tirmāna. Jatis figure in a beautiful sequence. The Pancharatna prabandha stands as a monumental proof of Sahaji’s proficiency in Sangita in its scientific and practical aspects.

1. D. 540. D. Cat. of Tel. MSS.
Panchabhāshā - Vilsam is another yakshāgāna in five languages, having four darus in Tamil and abhinaya-padas.

(b) The Padas of Sahaji: Kāsinātha,1 the court-poet of Sāhajī, refers in one of his śabdās to the varied nature of the ruler's compositions-
tam dhinnamdittam tarikutaha atita - vishamamanagatamum samamandu
šuramu salāmu daruvulu jati taruvu sū빨di sangatika janaranjitaami
kuravanchiyu Tyāgarajuppanu velasini prakataamuga bahu nājakālań-
kāramugārachiyinchidivi - ammamma satatamu sāmbasiva bhakti
yanugala Dipāmbā garbha sudhākara.....Kāsināthanutendra gaṇguna
sāndra bōsalu candra sāha bhūpalure.

Sahaji composed beautiful padas in rakti and ghana ragas on
Sringara, Bhakti and Vairagya themes. These are collectively
referred to as Tyagesa padams, composed in Sanskrit, Marathi and
Telugu. In Sankarapallaki, he refers to the stotra Padams (Vinuti padas)
also in praise of Siva.2 The manuscript D. No. 853-Marathi
amanath Bundle-D. No. 855 contains the following variety of
Padas:

Bhakti padas - 50; Bhāva padas - 5; Vairāgya padas - 9;
Sṛngāra padas - 103; Hāsya padas - 14; Nīti padas - 24; and
Mangalamu - 3, making a total of 208 Padams in one manuscript. The
manuscript with D. 852 - [Marathi amanath Bundle numberless-
Vahi 602 ] contains padas by Sahaji on Bhakti theme. Songs in praise
of the deities of shrines in and around Tanjore are available with
Tyaga and Tyāgēsa mudrā along with the name of the deity. The
following Pada in Purvi, - ādi tala has the mudrā:


\[
\begin{align*}
\text{Vasantabhairavi - ādi} & \\
\text{Bilahari - āṭa} & \\
\end{align*}
\]

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1. On Merattur Kasinatha, the Sabda composer, see Dr. V. Raghavan, J. of
the Music Academy XIV 1943, Pp. 130–34.

2. dina dinamu - devunipai Sri Saha ghanudu kavinci meti - kavitalu vinuvela—
etularamandu velaya Saha vibhundo cesina—vinutipadamulu padumi...
Another Manuscript D. 443 with B.No. 11643 contains Padas with Tyāgeśa mudrā, sometimes coupled with the Śahamudra also. In one pada the mudrā occurs as follows:

...... Chakkani
nā pallikōṇḍa sānikku...
Tyāga pallikōṇḍa perumāḷukku.

The Tamil word is easily identifiable.

Sahaji as a patron:

Sahaji is well known for his proverbial patronage to many distinguished composers of Padas, Yakshaganas, dramatic works, musicians and musicologists who adorned his court. References are found to the court vidwans such as Girirāja Kavi, Vāsudeva Kavi, Rāmabhārati, Somakavi, Periyappa kavi, Kasinatha kavi, Viṇa Ayyanāja, son of Venkatesa Kavi and author of Rādhaśrayaśraya Samvāda - (D. 15276 - G. O. M. L.), Kavigiri, Dhundirāja, Muttukavi, Nārāya kavi. The Śrīngāramanjarī Sahajiyam, a nataka depicting the life of Sahaji, by Periappa kavi was performed in the Tiruvarur Temple during the chitra month. In the case of some composers who were contemporaries of Sahaji like Viṇa Ayyanāja and Vāggeyakarāg-rāṇi Rājagopāla kavi, references to their names only are available and nothing beyond. The composers patronised by Sahaji composed innumerable sringārapadas in Telugu, Tamil, Sanskrit and Marathi.

Among those court vidwans who made substantial contribution to the musical efflorescence of Tanjore during the reign of Sahaji, Girirāja Kavi was the most illustrious. A number of Padas and Yakshaganas dedicated to Sahaji and his brother Sarāboji I (1712-1729) with the mudra girirājanāta are found in the vast collection of Telugu manuscripts in the T.S.S.M. Library. There is authentic evidence to prove that Girirāja enjoyed a great reputation for a considerably long period and was patronised by the two Maratha kings. Details relating to his family pedigree are available in the Dvipadakavya Rukmāngadacharittra (D. No. 353, pp. 123 - 125 - D.C. of Tel. Mss. - T. S. S. M. Library), composed by his worthy brother Kavigiri alias Venkatagiri. Kavigiri wrote the treatise on dance entitled Abhinayadarpana and was awarded the title Vichitraraya-vatamsa by his patron Khandoji-rāya. The genealogy of Girirāja kavi as found in Rukmangada-caritra is

2. Viṇa Ayyanāja, Viṇa player, a disciple of Sridhara Ayyaval and author of Vyasataparyanirnaya and Prunavartha Subhodaya.
very important as it serves to point out once for all that he was quite
different from Giriraja, the grandfather of Saint Tyagaraja.

The Genealogical table of Giriraja Kavi

\[ \begin{array}{c|c|c|c}
\text{Gopanna} & \text{Giriraja kavi} & \text{Venkata} & \text{Kavigiri} \\
\text{(contemporary of} & \text{Sahaji II and Sarabhoji I)} & \text{alias} & \text{Venkatagiri} \\
\text{Sahaji II and Sarabhoji I)} & \text{Venkatagiri} & \text{(author of} & \text{Abhinayadarpana)} \\
\end{array} \]

Giriraja was the second son of Aubalanna and Jänakamma. He belonged
to the Velanadu Telugu Brahmin family and was born in the
Āpastamba sūtra and Lohita gotra. His family name was Darbhavamsa.
Kavigiri refers to Girirāja thus:

“mārtāṇḍa kula sāhamahipāla sabhanu
kirtikekkina vāḍu girirāja sukavi
sangita kalārahasyamu gannavāḍu....”

Proficient in music and known for his eminence, he adorned the court
of Sahaji. It is beyond doubt that Tyagarājaswamy belonged to
Kakarlavamsa. Saint Tyāgaraja’s grand-father, Giriraja, could not have
lived positively during Sahaji’s reign (1684–1712) and the intervening gap
between them is too wide to be acceptable. Tyāgaraja’s father, Rāma-
brahman, it is said, was an expounder of the Rāmāyaṇa in the court of
Tulaja II (1763 - 1787). Tyāgaraja himself was a contemporary of Sarabhoji II (1798–1843). Hence Giriraja and Girirāja kavi are two
different composers; the latter flourished in the court of Sahaji and Sarabhoji and was a good composer of Yakshaganas and Śṛṅgarapadas.

Contribution of Giriraja Kavi:

The author of the erotic Padas and Yakshaganas extolling Sahaji
and Sarabhoji, with the mudra ‘Girirāja’ must have been an eminent
scholar in Telugu and Sanskrit, besides being a fine composer
in music. About two hundred Śṛṅgāra Padas are preserved in
manuscripts, with the full text: the names of rāga and tāla are indicated
on top of the songs. For some Padas, these particulars are not marked.

The kings have been portrayed as the nāyakas in these compositions
and the various mental states of the damsels in love are depicted in a
ucid manner. Giriraja must have digested the work 'Sringara Rasa Manjari' and other treatises relating to the subject of erotics. It is highly probable that he derived inspiration from Kshetrayya, whose padas on Lord Muvva Gopala served as models for all later composers of such form. About a hundred and fifty padas of this composer are available in honour of Sahaji alone. In the absence of notation, we are not able to assess the musical worth of these songs. Yet a perusal of the long list of ragas, representative of the Ghana, Naya and Rakti groups, throws sufficient light on the musical atmosphere of the Court, the most popular rāgas and the general trend of music during the author's time. Of the rāgas, Āhiri, Surati, Kāmbhodi, Todi, Revaguptis, Aṭaṇa, Sankarābharaṇa, Goulipantu, Panūvarāli, Bhairavi Gummakāmbhodi, Saindhavi, Sāveri, Kurunji, Asāveri, Madhyamāvati, Māngalakaisiki, Todi, Gouri and Sāranga are frequently used, Hindustani ragas like Toya asāveri, Immankalyani, Jejēvanti, Brindāvani, Nāyaki Kānara, Bibās, Jōgi asāveri, Kalhāru and Bilāval (Sankarabharana) are also used by the composer. In the history of Karnatic music, Giriraja happens to be the earliest to compose in the raga Brindāvani. The impact of North Indian music on our system is seen for the first time in the choice of some of the rāgas, tālas and musical instruments like Taws, during this period.

In one of the manuscripts containing such padas in praise of Sarabhoji, is found a beautiful Svarasthāṇa pada in Todi raga and Aṭa tala. It is a fine piece with jatis, svarākshara, raga mudrā and nayaka mudrā. The idea of composing songs with the above mudras and with svarāksharas was prevalent even during Giriraja's time. The following song (raga and tala not marked) reflects his elegant style and literary merit.

**Raga :**

**Tala :**

Kaliki suratavela jaladamai tocenu
Aliveni kuntalamulaniyedu celuvumirina cikatitanera

1. Palumāru aladāni bāgaguru menanedi
   Tolakari merapu nilukadai meraya
   Gāravamuna dāni galaravamulanedi
   Mīrīna urumulu nikkilicalaga

2. D No. 448 – D.C. of Telugu Mss., T.S.S.M. Library
Sarasudaina: Sahendrumanasne mayuramu
Kanakangi ghanamucuci tanarucununde
Sarasundu Giriraja sannutupdapudu
Paripari vidhamula marukeli kuda.

Also Giriraja has invented new ragas and named them after his patron viz., Sarabharaja candrika, Sarabha lalita, Sarabha kalpam, Suranidhi and Sarabhanalini. The melodic individuality of these ragas are however not known.

As a composer of Yakshaganas, Giriraja excels himself. Yakshagana plays were very popular at Tanjore then. He was the author of the five musical plays in Telugu, namely, Sarvangasundari vilasam*, Rajamohanakoravanji*, Rajakanyapariyayam*, Vadajayamu* and Lilavatikalyanam*.

Rajamohana Kuravanji celebrates the love of the heroine Rajamohini for the monarch, Sahaji. It consists of dvipadas, darus, dialogues and mangalam. When the king sets out in procession, the heroine falls in love with him and pines for him in the Sringaravana. She chides the moon and the southern breeze in Viraha. Highly rakti ragas like Ahiri and Mukhari are used in this context, for effectively portraying the pangs of love. Finally the heroine sends a love-message through her parrot to her lover in a daru, set in Bhairavi raga. The advent of the Kuravanji who reads the palm of the heroine is indicated in a pravega daru, and she foretells the happy union of the couple. In keeping with the Kuravanji technique, Giriraja has introduced the characters of Singi and Singan. The sobhana mangalam gives the names of the composer and the patron.

Śrīkaruniki Rājaśekharuniki
Giriraja pāluniki dhara sarasuniki
Vāsavanibhuniki varasāhitya bhōjuniki
Ma Sahend-ū rajendruniki mangalam.

The Yakshagāna ‘Lilavatikalyanā’ deals with the marriage of Lilavati with Sarabhoji.
The poetic excellence of Giriraja is clearly revealed in the fine musical style of his Padas and Yakshagānas. The use of gadyasāhitya and padya sāhitya in Kaisiki riti is remarkable. The presence of prosodical embellishments such as anuprāsa, yamaka and antyaprāsa lend special beauty to the form. For most of the Padas, there are many charanas and those with jatis or sollukkattus were intended for dance. In short, the author of these compositions was proficient in sangita and sāhitya and shows his literary and musical scholarship.

**Soma Kavi**

We are introduced to this hitherto unknown composer of Śringāra padas in fine Telugu by his elegant compositions in praise of Sahaji Maharaja. It is possible that he flourished in the Court of Sahaji and was also a contemporary of Giriraja Kavi, the illustrious author of Yakshagānas and love songs. About seventeen padas1 with the signature ‘Soma Kavi’ are dedicated to his patron. The style of the compositions bears similarity with that of Giriraja and in certain cases excels them. The choice of appropriate words capable of artistic expression and the use of fine, easy flowing poetry are the remarkable characteristics of his songs. It is regrettable that the details of rāga and tāla are not marked for most of these songs. The bare text of the songs alone is available. The poetic talent of the composer and his scholarship are displayed in full in his pieces.

Of Soma Kavi, biographical details are not traceable. The Pada in Śankarābharaṇa rāga is a fine piece and reflects the dignified style of the composer. The full text of this song is as follows:

Raga - ankarābharaṇa Tala -?

P. Balanu ne cala Balanu ne cala
Sāhabhūpāla.

C. Māvāru pendliveja paidi mudicinaru
Geliseyakura venta venta tirigi gubbalanti
Nadu emmovi palugantu cesevura.
Ituvanti vagalu manara.

Adaru bedaru leka nivicca dalanci mellana
Madanu grihamupai ceyi vesevu meragadura
Pakkaceri manumigulakokkoka vidhamulanu
Grakkuna era elavu ghana Somakavinuta.

---

Vasudeva Kavi was an eminent composer of Tamil padas, who adorned the Court of Sahaji. To him, are ascribed about hundred and more Sringara-padas addressed to Sahaji. Particulars of raga and tala are not traceable. He was perhaps one of the favourites of the ruler and had praised the musical accomplishments of his patron in affectionate and eulogising terms as Sangita Sāstra Vyāpāra, Sangita rasalihā, Sangita lola and Sangidathil Birudu Patramam etc. Except that he was a court poet, nothing further is traceable about his family and private life.

That he was a versatile composer is easily revealed by his compositions. Being a linguist, he has composed in Tamil, Telugu, Sanskrit and in Manipravala. The total number of his padas is about fifty-eight. Most of his padas are in Tamil, while there are about forty-two in Sanskrit. A few are in Telugu and Manipravala. The Sanskrit pieces reflect a good style and reveal the scholarship of the author. All the compositions contain the mudra 'Vasudevakavinuta' and also the patron's name. The sahitya has its poetic excellence and must have afforded good scope for music and dance.

It was an age when royal patrons took exceptional interest in fostering music and dance. The Natya Sala attached to the Royal establishments had a retinue of musicians and dancers. The abhinaya-padas were composed for use in the performances held frequently in the royal establishments. On the model of the padas of Ksheirayya, bhava-padas in Tamil which afforded scope for expressing the subtle feelings came to be composed in large numbers. These compositions dedicated to the patron must have formed the repertoire of the court dancers. The following song was intended to arouse the king from slumber. Herein a list of few morning ragas sung by the musicians on the specific occasion is available.

Here is an instance of a maanipravala pada by the composer using Sanskrit and Telugu. The raga and tala of this piece are not noted.

\[
\begin{align*}
\text{সময়ে নেদাণি পাপাপে, রাজন, কিরিন্দ?} \\
\text{বাহুল্যবাল! কীমিতিবাঙ্গ!} \\
\text{দেবরো মে গৃধে বলেত; যাতা} \\
\text{দেখায় মায় কৃষ্ণে; তবে} \\
\text{কেন্দ্র হা তব্যা বিলায় রাজনেতার} \\
\text{ভূযোগ্যি কিন্তু হো ঘটতে (সময়ে)} \\
\text{মত্য উদীপ্য (র্ঘ) বচন; কেন্দ্র (শে) মন্দিরে} \\
\text{মা কুহ মাত্যনিশ্চিন (নিশ্চিন); মান্ত ভবনপি চিত্রবন্ম! শোভাচুরোদসি} \\
\text{বাহি ভূখন্ত তে সদনম |} \\
 grandmother পুলিপাল! রস্ম- \\
বাযুনিকবায়ুমান মন্দির- \\
শাখিক সংভবনপি প্রবরে রাজ \\
বাহুল্যবাল মনোহরম | (সময়ে)
\end{align*}
\]

Vāsudevakavi is also the author of a fine Sanskrit work called 'Dautya Pañcakam'. It consists of five darus and each of these is preceded by a crisp sloka which serves as a prelude to the songs. The Dautya Pañcakam tells about the love of a courtesan for King Sahaji. The various forms of love messages through birds, animals, clouds and human beings have been beautifully portrayed. The author has dedicated this work to his patron in the sloka given under.

\[
\begin{align*}
\text{শোভাহরাজা মণিবিশ্বাস বিষধিতায়:} \\
\text{ন্টারবল্লরসরসসপ (রাজ) বৃত্তিকার্যায়: |} \\
\text{অনাব্দেকথ্যবিশ্ববাদামি বাণী-} \\
\text{পাদার্জার(ত)গুলন শোভাম (শোভা) দিন: |} \\
\end{align*}
\]

Vāsudeva Kavi has adopted a fine and learned style in his Sanskrit compositions.

Besides, a set of nine compositions in Sanskrit called Navaratnāmalikā in honour of Sahaji is ascribed to the composer. It is obvious that all these songs were quite popular in the Court. Further more, these Sahityas stand as important proof of Sahaji's unstinted patronage to composers of song and literature in Tamil. The musical structure of
these sahityas could not however be traced. Though these songs may not be of much practical value at present, in the absence of notation, yet their historical and technical significance cannot be ignored. References to the musical accomplishments of the respective patrons are interwoven into the texture of the sahityas of the songs. Again these provide technical details that are useful for tracing the history of musical forms in their structural aspects besides giving additional clue to the most popular ragas, their names and musical forms of the particular period. Thus from the point of view of research, the importance of these compositions of the court poets should not be overlooked.

Rama Bharati

It is well known that Tamil literature and song received equal encouragement at the hands of the scholar prince. Rama Bharati was a scholar in Tamil. He was one of those famous composers of Sringara padas in Tamil in praise of Sahaji and adorned the Court of Tanjore.

That he was also known as Panchanada Rama Bharati is seen from the text of one of his songs. It is clear that the composer hailed from ‘Panchanada’, popularly known as Tiruvaiyar. No authentic information on the life of the author is found.

His compositions on Sahaji were intended to be sung and danced by the court dancers. They are on the model of the padas of Giriraja. These compositions depict the love of a lady towards King Sahaji, the Nayaka. The nine rasas have been admirably portrayed. Different types of Nayikas have been represented and there are padas for every conceivable situation and type of Nayika. The music of these padas is not available. The Sahitya is full of prosodic excellences and bristles with yadugai and monai beauties. Here is the text of a song taken from the manuscript entitled ‘Rāmabhārati Padas’ which is illustrative of the poetic style of the composer:-

P. Moha migavānene mōdiyenmel seyvānen
Sāharāja Bhūpāla! sarasa sangita lola!

A. P. Madanan kaṇaiyaleyya madiyam sendazhal peyya
Aṭakkakkūdāden seyye unnai nambināle

C. Orunalum piriyene enna kurai seydene
Innam un bārandane

In addition to the regular musical compositions, Rama Bharati has also left behind beautiful poetic stanzas, such as Vānṇam with jāti, Tāzhisai, Āsiriyā Viruttam, Kālippā etc. The total number of his compositions is seventy-four and includes forty-nine Śringāra padas and several types of versification.

Bharata Nārayana kavi and Bharata Kāsinātha Kavi and Bharata Rāma kavi:

During the period of Sahajī and Sarabhoji, the above composers of dance music flourished. Mss. 904, 905, 906, 907 contain the Sabdas of these composers. Kāsinātha who was also known as natana kāśi, Panchanada kāśi, Bharata kāśi and Vāṃśikavara, composed the Gajendra moksha sabda, Rama Pattabhisheka sabda and sabdas in praise of Lord Nāṭarāja of Chidambaram. There are Śabdas in praise of Sahajī by Kāsinātha. The portion giving the signature of the composer and the king is cited below from each.

(a) Śrī Kāsinātha nutesa choladesa paripāla ratimadanalola Śāha bhūpāla salāmu.

(b) Śrī Kāsinātha bhūpa Eka āja kumāra Śāha rāja gambhīra.

(c) Bharata rāmakavinuta ...

(d) ........ Nārāyanakavi¹ nuta jagata... induśekharasundari govinda sodari bṛndārakamuni vandita aravinda nayana ānandavalli mamu gannatalli salāmu... (Jatis.)

(B. 11612–D. 464)

Pattābhīrāmayya, Sitārāmayya and Vasanthayya were Pada composers of the period. Their compositions numbering seven, nine and twelve respectively are available in Ms. D. No. 456. Varnas and Padas numbering about 15, in honour of Sahajī by one Varuṇakavi are also found. Raga and tala particulars are not given but the chandas is indicated at the top of each as tā na tana and so on. In addition, about 45 songs with jatis under the caption Devata Vandana are found in the list. The line containing the name of Sahamaharaja is cited below:-

Further one Dundhi rāja kavi, son of Lakshmana and the pauranika of Sahaji was the author of Sahavilasa gitam, (D. 10957. D. C. of Skt. Mss.) and he was known as Abhinava Jayadeva. On the model of Jayadeva's Gita Govinda, a panegyric ‘Saharajashtapadi’ was composed by an unknown author. The following ashtapadi from the work is to be sung in Kedaragoula raga like ‘Dhirasamire’ ashtapadi of Gita Govinda.

Yakshaganas composed by the court poets of Sahaji and other contemporary scholars.

1. Rajakanyā parināyayumu — Girirāja Kavi
2. Rājamohana Koravanji — D. 509
4. Bhulokadevendra vilāsām — author unknown-Tamil (No. 173)
5. Sarvāṅga sundari vilāsā nātakam — Tamil
6. Chandrikahāsa vilāsā nātakam — Tamil
7. Vishnusaharāja vilāsā nātakam — Tamil No.178
8. Kuravanji — Muthu Kavi-Tamil No. 66
9. Śringāramanjari Sahajiyam — Vina Ayyanna-Sanskrit
10. Atirūpavatī Kalyāṇa — Tamil-No. 183
11. Śantā Kalyāṇa — Telugu-No.639
12. Tyāgesar Kuravaji — Tamil
13. Sarvāṅga sundari vilāsām — Girirāja Kavi

Many saint composers and composers of devotional music lived during the period of Sahaji. Mention must be made of the following:

(a) Śridhara Venkatesa Ayyāval:—He was one of the exponents of ‘Nama siddhanta’ cult. He is the author of Ākhyāṭhashtki, a work on the theme of sanctity and efficacy of uttering the Lord’s name and attaining salvation. The saintly soul lived in Tiruvīsainallur, the famous colony of Brahmīns, founded and named as Sahajirājapuram after the Abhinavabhoja. This small village was the abode of learning and produced the greatest exponents in several branches of learning. Ayyāval had great admiration for the accomplishments of the talented ruler, who was
a sterling devotee of Lord Tyagajiva and it is no wonder that he com­posed the beautiful kavya ‘Sahendra Vilasa’ giving eloquent praise to Sahaji. In South Indian bhajanas, guru kirtanas are sung in praise of the trio viz., Sridhara Ayyaval, Sri Bodhendra Sadguru Swamigal and Marudanallur Sadguru Swamigal. The following are guru kirtanas offered to Ayyaval:

1. Bhakta Sridhara
   Venkataguruvaraya – Kedragoula raga – Adi
2. Gurumurti padamula – Sankarabharana – Jhampa
3. Swami mire gatiyani – Kambodhi – Adi

(b) Bodhendra Sadguru Swamy:–His Holiness was the 59th Jagadguru of Kanchi Kamakoti pitham, and was the architect of what is known as the Bodhendra sampradaya in Bhajana singing. The Nama sankirtana as it is done in South India especially in the Tamil Nadu, is conducted on the lines laid down by Sri Bodhendra. He composed eight works dealing with the Nama Siddhanta, viz., Nama-sandhyam, Nama-suroydayam, Nama-tarangam, Harihara-bheda-dhikaram, Harihara-advaita Bhushanam etc., Following are some of the compositions in praise of Bodhendra, sung in South Indian Bhajanas:

1. Bodhendra Jagadgurum
   āśraye– Devamanohari – Adi
2. Bhaja re mānasa Bodhendra– Behag – Adi
3. Šatāmāni pranutimbuchunu– Todi – Adi
4. Sri Gurum Bodhendram
   manasa– Suruti – Adi
5. Bodhendragurum bhaje’ham– Kanada – Chapu

(c) Sadākiva Brahmendra:–The great Saint composer of Advaitic Kirtanas was born at Tiruvisainallur and was a contemporary of Sridhara Venkatesa Ayyaval. He composed the “Siva Mānasika Kirtana” and many melodious kirtanas in flowing Sanskrit with the signature paramahamsa and dedicated them to his Guru, Sri Parama Sivendra Sarasvati. His kirtanas embody the truth of Advaitic philosophy, greatness of the Ramayana and the Bhagavata and nāma mahimā. These are in simple style, easy and attractive tunes and form an enriching part of devotional music and literature. He flourished during the

1. Sahendra Vilasa, Ed. with Introduction etc. by Dr. V. Raghavan, pp. 65-69
reigns of Sahaji and Sararboji, and blessed the latter with a copy of his famous work, ‘Ātina idyāvilasa’. Mention may be made of the following songs:

(1) Chintā nāsti kila – Sankarabharana – adi
(2) Bhaja re Gopālam – Hindolam – adi
(3) Brūhi Mukundeti – Senjurutti – adi
(4) Manasa sanchara re – Sama – adi
(5) Pība re Nāmarasam – Bhairavi – adi
(6) Jaya tunga tarange – Mukhari – adi
(7) Bhaja re Raghuviram – Mohanam – adi
(8) Gayati Vanamāli – Kuntalavarali – adi
(9) Bhaja re Yadunatham – Saveri – adi
(10) Kheḷati mama hṛdaye – Atana – adi
(11) Smara vāram vāram – Kapi or Kanada – adi
(12) Cheta śri Rāmam – Mohanam – adi
(13) Kridati vanamāli – Suruti – adi

In addition to the above, Paramānanda Yogi, Śivagnāna Swamīgal, Vaidyanatha Desikar and Tambiran of Tiruvavaduturai Mutt were contemporaries of Sahaji.

Sahaji as a musicologist:

_The Raga-Lakshana manuscripts_

That Sahaji, besides being a composer, was also a discerning musicologist who took enormous interest in the study of the theory of Music (sangita sastra) and in the systematisation of the divergent theories regarding the lakshana of ragas extant during his time, deserves to be widely known. Tulaja in his Sangita Saramrita while paying a glowing tribute to Sahaji’s accomplishments in the introductory slokas (pp. 2-13), rightly calls him “sangita tantrapriyah” (lover of the Sangita Sastra).

In the introductory portion of “Vishnu Pallaki Sevaprabandham”, the following reference to his attainments in the science of music, is found.

Significantly enough, Sahaji’s contribution to the lakshana or science of Carnatic music is to be considered specially unique, as it has a fundamental bearing on the development of the theory and practice of music during the period of the musical Trinity and after.
As a preliminary step, Sahaji recorded the different views of the lakshana of ragas, Hindustani as well as Carnatic, with the collaboration of the band of musicologists and musicians representative of these two systems. Consequently, we have now in the Thanjavur Saraswathi Mahal Library, ten lakshana manuscripts, containing the characteristics of the ragas as accepted by different scholars. It is not known whether Sahaji wrote any regular treatise on music in its important aspects as such like his brother Tulaja I (1725-1736), the author of Sangita Saramrita. But the lakshana manuscript in Telugu entitled Sahaji raga lakshanamu (B. 11620, D. 930, D. Cat of Telugu Mss. T. S. S. M. Library), expounding the raga lakshanas is definitely written by Sahaji himself as evidenced by the colophon found at the end of the description of each mela in which the rank of the mela is also mentioned invariably. Sahaji describes in his work, 20 melas and 112 janya ragas under them. At the beginning of the manuscript, the list of melas given in order by the author is incomplete with the mention of only 14 melas, and with intervening gaps in the manuscripts.

The melas that are missing in the above list viz. Sankarabharana, Kambhoji, Ramakriya, Saranga, Todi and Kalyani are described in the course of the treatment of the melas inside. Tulaja in the raga chapter of his Saramrita follows the same set of 23 melas in the very same order found in Sahaji's manuscripts. Though he adds one more mela viz. Velavali to Sahaji's list making it 21, he has actually described only 19, the lakshanas of Kalyani and Todi are missing as the raga chapter of Saramrita is incomplete. What he considers as most essential in defining the svarupa of raga, Sahaji expounds in simple, Telugu prose (vachana) in a crisp manner. Details regarding the mela, kinds of svaras taken, the svaragati which he mentions as 'svara nadavadika', vakra or avakra, the manner of svara progression in the arohana and avarohana, any special feature about them, the gana kala or performance time whether it is a kriyanga, bhashanga, whether the raga is

1. Raga Lakshana Manuscripts - B. 11548 - B. No. 11555. D. Cat. of Tel. Mss.
2. इति श्री भोजलक्षणोत्तरं श्री शाहाजीप्रकाशिता देशासिद्धान्तिविवरणं। Fol. 53 (a) Raga Lakshana Mss.
Sahaji, any special feature about them, the *ganę kala* or performance time, whether it is a *kriyāṅga, upāṇa, bhūshāṅga*, whether the raga is suitable for purposes of *ghanā (ghanya yogam)*, *nava* or *rakhśa* and *deśī* styles of performance, the *ṣaḍāva, audava* and *sampūrṇa* *jañyās* if it is a *melaṅkārtā*, are all available in the *lakṣāna* part. In addition to the theoretical description, the popular compositions, the *prayogas* and important *sanchāras* from the *daru*, *prabandha*, *alpa*, *ṭhāya* and *pada* are quoted in notation by way of illustrating the theoretical explanations. The following *lakṣyās* have been mentioned by Sahaji in svara notation in the description of his ragas:

1. *Chaturdandi prayogas* viz. illustrations from the traditional *gita, alpa, ṭhāya* and *prabandha*.

2. *Sūladi prayoga udgrāha*, or *eduppu prayoga*, *Āyītta* or *Rāga-vā dhani prayoga*, *tāna prayoga*, *nalugo mukulita tāna prayoga* (*chaturtha mukulita tāna prayoga*), *antima nyāsa* or *kadapati nyāsa prayoga*, a *kajaka prayoga*, *nāmavali prayoga*, *Prayogas* from *pada*, *daru* and *slokavarna* are given.

A comparative study of the contents of the Sahaji’s *Rāga-lakṣāna* work and the *rāga chāpter* of Sangita Sārāmrita establishes the fact once for all that Sārāmrita’s rāga chapter represents the Sanskrit version (संस्कृतीकरण) of the contents of the rāga lakṣāna expounded by Sahaji in Telugu, with the omission of details pertaining to *ghanja*, *naya* and *deśya* and with an addition of *graha, amśa* and *nyāsa*. The colophon at the end of each *mela* in the Lakṣāna manuscripts is omitted in Sārāmrita; but the *sanchāras*, *lakṣyās*, in svara notation are exactly similar in both. For instance, the Sri Rāga lakṣāna begins thus in Sārāmrita and the Lakṣāna Manuscript:— वासंबवूर्य चतुर्तिद्वीपसमून्नांसदिति मलनवसमून्नांसदिति ।

Aṇuvantaḥ तथा लिखवने।

Again for *Saḷagabhairavi*,

*Tulaja* — अन्तरोद्धे समपूर्णावलीयवृक्षुन्नंतिना नागचछिति।

*Sahaji* — अन्तरोद्धे अदुबंबवाडवसमपूर्णसमर्थनालाभूत राजु।

*Svara nadapadika* is given as *svaragati*. *Gītāntara prayoga* is only another *gīta prayoga*, (मरियोकालितप्रयोग) or (अन्यं तितिम) *. Whereas Sahaji has freely quoted illustrations from the Chaturdandi pieces, he
has not referred to the existence of Venkatamakhi’s scheme of 72 melakartas. Tulaja quotes Chaturandiprakasika many times and accepting the mela system of the latter, he has tried his best to popularise the same.

Developments in the sphere of lakshana and lakshya, after the period of Venkatamakhi and before that of Sri Tyagaraja are crucial in nature because these led to an over-all standardisation of ragas, musical forms and theoretical explanations of the practice in vogue, during the period of Trinity. It is in this context, that Sāhaji’s treatment of raga lakshana is remarkable. As Sāhaji was a composer of a high order, he understood the significance of the lakshya, musical practice and musical compositions in defining and unfolding the sound picture (sound image) of the raga. In the history of raga and raga lakshana, Sāhaji inaugurated the most practical method of illustrating the theoretical definition of raga by citing under examples of phrases, prayogas in notation from the famous compositions of his time, known collectively as chaturdandi composing Gita, alapa, thäya and prabandha, and other lakshya pieces like Sūlādi, udgra ha, daru, sloka and padas. Even in the standard treatises viz. Swaramelakaländhi, Rāgavibodha. Sangita Sudha and Chaturandiprakasika with the exception of Sangitapārījata, the ragas have been described and defined in a couplet or a sloka in terms of the kind of notes, gana kāla, and details regarding graha, amsa and nyāsa. No reference is found in the lakshana slokas to the actual musical compositions or the characteristic idiomatic phrases, permissible and non-permissible sancharas which go a long way in the attempt to practically visualise the raga in the absence of a regular oral exposition of it by a musician. Raga being an abstract phenomenon, its form is to be visualised (vyakta rūpa) in the various musical forms only—the rūpa of the raga projected in a certain dimension, in each type of musical form in consonance with the melodic context, emotional content, and subjunctual context. Thus the raga form in its entirety is to be comprehended taking into full consideration all the available types of compositions in it. And no elaborate definition of a lakshana of a raga can convey the least idea of the raga which has a characteristic complexion. So the credit of having introduced into the theoretical description of ragas, the illustrations from current lakshya goes to Sāhaji, who thereby upheld the superior worth of the lakshya over lakshana as per Amāṭya’s dictum (सधवप्रजायः खल्लौ शास्त्रम्) though both are rightly considered as the two eyes of the subject.

Again in the history of raga classification Sāhaji happens to be the first lakshanakāra to speak of ragas in terms of ghana, naya or rakti and desī. This system of Ghana, naya and desī ragas developed in the post-
Venkatamakhi period. The anubandha to *Chaturdandiprakāśikā* mentions it. As a result of contacts with Hindustani music, which took place during the reign of Sahaji, many North Indian ragas had become popular in Tanjore and these came to be identified as *deśī*. Those fit for performing madhyamakāla tānām in trikāla which sounds quite majestic were referred to as *Ghanam*, while the rakti or naya raga gave elaborate scope for descriptive and detailed raga variations (*ālāpa*). According to Sahaji some ragas are meant for only *Ghana*, while some are fit for use both as *ghara* and *naya*. Tulaja has omitted this particular detail, while he had followed all the other information set out in the raga lakshana manuscripts. Further Sahaji gives sahitya for all the Gita, sulādi and prabandha prayogas, while Tulaja has omitted the sahitya portions in most cases for the same ragas.

A note on the musical compositions and lakshyas cited as illustrations for the various ragas may be given here.

These show that authority existed in classical tradition for introducing certain sanchāras, which have later fallen out of use.

1. *Udgrāha prayoga* :- The prabandha composition has the six dhātus and four angas viz. udgrāha, dhrūva, melāpaka and ābhogha. The udgrāha is the opening section and represents the take-off (*udgrhyate iti udgrahah*). This section later developed into the pallavi section during the days of the Ṭalapākkam composers who happen to be the earliest to compose kirtanas with the divisions known as Pallavi, Anupallavi and Charanam. It is interesting that we do not come across the sectional names as pallavi or anupallavi and charana in the lakshyas cited. The term udgrāha prayoga denotes and points to the sanchāra that can appropriately commence the raga, the starting phrase embodying the quintessence of the raga in a nutshell. The udgrāha prayoga is the attractive permissible and most suitable sanchāra which usually figures in the beginning of a prabandha.

2. *Kataka prayoga* : It is described as a passage of tāna intended for playing on the vīnā.

*Ālāpa*: Though Raga *ālāpana* belongs to the sphere of extemporization, we find *Ālāpa* for many common and rare ragas composed and given in svara notation and are carefully preserved in the manuscripts belonging to the period of Sahaji. The *ālāpa* paddhati as adopted in these svara notations, recognises the stages like āyittam, ējūppu and its muktāyi, udgrāha and its muktāyi and lastly sthāyi. The enunciation o
Sri Raga alapa is remarkable and reflects the traditional lakshana and method of alapana of the raga which has come down to the present times almost in tact.

According to Sangita Sudha, the Akshiptika section is known as a jiyttam, the popular vernacular term. The starting of a raga elaboration on a particular note and phrase reveals the identity of the raga. The second stage of Raga alapana known technically as Ragavardhani, is known popularly as Eduppu and Karanam while the conclusion of this section is denoted generally as muktayi or nyasa. In practical usage, the sthayi and the final section of an alapa exposition which comprises singing of various permutations and combinations of svaras forming beautiful tana patterns, is referred to as Makarini.

The raga alapana paddathi which was standardised by Govinda Dikshitar and King Raghunatha Nayak of Tanjore in the prior century and recorded in the pages of Sangita Sudha must have been in full swing and attained popularity with the musicians of Tanjore in the subsequent centuries.

Gatradandi: Refers to the alapa with nam-tom syllables and is the tānam performance to be rendered by a voice. The presence of tannakara syllables for the svara notation makes it a vocal form ‘gatra danḍi’. It has also to be developed through stages of Ayattam, Eduppu and its muktayi, udgraha and its muktayi and sthayi. The Jantra danḍi is again tana passages meant to be played on instruments, Vina.

Thāyas: The Sanskrit word sthaya got itself changed to thāya and means a characteristic and idiomatic phrase or a grouping of svaras. The thāya for Ritigoula for instance, runs thus: n n n n n n n d M n n s //

Madhyamadī: S n s r / s s n p / m r M m r M //

Suddhasaveri: s r s d d d d d p / r s n d p / r s n s r / r r g /

rs n s r s n p / p m g g / g r / s d d n //

Dhanyasi: s g s n n N S n P s n n p

Nata: m m P / s n P n s s n p - d n s s n p r g m P /

d n s / s n p.

Gaula: R R R R / r r s.

The manuscript with B. No. 1162 entitled Sahaji Raga lakshanānti (outtaram) is written in prose but does not contain the signature of Sahaji and is thus of doubtful authorship. Here is a description of
ragas which include some North Indian ragas also. The ascent and
descent of the svarakrama, the varja svaras, kinds of notes, the mela raga
and the svara sanchara for the ragas and gitas for some ragas are available. Since the manuscript is injured in many places, very often the con­
tinuity of the details cannot be had. The following is an index of 25
ragas as found in the commencement of the manuscript and a perusal
of the contents reveals new and apūrva ragas with supporting evidence
of some practical compositions of gitas in them.

1. Chāyānāṭa
2. Jayantasri
3. Vegavahini
4. Nagadhvani
5. Śyāmakalyāṇi
6. Singhoda(?)
7. Dipaka
8. Nāṭakuranji
9. Suddha Saveri
10. Maruva
11. Purvakalyani
12. Mānji
13. Gouri kānara
14. Śyāma kānara
15. Māru
16. Chetaśrī(?)
17. Trivani
18. Deskar
19. Usāni kapi
20. Kajingada
21. Deśakshi
22. Suddha mukhari
23. Ārabhi
24. Hindola
25. Anandabhairavi

From the gīta portion of the contents of this manuscript, it will be
seen that Gouri, Vasanta, Surati, Hamiru Kalyani, Asaveri, Kapi,
Āharī, Kānada and Bāgada also figure as melas with janyas grouped
under them. Also some Hindusthani ragas are given as janyas under
Karnatic mela ragas. Javanpuri todi under Āharī melam, Sāgara under
Kānada, Garuda under Malavagoula, Khāta under Todi, Māru under
Bāgadaī and so on. The diversity of views regarding the melas and
their number is evident in an abundant manner in these lists of melas.
recorded in the different manuscripts. The inclusion of Hindustani ragas in this list proves their popularity in the Karnatic system.

Manuscript Nos. B. 11549 and 11552 containing lakshanas of nearly hundred ragas are ascribed to one Viṣṇa Sītāramayya, son of a Vainika whose name could not be deciphered from the manuscript as it is damaged here.

Two lists of melas are found in the manuscript, one set of 20 melas approved in lakshana and another list of 10 melas recognised in lakshya.

The list of 20 melas comprises Mukhari, Śrī, Hindola, Suddharāmakriya, Desākshi, Kannadagoula, Suddhanāta, Āhiri, Nādanāmakriya, Suddhavarāli, Vasantabhairavi, Kedāragoula, Revagupti, Samanta, Ritigoula and Kāmbhoji with four other melas missing.

Śrī Raga mela lakshana as available in this work bears similarity with that in Sangitha Saramrita. The illustrations cited may be noted: the svaras do not ascend in a regular order as s r g m p d n s and in avarohana the svaras occur thus: s n p m p m r / r g r g / g r s s n p p p m r r g r s / / The gita prayoga in Manirangu is given as s n p m g g r- s p n p m g r r s - and so on.

According to a different Lakshya, the following melas are given: Mukhari, Desākshi, Varāli, Ritigoula, Hejjuiji, Samanta, Revagupti, Rāmakriya, Nādānakriya, Vegāvahini, Āhiri. Kedāragoula, Bhūpāla.

The following list of melas is given separately:

Śrī, Goula, Kambodi, Bhairavi, Sankarabharana, Kannadagoula, Vasantabhairvi, Nāṭa, Sindhurāmakriya and Todi with a total of 90 janyas under them.

The existence of various theories of melas and their number proves that the scheme of 72 melakartas formulated by Venkatamakhin in 1660 A.D. had not been wholly adopted in practice. Śahaji (1684-1712) or his contemporary musicologists had not referred to the formulation of the 72 melas though however Śahaji accepts 20 melas which include, out of Venkatamakhin’s 19 melas, sixteen, Sāranga, Chāya nāṭa and Todi being additions. Samanta mela and Pantuvarāli mela of Venkatamakhin are grouped as janyas under Śankarabharana and Sindhurāmakriya melas of Śahaji. Instead of Simharava, Śahaji recognises Vegāvahini as mela.

To sum up, the dynamic artistic spirit of Śahaji was chiefly responsible for creating an all-round musical activity in the field of Lakshana
and Lakshya of music, which brought in its wake in the subsequent period of the Musical Trinity, a rich harvest of soul-stirring compositions of classical beauty and the alluring musical forms composed by veterans like PachimiriyaM Adippayya, Merattur Venkatarāma Sāstri, Mānambuchāvadi Venkatāssubbayya, Ramaswami Dikshitar, Melattur Virabhadrāyya and Paidāla Gurumurthy Sāstri. The dance repertoire in vogue in Sāhaji’s period underwent slight modification in respect of names and structure in the subsequent centuries as evidenced in the compositions of the Tanjore Quartette. The rich crop of musical forms relating to pure nritta, nritya or abhinaya and those of the Trinity which are verily definitions of the spirit and structure of our classical ragas and tālas, in various styles, itself is a pointer to the complete settling down of the minor confusions evident in the prior century.
NANTUNI

CHUMMAR CHOONDAL, Trichur

(With demonstration by Umähattu Sankunay Man̄harti)

1. Nantuni is an ancient musical instrument of Keralā. It has a rectangular hollow wooden body with a tail-like projection. Two fibre strings made out of either sisal or palm fibre are stretched over the body supported on bridges, tied to an iron hook at one end and tightened by two pegs at the other. The total length of the instrument would be about 4½ feet, width 6 inches, resonator length about 14 inches. A few frets are provided at about the middle of the instrument. While the player presses only one string, the other acts as the drone, both strings being plucked together. Of the two strings or fibres, one is thin and the other thick. The thicker is intended for drone or ‘Sruti’. The thin fibre is pressed by left hand fingers to produce ‘Syaras’. Though it has got five frets, only the middle and lower are pressed. Usually only three varieties of notes are produced. However its sruti is approximately equal to one ‘Katta’ i.e., the first note in the Harmonium.

I could see three-stringed Nantuni also in rural areas of Trivandrum.

1.2 Musical notes are produced by plucking the sisal fibres with a piece of horn (plectrum) (which is locally called ‘Vayana’) having the shape of a large black bee. Nantuni is held either vertically or horizontally, supported by the left hand and played by the right hand. The principles observed in the construction of Nantuni is the same as in Veena. The body is made out of a soft wood called ‘Kumij’ (Gmelina Asiatica), or at times with ‘Koovaḷam’ (Bael Tree). According to the traditional authorities, ‘Aśāns’, the parts of the instrument are described as Muṭi (Head), Kayyu (Arm), Kutira (Horse), ORRu, Peeṭam etc. There should be a hole at the centre of the peeṭham, the wooden resonator. The instrument requires expert carpenters to make it. Peeṭam is made out of Jack wood. Therefore two varieties of soft as well as hard wood are essential for its construction. A piece of wooden chip called ‘Takkritta’ is used for tuning up the fibres. This is equivalent to ‘Jeeva’ in a ‘Tambura’.

2. The description of tajas:-

The following ‘tajas’ are used when the artist sings:
1) **Muntalam**: This is equivalent to ‘Khanda Chhapu’ of five matras-Takita taka.

2) **Nalam talam**: It is equivalent to ‘Adi talam’. The Naḍa being-taka timi.

3) **Eru talam**: It is equivalent to ḍha tāl; tisra nada with three matras.

The song is sung in a recitational manner. They call it ‘Seluka’
(1) nālam sālu (2) ēru sālu (3) anathukkam (4) ammanichaya etc. But strictly speaking we cannot say that these are ragas.

3. This musical instrument is generally made use of by Manṭān community, as well as another community called ‘Kurupu’ chiefly in central Kerala and north Malabar. These communities play this instrument for ‘Kalamezhuthu-Paṭṭu’ and also Bhagavati ToRRam, another devotional ballad to invoke goddess Bhagavati. Velan and Perumana community used to play Nantuṇi for their ritualistic ceremonies. Nantuṇi is also used in some temples in Kerala.

4. There are some references about this old musical instrument in Rāmakathāppattu and Unnunilsandesam. In Rāmakathāppattu (Volume 2, Yuddhakanda, Vrittam 30, Viruttam 4–5), the royal procession of Vajradamshtra is accompanied by 21 instruments including Nantuṇi. In the sloka, however Nantuṇi is named as Nanthumy.

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1. Washerman 2. Title of different castes equivalent to Nairs; Kammala castes.
4. A caste of midwives, accoucheurs.
5. A sub-division among mannan community.
6. Rāmakathāppattu by Ayyippilla Asan, who flourished at Kovalam near Trivandrum sometime about 1400 A. D.
7. An ancient famous message poetry in Malayalam—anonymous.
8. “Kitupiti Kombu talalotu kalam
Kinamallari Veena Kinnariyum
Natamiṭṭu patayil naganasuradikal
Nantuṇi maddalam pala osai
... ... ... ... ...”
Dr P. K. Narayana Pillai, commentator of Rāmakathāppūṭṭu says ‘Nanthumy’ is no other than Nantuṇi.

4.1 A Sandesakavya called Unnunilisandēśam in its XIXth Sloka* in the first part has also a reference to it. Here the author introduces Nantuṇi in a peculiar way. The King of Gods, Devendra, and ‘Kinnaras’ during their leisure come down to earth and enjoy the musical display of many indigenous instruments.

5. In the beginning of Nantuṇīppāṭṭu, the origin of Nantuṇi is described in rhythmic rendering. Nantuṇi according to the description is not a mere ordinary musical instrument; it is a divine musical instrument. The two strings called ‘Anna’ means Bhagavati of food, Anna-poorneswari and ‘Alamba’. The way sounds emanate from these strings is beautifully portrayed as the songs of two skylarks in an isolated island. The entire data of Nantuṇi are also described here.11

6. The etymology of the term Nantuṇi is connotative.

Nam+dhusni—— Nantuṇi —> Nuntuṇi

The instrument that echoes the sound ‘nam’ and therefore the term Nantuṇi. Dr. Gundert, the lexicographer, in his dictionary speaks of it as “a kind of Guitar, used by Marans”. Dr. Gundert refers to Nantuṇi as being played generally by a community called ‘Marans’. Marans, the drum-beating community, never make use of Nantuṇi. And hence the reference of Dr. Gundert does not seem to be quite correct.

7. Similar stringed instruments like Nantuṇi are seen in India and abroad. ‘Rabab’ is important among them. It has a close affinity to Nantuṇi. It is similar to ‘Tanbur’ of Hursan, a long necked lute having a small budding-body, several frets on finger-board and two strings of the same thickness, which were plucked with a plectrum. Commonly of five frets, sometimes more, of the Tanbur were fixed, the others remained movable.12 The operation of ‘Tanbur’ and ‘Rabab’ is different

10. Annai-Mother in Tamil.
11. The information gathered from Sri Umanattu Senkunni Mannan, the traditional aasan who gave the demonstration on the instrument.
8. Dr. Chelnatt Achyutha Menon refers Nantu to 'Yazh' (Harp) of Tamil Nadu. The word 'Vyszham' from 'Vyazhampattu' is derived from 'Yazh'. Nantu does not have any close relation to Yazh. It is evident that Yazh is the ancient form of stringed instruments; yet the structure and operation of Nantu differ.

9. At present Nantu is used only as a drone and a tajavadya. There is no attempt to play any tune on the instrument. Though it is not fit as a concert instrument, it is quite fit to be used as a folk instrument. As there is no reliable and concrete data regarding the exact period when this instrument was begun to be used it can only be inferred that this instrument must have been in vogue for a long time.

Name of the Informants:

1. Sri Umanattu Sankunny (76), Mannan, Ayyanthole, Trichur-4.
2. Sri Parakkattu Ramu (54), Mannan, Kodonnur, Trichur District.
3. Sri Chethikkattil Kunjunni (60), Mannan, Moorkkanikara, Trichur District.

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Venkita Subramonia Iyer, S. (Dr.); Sangeeta Sastra Pravesika, Kerala State Language Institute, Trivandrum, 1975.

Josef Kuckertz (Dr.); "Origin and Development of the Rabab", Sangeet Natak, No. 15, New Delhi, 1970.

The late Sri Jayachamaraja Wadiyar graduated from the Maharaja's College, Mysore, with History, Economics and Politics as his subjects, in 1938. He later studied Vedanta under two eminent scholars of the day, Sri Navinam Venkatesa Sastry and Sri Chandrasekhara Bhattaru and also acquired a good knowledge of Sanskrit. He used to meet frequently Samskritabhushana Professor S. Ramachandra Rao for discussion and clarification of doubts. The scholarship that he acquired by long study was recognised by the award of two doctorates—LL.D. of the Banaras Hindu University and D. Litt. of the Annamalai University.

As evidence of his scholarship, he has left us the following works:

(Published already):

1. Dattatreya—the way and the goal (published by George Allen and Unwin)
2. Gita & Indian Culture
3. Man & Religion
4. Atma & the Brahman
5. Some Aspects of Indian Aesthetics (published by Madras University).
6. In addition several scholarly Convocation Addresses and other speeches.

Two works—"Indian Forests" and "Indian Aesthetics"—are said to be ready for publication.

He ascended the Mysore throne when he was 23 and ruled the State well. He was one of the first rulers to join the Indian Union after Independence, and was Rajapramukh of Mysore first and then Governor of Mysore and later also Governor of Madras, after which position he retired from administrative responsibilities. He earned the regard and affection of the people in these positions. He then accepted lecturing engagements at the invitation of public bodies in North and South America, Ghana, Switzerland, Russia and Australia.

His interest in music was abiding and wide. Early in life, he obtained a diploma from Guild Hall of Music, London, and later became an
Honorary Member of the Trinity College of Music, London. He was proficient in the playing of two instruments, the Piano and the Organ. His library of Gramophone records of Western music, built up over long years, is one of the largest.

He developed a keen interest in Carnatic music and acquired proficiency in it under the guidance of scholars like the late Sangitakalanidhi Sri Vasudevacharya. He is now one of our Vaggeyakaras and has given us a number of kritis as a mark of his scholarship. He also served as Chairman of the Central Sangita Nataka Akademi. He was a great patron of musicians.

His devotion to God and Guru was phenomenal and he gave liberally to all causes and was called ‘Pratyaksha Bhoja’. Though a ruler, it may be said he was a ‘Yogi’. He was a Srividyopaksaka.

I was one of the palace Vidwans who was summoned to sing on the occasion of the daily pooja. During 12½ years of my service as palace Vidwan, I have sung on 600 occasions and there have been many interesting incidents during these kacheries.

Sri Vasudevacharya used to bring the manuscripts of kritis and tell me that they were the compositions of Sri Wadiyar and that I was required to learn and sing them on the occasion of puja. I thus acquired 94 of his Kritis. In 1964, I spoke about these kritis and sang some of them in the Academy’s annual conference. Even so, I think this short introduction now will not be out of place.

The language of the kritis is Sanskrit and the subject-matter is devotion, praise of the glory of the Lord and seeking his succour. 61 are in praise of Ambika, 15 in praise of Siva and 11, 4, 2 & 1 in praise of Ganapati, Vishnu, Sarasvati and Lakshmi respectively.

Ninety-four kritis have actually 94 different ragas in which there are some with Vivadiswaras, like Bhupalapanchama and one or two with Svarantaraprayoga (Bhanuchandrika). In many Kritis names of the Ragas are also given. They are set to the usual pattern of Pallavi, Anupalli and Charana and with one or two avarta Sahitya in Madhyanaadai at the end of Anupalli and Charana. In some other compositions, the latter part of the Charana follows in its music the Anupalli as usual. They are in the usual Suladi talas, and in both vilamba and madhya kalas. There are a few compositions in the pattern of Pancharatnakritis of Sri Thyagaraja. There is one kriti in a new raga, Jayasamvardhini, under the 17th mela Suryakanta, and is set to
Khanda Triputa tala ("Pahi mém Sri Rajarajesvari"-Aroha SGMPDNS-Avarohana SNDDMGRS).

The Ankita is mainly his favourite deity's name Sri Vidyā. She is referred to as Sri Vidyaśodarini, Sri Vidyaśvatī, Sri Vidyaśarada, Sri Vidyaśākhā, Sri Vidyaśvarā, Sri Vidyaścandrika, Sri Vidyaśpandita, etc. There are also some references, such as Nāgalingavāraputram, Nāgalingavārasutam, but they are not ankitas. The language is tough in several places and the kritis will be difficult to handle for those without some knowledge of Sanskrit. Some vidwans say, they are like the Kritis of Sri Muthuswamy Dikshitar.

The Kritis run in Atīta and Anagata Grahas and they are to be handled carefully with a proper sense of laya. As there are also several rare ragas used in the compositions the raga-aspect also requires careful study before the Kritis could be sung. Several Kritis were made popular by the late Sri Ariyakkudi Ramanuja Iyengar, himself as Asthana Vidwan. Smt. M. S. Subbulakshmi also sings some of them. A few representative Kritis are now being rendered before you.
Western Parallels of Indian Pallavi Techniques

Mrs. Dr. E. te NiJenHuis
University of Utrecht, Holland

It is a great honour to me that I deliver this year the Dr. V. Raghavan 61st Birthday Endowment Lecture. For years, Dr. Raghavan, whose publications on the history of Indian music, dance and aesthetics have found general recognition in India as well as in Western countries, has been encouraging Western musicologists to participate in the conference of the Music Academy. With his broad-mindedness, which is well known in my country, Dr. Raghavan enabled me to contact the musicians, record some of the beautiful Festival concerts and study Samgita manuscripts in various South Indian libraries. I hope this fruitful co-operation will be continued in future.

Today I would like to compare special techniques of South Indian Pallavi improvisation with composition techniques in Western music. In older European music there was a time when musicians practised the art of improvising like Indian musicians do today. But, when, in contradistinction to the Indian universal rasas, in European music the expression of the composer's individual emotions became more and more important, the freedom of the performing artist was gradually restricted. Composers did not like changes in the melody, because these might change the emotional content of the composition. So the musicians gradually lost their skill in improvising and nowadays there is hardly any performing artist of classical music in the West who is able to add something of his own invention to a pre-composed piece of music. Therefore I cannot show you many examples of improvised performances of older European works. But a number of theoretical works from the sixteenth and seventeenth centuries discuss the art of improvisation. According to these works a good singer was supposed to be able to sing an improvised melody together with a pre-composed melody sung by somebody else. He should also be able to adorn a melody, or rather, to adorn his part, when singing in a chorus. So polyphonic style did not prevent the musicians from improvising, but in a polyphonic composition they had to apply improvisation with some modesty, that is to say, adorn the parts alternately.

* Dr. V. Raghavan Sashtyabdapurti Endowment Lecture.
The method of adorning a melody mainly consisted in:

1. filling up the time of long notes,
2. filling up the gap between larger intervals,
by neighbouring notes, scale patterns, grace notes, etc.

Sixteenth and seventeenth century theoretical works that were probably written for the benefit of students and music-lovers, illustrate this method of ornamentation by providing long lists of music examples for notes of different duration and for different intervals to be filled up.

I shall quote some examples from the Tratado de glosas by Diego Ortiz, a theoretical work written in 1553.

In the older European music not only vocalists, but also instrumentalists practised the art of improvisation, the latter even to a higher degree. Like the vocalists the performers of instrumental music were able to add to an existing composition their own ornamentation or even a new improvised part. The treatise by Ortiz that I mentioned before, contains several examples of new instrumental parts added to pre-existing vocal compositions. Ortiz presents 8 instrumental recercadas based on well-known contemporary songs, namely 4 recercadas based on the French song ‘Douce memoire’ by Pierre Sandrin and 4 based on the Italian madrigal ‘O felici occhi miei’ by Arcadelt. The original polyphonic vocal compositions are set for harpsichord or organ, while the new parts that Ortiz has composed in contemporary improvisation style, are to be played on the viola da gamba (the older European tenor violin). You are now going to listen to modern performances of these works.

The first composition “Douce Memoire” will be presented once in the original vocal setting, accompanied by organ, then in a special setting for spinet solo, and finally you may listen to the four recercadas by Ortiz based on this song, played on organ or harpsichord and viola da gamba. Of the second composition “O Felici Occhi Miei” three vocal performances as well as the performance of Ortiz’ instrumental recercadas, based on it will be presented. [Illustrations played.]

Towards the end of the 17th century true improvisation disappeared from European music, but the improvisational style had entered the art of composing itself. The older improvised passages and ornaments became stereotyped and were more or less standardized. Special signs and symbols were invented to indicate particular ornaments prescribed by the composer himself. The works of the great German composer
J. S. Bach, which are as a whole a synthesis of older and contemporary musical styles, also reflect the older improvisational style. In his variations (called Doubles or Agréments) to some dances in his English Suites for harpsichord we may easily recognize the older instrumental style of improvisation. Likewise we may recognize in several Arias from his Cantatas which require great skill on the part of the performing vocalist, the passages and ornaments which, in the older period singers would have used in their improvisation.

But the Arias from Bach's Cantatas are also interesting from a different point of view. In my opinion Bach treats, in these compositions, the text in the same way as the Karnatak musician (composer and performer) does in his samgatis, that is to say, he gradually works up to a climax by repeating words or phrases with melodic variation.

While listening to the following music examples the Indian expert may decide whether he too can distinguish in these compositions, in spite of the great differences in style between Indian and European music, the principle of samgati. It is true that the different basic structures, that is to say, the Indian rāga system and the European tonal system, influence the technique of variation, but the general approach is the same; in Bach's type of variation as well as in the Karnatak samgati type of variation the ornamentation of the melody is gradually increased and leads to a climax. In some variations Bach leaves the rhythmic setting of the text unchanged, but introduces a new melody, like in the Indian niraval. The following music examples, also taken from Cantatas of J. S. Bach, may illustrate this interesting variation technique. [Illustrations played.]

Music Examples: A. niraval technique:

B. sangati technique:
4. J. S. Bach, Aria: Liebster Jesu, mein Verlangen, from Cantata no. 32.
5. J. S. Bach, Aria: Was Gott tut, das ist wohl getan, from Cantata no. 100.
C. passages and ornaments:

6. J. S. Bach, Courante II and doubles from English Suite no. I
7. J. S. Bach, Sarabande and agréments from English Suite no. III.
8. J. S. Bach, Sarabande and double from English Suite no. VI

However, for a more striking example of niraval technique in European music, we have to go back to the fourteenth century. At that time, in Europe, especially in France, the greater polyphonic religious compositions, like mass and motet, were based on the isorhythmic principle. This means that in large sections of these compositions the rhythmic setting of whole musical phrases was kept intact, while only the notes changed. This technique was called talea, which probably derives from the French word taille, which means phrase. The similarity with the Karnatak niraval technique is surprising, but it should be stated that in the isorhythmic compositions the words of talea phrases are not repeated. Now it is up to you to decide whether you can recognize the Indian niraval technique while listening to the Kyrie, the Sanctus, the Agnus Dei from the Messe de Notre Dame of the French composer Guillaume de Machaut. [Illustrations played.]

Thus far I have been discussing variation techniques which are not limited to the improvised Karnatak pallavi composition, but are also applied in other Karnatak compositions, like the kriti and the varnam. But now I would like to examine some type of variation, which, if I am well informed, is specific to the pallavi improvisation in the Karnatak ragam-ta am-pallavi performance. I mean the anuloma and the viloma-anuloma. These procedures, consisting in rhythmic diminution and augmentation respectively, are well-known techniques in Indian as well as in Western music. In the case of anuloma the notes of the pallavi melody have only half or one fourth of their original time value, so that one performance of the melody requires but half or one fourth of its original number of a varitas. In the case of viloma-anuloma the time value of the notes of the melody is doubled or quadrupled, so that one performance of the pallavi requires twice or four times its original number of a a ras. In the West rhythmic diminution and augmentation of the melody were favourite techniques of polyphonic composition. The works of J. S. Bach contain numerous examples of these techniques. But the most excellent examples are found in his Art of Fugue, a set of polyphonic variations, fugue and canons, based on one theme. I shall demonstrate the application of the diminution and augmentation technique in this work by giving a brief analysis of parts of the fugues nos. 6, 7 and 9. [Illustrations played.]
In bars 1-4 of Fugue 6 the bass introduces the theme that has been
developed from the main theme of the composition.

In bars 2 and 3 the soprano presents the diminution of the theme, but
in the inverted order, that is to say, all ascending intervals become
descending intervals and all descending intervals become ascending
intervals.

In bars $2\frac{1}{2}-4\frac{1}{2}$, however, when the other voices have not finished their
parts, the contralto presents the diminution of the theme in the regu­
lar order.

The original form of the theme appears in bars 8-11 in the contralto.

In bars $9\frac{1}{2}-11\frac{1}{2}$ the soprano performs the diminution.

In bars $15\frac{1}{2}-17\frac{1}{2}$ the soprano produces the diminution in the inverted
order.

In bars 16-19 the tenor presents the original form of the theme.

In bars $19\frac{1}{2}-23\frac{1}{2}$ the tenor performs the original theme in the inverted
order.

In bars 25-28 the contralto uses the original form of the theme.

In bars 26-27 the tenor presents the inverted diminution of the theme.

Fugue no. 7 contains examples of augmentation and double aug­
mentation.

In this fugue the diminution of the theme of fugue 6 functions as main
theme, which is introduced in bars 1-2 by the contralto.

In bars 2-5 the soprano presents the augmentation of this theme in
inverted (i.e. upside down) order.

In bars 5-12 the bass performs the double augmentation in the inverted
order, but in the dominant tonality, which means that the fifth
note (pa) has become the tonic (sa).

In bars 9-10 the tenor uses the inversion of the main theme with its
original time values.

In bars $12\frac{1}{2}-14\frac{1}{2}$ the soprano presents the so-called tonal answer of the
theme which ends here on the subdominant tonality. This means
that the fourth note (ma) becomes the tonic (sa).

In bars $13\frac{1}{2}-17$ the contralto presents the augmentation of the theme in
the inverted order; the soprano applies the same technique near the
end of the fugue.
Finally you may listen to the complete performance of fugue no. 9. [Illustrations played.]

Here the main theme represents a further stage in the development of the basic theme of this whole cycle of compositions. The longer notes of the basic theme are filled up with passages. But at several instances in this fugue the un-ornamented basic theme is presented in its augmented form.

In this lecture I did not discuss all the techniques used in *pallavi* improvisation. For instance, I did not examine the *rāgamalika* and *tālamalika* techniques, which might lend themselves for a comparison with the application of different church modes and polymetric structures in the older European compositions. But, with a limited number of music examples, I have tried to demonstrate how some of the Indian techniques are used in European music. I feel great respect for the Indian musicians, who skilfully apply, in their improvisation, techniques which in the West are considered to be the intricate rules of composition to be found only in the works of the great composers.
Writing about Indian music, many authors have discussed the subject of the \textit{bruti}s. Some may have noted the great differences between the ancient \textit{bruti} system and the modern Indian tone system, others may have tried to apply the ancient theory of the 22 \textit{bruti}s to modern Indian music. But almost all of them made a direct comparison between the two systems, neglecting two thousand years of musical history. An exceptional case is Bhatkhande,\textsuperscript{1} who has discussed various tone systems (musical temperaments) in his \textit{Comparative Study of Some of the Leading Music Systems of the 15th, 16th, 17th and 18th centuries}. A closer examination of the Sanskrit texts, as undertaken by him, is indeed indispensable for a better understanding of the changes of tone system (temperament) that have taken place in the history of Indian music like in other musical cultures as a result of the invention of new musical instruments.

In the archaic period Indian as well as other South-East Asian countries may have used the equidistant scale that has been preserved in Javanese music. The ancient Indian \textit{gāndhārogrāma}, which was already out of date at the time of the \textit{Nāṭyaśāstra}, reminds us of such an archaic system. In the ancient period, i.e. the later Vedic period, the time of the \textit{Nāṭyaśāstra}, and the first centuries A. D., the Indian music was apparently performed in the two \textit{grāmas}, \textit{sadja}-and \textit{madhyama} based on the system of 23 \textit{bruti}s. But when after the seventh century A. D. the arched harp type of \textit{vīṇā} was gradually replaced by the new stick-zither type of \textit{vīṇā} the ancient \textit{bruti} system may have fallen into disuse. Especially on the fretted \textit{vīṇā} with more than one string that was developed after the eleventh century, the ancient system with its unequal whole tones may have caused difficulties. This may have led to such experimental temperaments as Śāṅgadeva's description of fret distances on the \textit{bhātī}-, \textit{madhyama}- and \textit{laghvi-kinnari} \textit{vīṇās}.

\textbf{1.} This lecture is based on the second chapter of the present writer's recent publication: \textit{Indian Music}, E. J. Brill, Leiden 1974.

In the 16th century Ramamātya developed a temperament that was like the ancient Greek Pythagorean temperament and the Arabic temperaments in the middle Ages, based on the cycle of fifths. His new temperament may have been influenced by the Arabian temperaments, but may also have developed independently, as the svayambhū relationship between particular notes of this temperament can be traced back to the consonant (samvādin) notes of the ancient Indian music.

About 1600 Pundarikavīśṭhala in the North and Somanāṭha in the South present system of 18 and 17 tones respectively, which closely resemble the Arabic 17 tone system of Saif-ud-Din (13th century), but appear to be further developments of Ramamātya’s system of twelve unequal Pythagorean half tones, because these authors refer to the latter’s svayambhū temperament.

In the 17th century Ahobala and Ṣrīdayanārāyaṇadeva— it is not known which of them was the first—describe a system of twelve notes, the position of which is determined by accurate measurements of the string divisions. Most of their notes are still used in modern Indian music. In his book Melodic Types of Hindustān, Bose has calculated the intervals used in some modern Hindustāni rāgas. The same work was done for modern Karpāṭaka rāgas by Ramachandran.

I admit that in the ancient Indian music, musical intervals have probably never been absolutely fixed, but were always determined by the performing artist, while in modern practice their intonation may even differ in the same rāga from one performance to the other. Nevertheless, though being irrelevant to music practice, a study and interpretation of the interval calculations given in the samgīta texts is important for a clear view on the development of the Indian tone systems. Now I shall discuss some details of the above-mentioned temperaments.

Theoretically the ancient Indian octave (sapaka) contained twenty-two brūtis or micro-intervals. Mathematically considered these brūtis are equal, each bruti being $\frac{1}{2}$ of the octave, i.e., $\frac{1}{12} \times 1200$ cents = 54.5 cents—a micro interval resembling the ancient Indian intervals according to the bruti system (1 bruti = 54.5 cents) of course a purely theoretical calculation only mathematically valid—the sūdṛīha and vikṝṭa notes corresponding to these intervals could be reconstructed as follows:

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### Names of Notes, Srutis, Cents, Western Equivalents

<table>
<thead>
<tr>
<th>Names of Notes</th>
<th>Srutis</th>
<th>Cents</th>
<th>Western Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>śuddha sa</td>
<td>0, but 4 to 3,ni</td>
<td>0</td>
<td>d</td>
</tr>
<tr>
<td>śuddha ri</td>
<td>3 to sa</td>
<td>164</td>
<td>e^#</td>
</tr>
<tr>
<td>śuddha ga</td>
<td>5 to sa</td>
<td>273</td>
<td>f^#</td>
</tr>
<tr>
<td>sādha rāpa ga</td>
<td>6 to sa</td>
<td>327</td>
<td>f^+++</td>
</tr>
<tr>
<td>antara ga</td>
<td>7 to sa</td>
<td>382</td>
<td>f^±</td>
</tr>
<tr>
<td>cyuta ma</td>
<td>8 to sa</td>
<td>436</td>
<td>f^+</td>
</tr>
<tr>
<td>śuddha ma</td>
<td>9 to sa</td>
<td>491</td>
<td>g^</td>
</tr>
<tr>
<td>triśruti pa</td>
<td>12 to sa</td>
<td>655</td>
<td>a^±</td>
</tr>
<tr>
<td>śuddha pa</td>
<td>13 to sa</td>
<td>709</td>
<td>a^+</td>
</tr>
<tr>
<td>śuddha dha</td>
<td>16 to sa</td>
<td>873</td>
<td>b^#</td>
</tr>
<tr>
<td>śuddha ni</td>
<td>11 to sa</td>
<td>982</td>
<td>c^±</td>
</tr>
<tr>
<td>kaiśika ni</td>
<td>19 to sa</td>
<td>1036</td>
<td>c^*</td>
</tr>
<tr>
<td>kakali ni</td>
<td>20 to sa</td>
<td>1091</td>
<td>c^</td>
</tr>
<tr>
<td>cyuta sa</td>
<td>21 to sa</td>
<td>1146</td>
<td>c^+</td>
</tr>
<tr>
<td>śuddha sa (tāra)</td>
<td>22 to sa</td>
<td>1200</td>
<td>d^</td>
</tr>
</tbody>
</table>

However, it is highly unlikely that equal temperament existed in ancient Indian music and much more probable that the old melodic instruments (arched harp, lute and flute) were tuned by ear, which means that only harmonics of simple frequency ratios (1:2:3:4:5:6:7 etc. up to 16) could have been used. Daniélou', whose views have been adopted by many writers on Indian music, has attempted to reconstruct the ancient Indian temperament by combining the ancient Greek Pythagorean temperament (which derives every interval from the cycle of fifths $\frac{1}{2} \times \frac{3}{4} \times \frac{5}{4}$ etc.) with the harmonics $\frac{1}{3}$ and $\frac{1}{2}$ of just intonation.

Comparing Daniélou's calculation with the calculation according to the 22 sruti (= 1200 cents) system, the number of cents in Daniélou's intervals (to sa) sādha rāpa ga ($\frac{1}{3}$), antara ga ($\frac{1}{4}$), śuddha ma ($\frac{1}{5}$), śuddha pa ($\frac{2}{3}$), śuddha dha ($\frac{2}{5}$) and kakali ni $\frac{1}{6}$ corresponds reasonably well with the ancient sruti system. However, the other intervals suggested by him differ widely from their ancient equivalents. For example, his śuddha ga ($\frac{1}{3}$) is 21 cents more than the śuddha ga (= 273 cents) in the ancient sruti system. In my opinion Daniélou is mistaken when he takes the śuddha ga ($\frac{1}{3} \times \frac{3}{4} = \frac{1}{4}$) as a perfect fifth (downwards) on śuddha ni ($\frac{1}{4}$ - 996 cents). The latter interval is incorrectly calculated by him as a perfect fourth on śuddha ma $\frac{1}{3} \times$ 2

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since the ancient Indian theory of consonance did not regard the notes ma and ni as consonant (samvādin), which means that there were not in a perfect fourth relationship. The present writer suggests that in the ancient period the Indian musicians might have used the harmonic seventh (\( \frac{5}{4} = 969 \text{ cents} \)) as buddha ni and with ancient theory these notes (i.e., ga and ni) constituted a consonant relationship, whereas ma and ni did not.

The present writer proposes substituting ri of ratio \( \frac{7}{4} = 165 \text{ cents} \), which is almost equal to the mathematically calculated three-sruti ri \((3 \times 54.5 \text{ cents} = 163.5 \text{ cents}) \), for Daniéou's ri \( \frac{9}{4} = 204 \text{ cents} \). Why should the ancient musicians not have used this harmonic of ratio \( \frac{7}{4} \), which is an easily recognizable interval when played in the third octave by a wind instrument, for example by a flute. There are grounds for regarding this interval, trisruti ṭrāṭaka, as a very significant one in ancient Indian music. Three of these intervals of ratio \( \frac{7}{4} \) (= 165 cents) constitute a fourth of 495 cents \((3 \times 165 \text{ cents}) \), which very closely matches the perfect fourth \( \frac{3}{2} \) (498 cents) as well as the nine-sruti ma \((= 491 \text{ cents}) \) of the 22-sruti system, the so-called ma aṇāḍhin, “the imperishable ma,” which has probably a fundamental note in the ancient Indian system. Ri of ratio \( \frac{7}{4} \) (= 165 cents) can also be used as a basis for calculating the dha which, according to the ancient theory, was consonant, i.e., constituted a perfect fifth of ratio \( \frac{3}{2} \) with ri \((dha = \frac{3}{2} \times \frac{7}{4} = \frac{21}{8} = 167 \text{ cents}) \). Moreover the ratio \( \frac{7}{4} \) is of interest because it entails a division of the string into 11 equal parts, 11 being a factor of the total number of srutis (22) existing in the octave.

But first and foremost the interval ri of ratio \( \frac{7}{4} \) is of vital importance because without this interval Bharata’s well-known experiment with the two vinas would not be possible. In order to prove the existence of the śruti and especially of the main śruti (pramāṇa śruti), which constitutes difference between the four śruti pa of the sadjagrāma...
After prescribing the lowering of \( pa \) on the \textit{calavina} Bharata states that the other strings of this \textit{vina} should be lowered accordingly, which entails retuning the other string in their \textit{sadjagrama} relationship to the new, lowered \( pa \). This procedure has to be repeated three times, so that the whole experiment consists of lowering the strings of the \textit{calavina} four times. According to Bharata the twice lowered notes \( ga \) and \( ni \) of the \textit{calavina} respectively coincide with the notes \( ri \) and \( da \) of the \textit{dhruvavina} the thrice lowered \( ri \) and \( dha \) of the first instrument with the \( sa \) and \( pa \) of the latter and finally, the four times lowered \( sa, ma \) and \( pa \) of the first instrument with the \( ni, ga \) and \( m	ext{'} \) of the latter.

It is true that two pramāṇa śrutis of 39 cents cannot constitute a half tone: neither can three of these śrutis constitute a minor whole tone, nor four of them a major whole tone. But assuming that the ancient Indian tuning was done by ear alone, the pramāṇa śruti cannot have been an accurate, mathematically correct interval. Furthermore, I am inclined to think that the notes sa, ri, ga, (antara ga), ma, pa, dha, ni (kākālī ni) produced on the seven or nine open strings of the arched harp could only have represented simple frequency ratios when tuned by ear. For my part I cannot accept the frequency ratios of the ancient suddha ri, ga, dha, ni and cyuta sa, ma and pa (= triśruti pa) given by Daniélou. Therefore I suggest the following reconstruction of the ancient Indian notes:

<table>
<thead>
<tr>
<th>names of notes</th>
<th>śruti</th>
<th>ratios</th>
<th>cents</th>
<th>Western equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>suddha sa</td>
<td>0, but 4 to s. ni</td>
<td>1</td>
<td>0</td>
<td>d</td>
</tr>
<tr>
<td>suddha ri</td>
<td>3 to sa</td>
<td>4/3</td>
<td>165</td>
<td>e**</td>
</tr>
<tr>
<td>suddha ga</td>
<td>5 to sa</td>
<td>7/4</td>
<td>267</td>
<td>f**</td>
</tr>
<tr>
<td>sađharaṇa ga</td>
<td>6 to sa</td>
<td>5/3</td>
<td>316</td>
<td>f*</td>
</tr>
<tr>
<td>antara ga</td>
<td>7 to sa</td>
<td>5</td>
<td>387</td>
<td>f*</td>
</tr>
<tr>
<td>cyuta ma</td>
<td>8 to sa</td>
<td>7/4</td>
<td>435</td>
<td>f***</td>
</tr>
<tr>
<td>suddha ma</td>
<td>9 to sa</td>
<td>7</td>
<td>498</td>
<td>g*</td>
</tr>
<tr>
<td>triśruti pa</td>
<td>12 to sa</td>
<td>4 5/6</td>
<td>663</td>
<td>e**</td>
</tr>
<tr>
<td>suddha pa</td>
<td>13 to sa</td>
<td>3 7/5</td>
<td>702</td>
<td>a**</td>
</tr>
<tr>
<td>suddha dha</td>
<td>16 to sa</td>
<td>5 4/5</td>
<td>867</td>
<td>b**</td>
</tr>
<tr>
<td>suddha ni</td>
<td>18 to sa</td>
<td>7/4</td>
<td>969</td>
<td>c*</td>
</tr>
<tr>
<td>kaiśika ni</td>
<td>19 to sa</td>
<td>7</td>
<td>1018</td>
<td>c*</td>
</tr>
<tr>
<td>kākālī ni</td>
<td>20 to sa</td>
<td>7/4</td>
<td>1088</td>
<td>c**</td>
</tr>
<tr>
<td>cyuta sa</td>
<td>21 to sa</td>
<td>7 1/4</td>
<td>1145</td>
<td>c**</td>
</tr>
<tr>
<td>suddha sa</td>
<td>(tāra)</td>
<td>22 to sa</td>
<td>2 1200</td>
<td>d</td>
</tr>
</tbody>
</table>

It must have been quite easy to play the three ancient grāmas on Bharata's citra-viṇā - an arched harp with seven strings.

In the first place, its seven strings may have produced the following seven suddha notes of the sađjagrāma:

<table>
<thead>
<tr>
<th>svaras</th>
<th>sa ri ga ma pa dha ni (sa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>śruti</td>
<td>3 3 4 4 3 2 4</td>
</tr>
<tr>
<td>Western notes d</td>
<td>e** f** g* a** b** c** d</td>
</tr>
</tbody>
</table>

11. See note 10
12. See note 10
Secondly, the madhyamAGRama may have been produced by changing the sadjAGRama pa of four shruti (709 cents) into the madhyamAGRama pa of three shruti (655 cents). This lowering of pa could be realized by tuning the pa string as a perfect fourth to the ri string i.e. \( \frac{4}{3} \times 4\), or 165 cents + 498 cents = 663 cents (which fairly corresponds to the mathematically calculated three-shruti pa of 655 cents).

However, Bharata\(^1\) states that the madhyamAGRama could also be produced in another way, that is to say by means of transposition (samjNAbheda, lit. "changing of the names [of the notes]"). As a result of this procedure the pa of the sadjAGRama becomes the sa of the madhyamAGRama and the names of the other notes change accordingly. There is only one note which has to be altered: the two-shruti buddha ga of the sadjAGRama has to be changed into the four-shruti antara ga in order to become the four-shruti dha of the madhyamAGRama which means that the ga string (of ratio \( \frac{3}{2} = 267 \) cents) should be tuned as a major third (of ratio \( \frac{2}{3} = 386 \) cents, which differs very little from the mathematically calculated antara ga of 387 cents). This method of transposition (samjNAbheda) is illustrated by the following chart:

<table>
<thead>
<tr>
<th>shruti</th>
<th>3</th>
<th>2</th>
<th>4</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>sadjAGRama</td>
<td>sa</td>
<td>ri</td>
<td>ga</td>
<td>a, ga</td>
<td>ma</td>
<td>pa</td>
<td>dha</td>
</tr>
<tr>
<td>shruti</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>madhyamAGRama</td>
<td>ma</td>
<td>pa</td>
<td>dha</td>
<td>ni</td>
<td>sa</td>
<td>ri</td>
<td>ga</td>
</tr>
</tbody>
</table>

Western notes: d' d c' b' a' g' f' e' d

This second method of realizing the madhyamAGRama, was probably the one used in practice, because by this means the seven strings of the ancient vina when played consecutively produce both the notes of the sadjAGRama from sa to ni as well as the notes of the madhyamAGRama, which according to the N\textit{A}ty\textit{a}s\textit{tra}\(^1\)\(^4\) starts from ma and ends on ga and only necessitates the retuning of the sadjAGRama buddha ga into antara ga (= the madhyamAGRama buddha dha).

Thirdly, in the same way, that is to say, again by changing the names (samjNAbheda) of the notes of the sadjAGRama, the third ancient gr\textit{a}ma, the gANDh\textit{a}g\textit{r}AMA, could be played. This gr\textit{a}ma—probably the oldest of the three ancient basic scales as it had already become obsolete at the time of the \\textit{Naradiya Sik\textit{\textsc{s}}}\textit{a}\(^1\)(ca. first century B.C.)—can also be derived from the sadjAGRama by calling sa and the other notes ga

---

15. Compare NarS. 1, 2, 6; MBrh. 91; SarnS\textit{R}. 1, 4, 5i KuS\textit{R}. 2, 1, 1, 296; NarSM. 1, 1, 49f.
etc., ga being the traditional starting note of the gāndhāragrāma. Since
the ancient musicologists do not agree about the construction (i.e., the
measurement of the intervals) of the gāndhāragrāma, it is not clear
which of the strings has (or have) to be returned. Sarāgadeva des-
tribes two possible reconstructions: one resulting from merely changing
the names (samjñā-bheda) of the notes of the sādjagrāma without further
alteration; and the other resulting from using the same method of
samjñā-bheda with one alteration (i.e., changing suddha ga of ratio $\frac{4}{5}$ into
gūndhāra ga of ratio $\frac{5}{4}$, which becomes the triśrutī pa of the gāndhāra-
grāma). These two methods can be illustrated as follows:

**Method 1:**

<table>
<thead>
<tr>
<th>śrutis</th>
<th>sa</th>
<th>ri</th>
<th>ga</th>
<th>ma</th>
<th>pa</th>
<th>dha</th>
<th>ni</th>
</tr>
</thead>
<tbody>
<tr>
<td>gāndhāragrāma</td>
<td>ga</td>
<td>ma</td>
<td>pa</td>
<td>dha</td>
<td>ni</td>
<td>sa</td>
<td>ri</td>
</tr>
</tbody>
</table>

**Method 2:**

<table>
<thead>
<tr>
<th>śrutis</th>
<th>sa</th>
<th>ri</th>
<th>ga</th>
<th>ma</th>
<th>pa</th>
<th>dha</th>
<th>ni</th>
</tr>
</thead>
<tbody>
<tr>
<td>gāndhāragrāma</td>
<td>ga</td>
<td>ma</td>
<td>pa</td>
<td>dha</td>
<td>ni</td>
<td>sa</td>
<td>ri</td>
</tr>
</tbody>
</table>

However, the author of the Samgītakaranda, who lived at
about the same time as Sarāgadeva, defines the gāndhāragrāma as
follows: when from ri and from ma one śrutī goes to gūndhāra and one
śrutī from pañcama, joins the śrutis of nīgāda, in that case Nārada
speaks of “gūndhāragrāma”, which results in the following scale:

$$ga_3, ma_3, pa_3, dha_3, ni_4, sa_4, ri_4 (ga)$$

This scale can also be derived from the sādjagrāma by means of samjñā-
bheda, if suddha ga is changed into sādhrāma ga and suddha pa into
triśrutī pa:

<table>
<thead>
<tr>
<th>śrutis</th>
<th>3</th>
<th>2</th>
<th>4</th>
<th>0</th>
<th>3</th>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>sādjagrāma</td>
<td>sa</td>
<td>ri</td>
<td>ga</td>
<td>sādhrāma</td>
<td>ma</td>
<td>pa</td>
<td>dha</td>
</tr>
<tr>
<td>śrutis</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>gūndhāragrāma</td>
<td>ga</td>
<td>ma</td>
<td>pa</td>
<td>dha</td>
<td>ni</td>
<td>sa</td>
<td>ri</td>
</tr>
</tbody>
</table>

Western notes: $d$, $e^\#$, $f^\#$, $g^\#$, $a^\#$, $b^\#$, $c^\#$, $d^\prime$

Although only in two of the above-mentioned reconstructions of
the gūndhāragrāma the number of three śrutī intervals prevails (four

16. SamSR. 1, 4, 4.
17. NarSM. 1, 1, 54.
intervals of 3 śrūtis and one of 2 śrūtis), Daniélou ventures to say that the ancient gāndhāragrāma might have been a scale consisting of equal intervals, as is nowadays used in the classical music of Burma and Indo-china. Daniélou also suggests that this equidistant scale was only suited for playing on non-fretted instruments (such as the arched harp) and hence disappeared from India when the ancient harp type of viṇā was replaced by the stickzither-viṇā in about the sixth century A.D. I admit that the standard interval (= 171 cents) of the equidistant scale closely resembles the ancient Indian three-śrūti interval (= 165 cents; ratio $\frac{3}{2}$). I am even ready to accept that the equidistant scale may have been the forerunner of the gāndhāragrāma and goes back to a time before the invention of the 22-śrūti system, which does not permit division of the octave into seven equal intervals.

But the ancient gāndhāragrāma too did not fit into the 22-śrūti system described in the Nātyaśāstra. It had probably already fallen into disuse before the first century B.C., that is to say long before the arched harp (which is still mentioned in the Nātyaśāstra) was replaced by the stick-zither-viṇā. Disagreeing with Daniélou who suggests that the equidistant gāndhāragrāma was not suitable for being played on the new type of viṇā, I think it much more likely that it was not the gāndhāragrāma—already obsolete before the new viṇā was introduced—but the unequal whole tones (of 3 and 4 śrūtis) of the śadja-and madhyama-grāma that caused difficulties when produced on a stringed instrument (stickzither-viṇā) which was played in the same way as a lute i.e. by shortening the strings. Moreover, I very much doubt whether any of the ancient grāmas with their unequal whole tones of 4 and 3 śrūtis could ever have been played on thirteenth century fretted viṇā.

Śaṅgadeva’s descriptions of the bṛhat-, madhyamā and laghvikin-nari viṇās, and more especially his measurements of distances between the fixed frets of these viṇās, go to prove that the temperament of stringed instruments had changed since ancient times.

The following table shows the difference between Śaṅgadeva’s temperament of the three kinnari viṇās, the interval ratios of which can be derived from the measurements of the fret distances mentioned by him, and the ancient Indian temperament.

---

<table>
<thead>
<tr>
<th>ancient names</th>
<th>mathematic intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Šuddha sa</td>
<td>0 sruti 0 cents</td>
</tr>
<tr>
<td>Šuddha ri</td>
<td>3 164</td>
</tr>
<tr>
<td>Sadharaṇa ga</td>
<td>6 327</td>
</tr>
<tr>
<td>Antara ga</td>
<td>7 382</td>
</tr>
<tr>
<td>Suddha ma</td>
<td>9 491</td>
</tr>
<tr>
<td>Suddha pa</td>
<td>13 709</td>
</tr>
<tr>
<td>Suddha dha</td>
<td>16 873</td>
</tr>
<tr>
<td>Suddha ni</td>
<td>18 982</td>
</tr>
<tr>
<td>Kaisika ni</td>
<td>19 1036</td>
</tr>
<tr>
<td>Suddha sa</td>
<td>22 1200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sāṅgadeva's kinnari-viṇa fret distances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Šuddha sa 0 cents</td>
</tr>
<tr>
<td>Āl-Farabi's 3rd fret 145 cents</td>
</tr>
<tr>
<td>Ga 315 cents</td>
</tr>
<tr>
<td>Ma 497 cents</td>
</tr>
<tr>
<td>Pa 700 cents</td>
</tr>
<tr>
<td>Dha 883 cents</td>
</tr>
<tr>
<td>Ni 1003 cents</td>
</tr>
<tr>
<td>Sa 1200 cents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Madhyama kinnari-viṇa intervals minus 50 cents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suddha sa 0 cents</td>
</tr>
<tr>
<td>Suddha ri 146 cents</td>
</tr>
<tr>
<td>Suddha ga 315 cents</td>
</tr>
<tr>
<td>Suddha ma 497 cents</td>
</tr>
<tr>
<td>Suddha pa 700 cents</td>
</tr>
<tr>
<td>Suddha dha 883 cents</td>
</tr>
<tr>
<td>Suddha ni 1003 cents</td>
</tr>
<tr>
<td>Suddha sa 1200 cents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Harmonic intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suddha sa 0 cents</td>
</tr>
<tr>
<td>1 165</td>
</tr>
<tr>
<td>Suddha ri 204 165</td>
</tr>
<tr>
<td>Suddha ma 386 316</td>
</tr>
<tr>
<td>Suddha pa 718 498</td>
</tr>
<tr>
<td>Suddha dha 867 96</td>
</tr>
<tr>
<td>Suddha ni 1035 996</td>
</tr>
<tr>
<td>Suddha sa 1200 1200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bṛhati-kinnari-viṇa intervals minus 50 cents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suddha sa 0 cents 145 cents</td>
</tr>
<tr>
<td>Al-Farabi's 3rd fret 145 cents</td>
</tr>
<tr>
<td>1 165</td>
</tr>
<tr>
<td>Suddha ri 163 cents 165 cents</td>
</tr>
<tr>
<td>Suddha ga 319 cents 316 cents</td>
</tr>
<tr>
<td>Suddha ma 502 cents 498 cents</td>
</tr>
<tr>
<td>Suddha pa 686 cents 702 cents</td>
</tr>
<tr>
<td>Suddha dha 864 cents 884 cents</td>
</tr>
<tr>
<td>Suddha ni 994 cents 996 cents</td>
</tr>
<tr>
<td>Suddha sa 1200 cents 1200 cents</td>
</tr>
</tbody>
</table>
The notes of the three kinnari vina\textquotesingle s appear to be much higher than their ancient equivalents. In the case of the \textit{brhatikinnari vina} the notes seem to have moved from their original position to the next higher sruti. Especially the fourth (ma) and the fifth (pa) have got such unnatural, high pitches, that one is inclined to think that Sarngadeva did not start his scales from the ancient \textit{suddha sadja}, but from the ancient \textit{cyuta sadja} \textsuperscript{a}, which is one sruti (i. e. approximately 55 cents) lower than \textit{suddha sadja}, so that all intervals to sa become unusually wide, and the corresponding notes unusually high. On that assumption 50 and 40 cents could be respectively subtracted from all the \textit{brhati-} and \textit{madhyam\textsuperscript{a}kinnari vina} intervals to obtain more natural intervals.

As a result of the 50 cents subtraction the \textit{brhatikinnari vina}\textapos;s intervals ga, ma, pa, dha and ni now come very near to the frequency ratios $\frac{1}{6} = 316$ cents, $\frac{1}{5} = 498$ cents, $\frac{1}{4} = 702$ cents, $\frac{1}{3} = 884$ cents $\frac{1}{2} = 996$ cents, respectively. Only ri, which according to Sarngadeva was an interval of 196 cents (and therefore approaches ratio $\frac{1}{5} = 204$ cents), has now become a very small interval of 146 cents. However, it is interesting to note that this interval is almost identical with an Arabian interval, namely with Al-Farabi\textquotesingle s third fret of the lute (145 cents)\textsuperscript{b}.

By subtracting 40 cents the \textit{madhyam\textsuperscript{a}kinnari- vina} intervals ri, ga, ma and dha approach the ratios $\frac{1}{6} - 165$ cents, $\frac{1}{5} = 316$ cents, $\frac{1}{4} = 498$ cents and $\frac{1}{3} = 867$ cents, which according to the present writer, respectively represent the ancient \textit{suddha ri}, \textit{sadhara\textsuperscript{a} ga}, \textit{suddha ma} and \textit{suddha dha}. However the ni of the \textit{madhyamakinnari vina} which has become an interval of 995 cents (approaching ratio $\frac{1}{2} = 296$ cents) does not fit into this ancient series of harmonic intervals,\textsuperscript{c} and the pa has now become a rather unharmonic fifth of 686 cents.

In the case of the \textit{laghvikiarari vina} a subtraction of 40 to 50 cents would give a very low fourth (478 to 668 cents). Therefore one might take the intervals of \textit{laghvikinnari vina} as they are handed down by Sarngadeva, i. e. without applying any subtraction, and compare them to the nearest harmonic intervals:

\begin{itemize}
    \item 20. Compare p. 118 above
    \item 22. Compare the ancient Indian consonant theory and Danielou\textquotesingle s interpretation of the ancient Indian \textit{ni} of ratio 16/9 on p. 115 above.
\end{itemize}
<table>
<thead>
<tr>
<th>Interval</th>
<th>Nearest Harmonic Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>sa = 0 cents</td>
<td>$\frac{1}{1} = 0$ cents</td>
</tr>
<tr>
<td>ri = 239 cents</td>
<td>$\frac{5}{4} = 231$ cents</td>
</tr>
<tr>
<td>ga = 387 cents</td>
<td>$\frac{5}{4} = 386$ cents</td>
</tr>
<tr>
<td>ma = 518 cents</td>
<td>$\frac{3}{2} = 702$ cents</td>
</tr>
<tr>
<td>pa = 718 cents</td>
<td>$\frac{15}{8} = 906$ cents</td>
</tr>
<tr>
<td>dha = 905 cents</td>
<td>$\frac{19}{10} = 996$ cents</td>
</tr>
<tr>
<td>ni = 1007 cents</td>
<td>$\frac{23}{12} = 1200$ cents</td>
</tr>
</tbody>
</table>

Unlike the scales of the other two viṇās this scale has a major third (= ancient antara ga) and a very high major second (ri) of 239 cents. It seems to me that the smaller measurements of this instrument have increased the inaccuracies in the calculation of the fret distances.

Contemporary Arabic temperaments probably influenced Śrṅga-deva’s experimental kinnari viṇā temperaments. He may have known the lute temperament of Al-Farābī († 950)** and have tried to transmit some Arabic lute intervals to the Indian fretted viṇā. So the bṛhati- and madhyamākinnari-viṇā intervals of ri respectively 196 and 203 cents were possibly imitations of the Arabic index finger fret (i.e. of the fifth fret, named sabbāba) $\frac{11}{6} = 204$ cents. Similarly, the bṛhati- and madhyamākinnari-viṇā of respectively 365 and 359 cents more or less correspond to the Arabic middle-finger fret, i.e. the eighth fret, the so-called Zalzal’s middle-finger) of ratio $\frac{15}{8} = 355$ cents. On the Arabic lute as well as on the Indian fretted viṇā the little finger may have produced the fourth of ratio $\frac{1}{4} = 498$ cents, remembering however that this ratio differs from Śrṅga-deva’s calculation of this interval (without subtraction) on the three kinnari viṇās. The Arabic ring finger (i.e. the ninth fret, named binsir) of ratio $\frac{11}{7} = 408$ cents was apparently not used in Śrṅga-deva’s viṇa technique. Nevertheless though Śrṅga-deva is silent about the application of that finger, it can be assumed that Indian viṇa players used it to produce the antara ga of ratio $\frac{1}{4} = 386$ cents.

The above-mentioned thirteenth century measurement of the fret distances on three stickzither-viṇās would seem to justify the conclusion that Śrṅga-deva was trying to adjust the ancient basic scales to the new fretted viṇā, just as in Europe several attempts were made to find a temperament to suit the fretted lutes and keyboard instruments. But whereas in Europe the new sixteenth century harmonic style with its

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23. Compare Manik, o.c., p. 42
many modulations (change of tonic) inevitably led to equal temperament, India had no need of such a temperament since its music never deviated from its primary melodic rāga system based on a fixed tonic, variety being achieved not through modulation but through the vast diversity in melodic patterns (rāga).

The sixteenth century Indian musicologist Rāmamātya, who re-organized the Indian theory of music and laid the foundations for the modern Karnāṭaka rāga system, accurately describes the tuning and fret positions of the contemporary Karnāṭaka vīnā.

Rāmamātya, who was a protegē of Rāma Rājā, the powerful minister of king Sadāśiva (1542–1568) of Vijayanagar, wrote his Svaramalakālanidhi at a time when the kingdom was already in decline, though it had not yet fallen into the hands of the Muslim invaders. Nevertheless Muslim culture may already have infiltrated these Southern regions before the fall of the famous kingdom. It is therefore not impossible that the temperaments and fret systems of the Arabian lute (with 6 or 7 frets)\textsuperscript{25} influenced the temperament of the sixteenth century South Indian fretted lute, the śuddha-mela-vīnā, described by Rāmamātya.

In determining the relation of the notes to be fixed on the six frets of the four melody strings of that instrument, this author uses the Svayambhū principle \textsuperscript{26} i.e. the natural consonance of the harmonic intervals $\frac{5}{3}$ (perfect fifth) and $\frac{4}{3}$ (perfect fourth) which according to ancient Indian theory are consonant (samvādin). This means that all the intervals contained in Rāmamātya’s scale could be calculated as a power of ratio $\frac{5}{4}$ (or $\frac{4}{5}$). The result of this so-called Pythagorean temperament is a scale consisting of unequal half tones that is to say of diatonic half tones of 90 cents (=Pythagorean limma of ratio $\frac{5}{4}$) and of chromatic half tones of 114 cents (=Pythagorean apotome of ratio $\frac{4}{5}$), which represent the twelve śuddha and vikṛta notes of the sixteenth century South Indian system.

<table>
<thead>
<tr>
<th>names of notes</th>
<th>ratios</th>
<th>cents</th>
<th>cents</th>
<th>Western equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>śuddha sa</td>
<td>1</td>
<td>0</td>
<td>—</td>
<td>d</td>
</tr>
<tr>
<td>śuddha ri</td>
<td>$\frac{5}{4}\frac{3}{4}$</td>
<td>90</td>
<td>90</td>
<td>$e^b-1^o$</td>
</tr>
</tbody>
</table>

\textsuperscript{25} Compare Manik, o.c., p. 66, fig. 18 and p. 56, fig. 17: Safial-Din’s system, and p 32, the older Arabic fret system of Al-Kindi.

\textsuperscript{26} Compare Ram SM. 3. 18–62.
In this sixteenth century scale the ancient minor whole tones of three śrūtis (sa-ri, ma-cy-pa and pa-dha) replaced by half tones of 114 or 90 cents; the ancient two-śrūti intervals (ri-śu-ga-cy. ma, dha-śu-ni and kai. ni-cy.sa) by half tones of 114 cents, while the ancient one-śrūti intervals (śu. ga-śa. ga, cy. ma-śu. ma, cy. pa-śu. pa, śu. ni-kai. ni and cy. sa-śu. sa) are represented by half tones of 90 cents.

The following table shows how Rāmāmātya fixed the theoretical intervals (L = limma of 90 cents and A = apotome of 114 cents) of his so-called svayambhū ("natural") temperament on the six frets and the four melody strings of his śuddha-mela-vīṇā:

<table>
<thead>
<tr>
<th>fret number</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>fret distance (cents)</td>
<td>90</td>
<td>114</td>
<td>90</td>
<td>90</td>
<td>114</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>anumandra sa string</td>
<td>sa L ri A ga L sa ga A cy. ma-L ma A cy.pa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>anumandra pa string</td>
<td>pa L dha A ni L kai.ni A cy. sa L sa L ri</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mandra sa string</td>
<td>sa L ri A ga L sa ga A cy. ma L ma A cy.pa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mandra ma string</td>
<td>ma A cy.pa L pa L dha A ni L kai.ni A cy.sa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Although the interval ma-cy.pa is theoretically an apotome (A = 114 cents) in Rāmāmātya's svayambhū temperament, the note cyuta pañcama is tuned slightly lower when produced on the vīṇā since it is fixed on the first fret (90 cents from the bridge, meru) of the mandra ma string and on the sixth fret (90 cents from fret number 5) of the anumandra sa and mandra sa strings. Similarly cyuta sa of the mandra ma string is fixed on the sixth fret, although the interval kai.ni-cy.sa is theoretically an apotome (A = 114 cents) in the svayambhū temperament. Rāmāmātya considers it permissible to tune cyuta sa and cyuta ma a little lower, so that these notes coincide with the kākali ni
and the *anta ga* respectively, because the difference is almost negligible (i.e. 114 cents — 90 cents = 24 cents, representing the Pythagorean comma). Ramamatya's statement implies that also *cyuta ma* of the *anumandra* and *mandra sa* strings and *cyuta sa* of the *anumandra pa* string, fixed on the fourth fret, were tuned rather low (i.e. to make an interval of 90 instead of 114 cents with the preceding fret). This leads to the conclusion that the Pythagorean intervals of 114 and 90 cents between the third and fourth and fifth frets must have been interchanged. This method of placing the frets has one disadvantage: the note *suddha ni* of the *mandra ma* string becomes too low, i.e. 24 cents (the Pythagorean comma) lower than its equivalent in the theoretical *svayambhū* temperament.

The fact that Ramamatya does not advise to use the notes *mandra sa* and *mandra ri* on the 5th and 6th frets of the 2nd string respectively, because these notes occur again on the 3rd string, may prove that Ramamatya himself knew the disadvantages of his own system of tuning, although he does not devise a method by which the disharmony of the different intonations of *cyuta pañcama* could be avoided.

Ramamatya's *svayambhū* temperament, as well as its realization on the *vina*, was accepted by the later sixteenth century Karnataka musicologists Puṇḍarikaviṭṭhala (the author of the *Ṣaḍrāgacandrodaya* and Śrīkaṇṭha (the author of the *Rasakaumudi*) who, after migrating to the North, most probably introduced this temperament in Hindustānī music. Somanātha, a South Indian author from Andhara Pradesh, also refers to this temperament in the second chapter of his *Rāgavibodha* (1609), but in the second list of melas at the end of that work he mentions seventeen notes which remind us of the Arabic 17-tone system of Sāfī-al-Dīn († 1294).

Somanātha's 17 tones, however, most probably derive from Puṇḍarikaviṭṭhala's 18 tones. In his treatise Rāgamaṇjari the latter author has apparently tried to re-interpret the ancient śrutis on the basis of Ramamatya's *svayambhū* temperament, with the exception of the first and second śrutis of the intervals *ri* and *dha*, which according to him should not be used in practice. Somanātha has obviously copied this system, except for Puṇḍarikaviṭṭhala's interpretation of Ramamatya's *cyuta*
pañcama as two different intonations (ekagatika and dvitiyagatika ma).
Using the higher intonation of the two Somanātha named this note tivratama ma.

Whereas in South India Rāmāmātya’s svāra nomenclature (i.e. names of the notes) as well as part of his svayambhū temperament has been preserved up to the present day, a new system was developed in the North towards the end of the seventeenth century.

Although we do not know whether Ahobala or Ḥṛdayanārāyaṇa-deva invented the new temperament, and which of these two musicologists was the first to change the names of the notes, the new system is clearly described in Ḥṛdayanārāyaṇadeva’s Ḥṛdayaprakāśa as well as in Ahobala’s Saṅgītapārījata. Both these authors give accurate measurements for the division of the strings in order to determine the position of twelve notes in the saptaka and thus enable us to exact frequency ratios of these notes.

<table>
<thead>
<tr>
<th>notes</th>
<th>ratios</th>
<th>cents</th>
<th>Western equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>śuddha sa</td>
<td>1</td>
<td>0</td>
<td>d</td>
</tr>
<tr>
<td>komala ri</td>
<td>$\frac{27}{25}$</td>
<td>133</td>
<td>eb^<em>^</em>^<em>^</em></td>
</tr>
<tr>
<td>śuddha ri</td>
<td>$\frac{3}{2}$</td>
<td>204</td>
<td>e + 4</td>
</tr>
<tr>
<td>śuddha ga</td>
<td>$\frac{5}{3}$</td>
<td>316</td>
<td>f + 1.8</td>
</tr>
<tr>
<td>tivra(tara)ga</td>
<td>$\frac{6}{5}$ ($\frac{57}{4}$)</td>
<td>404 (408)</td>
<td>f^<em>^</em></td>
</tr>
<tr>
<td>śuddha ma</td>
<td>$\frac{1}{2}$</td>
<td>498</td>
<td>g ^-3</td>
</tr>
<tr>
<td>tivratara ma</td>
<td>$\frac{5}{3}$ ($\frac{53}{27}$)</td>
<td>631 (634)</td>
<td>g^<em>^</em>^*</td>
</tr>
<tr>
<td>śuddha pa</td>
<td>$\frac{3}{2}$</td>
<td>702</td>
<td>a + 8</td>
</tr>
<tr>
<td>komala dha</td>
<td>$\frac{10}{7}$</td>
<td>853</td>
<td>b ^-7</td>
</tr>
<tr>
<td>śuddha dha</td>
<td>$\frac{13}{9}$ ($\frac{87}{60}$)</td>
<td>933 (906)</td>
<td>b^<em>^</em>^*</td>
</tr>
<tr>
<td>śuddha ni</td>
<td>$\frac{1}{2}$</td>
<td>1018</td>
<td>c + 1.8</td>
</tr>
<tr>
<td>tivra(tara) ni</td>
<td>$\frac{3}{2}$ ($\frac{17}{10}$)</td>
<td>1107 (1137)</td>
<td>c^<em>^</em>^*</td>
</tr>
<tr>
<td>śu. sa (tara)</td>
<td>2</td>
<td>1200</td>
<td>d'</td>
</tr>
</tbody>
</table>

The numbers placed in brackets in this table represent Bhatkhande’s interpretation of the relevant Sanskrit texts.

The above-mentioned seventeenth century North Indian notes śuddha ri ($\frac{3}{2}$) and śuddha dha ($\frac{13}{9}$) correspond with the contemporary South Indian notes śuddha ga and śuddha ni respectively. The North Indian komala ri and komala dha are tuned much higher than their South Indian equivalents śuddha ri and dha and approach the ancient

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Indian śruti (tristru) ri and dha of ratio \( \frac{1}{4} = 165 \) cents) and ratio \( \frac{1}{8} \) (= 867 cents) respectively. The North Indian śiva ga and śiva ni differ only slightly in pitch from the theoretically calculated (i.e. calculated according to the svayambha temperament) South Indian cyuta ma and cyuta sa, which however must have been pitched a little lower (24 cents) when played on the vina, since Rāmāmātya states that these notes conicide with antara ga and kākali ni respectively **. The seventeenth century North Indian buddha ga (\( \frac{5}{8} \)) and buddha ni (\( \frac{7}{8} \)) are comparable with the ancient sādhāraṇa ga and kaiśika ni respectively, but are a little (22 cents) higher in pitch then their contemporary South Indian equivalents (i.e. Rāmāmātya’s sādhāraṇa kaiśika ni). The intervals ma (\( \frac{4}{4} \)) and pa \( \frac{4}{4} \), which were most probably also used in the ancient period, are obviously common to both North and South Indian music from the sixteenth century onwards. Both the seventeenth century North Indian śivratama ma (\( \frac{4}{5} \) = 631 cents) and the sixteenth century South Indian cyuta pa (\( \frac{4}{5} \) = 612 cents, on the vina 588 cents) are low interpretations of the ancient three-śruti pañcama (\( = \frac{12}{4} \) = 663 cents).

However it should be borne in mind that all the above-mentioned ratios only represent theoretical intervals. Even if a particular string-division is indicated as given by Ahobala and Ṣrīdayanārāyanadēva, the intervals are not absolutely fixed but are finally determined by the performing musician. As a result of the traditional Indian technique of deflecting (i.e. pulling sidewards) the string even on instruments with fixed frets (like the North Indian būr) and the South Indian vina the pitch of the basic notes used in the various rāgas depends solely on the instrumentalist’s individual interpretation and may even differ in the same raga from one performance to the other. Since the art of improvisation and the performer’s individual interpretation have always been the most important aspects of Indian music, it is unwise to base rigid conclusion on statements found in ancient as well as in modern theoretical treatises on music. Nevertheless modern Indian musical practice does use intervals** from Pythagorean (\( \frac{2}{3} \), \( \frac{5}{4} \), \( \frac{7}{4} \), \( \frac{44}{44} \), \( \frac{32}{33} \).
etc.) and just temperament ($\frac{5}{4}$, $\frac{3}{2}$, $\frac{3}{4}$, $\frac{2}{3}$, $\frac{4}{5}$). Although during later centuries perhaps even since the thirteenth century—the fret of the South Indian viṇā have been fixed,** definite harmonic intervals of simple ratios such as those mentioned by Ramanathan and other musicologists** are scarcely recognizable (by the human ear at least), since the executing artist usually buries the main notes of a melody under a heap of grace notes. (i.e. slides, slurs, shakes, etc.)

Comparing the Indian musical temperaments in different periods, one may arrive at the following theoretical conclusions:

The ancient nomenclature has been preserved in Karnāṭaka musical theory, although the pitch of several of these notes has changed in the course of time. Only the tonic (sa), the fourth (ma) and the fifth (pa) appear to have retained constant values. The ancient harmonic major third (antara ga) and major seventh (kākali ni) are still found in modern Karnāṭaka and Hindustānī music, but these intervals were interpreted in a different way during the sixteenth and seventeenth centuries. Two interpretations, are still common in modern Hindustānī and Karnāṭaka music. The ancient śuddha ri ga dha and ni however changed considerably in course of time. Śuddha ga and ni were lowered almost a semitone, while the śuddha ri and dha were respectively lowered 32 and 53 cents. The ancient cyuta sa (or cyutaśadja ni) and cyuta ma (or cyuta-madhyama ga), referred to by the thirteenth century author Sāṅgadeva, disappeared after the sixteenth century when Ramamātya replaced them by kākali ni and antara ga respectively. Only the seventeenth century North Indian tīvra ni and tīvra ga remind us the ancient cyuta notes, because their pitch is higher than their contemporary and modern Karnāṭaka equivalents kākali ni (= modern Hindustānī śuddha ni) and antara ga (= modern Hindustānī śuddha ga). The ancient triśruti pa though considerably lowered in course of time, is represented in modern Karnāṭaka and Hindustānī music by prati ma and tīvra ma respectively. According to the eighteenth century musicologist Tulajā** the ancient madhyamagrāma pañcama (= triśruti pa or cyutapañcama ma) was commonly known as varalimadhyama, since it was a characteristic note in the rāga varāli.

36. TuliSS. p. 69.
In his article "Muslim Influence on Venkatamakhin" Brahaspati criticizes the Kārṇaṭak seventeenth and eighteenth century theoreticians because they interpreted contemporary music according to some of the ancient principles, and states that they only tried to conceal foreign and especially Arabian influence. But apparently, he did not realize that in musical history, in the East as well as in the West, musicologists have very often looked backwards and founded their opinions on ancient authorities. One should not forget that in older periods of musical history, the authority was considered to be more important than empirical knowledge, and this conception was still alive in the later periods. It is true that this makes a critical study of the Samgīta texts more difficult, but for the older period these theoretical works are our only sources for musical history, except for the pictures provided by sculpture and painting. In the case of a study of the tone systems and musical temperaments the texts themselves still provide interesting material and even such well known texts as the Samgītaratnakara, if carefully read, may throw some new light on this difficult subject.

37. Sangeet Natak 13, p. 7.
SOME ASPECTS OF RAGA
Illustrated talk
Professor V. V. SADAGOPAN

Introduction

Alain Danielou once referred to the "haphazard growth" of musicology in India'. In a sense, we must admit, the observation is true. After discussions with other musicians and scholars—notably Mudikondan Venkatarama Ayyar of the Madras Music Academy, Premlata Sharma of the Benaras Hindu University and Dimitriev Stefenovic of the Musicological Institute, Belgrade (Yugoslavia), we are confirmed that much of what is doled out in the name of musicology (including music history) is ordering the mind farther and farther away from scientific-artistic truths and from the very purpose of music. A sensitive understanding, practice and appreciation of music is, one would agree, the major objective of musicology. But there is too much side-tracking. Irrelevancies and misleading "Grammar and Theory" abound in such vast proportions that sensitive practitioners and listeners turn away at the very mention of the word "Musicology".

At the same time, this has produced a class of "neo-elites" whose minds are (dis)-ordered by rule-of-thumb grammar resulting in a harvest of fire-eating feats in the name of "virtuosity". No wonder, the common man with taste seldom gets an opportunity to listen to music which lifts the mind and melts the hearts. To him, therefore, the very word "classical music" is anathema.

It is not that we have no musicological literature that speaks to purpose. Thank heavens, we have, belonging to a slightly differing tradition of Singaracharya, descriptive and suggestive lakshanas of rāgas in the context of compositions published in notation by K. V. Srinivasa Iyengar. On the purely musicological side, we have a large area of scholarly studies published by V. Raghavan.

My special interest has been to study these in depth and to relate them with observed facts of practical music of two generations that I know of personally. In order to distinguish this sphere of studies from the rest of musicology I denote it by the term "MUSICONOMY".

The difference may be gauged on a comparison between astrology and astronomy. The former is mixed up with much superstition and inexactitude, at any rate nowadays. Astronomy is more precise and to purpose. However, Logos and Nomos are cognate words indicating reason, law, word. Reason alone cannot explain the facts of music, "classical", "popular" or "folk". Reason, reasonableness rather, will provide the infra-structure of Musiconomy. It will help the student to develop a well-ordered mind for smooth functioning on the terra firma of purposeful lakshana. But it will also employ other means such as the suggestive language of poetry and equip the students with wings of imagination and aesthetic feeling. The emblem that I now present before you—laughing child on flying chariot—embodies this approach of Musiconomy.

Laughing child: (a) Laughter is indicative of a relaxed state of mind drawing sustenance from Ātmānanda. (b) In addition, Childhood denotes innocence and purity. Cf. the wisdom of the Vedas:

पाण्डित्यं निषिद्ध वाक्येन तिष्ठातेत्

Flying Chariot denotes (a) Movement, on smooth wheels on the terra firma of "rules and regulations", of grammar and theory, and (b) Soaring flights on wings of imagination and feeling.

Rāga

We now proceed to study some of the essential aspects of Rāga from the angle of Musiconomy.

Rāga arises out of Svaras. Regarding svaras, a basic mistake was made in the acceptance of the translation of the term svara as "Note". The term "note" in Western musical terminology denotes a tone of fixed pitch value; it is what is noted down; it has duration. It is not easy for anyone who has grown in this kind of consciousness, Western or Indian, not to think of svaras as "impure notes". "Tone" is a better translation, provided we make it clear that what is meant is not only the tonal position but also the tonal interval, including Srutis which make up the tone. Why not we use svara as such? The sensitive Indian musician and listener are both conscious of the fact that Svara derives from a combination of sva-and Rañj|Rañg means a beautiful and colourful tone and that it admits, as in the beauties of natural

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2. The subject of sruti has been the hunting ground of scholars of a kind. It may be noted that B. C. Deva and I, through our independent studies, have observed that srutis are 'indicators' in a 'continuum' (Journal of the Madras Music Academy, Vol. XXXVI.)
phenomena around us, of a variety of intermediate positions (srutis), glides (jāru/meeend), graces (anusvaralalāṅkāra), portemento (gamaka), dynamics (svara-kāku) and so on. It is these that play a major role in individual style.

We may now proceed to a consideration of how svara combinations lead us gradually from recitation to Rāga.

Illustration:

<table>
<thead>
<tr>
<th>Ārcika</th>
<th>employing 1 svara (with latitude of accent suggesting contiguous svaras)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gāthika</td>
<td>-do- 2 svaras -do-</td>
</tr>
<tr>
<td>Sāniki</td>
<td>-do- 3 svaras -do-</td>
</tr>
<tr>
<td>Svarāntara</td>
<td>-do- 4 svaras -do-</td>
</tr>
<tr>
<td>The beginnings of Rāga</td>
<td>-do- 5 svaras -do-</td>
</tr>
</tbody>
</table>

It will be seen that the svaras S R G M P alone do not yield Rāga in the sense of distinctive colourful configuration of melody. They have to be dispersed in the two tetrachords and operated on according to principles of samvāda, vivāda and anuvāda.

The first thing to do, therefore, in Rāga, for a distinctive Rūpa is to find out the vādi-svara(s). The Samvādi(s) will be in the other tetrachord. To the extent that there is richness of Vādi-samvādi relationship, there is Rāga in its essential sense of raṅga and raṅjana, and it also gives rise to identifiable Rūpa. Vivādis have to be found by sensitive experiment and experience and not by blind application of the rule which says that they are either 2 or 20 srutis apart. Then come the remaining svaras—anuvādis—and it is largely on these that Rāga progresses. Let us see an example:

Raga Pantuvarali

Much of present day expositions of Pantuvarali raga ("Rāmakri" was the earlier name for it) even when it pleases, does so not because there is the inherent beauty of svara-combinations pertaining to the rāga but because of the tone quality of the performed music. Otherwise these would be sterile exercises in the scale known as Kāmavardhāni. In other words, Rāga Rūpa is missing. If we examine the Pantuvarāli rāga we would find this:

<table>
<thead>
<tr>
<th>Vādi:</th>
<th>Dhaivata</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samvādi</td>
<td>Rishaba</td>
</tr>
<tr>
<td>Vivādis</td>
<td>Nishāda and its counterpart Gāndhāra.</td>
</tr>
</tbody>
</table>
In satisfactory renderings of this raga we may notice that the *vivādi*-svaras are handled delicately by employing one of the following principles:

*Alpatva*
*Kampana*
*Svara-kāku* of diminishing volume.

*Illustration* - *Kalyāṇi*

*Śamvāda* and *Anuvāda* apply to *svāra*-phrases (*sthāyas*) equally as to *svaras*: *Illustration* : Devaganadhari, Sourāśṭram.

The foregoing has been mere suggestions for the directions in which to look for *Rāga-rūpa*. *Rāga bhava* will be taken up later. I shall presently perform some *rāgas* in a way which will illustrate the ideas mentioned herein before. I should like to point out that not all the world’s *lakṣaṇa-jñāna* will avail, unless the musician assimilates *lakṣaṇa* in his consciousness and contemplates on the *Rāga-rūpa* in relaxation born of *Ānanda*. He must contemplate on the *vādi-svara* (also known as *jīva svāra*). And he must contemplate on the image of the *rāga* in its essential aspects.

On an analogy with the well-known imagery of *Rāma Paṭṭā-bhisheka* here is a *śloka*. It says: "With *samvādi* on the left, the inspiring Guru in front, the body of good Śāstras at the back, veena and mridangam at the sides; and in the four corners—the good-voiced one, the well ornamented one, the *braddha*-born prince and the subtle knower—thus sits in the centre, the beautiful configuration of *Rāga* born of *Nāda*, illumined by special *Bhāva*.

बामः बादिसुता पुरौ गुस्तवः पश्चात्तुल्लासः स्वाक्षः
सदन्त्री सुन्दरः परिशिलणः वायविदिकोणेन च।
सुभीतः विवृत्तिः सुवृत्तिः अस्ताः स्वर्णः समविचुः
सच्च भावविशेषदीपस्मुः रागः भजे नामजाम्।
The temple of Chennakesava at Belur which forms the background of the Antahpura Geete was built by the King Vishnuvardhana of Hoysala dynasty in the year 1117 A.D. As all students of history are aware, this was an important dynasty which ruled a major part of Karnataka between the 11th and 14th centuries. The dynasty has left a legacy of richly artistic temples famed for excellent workmanship. Vishnuvardhana was one of the greatest rulers of this dynasty and his ideals are attested in one of the verses in the temple which was sung now.

Yam Saivas samupasate Siva iti brahmeti vedantino
Bauddha Buddha iti pramana - patavah Karteti naiyayikah
Arhannityapi Jainasasanaratah Karmeti mimamsakah
So'yam vo vidadhatu vanchitaphalam Sri Kesavas sarvada.

'Whom the Saivites adore as Siva and the Vedantins as Brahman, the Buddhists as Buddha and the Naiyayikas experts in proofs, Kartä (creator)
the Jains as Arhan and as Karma by the Poorvamimamsakas
let that all-pervarding Kesava grant always our desires' says this verse.

And there was no disparity between what he professed and practised. For instance Vishnuvardhana was a Jain before he embraced Vaishnavism under the influence of Sri Ramanujacharya, while his wife Santala Devi, hailed as one of the greatest beauties of her times and well-versed in music and dance, was a Jain but built the Kappe Chennigaraya temple along with Jain Basatis, all of which she munificently endowed. Her father, the General Marasingha Dannayaka was a Jain but her mother Machikabbe was a Saivite.

Thus we could see that during the reign of Vishnuvardhana and other Hoysala kings, there was tolerance of all religious faiths and beliefs and the State respected and afforded protection to all of them. During Vishnuvardhana’s time secularism was not a fashion but was really translated into action by the State.
After embracing Vaishnavism Vithuvarvarana got first temples dedicated to various forms of Narayana—Cheluvarayaraya, Lakshmi Narayana, Vira Narayana, Kirti Narayana and Vijaya Narayana. The Chennakesava temple is the fifth, that is the Vijaya Narayana temple.

Unlike the temples in other parts of the south, the Hoysala temples are not massive structures. Mostly they are built upon a star-shaped platform and flat structures. But the deficiency in mass is compensated by the excellent sculpture. From the bottom to the top, both inside and outside, entire walls of the temples are profusely ornamented with delicately carved friezes and sculptures depicting processions, episodes from the epics and mythology, icons of various gods and goddesses, all divided by filigree-like delicate scroll work and gracefully dancing celestial maidens.

Among the hundreds left by the Hoysalas three temples stand out by the superiority of their artistry and craftsmanship, that is, Belur, Halebid and Somanathapur. Of the three only Belur may be considered as a living specimen. The other two are mutilated monuments.

The presiding deity of the Belur temple is Sri Chenna-Kesava, a form of Vishnu and his consort is Soumyanayaki. There is also another temple dedicated to Kappe Chennigarayaswamy built by Queen Shantala Devi. Like all the Hoysala temples this one too is built on a star-shaped platform with 32 sides. The bottom of the temple is covered by frieze of elephants in motion, next layers with mythical Yakshas, Simhalalatas etc. Toping them are the scenes from the epics and above them are the figures of various gods and goddesses of Hindu pantheon. It is estimated that including the miniature figures there are over 10,000 sculptures of the gods covering these walls. Above them is a series of dancing apsarases and above them come the caves supported by the capitals. Gracing the tops of these capitals are the celebrated Madanika sculptures that form the subject of the present programme.

Originally they were 40 and now two are missing. Fortunately they have not suffered the fate of similar Madanikas in the Halebid, broken and disfigured, mute reminders of the vandalism and the fury of the iconoclasm of the troops of Allauddin Khilji commanded by Malik Kafoor.

The creators of these Madanika sculptures have called them Salabhanjika, Puthali etc. and have certainly captured the female beauty in all its forms from the sublime to the ridiculous. These inmates of the harem of Chennakesava are portrayed in the acts of dressing, dancing,
playing instruments and even funny situations. The poise, grace, over-
all charm and the perfection in their execution have been spoken and
written far and wide. They also suggest that most of these figures may
have been reproduction from life. Especially the name of Shantala Devi
occurs in this context. Hailed as ‘Vichitranartana pravartana patri
sikhamani ‘angita Sangata Sarasvati; Bharatagama bhavananihita
mahaniyamati pradipe’ and so on, Queen Shantala Devi was deemed as
a peerless dancer of her times and it is also stated that she used to
dance before the sanctum of Chennakesava on all important festivals.
And these sculptors of old captured many of her dancing postures and
translated them into these exquisite sculptures. It is noteworthy that
some of these sculptures also bear the signatures of the sculptors who
conceived and executed these marvellous specimens of plastic art.

Now coming to the feature proper. Its title is Antahpura Geete.
The composer is Dr. D. V. Gundappa of Bangalore. This octogenerian
is a much revered figure in the literary, cultural, political, and other
spheres of Karnataka. His literary output covers such wide ranging
variety from the Bhagvadgeeta to the quatrains of Omar Khayam, life
of Vidyaranya to the biographies of statesmen, artistes, men of letters
etc., children’s tales to the Soundaryamimamsa etc. He has scarcely
left any subject untouched. He was a friend, confidant of statesmen
like Sir M. Visvesvaraiyya, Rt. Hon’ble V.S. Srinivasa Sastri, Sir Mirza
Ismail and others. The Antahpura Geete is a series of songs composed
by him in praise of the beauty and grace of the Madanika figures grac­
ing the Belur temple.

The title ‘Antahpura’ may be intriguing, because it means a seraglio
or harem. How does a seraglio come into the sacred precincts of
Chennakesava temple? It may be deemed that the lord of this Antah­
pura is Chennakesava himself and these Madanikas are the inmates of
this harem waiting upon and serving the lord.

D. V. G. as an aesthete of the older school has delved deep into
the matter and has set forth both the over-all and underlying charm of
these sculptures in songs composed in Kannada but heavily seasoned
with Sanskrit. As one who had heard and even associated himself
with many musicians who were the leading lights of Karnataka music
during the early decades of this century, his taste, we need not emphasise,
is for the time-honoured and authentic stuff of Karnataka tradi­
tion. A glance at the ragas chosen is itself an index of this—Arabhi,
Ananda-bhairavi, Kedara, Kedaragaula, Kambhoji, Yerukala Kam-
bhoji, Huseni, Bhairavi, Kalyani, Goulipantu, Ritigaula, Nata, Neelambari, Natakuranji and so on.

The Antahpura Geetes commence with verses about the Soundarya Tattva, and also verses selected from the inscriptions of the temple itself as Nandi. Then a song in praise of Chennakesava; one in praise of Tattvasoundarya; and again of Chennakesava, complimenting him for having so many beautiful and accomplished maidens at this service. Then the songs that form the core start with the Mukura Mugdhe (lady with the mirror) and is followed by songs in praise of other Madanikas like Sukabhashinl; Vasanti; Kiravani; Kapikupite; Lilakirati, Manjukabari; Murajamode; Bhairavi; Tandaveswari; Muralidhare; Ganajeevane; Jaganmohini; Vinapani; Kutilakuntale; Rasikasabari; Virayoshite; Pumvidambini; Natyanipune; Ragayogi; Svaragahaste; Kritakasooli; Jayanishadi; Natyasundari; Bhasmamohini; Neelambare; Havasundari; Sakunasarade; Vitudhare; Nagavainike; Bhooshanapriye; Kelinirate; Koravanji; Keesarushte; Padanguiyey; Vikatanartini; Gandharvadevi; Lasotsave; Sukasakhi; Ullasini; Bhavadevi; Venissmhare and so on, with songs in praise of Manmatha and Mangalam to Chennakesava and Soumyanayaki. The detailed notes about each song and its subject in the book is of great help to understand and appreciate the subtleties in the sculpture and the ideas behind.

Now the title of the first song is Manju Kabari—that is one with lush and beautiful tresses. This crowning glory of the woman has fascinated man from time immemorial. He is never tired of glorifying its charm in prose, verse, song and even stone using many evocative similes. And we must say that the female is no less conscious of its charm and also its power and spends good time in enhancing its charm by grooming and shaping the hair so as to captivate the heart of man.

The Madanika of this song is busy with this time-honoured function. She is caressing and combing her long-flowing tresses, while the attendents are waiting with additional ammunition like scented oils, perfume, flowers and so on to aid her in her conquest of her lover’s heart.

‘Has it become beautiful - perhaps to your satisfaction - oh smiling nymph’ asks the composer.
This crowning glory reminding a Rajamukuta,
Wafting the fragrance of various flowers,
Scented oils prepared by the Agaru of Kashmir and other ingredients
By these and the sinuous braid suggesting a Nagapasa, a black serpent-like rope - and the beautiful coiffure you are capturing the heart of innocent Lord Chennakesava.

The title of the second song is—Mugdha Mukure—Maiden with the Mirror.

This is one of the most beautiful sculptures in the temple. After the grooming of the hair, the lady is in the next stage of the toilette. The whole luscious figure exudes the consciousness of her charm and its power to fascinate man.

‘Are you in love with yourself, oh maiden of the Mirror?’ asks the composer.

Are you charmed by your own beauty?

Your fingers are held ready to decorate with kumkum a beautiful and broad forehead reminding a spread curtain. But why are you still? Have you forgotten yourself admiring your own charm?

Standing in that tribhangi posture what do you see in the Mirror? Do not tarry, my lass, because you may miss Lord Chennakesava. Where is he?

The title of the next song is—Jaganmohini.

This, dancing figure is said to depict Vishnu in the role of Mohini who deceived the Asuras and especially Bhasmasura. According to the sthalapurana of Belur it was the place of this event.

The theme of the song too stresses this episode from the Puranas. Apart from the grace and poise of the figure and the precision of the sculpture there is also another interesting feature testifying to the excellent craftsmanship. In the midst of the intertwining creepers of the Torana, is carved a fruit, a fly has settled on it to take a bite, while close behind is the sinuous form of a lizard ready to swoop and swallow it.

The next one is Natya Sundari—as every one could make out. After grooming her hair and finishing her toilette the lady must be thinking of the pleasant time she will have with Lord Chennakesava and dancing with ecstasy.
This is one of the Madanika figures which bear the signature of the sculptor. He is Chavana, son of Dasoja.

Oh you are a beauty, certainly a beauty, exclaims the composer.
You are certainly a messenger of Manmatha.
What are these vinyasas— or the variations of gestures of hand and movements of feet
The smile on your lips that has lit up the face.
The flashing and piercing looks expressing an inner feeling and joy,
Whom are you remembering, dear, while singing and
To which souls are you bringing peace by the song?
You are singing and dancing to the waves of Tala and Tune and dancing with a radiant body like the dawn of the Spring—Vasanta ritu—you, a darling of Chennakesava.
Oh you are a beauty...certainly a beauty!

In the next two songs we switch over from the sublime to the ridiculous. As I have already stated the creators of these Madanikas captured female charm in all its attitudes and situations. The next two portray funny situations—funny for the onlookers and not for the person involved.

The title of the first song is Keesa-rushte—that is, one angry with the Ape. Perhaps it was the fashion during those times for ladies to keep Apes as pets for amusement—of course we may add, up to the time of their marriage. These animals being mischievous and unpredictable must have landed their mistress in trouble often. And this is one such situation.

The Ape is playfully dragging the saree of its mistress, who is furiously striking at it with a branch. But the composer has taken a different look of the situation.

Why are you angry, young lady? the beautiful-faced one!
What has happened? After all it is the playful mood of your pet. Should you rouse yourself for this?

And by this innocent action the Ape has exposed the radiant beauty and charm of your figure for the whole world to admire.

Are you not aware of this and appreciate this? Lord Chennakesava certainly approves of this.
Forget your anger; wipe off those angry looks and throw away that stick.

The title of the next song is Neelambare—or Dark-robed Damsel.

Here we find the lady in another funny situation, but mixed with fright.

A Scorpion has lodged itself in the robes of the lady who, becoming aware of it, has done what amounted to a striptease act of ancient times. Instead of running away the Scorpion is obstinately staying and staring at the frightened maiden.

Oh Neelambare—why this fear and confusion? asks the composer.

Why this confusion? Who told the Scorpion that your dark apparel would make an ideal home?

You were certainly right in choosing a dark-hued silk cloth to set off the charm of your golden-hued figure.

But what is this calamity? Only the consort of Soumyanayaki should save you.

But I also wonder whether this is also a trick of Lord Chennakesava who made you suddenly disrobe by invoking the Vrischika mantra and now enjoying the sight?

The title of the next song is Suka-sakhi—Lady with the Parrot.

While there may be instances of ladies having Apes and rarer instances of having even more dangerous animals as pets, one bird seems to have had a durable fascination for them. This is the Parrot. The classical literature in all our languages abounds with references to this bird serving not only as a pet but also a confidante. Ladies seemed to have derived greatest happiness in talking to, or teaching the bird to talk and listening to its coddling words. Some of the demure ladies even confided their thoughts to these confidants.

The Madanika here is also playing with her pet Parrot whose close intimacy with her mistress is attested by holding the necklace in the beak. Even some of the ornaments like the bracelets, rings etc. in the original sculpture are movable though they cannot be removed, testifying to the excellence of the craftsmanship of the Sculptor. The creator of this beautiful sculpture is Dasoja of Kuntaladesa.

Where did you bring this Parrot to play with darling? exclaims the composer.
Were you deceived by its talk?
Were you unhappy because there was none to admire your charm?

Or were you sad that there was none to hear you speak?
But can a bird that only repeats your word understand your thoughts and feelings?

Remember Lord Chennakesava, the creator of all the beauty in the universe whether in the speech of the Suka or Parrot or the music of Pika or Cuckoo, is watching you.

Now we have come to the end of this feature, which will close with a Mangalam in praise of Soumyanayaki, the consort of Lord Chennakesava. Before the Mangalam I would like to express my heartfelt thanks to the Music Academy, Dr. Raghavan, the Bangalore University for permitting their music M. A. students to participate in the programme, Vidvan Veena Doraiswami Iyengar for Music direction, the Dept. of Information, Karnataka Govt., and the Karnataka State S. N. Academy for the help they had given to the presentation of the illustrated programme.
THE KURUM KÚZHÁL OF KÉRALA*

L. S. RAJAGOPALAN

The Kurum-Kuzhal, also called Kuzhal, is one of the musical instruments traditionally used in temple-worship in Kerala. It belongs to the class of “Sushira Vadyas” or Wind instruments. It is a double reeded pipe—a diminutive Nagaswaram—and is almost the same as the Shanai of the North and the Mukha-Veena of the South.

The instrument may be 12 to 18 inches long. It consists of a conical wooden pipe (called Olavu) with a metal bell bottom attachment called Kizh Anasu. At the top end the reed (Narukku) is fixed to a small metal top attachment called Mel-Anasu. In some instruments there will not be a top attachment since that portion will also be turned out of the same piece of wood as the tube. The bottom attachment may also be of wood. The reed is made by a detailed process from a reed plant growing wild in marshy places. This is fixed to a small tube called Nelli which is inserted at the top of the pipe to fit properly. Formerly a circular metal or horn or mother of pearl disc called Kavludikki used to be fixed at the end of the reed. This disc is rarely seen nowadays. This disc is said to help—quite correctly I should think—even toothless artists play properly. Spare reeds, a horn or ivory bodekin (to clear the reeds) are hung from a string connecting the top and bottom attachments. It has seven holes in one line and there is one more hole at the top on the lower side which is closed by the left thumb while playing.

The word Kuzhal (Kulal) means a tube both in Malayalam and Tamil. In musical parlance Kuzhal means a musical instrument. To differentiate instruments, names like Oda Kuzhal (flute), Kurum Kuzhal (short pipe) etc. are given. Kuzhal is mentioned even in one of the earliest Malayalam works, the Ramakathapattu of the 14th century.

Kunchan Nambiar in his Tullal Works mentions the name Kurum Kuzhal itself along with other instruments including Nagaswaram *.

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* Demonstrations: Kuzhal-Manathanath Narayana Nair of Tiruvilvamala and Chenda-Annamananda Paramesvara Marar.

2. The Tullal work of Kunchan Nambiar, Pradosha Mahatmyam

It is to be noted that both Kurum Kuzhal and Nagaswaram are mentioned separately.
The expression “Kottum Kuzhalum” (கொட்டும் குழகலும்) and “Kombum Kuzhalum” (கொம்பும் குழகலும்) are often seen in literature as well as spoken language. Kuzhal is also mentioned in Silappatikaram, the famous Tamil epic.

This type of double reeded pipes is found all over the world, but, when a Keralite considers the process of its development, he gets nostalgic memories of the toy “peepee” made from coconut palm leaf by children. An one inch bit of coconut palm leaf is folded length-wise. The two halves are manipulated to take a slightly curved shape so that the ends would be elliptical. This would serve as a toy reed and when long bits of palm-leaf are wound round this, to make a conical tube, the child gets a good toy whistle. This toy is further developed by fixing the leaf reed to the tubular leaf stem of a papaya plant. Some holes are also made on the tubular stem to produce different notes!

We see the next development in the Kuzhal used by the Paraya community in Kerala. The reed is made of four bits of Palm-leaf (Palmyrah). In the instruments normally available in Trichur District the stem is a conical tube made of any jungle wood and is about 6” long and 1” diameter at the bottom. A thin bell-metal bell attached to this is about 4” long and has a diameter of 4½” at the end. The bottom-most hole is 2” from the end of the wooden tube. There are 4 more holes and the distance between each is being gradually reduced. There is a coconut shell disc lip-guard between the top hole and the reed called Kavilaati. The bell is called Kuzhal Talam. There is no top attachment but the reed is fixed to small metal tube (Nelli) and fixed to the top with strings in a crude way.

They play this pipe for their social functions like the attainment of puberty of girls, death ceremonies, for festivals like buffalo race, “Dance with a Headgear” (Mudiyattam), the Oracle (Velichapad), dance in Devi Temples etc. They have some songs which they sing in a peculiar mode appropriate to the occasion and the notes produced in their Kuzhal correspond to these chants. A trained ear can easily distinguish the different modes of these chants. The following svaras are heard: Sa Ga Ma Pa Ga Ma Pa Dha Pa Ma Pa Ga. While they

In his Sabha Pravesa Kunchan Nambiar says:

He mentions both Kurum Kuzhal and Mukha-Veena.

3. The Parayas are traditional basket-makers and also suppliers of raw hide from dead animals. They usually supply the skins required for drum etc.
produce only some 3 or 4 notes on their Kuzhal it has a weird, eerie or haunting effect, especially when one hears it at night. The 5 holes in this primitive instrument remind one of the pentatonic scale in the development of music.

There is another folk instrument known as Eazhava Vadyam which is seen in the Tenmalappuram area of Palghat District, where there is a good deal of Tamilian influence. As the name suggests the instrument is played by the Eazhava community and it is used for some social functions and for rituals and festivals in Kali Temples. A normal instrument has a conical wooden tube about 13 inches long, with bottom diameter about \( \frac{3}{4} \) inch. The bell metal bottom attachment is called Kalam (corruption for Kahalam), which is about 4" long with its bottom diameter also about 4 inches. The top metal attachment is called Melani and is about 2\( \frac{1}{2} \) inches long. There are seven playing holes plus four more vent holes at the bottom. Mandara Wood (Bauhinia Purpures) is claimed to be the best. Black wood and Palmyrah wood are also seen. The reed used to be made of palm leaf but now only Nagaswaram reeds are used. The tube of a Timiri Nagaswaram is sometimes used now since the demand for a new instrument is almost nil and no one seems to know how to make it. Their practice lessons are called Charali but they do not identify the svaras as SA RI GA MA etc. The students learn from observation of the demonstration of the Guru. After learning the Charali in which there are some 12 lessons they learn to play some pieces which they call Chindu. Normally half tones are not produced, but of late they have started rendering film songs. The drum accompaniment is called Thavil (which is a bit different from the normal thavil of Tamil Nadu). They do not use Ottu or Sruti. A team consists of 2 or 3 pipers, one drummer and one Elathalam player.

The Kurum Kuzhal is normally played by the Nair community in Kerala. Some families have been pipers for generations at some of the temples and many of them have the honorific title of Panicker - which is normally the equivalent of an Army Sergeant or drill master. Some references are seen about the use of the Kuzhal during the marching of the Army. The fact that the Nair community which is noted for its military traditions is playing it and that the players are called Panicker goes to show its martial tradition.

In Kerala there are a few special castes known as Ambalavasis or temple servants, like the Marar, the Pisharoti, Warrier etc. The Marars are the traditional drummers and musicians in the temple and for some
of the most important rituals they play the instruments like Sankhu, Chengila, Paani Maram, Edakka, Chenda and Thimila. There is no place for instruments like Kuzhal or Kombu during these rituals like Sri Bhuta Bali etc. As such one is led to be conclusion that the Kuzhal and Kombu were in fact “foreign” instruments which later got absorbed into the temple service in Kerala. The Kuzhal is used now-in some of the temples-for Palli Unarthal, for Seva three times a day, for Seeveli or circumambulation with the Utsava Vigraha (called Thedambu), for Chenda Melam during elephant procession, during festivals and also for Kootiyattam—the traditional Sanskrit Stage of Kerala.

An instrument called Madhukari is described in the Sangita Ratnakara of Sarngadeva. In the 6th chapter (chapter on Musical Instruments), Verses 787–793

Madhukari

मधुकरी उक्षणयः
मधुकरी दारविव बा खात काहलाकःतिघारिणी।
अश्चिन्त्यकुला च दैव्येऽमपुर्वी गुर्भा।॥
मधुकरन्त्रेः तु तु ध्वनिः सापुर्वीजजसभब्यं।
मधुकरादुद्धरुलानि त्वक्स्ता चत्वारि वंशवद्व।
विघाय सा रन्ध्राणि कुर्बिन्त विवरान्तरस।॥
तेषां च मधुकराद्वार मधुचेत्योभासंस्कितं।
मधुरशास्त्ररिद्वै तनमधुकरन्त्रे तु ताङ्रे।॥
निघात्वा यवश्चुला नालिका चतुर्वश्च।
तदृशं चक्किका खाय्या दन्तजा हुक्किजाख्या।॥
रन्ध्रापश्चे काश्याची यद्वा देववन्तोहुक्कामृ।
हुक्किकां किंचिदुद्विद्रमाल्टीकलिकाकृतिम्॥
मदुत्तं कश्यास्केत खिप्ता मधुकरीं तत।
वंशानं बादेष्टं रन्ध्रं पिद्यतात्यथस्तन्तमृ।
वामाहुकुताप्रभागेन्तुर्कं निर्यश्चुक्क्वरिणा।॥

4. Madhukari derives its name from the similarity of its sound to that of the buzzing of the honey-sucking Black Beatle.
This may be translated as follows:

A good Madhukari is 18 'angulas' long (one angula is a little more than one inch) and may be made of horn or wood and is shaped like Kāhalā (conical tube). The opening at the blowing end is the size of Tuvar (Dal) seed. Four inches off the mouth, 7 holes are to be made as in flute and another hole is made on the lower side between the mouth and the first hole. For getting a sweet sound a 4-inch copper tube of the diameter of a barley seed is fixed to the mouth and on top of that a circular disc of ivory or mother of pearl is to be fixed. In the hole of the tube a reed having the shape of a partially opened Jasmine bud made from Deva Nāla (a reed plant) and made soft by cooking in milk is to be fixed. The Madhukari is to be played like a Vamsa (flute). The hole in the lower side is to be closed by the left thumb.¹

When one compares the specifications given for Madhukari with that of the Kurum Kuzhal we see they are almost identical.

The instrument used to be made in Kerala in several places like Trippunithura near Cochin and Panamana Village in Palghat District, Tiruvilwamala in Trichur Dist. etc. Due to decline in temple finances, the temple arts also declined and the demand for the instrument became negligible. Hence it is no longer made in Kerala. It is usually obtained from manufacturers of Nagaswaram in Tamil Nadu, from places like Narasingampettai in Tanjore District. Old broken Nagaswarams are also cut to make Kurum Kuzhal now.

Training

Traditionally the young boy goes to help his relatives who play in the temple. He keeps the cymbals for Talam. Then he starts playing the Sruti (Ottu) and learns to breathe and blow at the same time. This is called Swasam Marikkuka. For this a bamboo tube is taken and blowing is practised on it.² Saptasvarams are learnt-first vocally, then on the instrument. Teaching goes on as in the case of traditional Carnatic Music, with saptasvaram, Varisai, Alankaram, Gitam, Var-

¹ When the hole on the lower side is to be closed by the left thumb the method of holding is also specified automatically. This is how it is done in the case of Kurum Kuzhal also.

² When I asked one of the old artists how this breathing and blowing at the same time is learnt, he gave the naive reply that when a boy is afraid of the slaps he will get from the master, he will learn in double quick time.
nam and Kirtanam. Then the student graduates to the playing of Ragas and Parru (परु). Parru is similar to the rendering of a Pallavi. It is described later.

With the decline in the patronage for the temple arts the income of the artists also went down very much; so much so, all Kuzhal artists have taken to the playing of Nagaswaram, since it is in greater demand, especially for marriages etc. They have neglected the Kuzhal and this has led to a great deterioration in the standard of playing, and one can rarely come across a Kurum-Kuzhal artist who can play it really well.

The holes in the Kurum Kuzhal are made to correspond to the Harikambhoji scale. Sharper or flatter notes are rendered not only by opening or closing the holes partially but also by the adjustment of the reed in the lips, pulling it out or pushing it inside the mouth and thus effectively altering the length of the air column in the tube. The last hole (in the bottom end) is taken as the shadja, the solitary hole in the lower side closed by the thumb is the nishada and the first hole (at the top end) is the upper shadja. So the player is handicapped when he has to play the notes below the basic shadja. By closing the last hole near the bell bottom, with the little finger he can get Nishada and by pulling the reed out he can produce Dhaivata and even Panchama.

We may now compare the Kurum-Kuzhal with other similar instruments. As already mentioned this type of wind instrument is found in many places. We considered earlier the details of Madhukari as given in the Sangita Ratnakara. This name exists in its Prakrit or slang form in the Mohuri of Orissa. It is used in temple rituals and in folk dances in Orissa. This name is again further corrupted in the Mori of Mysore.

The Nagaswaram is a development of Madhukari. The name Nagaswaram is not mentioned in literature before the 14th century. There is no hole in the Nagaswaram in the lower side to be closed by the thumb. There are also 5 holes at the bottom in Nagaswaram which are for the control of air exit. The shadja is kept on the third hole from the top and this enables the player to render the lower notes up to Gandharam even. So, what is shadja in the Nagaswaram will be Panchama in Kurum-Kuzhal. As the length of the Nagaswaram is much greater, the pitch is lower.
The Shanai is almost like the Kurum-Kuzhal in size and appearance, but it does not have a thumb hole on the lower side.

Mukha Veena—This instrument was once popular in Tamil Nadu and it is still in use in some temples. It used to be part of the Bharata Natyam orchestra (Chinna Melam). In the description of this instrument got from one source the size of a normal instrument is given as 11 inches. It has 8 holes but no 'thumb' hole on the lower side. The last but one hole is kept as the Shadja. But, in the description got from another source it is mentioned that in olden days Mukha Veena used to be about 14 inches long and that it had seven holes plus a 'thumb' hole in the lower side and the lowest hole is taken as the Shadja.

From these we can conclude that the older Mukha veena is identical with the Kurum Kuzhal. Mukha-Veena is mentioned in Malayalam literature also and it is probably in areas like Trivandrum where Tamil influence is more, that the instrument was known by both the names—Mukha Veena and Kurum Kuzhal. Traditionally the wood to be used for the tube is Karungali (Sanskrit Khadira, Acacia Sundra, Tamil 'கருங்கலி'). Ebony and Dark Rose-wood were also used.

7. In some books it is seen that Shanai was introduced into India from Persia and that Nai is the name of a similar instrument in Egypt. In view of the description of Madhukari in Sangita Ratnakara it would be clear that such instruments already existed in India and probably only the name Shanai was "imported" from Persia.

8. The description was obtained due to the courtesy of Sri. T. S. Parthasarathy who inspected the Mukha-Veena available at the A. I. R. studios at Madras.

9. This description was obtained from S. S. Rangappa, Mukhaveena Vidwan of Coimbatore through the courtesy of Tiruchy Sundaram. Sri Rangappa explains that the instrument he now uses is a modified one. The tube is made of bamboo and not wood and this gives a different timbre to the sound. He has also provided extra holes to control the exit of air.

10. Khadira wood is also recommended for other musical instruments, like the Maddala or Mrdanga.

कह्दी: खादिर: श्रेणी ही: स्वादन्यदारूजः; |

(details of Maddala from Sangita Damodara)

It is also interesting to note that even in the Vedas Khadira wood is specified for making sacrificial implements.

बैलो वा खादिरो वा पालातो वा अन्येषां यहकु त्तूम्य यूपं महति |
The reed used to be made from a plant known as Ama (அம்) growing in marshy places. This Ama\(^{11}\) (called Sara in Sanskrit) is also used for some Vedic sacrificial purposes in Kerala. The reed is collected during the summer before the advent of the rains. It is dried in the shade and kept aside for a year. It is then cooked by inserting it in par-boiling paddy. It is again dried and then it is cooked with some meat. It is then washed and dried. It is finally boiled with milk and washed and dried.\(^1\) Bits are cut to size and cylindrical piece of wood is inserted inside and rubbed with a strong string or a piece of gut. It is then put in a press to give it the proper shape. Nowadays no one attempts to make it in Kerala. They get it from manufacturers in Tamil Nadu. However the proper size required for Kurum Kuzhal is smaller than that required for the Nagaswaram and what they get in Tamil Nadu is the one normally required for Nagaswaram. With the ill-fitting reed the quality of the performance declines.

All instruments made from the cut tubes of old Nagaswarams do necessarily have the top and also the bottom attachments. These are made of good bell metal. The artists always keep these metal attachments well polished and they will be glittering in the sun during elephant processions. Formerly the bell-shaped attachment used to be plain in shape but now the shape is more artistic with ridges and rings around it.

The Use of Kurum-Kuzhal in Temple service in Kerala

1. It is used for Palli Unarthal, early morning between 3 and 5 a.m. It is also used for ‘seva’ morning, noon, evening and night, for Deeparadhana etc. Though the instrument is mostly replaced by Nagaswaram it can still be seen in some of the temples. The following Ragas are normally played according to the time of the day.

<table>
<thead>
<tr>
<th>Time</th>
<th>Ragas</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 to 5 a.m.</td>
<td>Bhoopalam</td>
</tr>
<tr>
<td>6 a.m.</td>
<td>Desakshi and Bilahari</td>
</tr>
<tr>
<td>10 a.m.</td>
<td>Saveri, Dhanyasi, Bhairavi</td>
</tr>
</tbody>
</table>

11. Ama is called Sara (शर) in Sanskrit. The name Saravanodbhava for Lord Subrahmanya is because he was born in a forest of Sara, reeds.

12. The cooking of the reed in mills is mentioned even in the description of Madhukari in the Sangita Ratnakara. Bio-chemists should be particularly interested in the change brought about in the reed by this process. Scientific institutions could take up research on such procedures laid down by old masters to understand and even improve upon the process.
3 to 4 p.m. Purvi Kalyani
6 p.m. Kalyani, Sankarabharanam, Natta
8 p.m. Thodi, Kambhoji, Yedukulakambhoji, Neelambari, Mukhari, Ananda Bhairavi, Kanakkurunji

2. Seeveli. In many temples the portable deity (Utsava Vigraha) is taken to circumambulate the temple three times at morning, noon and night. This is done to the accompaniment of many instruments like Chenda, Kombu, Kuzhal etc. In some temples like Tiruvilwamala (Trichur Dist.) special importance is given to the Kuzhal and the playing of several Ragas can be heard according to the time of the day.

3. In some temples during Pūjās: (done with the doors of the sanctum closed)—Nata Atachu Pūjā—the Kuzhal is played. This is replaced by Nagaswaram in many places.

4. During temple festivals there are some special occasions when Kurum Kuzhal is to be played. The ritual is known as Vilakku Aacharam.

The deity is brought out from the sanctum and kept in a convenient spot. Then several instruments are played individually. This is an occasion for the artists to demonstrate their talents. First a Thayambaka is played on the Chenda. Then a Keli or Parru is played on the Maddalam, then a Parru is rendered on the Kombu and finally a Parru is played on the Kuzhal. Normally only one person plays. He is accompanied by a Sruti (drone), a Chenda and one Elathalam (big size cymbals). The playing is started with a few snatches of Natta Raga. Then the main Raga is elaborated. Usually Kambhoji, Kalyani, Sankarabharanam, Bhairavi, Ananda Bhairavi, Neelambari, Mukhari, Devagandhari etc. are played. Then the rendering of the Parru proper starts. This is akin to the rendering of a Pallavi. The rhythm-keepers join only at this stage, unlike the Nagaswaram where the Thavil is played even during the short intervals of the playing of the Rāgam. First it is rendered in Vilamba Kalam. Then it is rendered in faster tempo when usually another Rāgam will be played. The Tala used is normally only Chempata (Adi Tala). After rendering in the faster tempo a Nadai is played, usually tisram. This is called Kooru Vayikkal. Then Suruti Rāgam is played in a Tala of 4 matras (three beats and a wave). Then a Kalasam (muthayippu) is played in Eka Tala and Madhyamavati Raga. For this sometimes only one cymbal is used by beating it with a stick (a miniature Chengila or Chembakkalam). If time permits some Kirtanas are rendered before doing the final Muthayippu in Eka Tala. For this the Kuzhal is accompanied on a Toppi Maddalam and not by the Chenda.
It is a pity that a real top-class Patru is no longer available to be enjoyed. The Patru-playing in Tripunithura temple in its hey-day used to take about 4 hours on Valiavilakku Festival day. This should give an idea of the importance given to Kuzhal.

The next function in the festival is known as the Edakka pradakshinam. The deity is taken round the temple to the accompaniment of instruments like Edakka, Toppi Maddalam, Kombu, Thimila, and Kuzhal. In some temples importance is attached to the playing of Kuzhal during this procession. First Nata Ragam is played. Some Rakti Ragas are rendered, set normally to Triputa (or Misra Chapu) talam. The Ragas heard normally are Yedukulakamboji, Paadi, Ananda Bhairavi, Kanakkurunji etc. Some Padams are also played. One such is Mathada bara deno. Some of the Sringara Padams of Kathakali may also be used. In areas surrounding the Thiruvilwamala temple a Padam heard is Kamini Mani. On probing into the matter I was delighted to find that this is a Mani Pravala Pada of Swati Tirunal. The full text is given below. The subject matter of the same is a conversation between a Nayika and her Sakhi. The Nayika asks, “why is perspiration seen on your face, why are your eyes red, why is your hair dishevelled” etc. The Sakhi gives evasive replies and finally the Nayika concludes that they are proof that her maid through whom she had sent a message to her Lord had herself had a union with Lord Padmanabha.

It may be mentioned here that some of the court musicians of Trivandrum were natives of Tiruvilwamala and the last remnants of the original Mohini Attam survived at the same place. Thanks to poet Vallathol this was revived at the Kerala Kalamandalam. The song Kamini Mani was one of the songs used for Mohini Attam long ago. The original Ragam seen for this song is a strange one-Poorva Kandom (or Purvikamboji). It is now rendered as a Ragamalika, usually in the following Ragas, Paadi (Kathakali type), Kanakkurunji, Punnagarvari, Gopikavasantham. The use of Tisrajati Triputa, the use of Rakti Ragas and the use of some of the Sringara Padams during Edakka Pradakshinam would go to show that at one time there might have been the dancing of women preceding the deity.18

13. Sloka 230, chapter 9 of Tantrasmuccaya (an authoritative treatise on temple rituals in Kerala) lends support to this point.
After Edakka Pradakshinam Chenda Melam for the Elephant-procession starts. The procession is a slow one and they stay at some spots for a long time to complete one of the stages in Chenda-playing. A Chenda Melam consists of a number of Chendas, Eta Talams, Kombus and Kuzhals. A few Chendas will be rendering the vinyasams (complicated rhythms) while the rest of the Chendas will be ‘beating’ the time. There may be as many Kombus and Kuzhals as the number of Uruttu Chendas (vinyasam-players). The Kuzhal artists will be facing these Chenda players and they effectively control the pace and Tala of the Chenda Melam. The chief of the Kuzhal players will be showing signals by drawing circles in the air with his instrument (called Kuzhal Minnikkuka) to regulate the play and to show where the Kalasams (Muthayippu) are to be played. During the interval between periodic Eta Kalasams the Kuzhal player may be playing some melody.

For example, for Panchari Melam in Chenda the Tala is Rupaka of 6 Matras. The first phase is done in an extremely slow tempo of 16 Kala Chowkam or 96 Matras. The Eta Kalasam will start at the 80th Matra, from when on, the Kuzhal also will play the Jatis and continue it till the 16th Matra of the next Tala Vatta. By his signs the Kuzhal player will indicate the number of Matras played.

There used to be some convention as to the Ragas to be played by the Kuzhal artists for various Melams (i.e., for the Chenda melam rendered in different Talams. For Pandi Melam Bhairavi is usually rendered in different Talams), for Panchari Melam Sankarabharanam, Arabhi for Chempata and Saveri for Chempa etc.

Unfortunately however at the present day no two Kuzhals will have the Sruti and no two players will be rendering in the same way with

हटकाएकाविरलमुलीचषस्ताखाखियायुः
स्मायदेवात्मः महतोहामहेला महेला: ||

A portion of the commentary on the sloka clarifies it as

विलासपुडः प्राठा युजनयः अश्रे गंगश्चयः

i.e. the deity is preceded by young women of status and maturity in their lovely feminine gait. It is to be noted that Kuzhal is not mentioned in the sloka though it mentions a number of other instruments. However Murali is mentioned though there is no tradition for the using of Flute in temple-worship in Kerala. It is therefore to be inferred that for want of a better equivalent in Sanskrit the word Murali has been used in the general sense of Sushira Vadya.
the result that it will be a veritable cacophony, but during the Kalasams they will be playing the Jatis of the Talam and it would add to the over-all grandeur of the Chenda melam. Thus during some stage of the Chenda melam the Kurum Kuzhal has the function of only a Tala Vadya.¹⁴

Kurum Kuzhal is one of the instruments used in Koodiyattam, the traditional Sanskrit stage of Kerala. This theatre form as it exists to-day is considered to be more than a 1000 years old, its present form being shaped by the Chera King Kulasekara Varma. The Chakyars who do Abhinaya in Koodiyattam are said to be the same community as the Chakkaiyan mentioned in Silappatikaram. Kuzhal also is mentioned in Silappatikaram as being used for the dances.¹⁸ So this tradition of using the Kuzhal in dance forms is nearly 2000 years old.

Unfortunately however at present there is no proper function for the Kuzhal in Koodiyattam. The Sanskrit verses are only chanted and not sung. The Kuzhal player renders whatever Raga he feels is suitable for the occasion and in many cases it becomes a distraction to the enjoyment of the wonderful abhinaya of the Chakyars.¹⁸

It is a tribute to the catholic outlook of the Music Academy, Madras, that they at least evince interest in this art of Kerala which is now on its last legs.

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5. Articles of the author on various Musical instruments of Kerala in the previous Journals of the Music Academy, Madras.

¹⁴ Even during a regular Katcheri in Carnatic Music when the vocalist renders neraval or Svaram in quick tempo the violinist does not follow the artist in the usual way. He plays only Sa Sa Sa Sa and adds only to the Tala-effect and the Violin acts as a Tala instrument for that brief period.

¹⁵ From the text of Silappadhikaram it is not clear what the instruments 'Kuzhal' is. The commentaries on the word Kuzhal give details of the placement of holes which is that of the flute. However the commentary also mentions that metal, wood or bamboo may be used for the instrument. In view of the fact even primitive tribes are having Madhukari type instruments for dances we may take it that the Kuzhal of Silappathikaram may well be the Kurum Kuzhal type of instrument.

¹⁶ See 'Music in Koodiyattam' by the author in Sangeet Natak 10.
APPENDIX

‘Kaminee Mani’ a pada of Swati Tirunal Maharaja used for Mohini Attam and for rendering in Kurum Kuzhal in temples.

The Arohana and Avarohana of Poorva Kamodari (Purva Kamboji) has not been traced. Atantha Tala is Khandajati Ata Tala.

The text of the song is a regular paraphrase of a sloka in Amarusataka (Sloka 118, Nirmayasagara Edition)
This may be translated as follows:

Lady: - Why is perspiration in your face?
Maid: - Due to sun’s rays.
Lady: - Why are your eyes red?
Maid: - Due to his (your lover’s) harsh words
Lady: - Why is your hair dishevelled?
Maid: - Due to wind.
Lady: - The kumkum (on your forehead) is lost.
Maid: - It was brushed off by the upper garment.
Lady: - Your are tired.
Maid: - Due to going and coming.
Lady: - Well, all that is proper; but then tell me my maid,
how has your lower lip got cut?

Swati Tirunal has only added one line that the maid must have had union with Lord Padmanabha, a twist that elevates the episode to a spiritual plane. The ‘Sambodhanas’ used by the Lady and the Maid added by Swati Tirunal also add to the beauty of the dancing.
AUTOMATIC MUSICAL INSTRUMENT

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In recent years great developments have been made in the design of electro-musical instruments. A tone of any pitch, loudness and quality may be generated by electrical means. The prototype of these was the singing arc of Duddell\(^1\). The arc was shunted by a coil and a condenser. By varying inductance of the coil, it was possible to play tunes on the arc. Electrical organs* have been built, using miniature rotating electrical alternators. A synchronous motor drives a series of ninety-one tone generators, through gears. The tone wheel is a polygonal plate of small size rotating near a permanent magnet on which a coil is wound. The speeds of rotation and the number of corners determine the pitch of the tones generated. Required timber is obtained by adding outputs from the generators. In photo-electric organs* a beam of light falling on a photocell is modulated by rotating transparent discs on which wave patterns are printed in black.

A number of electronic organs* employing valve oscillators for generating the tones have been commercialized. Most of the electronic organs consist of two manuals and a pedal key-board with a system of couplers. Each key connects appropriate oscillatory circuit to the loud speaker, which finally emits the sound. Tones similar to present-day instruments are obtained by adjusting harmonic structure and growth and decay - characteristics. Some of the combinations produce beautiful but hitherto unknown effects. Electronic instruments* have been developed in which pitch and loudness can be gradually varied as nicely as in a violin.

In electro-mechanical instruments the system is essentially the same as the conventional string instrument, save that the sound board is replaced by electrical means. In Electrical Piano* vibrations of the string are converted into electrical variations by means of electro-magnetic transducers and sound is emitted by a loud-speaker after

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1) W. Duddel, The Singing Arc, Electrician 46 (1900)
2) L. Hammond, The novachord, Electronics 8 (1935)
3) P. Toulain, The Electronic Musical Instruments, Revue d'Acoust 3 (1934)
5) F. Trautwein, Electro-musical Instruments, Funk (1930)
suitable amplification. One main advantage of the electrical piano is the wide dynamic range—the sound output can be adjusted so that it is suitable for the smallest apartment or the largest auditorium. In Electrical Guitar\(^7\) transducer is fixed to the bridge on which strings are stretched. Electrical variations are amplified and sound is emitted by a loud-speaker. The output can be made comparable to that of an orchestra.

Electro-mechanical instruments\(^8\) have been constructed in which 'reeds', 'springs', 'tubes', 'rods' or 'bars' are set into vibrations by hammers actuated by keys forming a key-board; vibrations are converted into corresponding electrical variations by suitable transducers and sound is emitted by a loud-speaker after amplification.

Key-board instruments with arrangements for tuning all the key or instruments in which there is a provision for changing the pitch gradually will be found useful for Indian melodic music. With these instruments it will be possible to generate music with new and radical tone complexes. In fact the electro-musical instruments, as they have less limitations, can outperform the conventional instruments in many ways.

These electro-operated instruments, however, differ from the author's invention in this respect that they are not automatic in action. Artists have to play on them.

The Automatic Musical Instrument\(^9\) is an electronic device. It is a stringed instrument—which provides automatic accompaniment to any vocal (or instrumental) music. The instrument requires no artist to play on it; but the strings are set into vibrations by the musical notes of the singer.

The notes of vocal music are picked up by a microphone which converts sound waves into corresponding electrical variations. Microphone current is then passed through a wave-shaping circuit which removes non-musical (consonant and high pitch sounds) sounds and gives a saw-tooth-wave-shape to the current. Out-put from the wave-shaping circuit is amplified and passed through a 'reed vibration

\(^7\) Olson, Musical Engineering, pages 182-190.

\(^8\) Goverment of India Patent No. 37672 granted to Shri H. V. Modak, 'A method of improving musical quality of the Automatic Musical Instruments', Journal of the University of Bombay, Nov. 1955
unit' which converts electrical variations into mechanical vibrations. Vibrations of the reed are communicated to a set of tuned strings through a small mass. The mass is held in suspension by all the strings and forms a common nodal point to all of them. When a note is sung, only the string tuned to this note vibrates while other strings practically remain stationary. As the singer sings in the microphone, the corresponding tuned strings resound in the same sequence and produce pleasing accompaniment. Vibrations of the reed are also loosely coupled to the sounding board which emits sound for intermediate tones and there is no sharp cut off in intensity in passing from one note to the other. With the help of a single audio oscillator two strings tuned to Sa (Do) and Pa (Sol) or Sa (Do) Ma (Pa) can be set into continuous oscillations. This gives musical background and to the singer.

The same technique has been used to get Automatic accompaniment from Musical Pillars. The pillars resound to notes of Veda mantra giving loud accompaniment.

Apart from this novel use, the instrument can find a number of applications. The instrument works on resonance principle, and therefore, the strings stop vibrating when the notes sung are out of tune. The instrument can, therefore, serve to examine how correctly one can sing in tune. This becomes easier with the help of indicator lamps electronically coupled to the strings. When a note is sung the string tuned to this note vibrates and the corresponding lamp glows. If the note sung is out of tune the lamp does not glow or it becomes dim, depending upon the deviation. For taking intonation tests it is of course necessary that the strings of the instruments are correctly tuned.

A method has been developed for accurate tuning of the strings using an audio-oscillator-which need not be a calibrated one-and a simple harmonic generator circuit. This method also does not require any musically trained ear. As the frequency of the oscillator is slowly reduced the strings are set into oscillations by the harmonics in the oscillator tone. If two strings are adjusted so that they are set into vibrations for the same setting of the oscillator, the first by the p-th

harmonic and the second by the q-th harmonic of the oscillator tone, then the strings are correctly tuned in the ratio of \( p/q \). Tuning of all the strings is possible because the notes in musical scales are inter-related by simple frequency ratios.

The most characteristic feature of the Automatic Musical Instrument is that it plays as the monitor not only to the observer but also serves as a monitor to the singer, while he is actually singing. There is no need of any laborious observations of frequency but straightaway the instrument tells the observer and the singer whether the correct scale is followed or not for the whole of the song.

It has been found that the method of tuning the strings can be applied for tuning all the basic scales which cover about 170 Ragas(*). The method of tuning throws light on ‘Sruti Scales’ and explains in a new way the propriety of dividing an octave into twenty-two parts.\(^1\)

Frequency ratios and corresponding Sruti intervals are as follows:

<table>
<thead>
<tr>
<th>Frequency ratio</th>
<th>Sruti interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/1</td>
<td>22</td>
</tr>
<tr>
<td>3/2</td>
<td>13 – 12.869</td>
</tr>
<tr>
<td>4/3</td>
<td>9 – 9.131</td>
</tr>
<tr>
<td>5/4</td>
<td>7 – 7.082</td>
</tr>
</tbody>
</table>

Multiplication or division of relative frequency by a frequency ratio corresponds to increasing or decreasing the Sruti number by the corresponding Sruti interval. This is possible provided the number 22, 13, 9 and 7 are proportional to the logarithms of 2/1, 3/2, 4/3, and 5/4 respectively, and actually it is very nearly so. More exactly we get

\[
\frac{\log 2}{22} = \frac{\log 3/2}{12.869} = \frac{\log 4/3}{9.131} = \frac{\log 5/4}{7.082}
\]

Sruti numbers can therefore be considered as one or two figure-logarithms for convenient representation of the frequency ratios. There is however, no rounding off of the actual frequency ratios, or there is no equal temperament. For example, a frequency ratio \( \frac{5}{4} - (\frac{3}{2} \times \frac{2}{3}) \) corresponds to the interval of \((13-9) = 4\) Srutis. Tuning of the strings is easily possible when different notes in a scale are represented by sruti numbers (with few modifications) in place of relative frequencies.

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(*') Frequencies allotted are taken from the existing literature.

Representation of frequency ratios on logarithmic scale by small whole numbers (Sruti numbers) has become possible because of the appropriate choice of the number twenty-two for the division of the octave. With this division the exact log numbers are very close to the whole numbers (12.869 close to 13 etc.). The greatest percentage error is only 1.4. Division of the octave must be such that the number of intervals should not be too large and the percentage error should be the least. Calculations were made to see whether there is any other number which is more suitable for the division of the octave.

<table>
<thead>
<tr>
<th>Number of intervals in the Octave</th>
<th>Greatest percentage error</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>3.4</td>
</tr>
<tr>
<td>19</td>
<td>1.9</td>
</tr>
<tr>
<td>20</td>
<td>7.3</td>
</tr>
<tr>
<td>21</td>
<td>3.4</td>
</tr>
<tr>
<td>22</td>
<td>1.4</td>
</tr>
<tr>
<td>23</td>
<td>5.8</td>
</tr>
<tr>
<td>31</td>
<td>1.0</td>
</tr>
<tr>
<td>34</td>
<td>0.79</td>
</tr>
<tr>
<td>53</td>
<td>0.36</td>
</tr>
<tr>
<td>65</td>
<td>0.35</td>
</tr>
</tbody>
</table>

It was seen that the percentage error decreases in an oscillatory manner, with increasing number of intervals and therefore the purpose is not served merely by dividing the octave into a larger number of parts. If the octave is to be divided into some other number of intervals, then as can be seen from the accompanying table, the suitable numbers will be 31, 34, 53 and 65; but these numbers will no more be ‘small’ numbers. The number twenty-two satisfies both the required conditions and so it is the most appropriate number for dividing the octave.

The Automatic Musical Instrument has been used for recording Melody-plot (time-pitch curve). For this purpose the indicator lamps which are electronically coupled to the strings of the instrument are arranged in a column. As notes are sung the tuned strings vibrate and the corresponding lamps glow in the same sequence. A photographic record of these lamps on a moving film gives ‘Melody-plot’ of music actually sung. Study of these curves may reveal secrets of artistic beauty in music. Extensive work is now conducted for improving this

method for recording melody-plot. By replacing indicator lamps by relays it may be possible to play automatically other key-board musical instruments in unison or harmony with the vocal music.

As a result of tone analysis of certain musical instruments (like Tambura) it has been noticed by the author that the richness in tone quality is due to constant phase fluctuations between fundamental and harmonies. It is remarked that the tones produced by electronic musical instruments, in spite of large harmonic content, appear dull. This is perhaps because this particular factor governing the tone quality has been ignored.

An electronic apparatus is being developed by the author to produce this phase modulation, for obtaining the peculiar richness in tone quality synthetically. The apparatus may be useful for the artists for enriching their own voice.

15. H. V. Modak, Dependence of musical quality on relative phase of harmonics, Paper, Indian Science Congress, 1960,
ANNAMACHARYA'S COMPOSITIONS

T. G. ANANTASUBRAMANIAM, Tirupati

Tirupati, 1424-1508 AD, was a 79th avatar, the 29th
pracharaka, and a notable saint, composer, and
devotee. He composed more than 10,000 mantras and
devotional songs in praise of Lord Vishnu. Tirupati
Devasthanams Epigraphical Report Part I, page
281, 1930-1931

Achalam has enumerated the compositions
written by Tirupati. Tirupati wrote
220 compositions in praise of Lord
Vishnu, the last of which was
written on the 23rd day of the
 month of Puranapada. Tirupati
Devasthanams Epigraphical Report Part I, page
281, 1930-1931

The compositions of Tirupati have been
written in the form of mantras and
devotional songs. These compositions
are devoted to Lord Vishnu and
his various avatars. Tirupati
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281, 1930-1931
பலி”, “பார்பரையும் பால் கரவு” சது (அரசு அத்தடி
மல்லியாடால் மலம்புழு, மாரமியான பச்சைமாலனும்).

ஆனால் தூத் ராமேஷ்வாமனே் என்னறியற் காக்கல் போராடக்
அன்றி நாட்டில் முதல் குரல்பாட்டில் அன்றியத் தனியே
சந்தையாக பார்பரையும் பால் கரவு என்று வேட்டரத். அப்போது அல்லது என்றியடியும் அந்த இல்லை
நாட்டில் பலரும் வரலாறு மற்றும் புரவல் குறிப்பிட்டது. அனுமானத்திற்குச்
நேரடி, “இந்தப் பார்பரையும் பால் கரவு” சது என்று குறிப்பிட்டது. (அரசு அத்தடியும்
நூறு நாட்டில் பார்பரையும் பால் கரவு என்று குறிப்பிட்டது)

அண்மையன அகாலம்பதிகார் அதிகப்பட்டு 100 நூற்றாண்டுகள் பாறை
கரவு நய்த் தனியும். [அன்றி என்னறியும் வரலாறு
மற்றும் புரவலும் நாட்டில் முதல் குரல்பாடு]. இன்னும் என்னறிய வரலாறு
மற்றும் புரவலும் தடைத் தோன்ற வரலாறு அளவை
நாட்டில் முதல் குரல்பாட்டில் வேட்டரான இடைவுக்கு
விள்ளையாக குறிப்பிட்டது. இதன் அரசீப்பை
அளவை ரோட்டிருக்கும் பார்பரையும் பால் கரவு என்று
நாட்டில் முதல் குரல்பாட்டில் வேட்டர் அப்போது.
நூறு நாட்டில் 32,000 சதுக்கள் என்று குறிப்பிட்டது
நாட்டில் முதல் குரல்பாட்டில் பலரும், அன்றியத்
நூறு நாட்டில் பால் கரவு என்று குறிப்பிட்டது T. T. என்று
குறிப்பிட்டது என்று குறிப்பிட்டது. இது என்னறிய வரலாறு
மற்றும் புரவலும் முதல் குரல்பாடு அமைந்து வந்து
நாட்டில் முதல் குரல்பாடு அமைந்து வந்து (அரசு
அத்தடி வந்து). இது என்னறிய வரலாறு மற்றும்
புரவலும் முதல் குரல்பாடு அமைந்து வந்து நாட்டில்
தென்னிணியல் விளக்கம் தென்னிணியல்

முதல் 1485-1490சமையல் அத்தடி என்னறிய வரலாறு
முதல் குரல்பாடு அமைந்து வந்து (அரசு
அத்தடி வந்து). இது என்னறிய வரலாறு
மற்றும் புரவலும் முதல் குரல்பாடு அமைந்து

விளையாட்டு.
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22,000 கிளின் சம்பிருப்பைச்சு விளகிய கிரார்கள்

தேர்த்து முடிய கிரார்கள் தம்முள் முடிய நீரேற்றப்பெற்று.

2. "நூற்றாண்டுச் ச் சுண்டுக்கள்". என்பது ஏனைய தம்முள் நீரேற்றப்பெற்று.

பொருள் விளக்கிய கிரார்கள், பெண்கள், மேல்லிய தம்முள் நீரேற்றப்பெற்று.

அம்மவலையின் விளக்கிய சம்பிருப்பைச்சு “சம்பிருப்பைச்சு விளக்கிய கிரார்கள்” என்பது சிபையுட்னு அம்மவலையின் விளக்கியச் சம்பிருப்பைச்சு.
1986-ல் K. ராஜகிருஷ்ண எழுதிய “The works of Tallapakam Poets Vol. II” எனும் புத்தகம் பதிப்பிட்டது. ஆகஸ்ட் தேதி நேய்த்தியும் காலம் இருந்தாகோ நேய்த்தியும் காலம்


1. சிறை செழுமை
2. சமூக குறுக்கு, செடு
3. , , , இந்தக் குறிப்பு
4. , , , , இந்தக் குறிப்பு
5. குறிப்பிட்டு, வருமாறு
6. குறிப்பிட்டு, வருமாறு
7. தன்னாலை வருமாறு
8. தன்னாலை

இந்தக் குறிப்பிட்டு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு 

சிவனால் வாழ்வு பற்றியுள்ள புத்தம் பரிகார பதிப்பு தன்னாலும் தன்னாலும் தன்னாலும் தன்னாலும் 

அரசியல் தொகுப்பு

அரசியல் தொகுப்பு பற்றியுள்ள புத்தம் பரிகார பதிப்பு 

நூற்றண்டு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு வருமாறு 

நூற்றண்டு வருமாறு 

2. இந்தக் குறிப்பு

3. இந்தக் குறிப்பு

4. இந்தக் குறிப்பு

5. இந்தக் குறிப்பு

6. இந்தக் குறிப்பு

7. இந்தக் குறிப்பு

8. இந்தக் குறிப்பு

9. இந்தக் குறிப்பு

10. இந்தக் குறிப்பு

11. இந்தக் குறிப்பு

12. இந்தக் குறிப்பு

13. இந்தக் குறிப்பு

14. இந்தக் குறிப்பு

15. இந்தக் குறிப்பு

16. இந்தக் குறிப்பு

17. இந்தக் குறிப்பு

18. இந்தக் குறிப்பு

19. இந்தக் குறிப்பு

20. இந்தக் குறிப்பு

21. இந்தக் குறிப்பு

22. இந்தக் குறிப்பு

23. இந்தக் குறிப்பு

24. இந்தக் குறிப்பு

25. இந்தக் குறிப்பு

26. இந்தக் குறிப்பு

27. இந்தக் குறிப்பு

28. இந்தக் குறிப்பு

29. இந்தக் குறிப்பு

30. இந்தக் குறிப்பு
Paṭam nukku kammam parigalitkudu bēndil
tōkkî ḍīrāyakondâpu dorāḍikī pâṭṭi

Saṅkañga gāvâyâd Sanṭyakâlumun
paṅkal āñēsē nūkuḍu nārâsiṇhdu

Vol. X. 285-P.

Tīn̄kîn̄di thê ñēppēndâla thēkkām ân̄n̄thakalâlēndrum on̄ēnēn̄di thēkkām alâmmakalēndrum on̄ēnēn̄di thēkkām. Añēmâm alâmmakalēndrum on̄ēnēn̄di thēkkām nārâsiṇhdu. Sañganâm nārâsiṇhdu tōkkî ḍīrāyakondâpu dorāḍikī pâṭṭi

Vol. XI 120-P.

Mûḷmûḍi vûṇḍa sūryâv nārâsiṇhdu
Nēlkoḷâ daṇḍûkâ niṇyânamu ṣêrē
Tûṇḍrâlaṭâmun lôḍeyiṇiḍi-râtaṭaṭu gañ̄ga

Añōmkari. Añōmkari ârâmânì garâmām palekkīvâm Añōmkari nārañēkkâm bekkâm bañâlakâm.

Navyâni
Navaṣṭeḻâle nāṭṭa nārâsiṇhdu ṣêrē
Navaṁen śhīkāḍìr nārâsiṇhdu gañ̄ga

Mûḷmûḍi vûṇḍa sūryâv nārâsiṇhdu
Nēlkoḷâ daṇḍûkâ niṇyânamu ṣêrē
Tûṇḍrâlaṭâmun lôḍeyiṇiḍi-râtaṭaṭu gañ̄ga

Añōmkari. Añōmkari ârâmânì garâmām palekkīvâm Añōmkari nārañēkkâm bekkâm bañâlakâm.

Saṅkañga gāvâyâd Sanṭyakâlumun
Paṅkal āñēsē nūkuḍu nārâsiṇhdu

Vol. X 122-P.

Tīn̄kîn̄di thē ñēppēndâla thēkkām alâmmakalēndrum on̄ēnēn̄di thēkkām. Añēmâm alâmmakalēndrum on̄ēnēn̄di thēkkām nārâsiṇhdu. Sañganâm nārâsiṇhdu tōkkî ḍīrāyakondâpu dorāḍikī pâṭṭi

Vol. XI 217

Bēppē mûrênu vûndî bēsuṭâlu
Aṇçasu ma kāḍir̄ pàṭṭiṇikī

Ramântâm avântâmpam. A-87. 58. śhēnī.
பிறங்கள் செய்திகள்

கலாசார்ய பெருமளவு பெருமாள் அலக்கடை பொதுவணல்வியலாளர் போன்ற சுருக்கத்தை எழுதியது.

பல்பிய யாகவர்ணம் போம்மோரேண்டேலோன்
பல்லிரேசு பிளாட்டேன்ஸு

வள்ளி காவிரிக்கோன் அவீஸ்குட்டாக்கிமின்
மலையாள செருநியார்ஸிஹுரு கல்ப

ஆத்மா உள்ளது போம்மோரேண்டேலோன் கடவு பெருமாள் அலக்கடை
சுருக்கத்தை எழுதியது.

காற்று பத்தை

எழுத்து பாதுகாப்புகளை விளக்கி வெட்டுக்குமின்

தோண்டின் மதுரையுடை விடுதலோரா
தோண்டின் மதுரையுடை விடுதலோரா

காரணம் பல்லியசான்

இந்த எழுத்தை வெட்டுதலோரா

சொல்லப்பட்டது. இத்தால் பத்தை பாதுகாப்புகளை சுருக்கத்தை எழுதியது.

போது இந்து கடை செய்திகள் பல்பி பத்தை

1. தமிழ்முறை

பார்வேஜேலோச் பார்வேஜேலோச்

காரோலியாச்சுக்காட்டுக்களின்

சோவியன்மாவை எய்பாக்கியை

2. தமிழ்முறை

தோலியா முருகு செல் யானை

மலையாளுக் ராகு சோவியன்மாவை
ANNAMACHARYA’S COMPOSITIONS

कलिक काव्यर हरसुश्रव वाटुसलाने
तलगकितु रक्षामयु तोटेलनू

पलुमाह इनपूर्ण पायगानूरी
विनुपालू सेलवितो शीरक्षिशुद्धु

अन्नमाचार्य अन्तिम वरसकु बुद्ध, आज्ञाकारबुद्ध।
आज्ञालेखासुबुद्ध बुद्धि पाद भापकं बप्पुनुलारे।
हृदय बूहर नारे निशुटिन पितु बुरे रुपालन नकळाने
नर्तक निरुक्ताला मतवाल बन आज्ञातिक चित्रि नानन निस्विस्तर छन्।
आज्ञातिक शोधने अविश्वासाने खाय त्याने वाले काळे, आज्ञातिक, निर्णय,
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नमो नमो शाकुरगाजातु

क्षेत्रालोक-क्षेत्रगिल

शरणु शरणु देव शरणोपक
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मध्यातिक तुरुत्त्व निरुक्ताला मतवाल बन आज्ञातिक चित्रि नानन निस्विस्तर छन्।
आज्ञाकाशायम बुद्धि पाद भापकं बप्पुनुलारे।

ग्रामविश्व -रामकिया

विनिष्ठम जानकनी नी श्रीमुदु इति सेतिवादु
बेनसी यी रघुरामुदु इत्यत्यात देवसुवो

कौरि विनिष्ठु जाबे कुमारूणु निजिक्षेपे
वग्रामविश्व नेलकूल गुमें

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மாராணவும் எச்சரம் மின்னணை வெறவை
கீராணை கருணாநு பிக் நெம் தொடரை

1. கல்யாணரு ஹுண்டாந்து வேல்குரு
2. அவ்விரு கோரு ஹுண்டாந்து

சாரம்பின் தமிழ்நாட்டு

1. என்னைர்ப் பொண்டைவு எச்சர வேல்குரு
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2. அடை 'நினைவூத் யன்றுச் சுத்தார் வன்'
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RAMAKRISHNA


அப்பல் பாரதத்து லேன்டிரூவர்லேக்கு
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Gandharva
gānādīkāḥ
gānādīkāḥ

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அந்நிலையில் பல சிறுநகரங்கள் அடங்கிக் கட்டுகள்

காட்டு மாணவர்கள் கல்வியும் போன்று காட்டு மாணவர்கள்

தொடர்வு வேலாய்வு ஜனவரியும்

நெற்று கால்வு நடைபெற நேர

கர்குடி பலசூடா கெட்சில் குறிப்பிட்டு.

'தாமரபாகு நிலை நந்த தன்னு'

'சுமார் இந்திய இலக்க' கர்குடாயில்.

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தொலையோர் தலையிட்டு புத்தேண்டு

கோலை பல்சுட்டுக்கு வழு பாடல்

'அதுவாக சூலையை பிடிக்கவும் நேர்கையில் விளக்கும் இழுத்திற்கு காண்டு பூனே ஆண் பால் பிரித்துச் செல்லும் முனிவர்களைச் சொன்னாம் கூறினார்.

'அந்தல் இளவினால், அதனுடைய குளை வானம்' கால்.

இந்து புத்தேண்டு புது விளக்கத்தை தந்து கொள்ளும் வழக்கு.

முக்கியமாக "சுவாமிவாச பிசாகாரக" கால் துருக்கியுள்ள
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शोरश्रोराः श्रीनरसिंह-सुतुति

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मल्हूरि

कमलापति कमलनाथ कमलानमबन्धा

कमलहलानकोडिचनपुमुयात्या

कमलामलपनेत कमलवैरपंगात

कमलपकु यासिंहरस्यदय तेहु नमो नमो

जलनितिज्ञमन जलनितिज्ञकन जलनितिज्ञस्यन

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जलनितिज्ञामाल जलनितिज्ञोपण जलनितिज्ञस्यकनवन

जलनितिकारण—नमो ते अहू जलनितिज्ञभीर नमो नमो

मदविष्णुप्रेमदास, भवानिष्णु—अद्वी, "जग समयम प्रेमगुप्त"

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कार्य काम्पलक प्रेमदास काम्पलक प्रेमदास

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"जग समयम प्रेमगुप्त"

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सूक्ष्म प्रेम—काम्पलक प्रेमदास

मदविष्णुप्रेमदास काम्पलक प्रेमदास काम्पलक प्रेमदास काम्पलक प्रेमदास। अन्वेषण करते: 
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கருணை தல மயம் அண்டு காற்று.

காம்போத்து

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உரை செய்து மாறிய மாறு மாற்று

அராமல்சுத்தே பெயர். பழம்பூசையாண்டு பெயர் அராமல்சுத்தே பெயர் மண்ட்டு.

சுத்தே பெயர் என இல்லை. சுத்தே பெயர் என இல்லை.

சுத்தே பெயர் என இல்லை.

சுத்தே பெயர் என இல்லை.

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சுத்தே பெயர் என இல்லை.

சுத்தே பெயர் என இல்லை.
Tirupati Devasthanam Epigraphical Report Series.
The Influence of Tala Dasa Pranas on the Jatis

R. Venkatarathnam, B.A. (Hons.)

Tala Dasa Pranas:

The taladhayayas of the ancient texts deal with the talas and their varieties as applied in Indian Music. A tala is described to be formed by the interaction of the ten elements of musical rhythm designated as the tala dasa pranas. Varieties of talas were then developed for regulating time-measured musical compositions. In fact, the rhythm influences all musical forms and even the graces (gamakas) in musical phrases are mingled with metre in terms of subtle matras. The Upanishads define Omkara (Aumkara) as comprising a duration of three matras. Nada is therefore measured rhythmically in terms of matras.

The ancient texts on music define matra as a multiple of kshana, the minutest of the time-intervals conceived by our forefathers. The matra is a measure of kala (time), the first of the dasa pranas. A temporal sequence of such matras forms a segment of time. The matra is, however, too small and hence to bring it into practice, the marga, the next prana was introduced. The marga is an objective scale in which the subtle matras are contained. It is the time-scale adopted for a composition, rhythmic or melodic.

This time-scale is in itself abstract and, as its recognition is possible only in terms of relativity, the next element, kriya was introduced by our ancient musicometricians. The kriya is an act to reckon the branches of and to move along the marga which is replete with matras. Varieties of kriyas, both sasabda and nissabda were therefore made conventional and hence traditional.

To make the reckoning of time still easier in musical art, the concept of anga as a linear acoustic sequence of kriyas was brought in.

Having devised these four pranas, kala, marga, kriya and anga, the musician was led to enquire where to commence his composition. For this purpose, the idea of graha, the fifth of the dasa pranas was shaped.

The next step should evidently be what the rhythmic structure of a composition or of a phrase should be. In this respect, the first five pranas form the foundation. The sixth prana, jati was then devised as the basement-cum-first-superstructure captioned as the ace form of the rhythmic edifice. Vide note (1) under Annexure I (A). All forms of
rhythmic phrases are thus contained in five jatis. As phrases developed into sequences, the sub-division of the anga and of the kriyas was, presumably, considered convenient. The kala, therefore, came into the rescue, as the seventh of the pranas to serve as lintel and to divide long sequences of phrases into equal parts in time.

The decoration and further details of refinement of rhythmic character were made possible by the last three pranas, the laya (including gati), the yati and the prastara.

Even though these ten pranas are spoken of as tala dasa pranas, they are, in fact, the ten rhythmic elements influencing all musical phrases (percussional and non-percussional), because a musical phrase in regard to its rhythm can be considered to be a tala in a microform. The rhythmic richness of the Indian musical phrases, therefore, consists in the concept of “varieties of talas set into a tala”. Thus, a unity is manifest in diversity and it is the main characteristic of the Indian heritage.

Jati as a Micro Tala:

Micro analysis aims at the study of inner details to the extent possible. Such an analysis can be made of the percussion expressions (jatis) treating each jati as a distinct tala. This consideration can be justified as the jati prastara is made on the same lines as applied to tala prastara. Therefore the movement of the jatis is a result of the influence made by the tala dasa pranas, the chief vayu being the rhythm.

A jati is, hence, a miniature or a micro tala and at the same time, it acts as a whole or as a part of an avarta or of a set of avartas of a macro tala, such as one of the 108 talas of the old times or of the 35 suladi talas of the later periods. In fact, we characterise a tala in terms of an expression (jati). Thus the tisra jati triputa tala (or the misra chapu tala) is characterised by the jati, “Tha Ki Ta / Tha Ka / Thi Mi /” (I, 0 0). The jati “Tha Ki Ta Tha Ka Thi Mi” is therefore a form of tisra jaati triputa tala (or misra chapu tala), whatever be its tempo (or gati), whatever be the tala in which it is set to be played and whatever be the sub-interval of the avarta in which it is played.

Thus the jati exists in the tala and at the same time, the tala exists in the jati. In other words, a tala is a sequence of jatis and a jati (long or short) is a sequence of talas. Simha Bhupala states that tala exists in the audible and in the inaudible syllables of the vadyas when set to druta, laghu, guru and pluta k alas.
The Influence of Tala Dasa Pranas on the Jatis:

The influence of the ten pranas on the Jatis can now be analysed one by one.

(1) KALA (Time):

Every sasabda akshara (stroke) played on a drum can be considered to have three distinct components. They are mūla (the nucleus), nada (the coda) and nissabda (the onset).

The mūla can be reckoned at the instant at which the sound of a sasabda akshara commences audibly. The sound so produced lasts for a short period enabling the acoustic quality of it to be identified in the form of a musical film on the moola. This short period forms the nada of the akshara. Afterwards, there is a period of silence, nissabda, that is responsible for the discreteness of the tala vadya aksharas. The mūla, nada and nissabda, thus, have the three characteristics of evolution, establishment and abandonment respectively. An akshara is, therefore, trimurti swarupa. The samyukta aksharas like Bhlam, D'u and Gram have each more than one set of these components. The nissabda akshara (visranti) is also imagined to be made up of these three components, because, it is the silence, santi, that wraps the mystic secrets of the universe. The gita-santi is designated as visranti. Vide note (2) under Annexure I (B).

The total duration covered by these components, mūla, nada and nissabda forms the Kāla or kālapramana of the akshara. Thus, the first of the dasa pranas forms the base for an akshara. The components of a gamaka akshara, other than the last of them, have each nissabda as silent. Thus, the aksharas are contained in kala. In fact, time is the container of the entire musical universe.

(2) MARGA:

The jati, a combination of sasabda and nissabda aksharas, can have musical movement only when there is a marga for it. The entire musical universe will be static and hence lost if there is no marga for its movements. Without marga, the direction, a force will be merely a scalar entity. Thus the marga measures and directs the mass of an akshara imparting thereby an acceleration to it. This rhythmic mass is the total amount (duration) of the moola, the nada and the nissabda. In short, the marga defines the time-scale for the tempo of a sequence of sequences of aksharas. The marga relates to the basic or main tempo for a composition or for a percussion sequence in accompaniment (vṛtii) thereto.
(3) **Kriya:**

The *kriya* is a manifestation of dynamism. The musical dynamics of the aksharas is manifest in the *kriyas*, the various *finger-techniques* for the various aksharas to be played on a drum. The *kriyas* in fact symbolise and determine the aksharas, sasabda and nissabda. Every *kriya* is prescribed to be directed by *dharma*, the tradition. *Kalpana*, the individual improvisation, should be in tune with tradition and hence it is spoken of as *manodharma*. *Asvaghosha* sings, "Pound loud (deep) the *drum* of *dharma*" (*Pratādaya dharma-dundubhtam*). The *depth* of the aksharas in a *drum* is conceived to be a *result* of following the tradition. This can be achieved by traditional finger techniques and postures, the *kriyas*.

(4) **Anga:**

A sequence of aksharas forms a *jati*. A sasabda akshara corresponds to a *virama*, the simple beat. It is in itself an *anga*. As *Simha Bhupala* states, the *anudruta* is the *rhythm* contained in a single short letter-utterance. (*Anudrutaadayo vibhedaah kaisciduktaah*).

The *nissabda aksharas*, following a sasabda akshara are musically and rhythmically associated and perceived with the *preceding* sasabda akshara to constitute the other *angas* like the druta, druta virama, laghu and so on. It is here that we get the idea that the jati prastara should be on the same lines as of the tala prastara, which is actually made in terms of the *angas*. The different *merus* constructed by musicometricians like *Shyama Sastrigal* provide a statistical analysis of the varieties of rhythmic patterns from various angles of view. *Vide annexures I and II*. A *meru* is a unidimensional or multidimensional classified distribution (infinite or finite).

(5) **Graha:**

A force requires a point of application on an object. Hence a jati subjected to rhythm is to have a *graha*. The term *graha* is not merely related to a tala. In fact, each jati or any part thereof has a *graha*. It is in this context that we speak of *sama graha jatis* such as the sarva laghu and of the *vishama graha jatis* which exhibit *edir nadaei* (cross-rhythm) or *usi*. The jati prastara would therefore be exhaustive in character while the tala prastara speaks only of samagraha rhythmic patterns. Because, a tala always commences with a beat (*sabda*). Mathematically, the number of sama graha patterns is the same as that of vishama graha patterns for a given total number of syllabic instants.
For instance, there are sixteen sama graha patterns and sixteen vishama graha patterns for a rhythmic sequence of five syllabic instants. *Vide details given in the annexure I.* Incidentally, it will be interesting to note that the number of patterns, each employing a given number of strokes (or rests) in a *sama akshara prastara* follows the *binomial law.* *Vide graph in the annexure II.*

The *equality* of the numbers of sama graha and vishama graha jatis is due to the fact that, after all, graha is a process of displacement in time. Again a rhythmic pattern will undergo an *apparent* change in form if any syllable other than the first of it is stressed or played with a distinguishable sound modulation. (*In mridanga, it is to be noted that the stress should itself be soft.*)

**Example:**

```
Ta  Ka  Ti  Mi
Ta  Ka  Ti  Mi
Ta  Ka  Ti  Mi
Ta  Ka  Ti  Mi
```

Such bheda due to a stress (tara) or sound modulation (varna) is known as sthayi varna or graha bheda. It follows, therefore, that the graha may be located at the instant (mula) of any akshara in a jati. In other words, we can define graha as a distinct point of time from or to which a rhythmic pattern or a part of it is focussed. In the case of a whole musical composition, we speak of three types of grahas, the sama, atita and anagata, only one of which is applied in the tala. A musical phrase of it or a jati in a sequence can however, be characterised by more than one graha. Aesthetic location of the grahas in a jati is a part of the art of musical rhythm for effecting gita-jati samyoga (ottudalai) in accompaniment. This does not necessarily mean that the rhythmic structures of the musical phrase and of the jati in accompaniment of it should always be the same. The structures should mainly be aesthetic and musical *in contrast* by a judicious location of the grahas in a sequence as in the case of kalpana swaras to be rendered for a composition at different points.

The main function of percussion instruments is hence to enliven the concert by marking time and rhythm musically and to add occasional streaks of vivid colour.
Again, the position (graha) of a jati in a sequence of jatis acts as a deciding factor of the gita-guna of the sequence as a whole.

(6) JAATI:

Any random arrangement of the sasabda and nissabda aksharas would not constitute a (meaningful) jaati. Though there are 32 types of patterns for a sequence of five syllabic instants, one pattern cannot be a suitable substitute for another in all situations. The tonal qualities of the different aksharas (sasabda) also play a predominant role in choosing a particular pattern. All the patterns for a given number of syllabic instants are, however, said to belong to a rhythmic family. The necessity for recognising long sequences (say of 64 syllables or of 128 syllables) led to the organisation of families of patterns. Each of these families is designated as a jaati.

Basically, the term jaati is related to the total number of syllabic instants in a sequence and hence the number of jaatis can be infinite. This generalisation is however complex and hence more conditions had to be laid down to constitute a jaati. It was therefore conceived by our ancients that a lengthy sequence could be reckoned in terms of sub-sequences. All such sub-sequences, forming non-overlapping segments of a sequence, were then classified into a small number of jaatis, as the quantum of classification was necessarily to be compact but exhaustive. Five one-digit numbers were intelligently chosen for this purpose. These numbers are, 3, 4, 5, 7 and 9 designated with the names, tisra, caturasra, khanda, misra and sankirna respectively. These five numbers possess some interesting properties which led to three fundamental theorems governing the construction of all rhythmic sequences, long or short. Vide paper on the theory of musicométrics presented by my Guru and myself in the Music Academy’s Conference on 31st December, 1972. All rhythmic structures are thus contained in the Jaatis — (Jaatibhih sarvam vyaaptam.)

The jaati is thus a tool to develop long sequences. The rhythmic meaning of an expression in a sequence is conveyed by the jaatis in it. The taanams played on veena and other instruments are, therefore, developed in terms of these jaatis for purposes of rhythmic compactness. A long sequence of these jaatis may again belong to one of these five jaatis.
In regard to a tala, kala is a mental process to split a minor duration into equal parts. The concept of kala is applied in the play or recital of jatis with aakala pramona suddha. The aksharas in a very slow tempo are intuitionally separated by means of kalas. This mental process will be evident when a pallavi is rendered in vilambita (very slow tempo). That is the application of kala comes in, when an anga of a jati is inconveniently long like the pluta (a sasabda akshara followed by eleven nissabda aksharas of equal duration forming, in all, twelve syllabic instants). While a sequence of jatis is reckoned in terms of the jatis appearing in it, a long anga of a jati is reckoned in terms of kalas. Here again, a long anga can itself belong to a jaati when viewed as a distinct jati of one sasabda akshara and a number of nissabda aksharas. Thus, a pluta is of tistra jaati \((12 = 3 \times 22)\). The common ratio adopted for the purpose of computing the jaatis is 2, so that a jati can be bestowed with the quality of jaati suddha.

In practice, a nissabda jati (a sequence of mere visrantis) is thought of as a process of kalas for balancing the total silence rhythmically.

Example:

Kaakapaada:

Thom ; ;; ; ; ; ; ; Here the aumkara in Thom is imagined to be prolonged to cover a duration equal to a kakapada considered in terms of four (equal) kalas of four syllables each.

(8) LAYA:

The laya can be defined as the degree of kala-pramana with which the syllables are bound. The great composers have set each of their divine compositions with a specific region of tempo (kala-pramana) and a composition is considered to lose its beauty (considerably) for a deviation from its originally conceived region of tempo. The tempo, this degree of kala-pramana, defines to a great extent, the very melodic character of a musical phrase and more so, of a whole composition. Because, laya is a vital force which measures the amount of energy in each part of a musical work.
Certain arrangements of tala vadya aksharas are more appreciable in a particular tempo than in another. It is with this aesthetic experience that separate types of madhurya jatis (tekhas) for the vilambita, madhya and druta layas have been brought into use by tradition. In the play of long sequences of jatis, the different layas are to be judiciously intermingled for purposes of laya vinyasa in tani as well as in accompaniment. Aesthetic rules have been framed in different schools for this purpose in tune with the demands of the several situations of accompaniment on the lines of sampradaya, thereby assuming a conception of the foundations of beauty and of a re-creation of the work of the art of accompaniment along the lines employed by the musician.

(9) YATI:

The arrangement of the jaatis in a sequence can be called the yati. Six patterns of arrangement are recognised for this purpose and they are marvellously exhaustive. Hence a long sequence is also a sequence of yatis, tattakaras, muktayis and korvais by the employment of yatis to conform to avarta suddha.

A sequence will be said to be in avarta suddha if it is possible of being made to cover a duration exactly equal to a geometric multiple of an avarta (cycle) of a tala, the common ratio being two. Thus, sequences covering two or four or eight avartas are said to be in strict avarta suddha. The lengths of the different parts of a musical sequence like pallavi, asupallavi and charanam are found determined with strict avarta suddha. This rule applies to the construction and play of Jatis too. If a jati exactly covers the whole duration of a tala anga, it is said to have anga suddha.

(10) PRASTARA:

With the first nine pranas in action, varieties of patterns are worked out by prastara. Prastara is applicable to both melody and rhythm. Because the same rhythmic pattern will assume different melodic patterns on account of sabda bheda (sound modulations) and sasabda akshara bheda. The varieties of patterns are therefore the outcome of the influence of the dasa pranas.

The infinite radiant forms of rhythmic and melodic phrases so derived are said to be the manifestations of the Nada Brahman.
Some of the interesting musiometrical theorems that can be deduced from the influence of the tala dasa pranas on the Jatis are stated below.

i] If the graha of the commencement of a jati sequence is changed, keeping the tala constant, there will be an apparent change in the whole rhythmic pattern.

ii] If the gati of a jati is changed, keeping the tala constant, there will be an apparent change in its rhythm.

iii] If the points of stress (tara) and modulations (varna) in a jati are changed, keeping the tala constant, there will be an apparent change in its rhythm.

iv] If a sequence of jatis is strictly in avarta suddha in chaturasra gati in Adi Tala in a given tempo, it will be with strict avarta suddha in chaturasra gati in rupaka tala if played thrice and also in tistra gati in Adi Tala if played thrice, provided that an appropriate tempo is chosen in each case.

These theorems are practically (and widely) applied in layavinyasa and in accompaniment of music.

Thus, a sequence of jatis is made musically and rhythmically complete by the influence of the tala dasa pranas. These pranas give a musically stable configuration to the jatis and their sequences. The force of musical rhythm (vayu is a resultant of the forces exerted by the ten pranas. These forces act on the tala as a whole and also get distributed over the syllables contained in the tala. This rhythmic force and the melodic force, combined together, lead to a pleasant equilibrium. Vide diagramatic representation in Annexure III.

The vocal music, the flute, the veena and the soft mridanga, all are to be directed to be rendered and played to achieve this point or plane of musical equilibrium. One's voice (male or female) should be sweet like the veena string. The madhurya aksharas like Nam and Dhim (Meettu and chapu) played on the mridanga should be sweet and soft, like veena sounds. 'Vinaya saa gayati' and 'mardangiko mukhyas tatha' are stated to be the main guidelines of Indian melody and rhythm.
ANNEXURE I

SAMA GRAHA AND VISHAMA GRAHA PRASTARA
FOR FIVE SYLLABIC INSTANTS (KHANDA JAATI PRASTARA)

(A) Samagraha Prastara (first akshara is sasabda)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Pattern</th>
<th>No. of sasabda aksharas</th>
<th>No. of visrantis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tha Ka Ta Ki Ta</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Tham Ta Ki Ta</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Tha Theem Tha Ka</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Tha Ka Theem Tha</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>Tha Ki Ta Theem</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Tha Dhith Thath</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>Thath Dheem Tha</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Thath Tha Dheem</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>Tha Ka Theem Tha</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>Thaam Tha Ka Tha</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>Tha Dheeng Tha</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>12.</td>
<td>Thath Thaang Thath</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>Thaung Thath Thaang</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>Tha Thaam Tha Tha</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>Theeng Tha Theeng</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>Thaam Thaam Thaam</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Maha Patala (Total) 48 + 32 = 80

NOTE: (1) The first pattern "ThaKa Tha Ki Ta" is called the Khanda Jaati sarva laghu or the "mūla jati for khanda jaati". It is popularly known as the ace form ( слова слова) for the khanda jaati. It is also pronounced as "Tha Thing Gi Na Thom".
ANNEXURE I (Continued)

(B) Vishamagraba Prastara (first akshara is nissabda)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Pattern</th>
<th>No. of Sasaba aksharas</th>
<th>No. of Visrantis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tha Ka Ja Nu</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Tha Jha Nuu</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Tha Thoam Gu</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Tha Dheeng</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Jham Tha Ri</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>Tha Jham</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>Theen Tha</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>Reem</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>Tha Jha Nam</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>Tha Reem</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Dheen Tha</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>Jham</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>Ki Ta</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>Thaam</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>15.</td>
<td>Thin</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

(Nissabda Jati)

Maha Patala (Total) 32 + 48 = 80

NOTE: (2) The relative transitional entropy information or surprise generated in regard to the arrangement of the sasabda and nissabda aksharas in moving pairs) in respect of a nissabda jati (sarva visranti) is indeterminate. The surprise of a continuous kaarvai (rest) is, therefore, indeterminate. That is, the information value of gita-santi in respect of the visrantis in it is indeterminate. Hence the Rig Veda states that it is santi that wraps the mystic secrets of the (musical) universe. If all the aksharas in a sarva-laghu (or sarva virama jati) are one and the same, then also, the transitional information generated is indeterminate.

(3) The moving pairs in "Tha Ka Tha Ki Ta" are Tha Ka, Ka Tha, Tha Ki, Ki Ta, and Ta Tha. The entropy generated by these pairs is known as the transitional entropy of the second order for the Jati, "Tha Ka Tha Ki Ta". The ratio of this entropy to its maximum possible value is called the relative transitional entropy of the Jati.
ANNEXURE II

KHANDA JAATHI SASABDA AKSHARA MERU.

SASABDA AKSHARA PRASTARA:-

<table>
<thead>
<tr>
<th>No. of Sasabda Aksharas</th>
<th>No. of Patterns (Bhedam)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL : 32

SASABDA AKSHARAS IN A PATTERN OF FIVE SYLLABIC INSTANTS
ANNEXURE III

MODEL OF DASA PRANAS

DASA

PRANAS

EQUILIBRIUM

MELODIC FORCE IN THE TEN PRANAS

JATHI
TALA PRASTARA

Akella Mallikarjuna Sarma, Secunderabad

In the evolution of the South Indian Music while the Raga chapter has been re-orientated the Tala chapter remains un-disturbed. The Raga represents the science of notes while the Tala represents the science of rhythm. This Tala chapter is divided into ten elements and these are called Tala Daśa Pranas. They are: (1) Kaala (2) Maarga (3) Kriya (4) Anga (5) Graha (6) Jati (7) Kala (8) Laya (9) Yati and (10) Prastara. Among these ten Pranas, the last but not the least, Prastara Prana plays a very omnipotent role in the Tala chapter. This Prastara Prana is the source for the derivation of all the Talas. By means of the Prastara Prana we get innumerable Talas. This Prana has been enunciated analytically in Sangita Ratnakara (Sanskrit), Sangita Darpana (Sanskrit), Tala Samudram (Tamil) and Tala Dasapranas Pradeepika (Telugu) in about 60, 100, 60 and 40 pages respectively. In Tala Dasapranas Pradeepika it is mentioned that this Prastara chapter plays a dominant role in the Dasapranas. By this it is obvious that this is a unique chapter.

It seems, at present, people who are well versed in this chapter are very few. This Prastara chapter if full of a complex of technical terms in the ancient books. So, it has become a very difficult task to the reader to understand all those terms. Besides this, in some of the books, the particular chapter is not dealt with categorically and analytically.

Prastara means splitting a Tala Anga by means of mathematical permutations and combinations. There are some norms to avoid repetitions while splitting the Anga. There are three systems of prastaras. They are:

1. Chaturanga Prastara:—In this only four Tala Angas, i.e., Druta, Laghu, Guru and Pluta are to be used while splitting the Anga. This system is meant only for splitting of the Angas dealing with Chaturasra Jati.

2. Panchanga Prastara:—In this only five Tala Angas, i.e. Anudruta, Druta, Laghu, Guru and Pluta are to be used while splitting the Anga. This is meant for splitting the Angas dealing with Tisra, Khanda, Misra and Sankeerna Jatis. But, this could also be implemented for Chaturasra Jati (Chaturanga Prastara does not accommodate the Jatis other than Chaturasra Jati).
3. Samyuktanga Prastara (synonyms: Misramanga Prastara and Misritanga Prastara):—In this system all the six Angas, i.e., Anudrasta, Druta, Laghu, Guru, Pluta and Kakapada are to be used besides many more Samyuktangas (combination of one or more Tala Angas). This system is being named as "Shodasanga Prastara". But, this is not correct.

Among the above three systems, Chaturanga Prastara is mentioned in Sangita Ratnakara, Sangita Darpana and Tala Samudram and both Chaturanga and Panchanga Prastaras are mentioned in Tala Dasaprana Pradeepika. Samyuktanga Prastara is a modern system. This system covers not only all the Prastara Talas got by the Chaturanga and Panchanga Prastara systems but also many more other Prastaras.

There is also another system, which is called Shadanga Prastara. In this system all the six Tala Angas, i.e., Anudrasta, Druta, Laghu, Guru, Pluta and Kakapada are to be used. But, this Shadanga Prastara is almost the same as Panchanga Prastara. While Kakapada comes into the picture small changes occur.

This Prastara Prana has been divided into 19 divisions in Chaturanga Prastara, 22 divisions in Panchanga Prastara and many more divisions than these two systems in Samyuktanga Prastara (particularly in Samyuktanga Prastara the number of divisions depend upon the Jati used by the Laghu).

In Panchanga Prastara the divisions are as follows:

1. Prastara:—Prastara means the mode of splitting the Anga. This is of two kinds: (1) Nija Prastara:—Splitting the Anga as per rules without any omissions of any Tala Anga. (2) Khanda Prastara:—This is divided again into two sub-divisions. They are: (1) Heena Prastara: Splitting up of the Tala Anga keeping the derived Prastara Tala devoid of a Tala Anga mentioned in particular. (2) Yukta Prastara: Splitting up of the Tala Anga keeping the derived Prastara Tala with a particular number of a particular Tala Anga mentioned in particular.

2. Sankhya:—The total number of the Prastara Talas got by splitting an Anga.

3. Patala:—The total number of the number of times that the least Anga of that particular system occurs while splitting an Anga.

4. Maha Patala:—(synonym: Sarva Patala) The total number of all the Angas occur while splitting an Anga.
5. **Nashta:**—While splitting the Angas we get innumerable Prastara Talas. For splitting and writing all those Prastara Talas it takes even many years. But, to avoid such laborious task and to ascertain the seriatiom of the Tala Angas of a required Prastara Tala among those innumerable Prastara Talas, a short-cut method was invented to solve it with the help of some figures. This is called Nashta.

6. **Uddishta:**—The short-cut method of answering a question about the serial number of a particular Prastara Tala bearing a particular seriatiom of Tala Angas, among all the innumerable Prastara Talas, with the help of some figures, is called Uddishta.

7. **Anudruta Meru (table):**—Detailed particulars of all the Prastara Talas such as devoid of Anudruta, having one Anudruta, two Anudrutas, three Anudrutas and so on, of all the Anga Prastaras.

8. **Anudruta Meru Nashta:**—The short-cut method of answering a question about the seriatiom of the Tala Angas of a particular Prastara Tala having a particular serial number, with the help of the figures mentioned in the Meru.

9. **Anudruta Meru Uddishta:**—The short-cut method of answering a question about the serial number of a particular Prastara Tala having a particular seriatiom of Tala Angas, with the help of the figures mentioned in the Meru.

10. **Druta Meru:**—Detailed particulars of all the Prastara Talas such as devoid of Druta, having one Druta, two Drutas, three Drutas and so on, of all the Anga Prastaras.

11. **Druta Meru Nashta:**—See item No. 8.

12. **Druta Meru Uddishta:**—See item No. 9.

13. **Laghу Meru:**—Detailed particulars of all the Prastara Talas such as devoid of Laghu, having one Laghu, two Laghus, three Laghus and so on, of all the Anga Prastaras.

14. **Laghу Meru Nashta:**—See item No. 8.

15. **Laghу Meru Uddishta:**—See item No. 9.

16. **Guru Meru:**—Detailed particulars of all the Prastara Talas such as devoid of Guru, having one Guru, two Gurus, three Gurus and so on, of all the Anga Prastaras.

17. **Guru Meru Nashta:**—See item No. 8.

18. **Guru Meru Uddishta:**—See item No. 9.
19. Pluta Meru:—Detailed particulars of all the Prastara Talas such as devoid of Pluta, having one Pluta, two Plutas, three Plutas and so on, of all the Anga Prastaras.

20. Pluta Meru Nashta:—See item No. 8.

21. Pluta Meru Uddishta:—See item No. 9.

22. Samyoga Meru:—A combination of all the Merus mentioned above.

In the system of Chaturanga Prastara, in which Anudruta should not be used, Anudruta Meru, Anudruta Meru Nashta and Anudruta Meru Uddishta will be absent and as such there will be 19 divisions only in this system.

Among all the above divisions Nashta and Uddishta are of great importance and interest.

In Sangita Ratnakara some rules are framed and mentioned in it to solve the Nashta and Uddishta and to write down all the different Merus without writing all the Prastara Talas, keeping the Chaturanga Prastara system only in view. But, some of these rules do not agree if we try them to apply to other systems too. So, many rules are framed to be useful to apply in general to all the systems of Prastaras and in particular to each and every system.

This Prastara chapter is in general of great use for both Musicians as well as Laya Vidwans. For example, in Samyuktanga Prastara, by splitting the Chaturasra Jati Kakapada (16 units), we get 32,768 Prastaras. Some of them are given hereunder for guidance.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Angas of the Prastara with solfa syllables.</th>
<th>The serial number of the Prastara Tala among the 32,768 Prastaras.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>O O U O O U U 1</td>
<td>3,739</td>
</tr>
<tr>
<td></td>
<td>D P p D, P m p D;</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>U U O O U O O O</td>
<td>5,332</td>
</tr>
<tr>
<td></td>
<td>m p D P p D P D</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>O O U O O U U O</td>
<td>7,477</td>
</tr>
<tr>
<td></td>
<td>D, P p D, P m p D,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>U U</td>
<td></td>
</tr>
</tbody>
</table>
4. O I O I O
   D P; D P; D || P ||
   8,515

5. U I O U O O O
   m p D; P p D, P D || P ||
   10,660

6. O O O O O O O O
   S R G R G M G M || P ||
   10,923

7. U U U O U U O U O U O
   g m p D P m p D P p D || P ||
   13,784

8. U O O U U O U U U O
   p D P m p D P g m D p D || P ||
   15,734

9. U O U O U O U O U O U
   s N r S g R m G p M d || P ||
   23,406

10. U U U U O U U O U O U U O U
    g m p d P m p d P p d P d || P ||
    24,048

11. U U I U I I U U
    p d P; p d P; p d || P ||
    25,028

12. O U U O O U U O O U U
    M g r G P m g M D p m || P ||
    27,567

13. U U U U U U O U U U U U O U U
    g r s r g m P s r g m P g m || P ||
    28,608

14. U U U U U O U U U U O U U U
    m g r g m P g r g m P r g m || P ||
    30,688

15. U O U O U U U O U U U U U
    d P p d P m p d P g m p d || P ||
    31,710

16. U U U U U O U U U U O U U U
    p m g r G d p m g M n d p m || P ||
    31,728

17. U U U O U U U U O U U U U U
    m p d P g m p d P r g m p d || P ||
    32,248

18. U O U U U U U O U U U U U U
    n d P g m n d P s r g m n d || P ||
    32,508

19. U U U U U U U U U U U U U U U U
    d m p d r g m p d m g r g m p d || P ||
    32,768

20. U U U U U U U U U U U U U U U U U
    m g r g m p d r g m p d g m p d || P ||
    32,768

U = Anudruta (1 unit); O = Drúta (2 units); O = Drúta Virama (3 units);
U
l = Laghu (4 units); I = Laghu Virama (5 units).

In this way we get a total of 32,768 varieties of Prastaras in Chaturasra Jati Kakapada Prastara. Among them the musicians may choose some of them and sing them with solfa syllables which will be much useful in Swarakalpana.

It is my sincere belief that this chapter is of great importance and interest for enthusiastic young research students, the Laya Vidwans, the musicologists and the musicians with a vision and aptitude for rhythmical raptures of the nectar of Karnatic Music.
PRINCIPLES AND NUMBER OF RAGAS OF COMPLEX REPETITION IN CARNATIC MUSIC

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A repetitive raga can be defined as a Shadava-Shadava, Shadava-Audava, Audava-Shadava, Audava-Audava raga which can theoretically be derived from more than one Melakarta Raga. Melakarta Ragas are 72 in number.

Some work on the principles of repetition had been done previously and published literature is available. The late Prof. Sambamurthy had formulated 14 principles of repetition. They are broadly correct.

The author has corrected certain wrong principles of repetition of Prof. Sambamurthy and calculated the number of repetitive ragas as 6312 instead of 6144 as shown by Prof. Sambamurthy. It had also been pointed out by the author that the principles of repetition of Prof. Sambamurthy were of simple nature.

Actually there are complicated or complex principles of repetition, which will be discussed in detail in this article. This is a new concept which has not been mentioned by anybody to the best of the author’s knowledge.

Before actually defining a complex repetitive raga a few examples may be mentioned. While giving the examples the following notation is used in this article.

<table>
<thead>
<tr>
<th>Sa</th>
<th>Shadja</th>
<th>Madhyama Sthayi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ri₁</td>
<td>Suddha Rishabha</td>
<td></td>
</tr>
<tr>
<td>Ri₂</td>
<td>Chatushruti Rishabha = Ga₀</td>
<td></td>
</tr>
<tr>
<td>Ri₃</td>
<td>Shstshruti Rishabha = Ga₁</td>
<td></td>
</tr>
<tr>
<td>Ga₀</td>
<td>Suddha Gandhara</td>
<td></td>
</tr>
<tr>
<td>Ga₁</td>
<td>Sadharana Gandhara</td>
<td></td>
</tr>
<tr>
<td>Ga₂</td>
<td>Antara Gandhara</td>
<td></td>
</tr>
<tr>
<td>Ma₁</td>
<td>Suddha Madhyama</td>
<td></td>
</tr>
<tr>
<td>Ma₂</td>
<td>Prati Madhyama</td>
<td></td>
</tr>
<tr>
<td>Pa</td>
<td>Panchama</td>
<td></td>
</tr>
<tr>
<td>Da₁</td>
<td>Suddha Dhaivata</td>
<td></td>
</tr>
<tr>
<td>Da₂</td>
<td>Chatushruti Dhaivata = Ni₀</td>
<td></td>
</tr>
<tr>
<td>Da₃</td>
<td>Shatshruti Dhaivata = Ni₁</td>
<td></td>
</tr>
<tr>
<td>Ni₀</td>
<td>Suddha Nishada</td>
<td></td>
</tr>
<tr>
<td>Ni₁</td>
<td>Kaisiki Nishada</td>
<td></td>
</tr>
</tbody>
</table>
Mohana Raga has the following arohana and avarohana. \( Sa \, Ri, \, Ga, \, Pa \, Da, \, Sa — Sa \, Da, \, Pa \, Ga, \, Ri, \, Sa. \) This raga with the above arohana and avarohana is repeated in 4 Janaka or Melakarta Ragas, namely Harikambhoji (28), Dhira Sankarabharanam (29), Vachaspati (64) and Mecha Kalyani (65) according to the simple principles of repetition; because \( Ma \) and \( Ni \) are eschewed in Mohana Raga and the above-mentioned Melakartas are different from one another either with respect to \( Ma \) or \( Ni \) or both. But Mohana raga can be derived from Mara Ranjani (25) or Kantamani (61) by taking the following arohana and avarohana. The number in the bracket indicates the number of Melakarta in the Melakarta scheme of Govindacharya using Katapayadi formula.

\( Sa \, Ri, \, Ga, \, Pa \, Ni, \, Sa — Sa \, Ni, \, Pa \, Ga, \, Ri, \, Sa. \) This will be the same as Mohana Raga with the following arohana and avarohana,

\( Sa \, Ri, \, Ga, \, Pa \, Ni, \, Sa — Sa \, Da, \, Pa \, Ga, \, Ri, \, Sa. \) Because we know that \( Da_r \) (Chatushruti Dh&ivata) is same as (Suddha Nishada). They have the same frequency. The above arohana-avarohana with Suddha Nishada is possible in Kantamani or Mara and from Ranjani as they differ each other with respect to Madhyama only.

Hence Mohana Raga is repeated 6 times strictly speaking. It is repeated 4 times with respect to simple principles of repetition and 2 times extra with respect to complex principles of repetition.

The word complex is proposed by the author because, usage of (\( Ni \), for \( Da_r \)) is not readily evident. One has to think over it.

During the course of discussion some friends tried to raise two objections over the above proposition.

1. Some opined that \( Ni \) cannot be used alone but when both Dhavatas are present in one raga, then \( Da \) should be pronounced as \( Da_r \) and \( Da \), as \( Ni \).

The above objection is no longer valid because while calculating the number of ragas, it has been mentioned that a Melakarta can give rise to 483 Janya Ragas. Of course when we mention Janya Ragas, Vakra Ragas of all types, Bhashanga Ragas of all types, Svarantara
Ragas of all types are excluded. The following are the types of Janya (Derivative) ragas from a Melakarta Raga:

<table>
<thead>
<tr>
<th>Type</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampurna</td>
<td>6</td>
</tr>
<tr>
<td>Shadava</td>
<td>15</td>
</tr>
<tr>
<td>Audava</td>
<td>15</td>
</tr>
<tr>
<td>Sampurna</td>
<td>36</td>
</tr>
<tr>
<td>Audava</td>
<td>90</td>
</tr>
<tr>
<td>Shadava</td>
<td>90</td>
</tr>
<tr>
<td>Audava</td>
<td>225</td>
</tr>
<tr>
<td>Total Number</td>
<td>483</td>
</tr>
</tbody>
</table>

Let us consider the case of Mara Ranjani. It also gives rise to 483 Janya ragas. Among those 483 ragas let us consider the Audava-Audava raga with the following arohana and avarohana.

Sa Ri, Ga, Pa Ni, Sa — Sa Ni, Pa Ga, Ri, Sa

It is one of the 483 Janya ragas of Mara Ranjani. No body can ask to pronounce Ni as Da because, in Mara Ranjani the usage is Ni only.

If the question is asked whether it will be same as Mohana Raga, scientifically, theoretically and mathematically the answer is ‘yes’, The same argument holds good for Kantamani also.

2. The second objection raised by some is as follows. When we sing Svaras as Sa Ri, Ga, Pa Da, Sa instead of Sa Ri, Ga, Pa Da, Sa the effect of raga is different. The opinion held by them is most unscientific. It is not really going to matter whether we pronounce Ni as Ni or Da. What really matters is with what frequency the note or Svara is sung. As a matter of fact the vocalist will be singing the Svaras as Ta - Ra - Na - Naa in the alapana. He never pronounces the svaras as Pa - Da - Sa in the alapana. Still the effect of that raga is produced with Ta - Na - Naa because the prescribed frequencies are used in making the alapana. And the vocalist never pronounces solfa notes while singing the Matu or Sahityam. But the letters will be sung with the prescribed frequencies of Svaras of that particular raga, whereas the violinist plays only swaras. Strictly speaking he has nothing to do with the sahityam except that he can play the song with bhavam if he remembers the sahityam. There are many songs with plural sahityams though he Svara is the same for them. For example “Sringaralahari” in the Raga Nilambari is composed by Linga Raja Urs and the original Sahityam was “Anandavalli kuru mudamavirata” composed by H. H. Swati Tirunal. The author has heard Kannada Sahityam for “Rara Venu gopa bala” in the raga Bilahari. For the dhatu of Kriti “Emayya Rama Brahmendradulakunena’ni maya poga”
Tarama" composed by Bhadrachala Ramadas there is a sahityam of Narayana Tirtha in Sanskrit, of course in the same raga Kambhoji.

Another convincing point follows like this. Let us consider the Kriti of Thyagaraja "Darini Telusu Konti" in the raga Suddha Saveri.

Sahityam Da Ri Ni Te Lu Su Kon Ti
Swaram Sa Da, Pa Ma,

Here for the word Darini, Svaras Da Ri Ni are not used because, as we know, in the raga Suddha Saveri Ga and Ni are eshewed. The vocalist says the word Darini to the frequencies of Sa Da, Pa and the same will be played on the violin. Only very rarely svaras and Sahityam coincide. The coincidence is known as "Svarakshara" which was discussed in detail by Prof. Sambamurty. It is beyond the scope of this article to discuss about Svarakshara.

As long as the vocalist sings the same frequency, he can spell it as he likes and as long as Violinist or Vainika places his finger at a particular point, he can think of it as Ni or Da. It matters very little.

In nutshell pronouncing Ni as Da will not change the effect of a raga as long as Srutis are maintained. Hence the objections raised and the opinions expressed against the propositions of complex principles of repetition are groundless.

A few more examples will be considered here.

Sa Ri, Ma, Pa Da, Sa — Sa Da, Pa Ma, Ri, Sa.
This is the arohana and avarohana for raga Suddha Saveri. Under repetitive ragas of simple nature it is supposed to be derived from Melakartas Kharaharapriya, Gaurimanohari, Harikambhoji and Dhira Sankarabharanam. Generally Dhira Sankarabharanam is supposed to be the Janaka (Parent) raga, probably because of Suddha Saveri's affinities with the raga Aarabhi. To discuss about Janaka-Janya raga system is beyond the scope of this article. Coming back to the topic Suddha Saveri can be derived from 5 more Melakartas with the following Arohana and Avarohana namely,

Sa Ga, Ma, Pa Da, Sa — Sa Da, Pa Ma, Ga, Sa.
This combination can be derived from Vanaspati(4) and Manavatii(5).
Sa, Ri, Ma, Pa, Ni, Sa — Sa Ni, Pa, Ma, Ga, Sa.
This combination can be derived from Jhankara Dhwani(19) and Mara-Ranjani(25).
This combination can be derived from Kanakangi(1). Hence Suddha Saveri can be derived from Melakartas 1, 4, 5, 19, 22, 23, 25, 28, and 29, total being 9 in number. (4 simple repetitions + 5 complex repetitions).

So far we have considered two examples of Audava-Audava ragas of complex repetition.

An example of Shadava-Shadava may be mentioned here Raga Chandrajyoti is a good example. The following is the Arohana-Avarohana for Raga Chandrajyoti.

Sa Ri, Ga, Ma, Pa Da, Sa — Sa Da, Pa Ma, Ga, Ri, Sa. This is mentioned in the books as the derivative of Raga Pavani(41). The difference between Navanitam (40) and Pavani (41) is only in the Nishadam. Since it is eschewed in the raga Chandrajyoti, theoretically it can also be derived from Navanitam. This is a case of simple repetition. But Chandrajyoti can be derived from the 37th Melakarta Salagamu with the following Arohana and Avarohana.

Sa Ri, Ga, Ma, Pa Ni, Sa — Sa Ni, Pa Ma, Ga, Ri, Sa. As mentioned earlier Ni = Da,. Hence the same effect as that of Chandrajyoti will be felt with the above arohana and avarohana. In other words Sa Ri, Ga, Ma, Pa Ni, Sa — Sa Ni, Pa Ma, Ga, Ri, Sa is one of the 483 Janya Ragas of Salagamu Melakarta. This is a case of complex repetition.

For the sake of argument one may say that the Da of Chandrajyoti need not exactly have the same Sruti as that of the Ni of Salagamu (taking into consideration the 22 Sruti concept).

The above objection is not valid for two reasons. Firstly the 72 Melakarta concept is based on 12 notes for easy calculation and convenience. There are still 10 Srutis extra. While adopting the 12 notes it is taken for granted that Ni = Da.

Secondly it is not necessary that the derivative ragas should have the same Srutis for all the Svaras as in the case of its Janaka Raga. Prof. Sambamurty had given many examples, a few of them will be mentioned here.

The Rishabha of raga Gaula is a Sruti less than the Rishabha of its supposed Melakarta Janaka Raga Mayamalava Gaula. The Ga of Raga Devagandhari is a Sruti higher than the Ga of its parent Mela
Dhira Sankarabharanam. Kuranj and Nilambari sometimes use Tiara Kakali Nishadham which is a Sruti higher than the Ni of sankarabharanam. The Ni of Begada is sometimes a Sruti less than Kakali Nishadham. But still Begada, Kuranj, Nilambari and Devagandhari are supposed to be derived from Dhira Sankarabharanam. Similarly the Ma of Raga Varali is of a higher Sruti than the Ma of its parent Raga Jhalavarali.

Hence even for argument sake one cannot raise any objection. 72 Melas are based on 12 Srutis. If one has to derive Janaka Ragas based on 22 Srutis, Ragas may run to thousands and lakhs in number.

It may be pointed out here that the author has computed the possible number of complex repetitive ragas using higher mathematics. It was based on the 72 Melakarta scheme, not on the 5184 Melakarta scheme of Prof. Sambamurty. In the 5184 Melakarta scheme a raga may be Kanakangi in Arohana and Harikambhoji in Avarohana and so on.

To sum up the author wishes to present the definition of Complex Repetitive Raga, and principles of repetition of complex repetitive ragas.

Definition of a Complex Repetitive Raga:

A complex Repetitive raga is a raga which can be derived from a Melakarta by change of name of its one or two Svaras but not the frequencies. In other words one or more Svaras may be used as Vikriti Svaras with the same frequency.

The following are the principles of repetition of complex repetition:

1. A Sampurna-Sampurna raga or Sampurna-Shadava or Shadava-Sampurna or Sampurna-Audava or Audava-Sampurna raga cannot have any complex repetitive raga.

2. A Shadava-Shadava raga can have complex repetitive raga but only one repetition is possible.

3. A Shadava-Shadava raga having Ri, Ga, Da, Ni in the arohana and avarohana cannot have any complex repetitive raga.

4. Any Shadava-Shadava raga without Madhyama cannot give rise to a complex repetitive raga. (This is the same as principle No 3).

5. In any Shadava-Audava raga or Audava-Shadava raga only one complex repetitive raga is possible.

6. When an Audava-Audava or Audava-Shadava or Shadava-Audava is such that all the svaras of a Melakarta are covered taking Arohana-Avarohana together, cannot give rise to a complex repetitive
raja. For example, a combination like Sa Ri Ga Ma Pa Sa. Sa Ni Da Pa Ma Sa, cannot give rise to a Complex repetitive raga.

7. A raga must have one or more of its svaras from Ri Ga Da Ni to become a complex repetitive raga, of course subject to the conditioned 1-6.

8. All complex repetitive ragas must also be simple repetitive ragas in nature (E.g. Mohana, Suddha Saveri, Madhyamavati, Chandryajyoti. But all the simple repetitive ragas need not be complex in nature. It is only in certain ragas complex repetitions are possible.

9. In any Audava Audava raga the maximum number of complex repetitions are 5 in number.

10. Any raga cannot repeat more than 9 times taking simple repetitions and complex repetitions together.

Applying the above principles the author has calculated the number of repetitive ragas and the figures are given below.

<table>
<thead>
<tr>
<th>Name of the Raga Type</th>
<th>Minimum Number of Possible Complex Repetitive Ragas</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Shadava-Shadava</td>
<td>24</td>
</tr>
<tr>
<td>(2) Shadava-Audava</td>
<td>120</td>
</tr>
<tr>
<td>(3) Audava-Shadava</td>
<td>120</td>
</tr>
<tr>
<td>(4) Audava-Audava</td>
<td>968</td>
</tr>
<tr>
<td>Total number of complex repetitive ragas of all types</td>
<td>1232</td>
</tr>
</tbody>
</table>

In one of the articles the author has mentioned the number of repetitive ragas as 6312 using principles of simple repetition (under publication). The number of complex repetitive ragas is 1232. Thus the total number of repetitive ragas of simple and complex repetition among 34,776 Janaka Ragas of 72 Melakartas is 7544.

If Svarantara Ragas, Vakra Ragas, Bhashanga Ragas and 5184 Melakartas are taken into consideration, the possible Janya Ragas will be infinity in number and repetitions will be billions and millions in number. To further complicate the matter theoretically, the number will become infinity if we apply 22 Srutis concept in 5184 Melakarta scheme. Of course it is of theoretical interest only. Then everything will be complex indeed.
It may be clarified here that the number 1232 for the complex repetitive ragas is the lower limit but not the upper limit. In other words, complex repetitive ragas cannot be less than 1232.

The total number of complex repetitive ragas cannot be less than 1232 in Hindusthani Music also. The only difference is that either Melakarta ragas or Janya ragas do not possess the same names in Carnatic and Hindusthani Music.

References

1. Murty P.S.N. — Simple repetitive ragas in Carnatic Music; (Under Publication).


NEW FRONTIERS OF MUSIC

Use of Music in Therapy: Principles and Practices

Dr. S. Ambujam, Delhi University

As I rise to present my paper, may I say how privileged and deeply grateful I feel to Dr. V. Raghavan and the authorities of the Music Academy for affording me this opportunity to bring to the notice of this august assembly my thought and experiences in a field which, I believe, has immense potentialities for development, a field which awaits systematic investigation and exploration for the benefit of the sick and the suffering everywhere.

The medical men of the ancient primitive tribal people always resorted to some sort of music chants or utterances along with the rituals conducted for curative purposes, and even today in some parts of the world this is still in vogue. The body and mind of man always go together in his reaction to any stimulus which may be described as a psycho-somatic behaviour. This psycho-somatic phenomenon occurs in everybody's life including that of a primitive man, whether he is in good health or ill. In the process of psycho-somatic reaction, he is guided by both the conscious and sub-conscious levels. Reactions under the sub-conscious levels are regarded as apparently involuntary, though when the sub-conscious levels are touched upon by suggestion or auto-reminiscence, a sort of outflow or catharsis takes place. This phenomenon was well known to the Greeks and Romans who employed music as a cathartic measure.

Russian Neurologists and Physiologists have conducted significant experiments on the correlation of the higher and lower nervous systems in any response to a stimulus, including Music. Mr. V. Feigin and Mr. R. Povilanko, in an article on Music Therapy, cite various psycho-somatic phenomena observed by them, and mentions one Dr. Bekhterv, a noted psychiatrist, using music in his practice, specially in functional diseases of the nervous system". Prof. V. Yefimov says: "How to control Irritability; better listen to melodious Waltzes whose rhythms are akin to those of the heart". In the United States where considerable work has been done in this field there are ample records and proof to show that particular psycho-somatic effects can be achieved by exposing patients to Music Therapy.

Ancient India has applied music in every day activity, and used music in diseases. The Theory of Rasas is the basic factor for applied music in India which one might term as 'Functional Music'.
Even in animal reactions to stimulus, we have been able to note this psycho-somatic phenomenon, and we have seen even animals charmed by Music. In India the snake charmer's tune is much praised for this effect. But the peculiar thinking process of the human brain, with its intellect and rationale, and capable of being conditioned, is different from the animal brain and its behaviour. Rational thinking and reacting is of course a special feature, and is being investigated upon; anyhow, we have a correlated activity between the psyche and physique, in all activity, whether in health or disease. The phenomenon of music as a stimulus is really an interesting factor for us to study and experiment upon. Psycho-somatic action is inter-related; e.g. even drugs set up such psycho-somatic results. The psychic and physical reactions are related and occur in a simultaneous way.

I draw attention to such facts to stress the point that music as a stimulus elicits its own peculiar responses from human beings (whether they have previous musical experience or not), in a psycho-somatic way. Music as a stimulus has an effect on the thalamic and hypothalamic regions of the brain, and also on the signal areas of the brain (cortices), which are said to go in action in emotional and corresponding physical activity. Several texts have appeared in the orient and occident on the psycho-somatics of music. In India we have authentic texts on music and dance, where music materials and their respective psycho-somatic effects have been analysed, cited and codified and these are described as "Universal Affects", true for all humanity, at least for a major portion of humanity; these postulates are fully described in the "Theory of Rasas", of Bharata's "Natya Sastra" of 2nd century A.D. Later texts also have mentioned and improved on this "Theory of Rasas", in relation to Raga and rhythm. The theory of Rasas deal with the Affects and Effects of the various Raga-melodies and rhythm.

The "Theory of Rasas" is quite elaborate in description and classification and the number of rasas classified are eight in the old texts and nine in later texts. In general they are called the "Nava Rasas"—"Nine Rasas" evoked by fine arts including Music and Dance. They are Veera (Valour), Raudra (Anger), Bhayanaka (Fear), Bibhatsa (Disgust), Karuna (Sympathy), Adbhuta (wonder), Hasya (laughter or merriment), Sringara (Love or affection), and Santhi (peace). The Indian aestheticans covered almost all human sentiments, affects and feelings within the ambit of these nine rasas. For example, if we take the Rasa Sringara or love, the love between friends, relatives, lovers, father and son, mother and daughter, master and servant, all
are covered by the Rasa Sringara—and this is also called Madhura or Sweet; in these instances love or affection differs in degree, content and kind. In the same way we can explain other kinds of rasas embracing all human activity. Karuna Rasa may mean sympathy, pity, compassion, softness in manners etc.

The Rasas are the psychic content of the psycho-somatic phenomena, and the psychic factors are causes of the physical responses, and these attitudes are called “Bhavas” or the somatic phenomena; an intense lover sheds tears, sometimes speechless, sometimes sings the glory, expresses internal joy, shows coy and shyness, feels internal warmth, and subsequent experiences, and these are described in a word “Bhava”; the after conduct of such Bhava is called the “Anu-bhava”, that which follows the Bhava. This Bhava and Anu-bhava, are quite discernible, in the expressive gestures of Indian Dance, called Abhinaya of Bharata-Natya. So the Rasa or affect leads to Bhava or attitudes followed by Anubhava, resulted behaviour.

In this country, we have an extensive repertoire of several kinds of music; sacred, secular, religious, social, ritual, devotional, material and so on. Efforts are afoot to codify and classify these properly, so as to relate them scientifically to various needs and purposes, among which music in therapy or hospital music is the recent and fascinating field.

In the Indian Theory of Rasas, a prominent place is given to the Sringara Rasa, which is called the origin of all other Rasas, which dominate man’s activities. Even so Adam ate the forbidden fruit first, by Eve’s loving and charming approaches and inducements to do so by the Madhura Bhava of Sringara.

We have in Indian Music, several forms or themes of music, which are dominantly affective to cause this ‘Sringara Rasa’ and ‘Madhura Bhava’. The same is true for the various different Rasas and Rasa Bhavas—or attitudes. Such music materials affecting their respective rasas, have been accepted in India, by experiment and experience, as of an “Universal Inherence Value”, true for all humanity—at least for those conditioned for some time. You may come with an argument, that for an alien audience Indian Music would be meaningless, and so it is useless for gaining any affects. But human nature as it is based on instinctive selective and impulsive promptings, backed by the thinking prowess never for long stands isolated or indifferent, and falls into natural reactivity sooner or later, by proper
conditioning if necessary. And this conditioning process is already going on. Audiences are appreciating and enjoying music which is alien to them. Several Westerners have reacted favourably to Indian Music and Indians have become appreciative of Western Music. The barriers are slowly disappearing in the sweet musicality of a piece sung or played. What we are concerned is the inherent musicality and its appeal, rather than the grammar, diction, structure etc.

Each and every piece of music can be evaluated as to its major impress and special impress. The major impress points to the universal inherence value and the special impress indicates the special value of a pitch of music. The universal inherence value in a music is a guidance for us to cover the majority of community effectivity in therapy and its special value indicates its suitability or usefulness in intensive individual therapy.

We have in our country a vast repertoire of absolute and thematic music, out of which it is possible to group several of them under one heading, relating to a particular affect or RASA BHAVA or emotional impress. We have to fit these in Music Therapy, under the principles of ELECTIVITY and SELECTIVITY; Electivity goes with the patient and Selectivity guides the therapist. The groupings held the therapist to avoid monotony.

Basic Factors:

The basic theme on which I build my principles of Music Therapy is: that music has its affects and effects on the humanity and the inherent affective value of the materials of music is the most important; that this can be verified and experimented upon on an extensive scale; that due classification is possible, and indeed necessary; and that such classification already exists in India in the code of the "Theory of Rasas" and musical texts on Ragas and Rhythm.

With our Music Materials and vast repertoire, we have been able to formulate the methodologies of Music Therapy, which have given us some good results. Though we have all the materials for Music Therapy to be organised on abroad basis in India, due to lack of finance and proper organisations and also the absence of a cadre of trained workers and the prevalence of career prejudices of vested interests, lack of training institutions etc. this has not been done.

We have in our own small way started The International Foundation for Music Therapy, with a centre at Madras, which has been doing some work for about a year; yet we have to convince the medical
profession. Some cases of chronic headaches and functional hyper-tension, have responded well to Music Therapy, and we hope certain hospitals would co-operate, as these have shown some interest.

Music therapy properly administered has helped to restore orientation in many a mental patient. Music has been used in surgery during anaesthesia, in maternity during labour, in dentistry and other fields as a diversionary therapy. It has been used in cerebral palsied children, to promote co-ordination and control, and to rehabilitate the handicapped.

We have extant texts on Music where Ragas and Rasas are dealt with, which would enable us to collect factual data for music therapy.

Apart from the factuals in extant texts on the psychosomatics of music, there are no pointed references of having used such factuals for curative purposes in these texts; but legends in history speak of cures of some diseases by music therapy. Prof. P. Sambamurthy has in his lectures and books, referred to one text by title ‘Raga-cikitsa’—‘Treatment by Ragas’, which is non-extant and could not be traced. Prof. Lalmani Misra of Benaras Hindu University once told me of two volumes of Sanskrit on music therapy which he noticed in Lahore Library, also untraceable now.

The United States has put music to the practical use of curing the sick, and they have a proud cadre, training institutions, and well established departments in their hospitals. To a certain extent scoffers of music therapy are silenced. Music therapy is becoming popular in U. K., Europe and several other countries, including the Soviet Union. Having set forth the above moorings for music therapy and having established that such a therapeutic procedure is possible in the treatment of the sick, let me discuss how we are actually using it; let us examine the materials available in India.

THE MUSIC MATERIALS:

In India music materials are dominated by aspects of melody or raga content and expansion and style. We know that in this country music originated from melodic chants almost 5,000 years back when Vedic chants were in vogue. In fact all music starts in a melodic form and one could say that it was prevalent in the Greek and the Egyptian eras. One learns that the Vedas were sung to the syllabic extensions and lastly the Sama Veda came to be sung in a musical style. These styles had their esoteric meanings and efforts on the rituals conducted.
We see in primitive civilisation such melodic simple extensions sung for curing diseases. We have in India special compositions called ‘Mantras’ which are ritual incantations, uttered for driving away diseases. Even now it is in practice in remote villages.

Coming to practical use of music, we have in India rhythmical and non-rhythmical music - and among each we have the absolute and thematic music (meaningful music). Within this ambit we have music of melodic dominance and music of rhythmic dominance. Several kinds of the above music fit in the Theory of nine rasas, and these have been described in the texts.

So we have:

1. Absolute Rhythmical Music
2. Absolute Non-Rhythmical Music
3. Thematic Non-Rhythmical Music
4. Thematic Rhythmical Music
5. Music of Rhythmical Dominance

The thematic rhythmical music of India consists of select compositions called ‘Kritis’, ‘Keerthanas’, ‘Bhajans’ etc., the bulk of which are compositions of sacred music, but in secular music also we have various compositions in different languages. In folk music again we have this type of music; this is a wide field where thematic rhythmical music plays a great part. Raga rhythm and theme, each plays an equally dominating part and as such this has a great value in music therapy. Bhajans are suited for group or chorus singing. The kritis and keerthanas and padams are of musical excellence in poetic language and suitable rhythm and tempo, for telling effect on the psyche and soma. Due to meaningful words, and of ideation these are powerful in impress and impact on the audience or those who are exposed.

Absolute rhythmical music sequences of notes set to rhythm having also melodic content, are called Swara Jathis and Varnams. When these are rendered on instruments they form pieces of absolute rhythmical music.

Another form of absolute rhythmical music is called “Thillana” where syllabic singing is restored to. Absolute non-rhythmical music constitutes our ‘Raga Alapana’, which is the delineation of a Raga or melody without any rhythm, chiefly dwelling on notes of consonance and assonance of a Musical Scale of ascent and descent. Such rendering
has ample creativity and improvisation, in the expansion of the Raga constituting the phases of start, climax and end. This kind of absolute non-rhythmic Alap Music has great potentialities of evoking the various Rasas or emotional sentiments and feelings, with their attendant physical responses. This is a peculiar aspect of rendering in Indian Music of the Raga.

The thematic non-rhythmical music is a composition of couplets or stanzas in chaste poetic language, describing an idea, moral, person, scene or a deity. These are rendered in selected Ragas suitable for the theme, to evoke the desired psychic and physical effect; these are found in sacred and devotional music such as Slokas, Archanas and Viruttams.

There are certain Ragas having double phases in their rendering; for example Raga Atana in slow tempo causes Karuna Rasa, sympathy or pity; and in its fast tempo it evokes Raudra Rasa, anger or valour etc. Having given you a short idea of our materials, I proceed to show you how we assess and evaluate the affects and effects of a raga or composition, for purposes of therapy. We call these experiments PROVINGS.

The Provings:

From data gleaned from our texts, we select a group of ragas and compositions set to suitable rhythms, having potentialities of evoking the same affects, though they may be differing in degree and content. It is possible to select a group of Ragas having affects of valour or love or affection, and so on. These are rendered in absolute and thematic music, rhythmical and non-rhythmical, in slow, medium and fast tempos, and each piece assessed through test-cards appendix 2. These experiments are conducted among mixed audience, after a pre-relaxation period and among healthy people. Both vocal and instrumental music are employed, preferably on stringed instruments. Violin has admirable suitability; next comes Vina as a suitable instrument. Other instruments also could be played for tone color effects.

The sessions are carried out for 15-20 minutes duration, with intervals of relaxation, and each person is given a test card, on which pieces sung or played are marked only Nos. 1, 2, 3 etc. Against the selected piece or music on the test card, are given words describing the various attitudes covered by the Nine Rasas; on the conclusion of each session, the prover is asked to mark a check against those words which actually tally with his affects or experience-and also any subjective physical feelings, or sensations. Observers specially designated note
physical behaviour and psychical expressions observed among the audience during the sessions. After the conclusion of the experiments the cards are collected, and evaluated for major and minor impress. By such means we collect data from each piece of music for classification, as stimulating, relaxing, gay, devotional, energising, soporific etc. The prover is also requested to mark the I, II, III, degree of the intensity of his experience against the words, I denoting greatest intensity, II next and III the least.

Appendix 3 of this paper shows affects of certain ragas in our experiments. This process of proving could be carried out for several other Ragas and pieces of music in them. This should form the research data for music therapy.

With sufficient data we can use music therapy in several diseases exclusively in conjunction with drugs in a total hospital programme. For instance we can treat melancholic and hypochondraics, and introvert schizophrenics, who suffer from sluggish and dull physiology functions, with music of relaxing affects for contact, and then stimulate the functions by stimulating music. Suitable drugs also could be associated with music therapy.

THE METHODOLOGIES:

Two broad methods are followed in the administration of Music Therapy, and they are EXPOSITION and PARTICIPATION.

Exposition is merely exposing the subjects to selected music stimuli, in short sessions, with brief intervals at a suitable time and place. Naturally the effect of music sets up a reactive phase of rapport of indifference; and such indifference could be favourably converted into rapport by offering “Electivity’’ to the subject by exposing similar musical stimuli, or through conditioning for some time. Exposition is regulated by the principles of “Selectivity’’ and “Electivity”’; the therapist selects the materials for the case, and the elective approaches to the particular material, by the patient is found out. This helps to carry out intense individual therapy. This principle of Selectivity and Electivity also applies to participation method.

The exposition therapy could be conducted for individual or group, in chamber or in open air. Wind instruments are very much suited to open air therapy.

The music of India is very well adapted to exposition therapy on account of its dominant melodic content and rhythmical varieties.
Some of the Western composition as Cantatss, Madrigals, Psalms and Chorales, and some church music, have an appeal to the Indian audience. Selected Western Music compositions could be exposed for music therapy in India also.

PARTICIPATION:

This method is widely practised in America and the West in several hospitals. Here the music therapy is valuable for those who have some background of musical experience; and who could be prompted to participate, in programmes conducted by the music therapist. This is also suitable for group therapy, as a team participation. The therapist endeavours to bring into the patient an effort to organise in an orderly way, and in due course the patient develops self-confidence, self-reliance and ego-sublimation of having achieved something. A disoriented person begins to come in contact with reality and order, by his participation in a music programme. Even persons who have not been initiated in music could become silent partners, and by constant listening these could be able to get into the programme by stages. So Exposition may become a stepping stone to participation. In Indian participation therapy could be developed through ‘bhajans’ which are suited to congregational singing of devotional songs.

Often when patients come into the Music Therapists’ room, we do not expect an immediate response from several of them, specially those who are disoriented. Exposition of selective music is casually done, and in due course after due conditioning, some patients show interest and these are the pivotal attraction for others to join; thus proper exposition would prompt natural participation in programmes of music therapy. Very often disoriented people take time to pick up and join, and once they join they have an exercise of their rational, and their disciplined willingness to come to the therapist is itself a gain towards successful therapy.

Exposition therapy under perfect relaxation of patients have successfully cured some functional hypertension cases and tension headaches (chronic and acute types). These two broad methods are governed by the four well-known principles of therapy in medical practice.

THE PRINCIPLES OF THERAPY:

1. The principle of “Contra”
2. The principle of “Similia”
3. The principle of “Iso”
4. The principle of “Pallia”
The principle of “Contra” is the principle of treating sickness by the ‘principle of opposites’. If we come across a restless person suffering from insomnia or sleeplessness, we play a music which would produce sleep. This principle in Greek goes as “Contraria contrariorientur”.

“Similia similibus currentur” is another principle which means similar things cure similar affections. Suppose a patient is very active and suffers from neurones; this patient is likely to have rapport with stimulating music and by his elective choice could be treated with a music of his liking—which establishes rapport or contact with him; then the same music can be adjusted to slow or medium tempo to cure him.

The principle of “Iso” is treatment by ‘Identicals’, as we employ cholera vaccine to cholera, smallpox vaccine to smallpox etc. This Iso principle in Music Therapy is popular in the U.S. and has been developed by Dr. Ira M. Altshuler and his sensational cure of a mental case is known to several music therapists of U.S.A. A violent neurotic man has to be rapported and contacted on his own level to draw him for co-operation, in treatment with an identical violent music and then he is to be led away with suitable relaxing music; a person having intense headache is to be reacted upon first by stimulating music and then by calm music. Here the Iso and the Contra go together.

We must however bear in mind not to play Iso or Similia music in cases where the suffering is hyper-intense, and the tissues are highly over-sensitive, as in status maniacus, status neuralgicus etc. In such cases we should resort only to the principle of Contra or Pallia, first to lessen the sufferings and then apply other suitable principles to cure the disease.

The principle of Pallia is treatment by Palliation, i.e. by some agent which would lessen the suffering; an itching skin requires some soothing lotion or ointment to allay itching. In the same way a sleepless person could be relieved or improved by music of soporific nature; we can extend this principle to several other diseases.

One important thing I should impress on you is, that Music as a therapeutic measure has its own sphere, and so it is a mistake to imagine that it can be extended to cover all diseases of humanity. It can be useful as a diversionary, rehabilitative, auxiliary or direct therapeutic measure. in the surgery, in the maternity wards, in the general
wards, and in some diseases of the mind and nervous system, and functional disorders. Though limited, it has a field in physio-therapy. The therapist is free to adopt any of the above principles alone or combined as he thinks fit, in consultation with others.

Having dwelt on the materials of music, and the principles of therapy, I should like to discuss some dominant factors relating to the psycho-physiologic responses in music therapy. There have been laboratory experiments in the U.S. and elsewhere to see how music affects pulse, blood pressure, respiration etc.

Music as a stimulus enters the higher nervous system of the brain, through the auditory paths (nerves) and reaches the Thalamic, Hypothalamic and signal areas (cortical areas). The auditory area is very close to these areas. The auditory apparatus is quick in its response and conveys the stimuli quickly to the associated regions of the higher nervous system, and this musical response is quick and lasts till the continuance of music; in other words its effect is evanescent. Pavlov's condition reflex theory is based on this phenomenon. Mr. Curt Sachs in his book "The rise of music in the ancient world" in chapter 9, page 253 refers to treatment by music therapy as "treatment basically Homeopathic".

The "Gnostic" area of the brain is important in diagnosing and guiding stimuli for corresponding psycho-physiologic reactions; music stimuli also pass through this area for proper integration and interpretation; in certain schizophrenics this area is found to be affected; this has to be further investigated. It is very likely music chosen aptly would stimulate this area for proper function and restoration, if it has not been damaged by tissue changes.

I have shown how musical stimuli could set up psycho-physiological responses in a person, and how best we can collect data useful for music therapy. [In Appendix I I have given some data based on research done by the Chairman, I. F. M. T., Dr. S. Raman and myself together.]

Music therapy in India is still in its infancy and is to be developed and popularised by introducing it in institutions and hospitals. A centre at Madras has been organised consisting of professors of medicine, psychology, musicology and musicians and educationists, and this organisation has just started its work with meagre means. In certain mental hospitals music is introduced weekly just to
promote socialisation among patients. The International Foundation for Music Therapy, Madras Center, has Dr. B. Ramamurthy who is an international Neuro Surgeon, and Professor of Neuro Surgery; we have other eminent doctors also. Major Parthasarathy, Professor of Psychology is another active worker. Another eminent Neuro-surgeon Dr. Kalyanaraman, of the General Hospital, Madraas, takes much interest in Music Therapy. Prof. A. N. Parasuram, a leading educator, is another patron; Dr. S. Ramaswamy, an eminent Doctor of Pharmacy at Madras, ex-President, Madras South Rotarians, gives his best cooperation for our work. We have at the Madras center a band of dedicated persons to organise Music Therapy.

Given the time and means, we hope to build an organisation in Music Therapy in India with liaison of international organisations.

I have sounded somewhat technical in certain places; but before a learned audience such as this, I thought I could afford to do so. I have, of course, tried not to make it too technical so that the general public may also appreciate developments in this field. Anyone who wants more details is always welcome to contact me and I shall be glad to furnish whatever information I have with me.

I thank you for your indulgence in giving me your attention.
This figure is a sketch to show the pathways of signals of sensations and motor impulses (psychic associated feelings too) through the related nerves. Note that the auditory sensation passes through the primary auditory and associated areas, to the gnostic or integrative or interpretative area, then on to ideo-motor area to be conveyed to corresponding somatic responses; the gnostic area is very important to diagnose, recognise and interpret any stimulus, visual-auditory and somesthetic sensation. The proximity of the auditory area to the different areas, and the conduction of musical stimuli through them, makes a complex of responses, psycho-somatic in nature. The thalamic and hypothalamic regions are also closely connected—which are areas of emotional responses. The gnostic area is situated on the left side and to the back of the occipito-temporal portion. The corresponding right side is inactive in general and rarely in very exceptional cases. When the gnostic area is affected imbecility results. This area is suspect in schizophrenics.

In short we can set up by musical stimuli impulses to go through the Hypothalamus Thalamus and from here to respective cortical centers for psychic and somatic effects. Such a study of qualifying behaviour is observed in Music Provings.
APPENDIX No. 2.

TEST-CARD

Name:--
Age & Sex:--
Occupation:--
Address:--

Musical Piece Nos:--
Trial Nos:--
Date:--

Vocal or Instrumental:--

1. Have you a taste for Music? Yes No
2. Have you practised music in any way? Yes No
3. What kind of Music do you like?
   Karnatic Music Vocal Instrumental, if so
   Hindustani Music " " "
   Western Music " " "
   Classical Music " " "
   Light Music " " "
   Folk Music " " "

4. If you are familiar with music of any kind as above, tunes, rāgas or melodies or songs, state four of them you like in the order of your preference.

5. On hearing this piece of music how do you feel? Please express yourself by checking a mark against as many words that tally your affected attitudes; please place Nos. 1, 2, 3, of the related music, also suffixing A B C to indicate the grades of impress of the particular attitude.

Attitudes:--

Stimulating Sentimental
Relaxing Religious
Depressing Dignified
Dull Grandeur
Monotonous Hopeful
Tensive Pride
Soft Devotion
Sad Restless
Soothing Disturbing
Joyful Violent
Fearsome Angry
Aversion
Disgusting
Merry
Dislike
Bright
Gay
Exciting
Energetic
Toning up
Victory
Valour
Fatiguing
Triumphant
Affectionate
Sympathy
Sorrowful
Love
Pleasant
Soporific
Lively
Pitiful
Grief
Ecstatic

Divine
Holy
Daring
Courage
Passionate
Sensual
Sexy
Serene
Helpless
Hatred
Impulsive
Discomforting
Release
Vigorous
Sacred
Light-hearted
Playful
Funny
Peaceful
Delight
Entranced
Charming

Observation:

Physical Behaviour:

Mild
Blissful
Amorous
Endearing
Composure
Buoyant
Easy feeling
Gentleness
Tired
Get Done
Inactive
Oblivious
Confident
Opulent
Socialising

Sublime
Enchanting
Sleepy
Balance feeling
Absent-mindlessness
Equanimous
Exhausting
Powerless
Strong
Brisk
Excellent
Beautiful
Affinity
Satiated
Aggressive
Self-being  
Warmth  
Confusion  
Forlorn  
Tearful  
Unpleasant  
Ennobling

Humility  
Stupid  
Helpless  
Hopeless  
Disinteresting  
Destructive  
Majestic

Designed by Dr. S. Ambujam

APPENDIX No. 3

RESEARCH DATA ON THE PROVINGS OF SOME RAGAS

1. Kalyani: Absolute Alap & Rhythmical-Adi Tala
   Song-Sārasa suvadana: Violin-medium tempo
   
   Affects: Happy; well-being; energising; blissful; pleasant joyful; bright; lively; delightful.
   
   Therapy: Dullness; depressing; melancholy; mental and physical debility; nervous debility; as a stimulant to sluggish body - functions, circulation.

2. Bilahari: Absolute Alap/Rhythmical -Adi Tala-
   song Paridana-Rupaka Tala; song Intakannananda - Violin-Med-Tempo
   
   Affects: Daring; courage; pride; bright; exciting; energetic; toning; exhilarating; ecstasy; grandeur; impulsive; triumphant; joyful; vigour.
   
   Therapy: Dementia; melancholia; hypochondriasis; timid; fearfulness; fear; introvert schizopkrenics; hallucinations and delusions, obrebral anemia; denervation; nervous debility; suspicious.

   
   Affects: Peace; joy; happiness; religious; devotion; calmness; release; soothing; hopeful; dignified; serene; charming; pleasant; warmth; love; affection.
   
   Therapy: Wild mania; temper; mental conflicts and imbalance; religious anxiety; neuroses; worry and insomnia; restless, mental and physical; lack of pep; indifference; apathy.
4. Yadukulakamboji

**Affects:** Calmness; peace; serene; release; relaxing; holy; sacred; sentimental (gentle); relaxation (sublimation-humility); divine; devotion; love; affection.

**Therapy:** Violent mania; hypertension (congestion); sexy mania; anger; sensual distortions and perversions; suppressed emotions, anxiety, neuroses, restlessness.

5. Khamas:

**Affects:** Passion; love; affection; sensual appeal; release; gay; joy; pleasing; pleasant; friendliness; (libidous) Love.

**Therapy:** Adversion between loved ones; domestic conflicts; lack of libido; apathy; indifference; hatred; sterility due to mental conflicts; frigidity; perversions; temper; irritability; amenorrhoea; menstrual disorders; conversion hysteria due to conflicts between husband and wife.

6. Mohanam:

**Affects:** Excellence; beauty; softness; pleasure; joy; affinity; charming; socialising; courage and valour; (in fast tempo) gaiety; ecstasy; exciting; stimulating; dignity; grandeur.

**Therapy:** Blues; hypochondriasis, timidity; melancholy; dementia; aversion to company and light; lack of socialising; solitude; sluggish and dull; depression; suicidal tendencies; black thoughts and impulses; funkiness.

7. Hamsadhvani:

**Affects:** Buoyancy; exhilaration; energising; toning; stimulating; activating; tensive; (fast tempo) impulsive; vigour; delight, lively.

**Therapy:** Tension headaches; congestions; dullness; depression; stimulates function; releases active congestion; sluggishness; chronic neuraligic headaches; idiocy; cerebral anemia.

Affects: Light-hearted; pleasant; easy feeling; carefree; playful; stimulating.

Therapy: Moroseness; sadness; grief; solitude; unsocial; dull; inactive; idiotic children.

Medium Tempo, Violin and Vina Duet.

Affects: Energising; toning; grandeur; victory; happy; pleasant; passion; love; affection; amorous; endearing; sentimental; stimulating; dignified; delight; exciting; ecstasy; charming; sexy.

Therapy: Dementia; stupidity; depression; blues; schizophrenia; melancholia; mania; cerebral anemia; extreme debility; nervousness; sexual perversions; geriatric debility; premature senility; cruelty and criminality; impulse to dance noted in some patients.

10. Kharsharapiya: Absolute Alap/Rhythmical Rupaka Tala-Song-Rama ni samana mevaru Violin, Tempo medium.

Affects: Sympathy; pity; compassion; endearing; dignified; affable; composure; peaceful; intellectual exhilaration; divine; happy; relaxing; happy; confidence.

Therapy: Dementia; depression; mild mania; restlessness; neuroses; insane jealousy; suspicion; insomnia; (slow tempo)-conflicts; cruel and hard-hearted; licentiousness; socialising; hatred; rough conduct; mental conflicts; indecision.

11. Kadanakuthulahalam: Rhythmical Adi Tala-Song Raghuvamsasudha; Violin Medium and Fast Tempo,

Affects: Vigour; strength; gay; merry; playful; brisk and active; buoyancy; release; pleasant; toning up; light-hearted; easy feeling; physically active.

Therapy: Lassitude; dullness; apathy; indifference; debility, mental and physical; stimulating; nervous debility; sleepy, drowsy, inactive.

Affects: Gentleness; compassion; sympathy; prayerful; devotion; religious; righteousness; humility; puritan feeling; blissful; peace; calmness; absent-mindedness; godly; helplessness.

Therapy: Violence, physical and mental; obstinacy; religious; mania; hysteria; dementia; forlorn; solitude; miserliness; hard-heartedness; rigid and rough conduct; criminal and cruel; insomnia; neuroses; functional hypertension.


Affects: Gentleness; mildness; relaxing; peaceful; sublime; divine; soporific; enchanting; sleepy feeling; perfect balance; release; absent-mindedness; equanimity.

Therapy: Insomnia-functional, neurotic, cerebral and toxic; anxiety; neuroses; hysteria; restlessness; functional hypertension; congestions; headaches, congestive and neuralgic, acute and chronic; disorientation of mind; introverts for contact.


Affects: Complete relaxation; equanimity; peaceful; release; humility; exhausted feeling; powerlessness; softness; 'get done' feeling; inactive; oblivious to surroundings; sympathy; pity; fatigue.

Therapy: Hypertension; violent mania; restlessness; cruel and hard-hearted; aggressive behaviour; disobedience and obstinacy; neuroses; criminality; sexual perversions of extreme nature.

15. Madhyamavati: Absolute Alap-Violin-Slow and Medium Tempos.

Affects: Pleasant; confidence; opulence; happy; serene; majestic; blissful; divine; sublime; delight; charming; ecstasy; hope; release;

Therapy: Neuroses; mental conflicts; hopelessness; funkiness; toning; stimulating; apathy; disaffection; obtuse mind; dullness; discourtesy; confusion of mind; disorientation.

The above therapeutics have been based on experience and suggestive corollaries for future experiments clinically. The mentals are given prominent consideration, for clinical improvement, for the related physical improvements.
A NOTE ON THE TAMIL COMPOSITION ASCRIBED TO MAHARAJA SWATI TIRUNAL

Dr. S. VENKITASUBRAMONIA IYER

During the Forty-Seventh annual Conference of the Madras Music Academy held in 1974, there was an announcement that a Tamil composition of Maharaja Swati Tirunal of Travancore was discovered in the music manuscripts in the family of the Tanjore Quartette. This was very happy news because till then no composition of his in Tamil was known, although one could reasonably believe that this multi-lingual composer who adopted Sanskrit, Malayalam, Telugu, Kannada and Hindusthani as the verbal medium of his musical expression, could not have ignored Tamil, the language that is nearest to Malayalam, his mother tongue, linguistically and geographically. This discovery in this particular family had a significance of its own since Vadivelu and his brothers, the Tanjore Quartette, were in the service of Swati Tirunal, and Vadivelu, in particular, was his close companion and earnest collaborator in his wide musical activity. Dr. V. Raghavan in the course of his illustrated talk on 'Svati Tirunal's contribution to Dance' in the same Conference referred to this newly discovered composition as a Varna bearing the Maharaja’s mudra and gave some details about it.

There was, therefore, no need to doubt its authenticity and in my book 'Swati Tirunal and his Music' I included Tamil as one of the languages in which the Maharaja has composed, although I could not get the text of this song then, with a note that strangely no composition of the Maharaja in Tamil was till then known.

The text of the song is now made available in Volume XLV of the journal of the Academy. This is a chowka varna beginning with Sami unnaiye nan and having svarasahitya throughout. It is worth while examining it to see how far the ascription of this to Swati Tirunal’s authorship is tenable.

(1) Contrary to the earlier announcement that the song is by Swati Tirunal, the authorship here is given jointly to Tanjore Vadivel, Tanjore K. P. Sivanandam and Maharaja Swati Tirunal. We are unable to know what part is played by each in moulding this composition. Sri K. P. Sivanandam is a living descendant of the Tanjore Quartette and his role here, perhaps, is as the editor of this piece. In that case, this piece is to be taken as a joint production of Vadivel and Swati Tirunal.
It is claimed that the mudra of Swati Tirunal occurs in this. The word ‘Kamalanabha’, of course, occurs in it, but this cannot be the sole criterion for assigning the authorship to him. There is a tendency on the part of many enthusiasts to rush to the conclusion that a composition is Swati Tirunal’s the moment this mudra is seen in it. Really this should be considered only as a corroborative evidence when other factors also favour. The word ‘Padmanabha’ occurs in the compositions of others also, as for instance in the Nagagandhari kriti ‘Sarasijanabhasodari’ and Karnatakadevgandhari kriti ‘Pancastaptiharupini’ of Muthuswami Dikshitar, the Bilahari kriti ‘Kayalareno krishna’ of Purandaradasa, and the Sriraga kriti ‘Karunai ceyyan’ and the Surati kriti ‘Nilavarna pahi mam’ of Irayimman Tampi. It may also be noted that many compositions well known to be Swati Tirunal’s like ‘Pahi parvatanandini’ in Arabhi, ‘Pahi tarakshapuralaya’ in Anandabhairavi and ‘Devi jagajjanani’ in Sanakarabharanam are bereft of this mudra, the probable reason being that they belong to a stage in his musical activity when the idea of having a distinctive mudra for his compositions had not dawned on him.

An examination of the sahitya clearly shows that it is in praise of Swati Tirunal, who is taken as the nayaka. The nayika is telling him that he is the lord of her heart (Nije tan en prananathan) and that he is Padmanabhasa Kulasekhar Maharaja (Kamalanabhadovanin dasanana Kulasekhararajendra). ‘Padmanabhasa’ is a hereditary title of the Maharajas of Travancore and ‘Kulasekhamaharaja’ is the name by which Swati Tirunal was known outside his state during his own time. It is evident from this that Swati Tirunal cannot be the author of this Sahitya. No one would compose a song making himself the hero, least of all Swati Tirunal who was particular that music, to be worth its name, should be in praise of God and God alone.

An examination of the dhatu of the composition in question reveals that it is identical with that of the varna ‘Saura kamini’ which is given in full notation in Balamritam, the collection of Swati Tirunal’s songs compiled and edited by S. Ranganatha Iyer. This varna with this Sanskrit sahitya is popularly sung by the Mullamoodu Bhagavatars, the musicians attached to the Maharaja’s palace, and is also played by the Nagaswara Vidwans of the Padmanabhaswami temple in Trivandrum. As is well known, only the compositions of Swati Tirunal are used in the Palace and in the Padmanabhaswami temple. The authenticity of this varna being Swati Tirunal’s is thereby confirmed.
From the above facts, the conclusion we have to naturally draw is that this song is the varna of Swati Tirunal to which a Tamil sahitya is supplied. It is quite likely that this sahitya in praise of the Maharaja is by the Tanjore Quartette since we find duplicate sahityas, some of them in Telugu, supplied to several of Swati Tirunal's varnas by them, and in some of them we find the very expression 'Kulasekhararajendra' as also in certain others like 'Samugamu' in Nata.

Although it is quite possible that Swati Tirunal has composed in the Tamil language, we have yet to get a specimen, the present sahitya fathered on him being clearly not his.
This book published under the centrally sponsored scheme for the production of books in regional languages at the University level is a very welcome addition to the meagre number of books on music in the Malayalam language. The first text book on classical Carnatic music in Malayalam seems to be one ‘Sangeeta Gunadarsam’ published from Trivandrum many years ago, probably for the use of students of the school of music run by the erstwhile Travancore State. That was just an elementary book on the theory of music coupled with the bare texts of songs of a number of composers. One book by Mekkunam was published a few years ago and recently another one by Ravindran, received favourable notices.

The Editors of the Language Institute, have in their Preface mentioned as follows:

“The basic theories of music have been introduced in this book in simple language. Though this book is written to conform to the syllabus of the B. A. Degree of the Kerala University, it could be used by students of the Pre-degree classes also. The book is written in a manner to make it useful even for the music-loving layman.”

The publishers can take legitimate pride in the fact that the book admirably fulfils all the needs they had intended it to meet. They have selected just the right person in Dr. Venkitasubramonia Iyer to fulfil this difficult task. The learned author who is Professor of Sanskrit in Kerala University is equally proficient in the theory and practice of music as well. The readers of this Journal would be familiar with his learned articles which have often appeared in it.

The book is divided into six main chapters, Svara, Raga, Tala, Gana, Vadya, and history. A few appendices are added on Music of Kerala, Old Tamil music, Hindustani music and the Science of Acoustics. Apt quotations from ancient texts like the Sangita Ratnakara are given in appropriate places. As the book deals primarily with theory, only a few notated pieces illustrating some of the various types of songs like Varna, Swarajati, Kriti, Pada, Ragamalika, etc., are given.
As there is a paucity of books of notated songs in Malayalam script one would like to see some books of notated songs published.

For a Government Publication the printing and get up of the book are good. The pictures of musical instruments in the book are not quite satisfactory.

Every lover of Carnatic music in Kerala would love to possess this book.

L. S. RAJAGOPALAN

*Swati Tirunal And His Music By S. Venkitasubramonia Iyer, College Book House, Trivandrum. 1975. Pp. 296 Rs. 35/-*

It is well known that the advent of Swati Tirunal as ruler of Travancore marked the beginning of a glorious chapter in the cultural history of the state. The artistic and scholarly labours of savants like Sir C. P. Ramaswamy Iyer, Dr. L. Muthiah Bhagavat and Sangita Kalanidhi Sri Semmangudi Srinivasa Iyer and the scholarly writings and expositions of Svati's music during the last few decades by Sri T. Lakshmana Pillai, Sri Sangita Kalanidhi T. L. Venkatarama Iyar, Prof. R. Srinivasan, Sri K. S. Ramaswamy Sastri, Prof. P. Sambamoorthy, Dr. V. Raghavan and Dr. Venkitasubramonia Iyer and others (see Dr. V. Raghavan's Svati Tirunal Bibliography, pp. 12–15, released as part of his speech delivered at the Annual Day and Patron's Birth-day celebration, Sri Svati Tirunal Sangita Sabha, Trivandrum on 22-10-1973) have gone a long way in deepening our knowledge of the contribution of the Maharaja.

The book under review has appeared at the right moment fulfilling the long-felt need and the lacunae in the sphere of musical literature. It rightly happens to be the first book to deal exclusively with Maharaja Svati Tirunal in the different aspects of his personality, the ruler, the man of letters, the philosopher – devotee of Lord Padmanabha, the patron and the composer. The study has further explored the factors that moulded the Maharaja as a composer and his concept of music and has evaluated the extent and nature of his patronage of fine arts and letters.
The author makes a useful survey under section 17, of the publications of Svati Tirunal's compositions since the beginnings of this century and refers to the pioneering services of Sri Chidambaram Vadyar who was responsible for the edition of 312 songs in the year 1916 and of Sri Ranganatha Iyer, whose edition of 125 songs entitled Balamritam came out in 1917 and Sangita Rajarangam in 1922. Subsequent publications of the compositions followed in course of time due to the efforts of Sri Muthiah Bhagavatar in his 'Maharaja Svati Tirunal Kritigal' in 1943, followed by "Svati Tirunal Kritimani-malai", a collection of 100 songs with detailed notation and text by Sri Semmangudi Srinivasa Iyer in 1942, under the auspices of Svati Tirunal Music Academy at Trivandrum which "was started owing to the liberal interest of the royal family to perpetuate the memory and to popularise the systematic study of the songs in correct form".

The author, a distinguished scholar in Sanskrit, is a reputed authority on Svati Tirunal and his music. Convinced of the purity of the songs of the Maharaja as rendered in the tradition of Mullamoodu Bhagavatars of Travancore palace and of the Nagasvara Vidwans of the Padmanabhaswamy Temple, the author has made a deep study of the compositions of the Maharaja with reverence and admiration for the royal vaggeyakara and contributed a number of articles to scholarly journals. Some of the chapters in this book are based on these articles.

There are three major parts in this book. The first part with the title 'Man' deals under five sub-divisions with the early life of the 'Garbhasriman', his early education, the making of his literary and musical personality, inculcation of bhakti in him and the political atmosphere of the time. The second part entitled "the composer" is fairly long with 12 sub-divisions. These deal exhaustively and in a masterly manner the most important aspect, namely Svati Tirunal as the composer of different types of musical compositions and their excellence; an analytical treatment of each type of musical form composed by Svati, namely, Ragamalika, Varna, Kriti, Svarajati, literary compositions and their structure, and the treatment of raga, tala, sahitya and its theme, their rhetorical and musical excellence. In short, a critical appreciation of the contribution of the composer finds a place in these pages. As a composer of Varnas and Ragamalikas in different languages, Svati Tirunal is par excellent. Varnas numbering about 16 were composed with anubandha by the Maharaja after the model of Pacchimiriyam Adiappayya's 'Viriboni'. varna, 'Sa vâma rusha' in Khamas for instance. The introduction of the name of the raga...
in the sahitya of varna composition is seen perhaps for the first time in the varnas of Svati Tirunal and those of the Tanjore Quartette. Varnas relating to praise or stuti of the Lord are designated as *stava varnas*, while those with sentiment of love are *Sringara varnas*. Varnas with ragamalika ettugada svaras are a special feature and the influence of Sri Vadivelu, the famous exponent of dance music and a favourite of the Maharaja is seen in the dance compositions. The author cites an important reference found in the “pancharāga svarajati”; the sahitya makes an express mention that the dhatu of the svarajati was composed by Svati Tirunal. The sahitya of the Todi section reads thus (vide page 220 – Appendix):

Svati-nṛpati-kṛta-ganamidamiha dhatu parimitam evam aviduṣā vinaya-vinanita-sirasā kenāpi | sarasam tvakrta mātuyutamapi ||

This reference will serve as an eye-opener to those who entertain doubts in regarding Svati Tirunal as the composer of so many musical forms.

It is true that Svati Tirunal was influenced to some extent by the famous court vidwans and composers like the Tanjore Quartette, Irayimman Tampi, songs of Margadarsi Sesha Iyengar and by the music of the Trinity.

The author rightly sets forth three important criteria for ascertaining the authorship of the compositions of Svati Tirunal. According to him the presence of the mudra ‘Padmanabha’ in the songs, easily decides the authorship. He hastens to add that all compositions with Padmanabha mudra need not be those of Svati Tirunal and songs without that mudra may also be ascribed to his authorship in view of other considerations. To mention a few examples, the following are ascribed to Svati Tirunal:

(a) *Pahi mam Brihamayike* (Huseni) by an unknown author
(b) *Seve sjanandureswaras–Iravimman Tampi–Kalyani*
(c) The varna “*sarasiyanaabha*” in Nata raga, known to be by Parameswara Bhagavatar.
(d) ‘*Pavona suguna*’ in Anandabhairavi—a varna by Muthiah Bhagavatar.
(e) ‘*Yenta vedinaga*’— in Navarasa raga in praise of Kasturiranga finds a place in the edition of Chidambara Vadhyar but not current in the Nagasvara tradition of the temple.
(f) “*Ha hanta vanchitaham*” in Dhanyasi.
(g) **Sarada vidhuvadanam** in Sankarabharana.

(h) **Manasi madana tampam** in Surati.

The author has made it clear on many occasions that only those compositions which are found in the list of songs rendered in the Padmanabhaswamy temple must be considered as the authentic pieces of the Maharaja and that is the most important evidence on the basis of which he has decided the authenticity of Maharaja's songs. The famous Ata tala varnas 'Sarasijanabha' in Kambhoji and 'Chalamela' in Sankarabharana are regularly used in the Padmanabhaswamy temple by the Palace Vidwans and Nagaswara players and this fact is alone sufficient to prove their authenticity. Since the composers have composed parallel sahitya for some the compositions of Svati Tirunal like Sāmīyai for Satura (Kalyani), Dāni sati for Dhāni Samajendra (Todi), Sarasa ninu for Sumasāyaka (Kapt), Sāmi rammmanove for Sā vāmā rushā (Khamas), Pannagadrisa for Pannagendrasayana, Sringalalahari for Anandavalli, Seve syanduresvara for Pahimam Sri Vageeswari (Nilambari), the question of deciding the authorship in such cases arises. The style and diction of the theme of the sahitya of some the compositions provide additional clue to ascertain their correct authorship. A technically defective sahitya cannot be the work of Svati Tirunal with his perfect mastery of Sanskrit and music. For instance, the author cites the varna 'Pavana suguna' figuring in Muthiah Bhagavatar's edition part-II. The changes that have been introduced from time to time in the matter of ragas and talas in the case of Svati Tirunal's songs are referred to by the author with concern. The following are a few instances:

(a) **Smarai nu mam sadayam** in Madbyamavati raga, now sung in Behag.

(b) **Bhāvayāmi raghurumam** originally in Adi tala set in Saveri raga. But in Balamrita and the edition of Muthiah Bhagavatar, the tala is misra Jhampa. At present it is rendered as a ragamalika in Rupaka tala.

c) **'Bhāvaye Sri Gopalam** in Punnagavarali, and Jhampa tala is now sung in Rupaka.

(d) **Bhogindra sāyinam** now sung in Kuntalavarali was originally Dhanyasi.

The author is of the opinion that the 'Navaratri kritis' of the Maharaja rendered even now during the Navaratri festival in the Padmanabhaswami Temple have come down without much change, in
a fairly original form. Also the music of Navaratnamalika has not undergone change.

In the section ‘on with the votaries of the Muses’, the author reiterates that in view of “their wide variety, uniformly high quality and eloquent appeal for bhakti, his compositions have claim for a place along with those of the musical trinity” (p. 183). It is true that Svati Tirunal has to his credit besides kritis, many dance forms, Ragamalikas Varnas, Tillanas, Padas in different languages and poems extolling the nine-fold path of devotion viz. Bhaktimanjari, a champu kavya, Syanandurapura Varnana prabandha, Padmanabhaswami sataka, also a small work on music entitled Muhanprasantyaprasavyavastha and the two narratives Kuchelopakhyaana and Ajamilopakhyaana. As in the case of every divinely inspired Vaggeykara, to Svati Tirunal, Lord Padmanabha was the source of inspiration and rightly did he address all his creative works to Him.

When the Maharaja handled Hindustani musical forms, the ragas like Behag, Mohanakalyani, Sindhubhairavi, Jhinjoti have been used in his songs. It must be mentioned that during the reign of Maratha Rajas of Tanjore, there were more contacts with musicians of North India who introduced some tunes and ragas along with their musical compositions into Karnatic music. There are Padas and other compositions in ragas like Behag and Mohana Kalyani by the asthana vaggeyakaras of Tanjore during the period of Maharaja Sahaji and Tulajaji.

The last of the Third part of the book is valuable as it contains a conspectus of the songs of the Maharaja available in various publications arranged in an alphabetical order. The list includes the songs from his upakhyanas and also songs with doubtful authorship. Further, the conclusion of the texts of new songs brought to light by the author, given in notation in both Sanskrit and English and of the musical adaptation of the first three sections of Syanandurapuravarnana Prabandha in the composer’s own words, enhances its practical significance. The classified selective bibliography with an Index and Errata merits special mention.

The book incorporating in its pages the results of many years of painstaking research, presented in a lucid and straightforward manner, gives an insight in the understanding of the personality of the composer and the magnitude of his contribution to our music and will prove very useful to students, performers and critics.

S. SITA
It means that by singing posterior Svaras one by one in the ascending order is Ārohī and to sing them in the descending order is Avarōhi. The combined Ārohī and Avarōhi result in the Sāncārī.

2. Alamkāras — The importance of Alamkāras in the Gaṇa has been emphatically illustrated by Bharata in a verse which says that the song with the exclusion of Alamkāras is as the moonless night or a dry river or a flowerless climber (Lātā) or like a lady who is not adorned with the ornaments. Alamkāras accord with the varṣas and that is why they are classified under four sections, as 4 varṣas. It will be a lengthy procedure to translate here every verse. Instead, is given below a tabular statement of the Alamkāras in three Sections with the names and illustrations thereof:

   1. प्रसजादि or भद्र - सा रि सा, रि ग रि, ग म ग,
   2. प्रसजान्ति or नन्द - साता रिरि साता। रिरि गग रिरि।
   3. प्रसजाकत्त or बिल - सा गरि सा। रि म ग रि।
   4. मन्दसवर्य or सोम - साता गग रिरि साता।
   5. कबरेतिरि or औष्ठि - सा ग रि ग, म ग रि सा।
   6. प्रस्तार or भाब - सा ग रि स, म ग रि स।
   7. प्रसाद or प्रकाशक - साता रिरि गग मगरि गरिता।

2. Ārohī Alamkāras—12
   1. कित्स्रेण - सा रि गा मा पा धा नी सा (beats lengthened).
   2. निक्ष्कर्ष - सतस रिरिरिरि or ससससस, रिरिरिरि
   3. किन्द्रु - सातसारि, रिरीरीरी (First 3 beats lengthened)
   4. अनुतुत्तू, स ग प नी (Dropping of alternate Svaras)
   5. हस्सि - स, सरि, सरिग (Addition of a note to every part)

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1. याक्षिणा श्रीतेव निश्चा विज्जेत्व नदी कला विपुष्चेऽ
   अविभूषितेव कान्ता नैतिकक्षक्षेताहि स्वाद्॥
3. Pārijāta 233-46. The descending order of Ārohī Alamkāras form Avarōhi Alamkāras
A COMPARATIVE STUDY OF

1. Prakrit - Sāri, Rīga, Gaṇa, Māpa
2. Bhāṣā - Sāsā, Gaṅa Rīrī Mām
3. Sānchikādān - Sarīga, Rīgam (last note lengthened)
4. Udāsīt - S Sarī Gaṅ, Rī Rī Mā
5. Udāsīt - Sāsāsāsā, Rīrīgam
6. Trāvan - Sarī Gaṅag, Rīga Māmā
7. Veṇī - Sasā, Rīri, Gaṅga, Māmā
8. Saṁcārī Alāṅkāras - 26¹

1. Maṅbadī - Sarīga, Maṅris, Sarīgarī, Sarīgam
3. Maṅdānta - Sasā, Rīrī, Gaṅga, Māga, Rīga Rīs
4. Pratār - S M Rī P, Gaṅ D M Nī
5. Prasad - S Rī S Rī Sarī Gārī
6. Vāstra - S Gaṅ Rī M, S Rīgam
7. Chālīt - S Gaṅ Rī M, M Rī G S, S Rī G M
8. Pārirā - S Gaṅ M Rī, Rī M P G
9. Abhāsa - Sarīga, Rīgam, Gaṃp
10. Bindu - Sa Sa Sa Rī Sa Gā, Rī Rī Rī G Rī Mā
11. Udāsīt - S Rī G Rī, Rī G Māga, Gaṃpām
12. Ûdī - S Māmā, Sām
13, 14. Sam or Prakrit-Sarīga, Maṅris Sarīga or Sasā, Māmā, Rīrī Pāp
15. Nibhrūjita - Sām Sām Sarīga
16. Ṣṭhēn - Sarī Sām, Sām Sap, Sāth Śaṁī, Śaṁī Sām.

¹ Cf. 254 to 277
In addition to these Ahobala explains the following Alamkāras—

1. Indranila 2. Mahāvajra 3 Nirdoṣa 4 Sīra 5. Kokila 6 Āvarta and 7 Sadānanda which are set in Dhruva, Maṇṭha, Rūpaka, Jhampa, Tripuṭa, Aḍḍa and Laghu talas (different beating times). These are to be used in singing the Gītā. For Rāgajīrṇa, the author makes a mention of 5 distinct Alamkāras as—1 Cakrākāra 2 Java 3 Saṁkha 4 Padmanībha and 5 Vārīda.

3. GAMAKAS

This is what is meant as Gamaka by Śrīnivāsa. Therefore, a specific way of singing the notes is Gamaka. As these lead the listeners to pleasingness they are known by the name of Gamaka. Śrīnivāsa mentions the following Gamakas:

<table>
<thead>
<tr>
<th>Sthāna</th>
<th>RTV 77-86</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parijata</td>
</tr>
<tr>
<td>2</td>
<td>RTV 69</td>
</tr>
<tr>
<td>3</td>
<td>RTV 82-84.88=Parijata 305, 10, 11.</td>
</tr>
<tr>
<td>4</td>
<td>Parijātā 304</td>
</tr>
</tbody>
</table>

The notes which result into these various Gamakas are said to be
If the avoidance of a note is fulfilled by the other note, the note avoided is Cyavita and the note which speaks by giving up its regular position on the wire of Viṣā, is Ārīra. The strike of two svaras at a time by a finger is Pratyāhata and striking a note twice is Dvirahata. In pronouncing the svara, if it is not revealed at its regular śruti it is Gharṣaṇa. The same note in the Avarohi is called Avaghārṣaṇa. When the note standing on the onward śruti, resorts to the anterior śruti, it is Punassvasthāna and if it stands on the posterior śruti, it is Agrasamsthāna.1

It is quite clear now that various methods of singing or playing, are applied to the notes and that they create Gamakas. In other words these are Gamakas. The names of the Gamakas may differ, but the method remains the same. In the case of Dhālu and Sudhālu2 a finger plays two and three svaras respectively. Leave the note struck and play onwards, the note left is Śānta.3 A continuous strike on two notes is Sphurita.4 A note struck twice is Tirapa5

4. Jātis—Ahobala further makes a mention of the seven Jātis of the notes. The names,

1 āvibhi 2 आतीर 3 प्रवाह 4 हिपित 5 वर्धन 6 वधर्षण 7 मान्य 8 वस्त्राण 9 विषय्यन.


2 Pārijata 311 = RTV 81—82
2 Cf. 304-5 = Cf. 83
3 Cf. 304
4 RTV 88
He has explained the use of these Jātis—

हम बंधाख्रें स्थिला स्थिला यदि विचित्रित
गायत्रा जातचंता स्तु: तत्वदशक्रमिभा:।
रागाण्व जीवभूमा ये प्रोकासैुक्रास्य बुधे: ॥

While playing Flute or any wind-instrument in a slow tempo the Jātis endowed with the respective Aṁśa (chief) note, being the essence of the Rāga, are to be sung. It simply means that a slow and steady pronunciation of the Aṁśa svara, is Jāti. In terms of modern music, we may say that in Darbārī Kāṇaḍā, mainly Gāndhāri Jāti is used, which means that ga-note is chiefly used in this raga. From Jātis we should proceed to Melas and Rāgas in which they are used.
CHAPTER SIXTEEN
MELA AND RĀGA

From the elaborate and detailed description⁴ of Melas in the RTV and scattered references in the Pārijāta, a fact is to be accepted beyond doubt that the Mela system as well as the way of classification of Rāgas was as prevalent and firm-rooted in the period of these authors and that their nature was already there, as it is at present.

1 Mela — Śrīnivāsa defines the term as—

८ ॥

The collection of the notes, capable of revealing a particular Rāga, is Mela. Here ‘collection’—‘Samudāya’ means adherence to the notes.

Then how many svaras should be in a Mela? Śrīnivāsa has classified his Melas under three headings—Sampūrṇa, Sādava, and Auḍava. From this it is clear that the least number of notes in a Mela, is five. One has to note that modern Hindustani Rāgas are classified in this way whereas the Melas have 7 svaras, only in the ascending order. As compared with the modern method, Śrīnivāsa also uses the Vikṛta svaras but the Melas of Śuddha svaras are fifteen in number. Instead of the lengthy description and translation of the verses of Melas, I mention here the particular notes thereof and the modern Melas or Rāgas, if they are correspondent:—

<table>
<thead>
<tr>
<th>Svaras in Mela of RTV</th>
<th>Modern Mela or Rāga</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All Šuddha svaras</td>
<td>Kāfi</td>
</tr>
<tr>
<td>2. Komala Ri</td>
<td></td>
</tr>
<tr>
<td>3. Ga tivra</td>
<td>Paṭadīpa</td>
</tr>
<tr>
<td>4. Ma tīvratara</td>
<td>Madhuvanti</td>
</tr>
<tr>
<td>5. Dha Komala</td>
<td>Āśāvari</td>
</tr>
<tr>
<td>6. Ri Komala &amp; Ga tivra</td>
<td>Āhirī Bhairava</td>
</tr>
<tr>
<td>7. Ri tīvratara &amp; Ga tivra</td>
<td>Kukubha Bilāvala</td>
</tr>
<tr>
<td>8. Tīvra Ga &amp; Ma tīvratara</td>
<td>Chāyā Nāṭa</td>
</tr>
<tr>
<td>9. Dha Komala &amp; Ni tivra</td>
<td>Naṭa Bhairava</td>
</tr>
</tbody>
</table>

In a similar manner all other corresponding Rāgas of modern times may be found out.

1 RTV—Melalakṣaṇa Prakaraṇa
2 RTV—91
2. Melas of Ahobala—As already indicated, Ahobala does not describe the Melas. Instead we have references to Melas names scattered here and there in the Rāgādhyāya. He has mentioned the following Melas—


3. Rāgas:—Śrīnivāsa has explained about 101 rāgas of different traits, mostly borrowed from the Pārijāta. According to him, a Rāga has some necessary factors as Ārohi, Avarohi, the exclusion of svara, Mūrcchana and Gamaka. He further opines that the way of singing a Rāga is decided and it must be sung in a particular way. The Ālāpa or Tāna wherefrom a Rāga starts is called Udgrāha. In modern music parlance, it is Pakara which manifests the exact nature of the Rāga. The regulation of the beginning and the end is Sthāyī Tāna. The Ārohi and Avarohi together result as Saṅcārī He describes this as follows:

\[
\begin{align*}
\text{आदादबृत्तादः सं तानोद्दायलक्ष्यं} & \quad | \\
\text{आचार्ययोग्य नियमस्त्यायं तः प्रजायते} & \quad || \\
\text{स्यायी तान: स चिष्टोस व्यवस्थणार्थकारिक:} & \quad | \\
\text{सच्चारी तु सं चिष्टोस स्यायारोह्यनमिनिष्ट:} & \quad || \\
\text{तः रागसं विस्तारिती: समासितवतोक हि स:} & \quad ||
\end{align*}
\]

Though the completion of the Rāgas, as Śrīnivāsa says, is indicated by Saṅcārī but some of his Rāgas end with Muktāyī which is sung after Saṅcārī. Whether Muktāyī and Saṅcārī are different or the same is not explained by him.

4. Rāga-description — To describe the 101 Rāgas of Śrīnivāsa and Ahobala, is neither necessary nor useful. To understand the nature of the Rāgas of Śrīnivāsa and Ahobala, I may mention them with the modern corresponding Rāgas as follows—

1 Pārijāta—368, 397, 412, 434, 435, 438, 441, 472, 476, 478 and 480 respectively.
2 RTV, Rāga Prakarana 1—2
3 Do. Do. 5—7
1. Saindhava — Sindhurā
2. Nilāmbarī — Kāfi
3. Dhanyā-Śrī — Bhimapalāṣi
4. Mālayāsī — Kauś Kāṇḍā
5. Raktahāma — Gorakhabhājana
6. Kollahāsa — Kalavati (slight resemblance)
7. Prasahna — Bāgeśhri (without pa)
8. Madhyāmadī — Madhyāmadī Sārāṅga
9. Toḍī — Komala rūbha Āsvaři
10. Bhairavi — Āsvaři
11. Ghaṭā — Kāṇḍā
12. Varāṭikā — Bhairava
13. Kambhavālī — Mālakaṁsā
14. Abhirīkā — Aḍānā
15. Gaurī — Gaurī
16. Kalyāṇa — Śuddha Kalyāṇa
17. Rāmakarī — Jaitāṣṭī
18. Śrāṅga — Śuddha Sārāṅga
19. Gulpakriyā — Jogiya
20. Velavāli — Bilāvala
21. Dipaka — Bībhāṣa (in Āroha)
22. Deśākhyā — Joga + Kalavati
23. Vasanta — Gauḍamalāsa
24. Lalī — Lalīta
25. Bhūpāli — Bībhāṣa
26. Māḷārāma
27. Jaladhara Kedāra
28. Mallārī — Megharanjani
29. Saurāṣṭri
30. Gaurī — Desbākāri — Bilāvala
31. Revā — Revā, Sālānā
32. Bhaiṛavā — Bhairava
33. Helpā — Jogiya
34. Desha — Gauḍa
35. Mālaha — Megharaja
36. Nātha — Bhaṅgara
37. Vihaṅga — Bhaṅgara
38. Pūrvā — Bhaṅgara
39. Paṅcamabhinnasaṣadā — Jaitāṣṭi
40. Bībhāṣa — Jaitāṣṭi
41. Sālānā Nātha — Jairāja
42. Chaṭā Nātha — Āṣanti Nātha — Miyānki Toḍī
43. Śuddha varāli — Miyānki Toḍī
44. Saudāmini — Puriya
45. Dhanāsri
46. Hansa Jogiya
47. Bhūpāli
48. Airāvata — Bītāga
49. Kāṃkaṇa — Cakradhara
50. Kalpataru — Paṭabhaṅga
51. Soraṭhi — Tilakāṣṭi

In spite of the above—mentioned corresponding modern Rāgas, slight resemblance in many rāgas of Śrīnivāsa or Ahobala, may be observed.

5. Additional Rāgas of Ahobala:— It was already indicated that the number of Rāgas described by Ahobala is more than that of Śrīnivāsa. Ahobala mentions 19 rāgas as below:

1. Vasanta Bhairava
2. Śoka Varāṭī
3. Baṅgahansa
4. Gopikā
5. Sārāṅga Gaula
6. Kāṃmoda Nāṭa
7. Kedāra Nāṭa
8. Varāṭināta
9. Āsvaṛī
10. Pūrvī Sārāṅga
11. Kuḍai
12. Gauḍa
13. Jaiśrī
14. Kumuda
15. Anandabhairavi
16. Rājadhāni
17. Savāri
18. Śuddhakaśhika
19. Tailāṅga.

1 Pārājata 379, 396, 400. 7, 11, 17, 24, 37, 40, 41, 42, 50, 56, 57, 65, 76, 83, 84, 86, 87, 88, 90.
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