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Philadelphia



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The content in this magazine is published with a spirit of openness of communication and freedom of expression. The opinions contained herein do not necessarily reflect the views of SRUTI, its board or its members. The articles have been published as is with some minimal corrections for clarity.

From the President's Desk

Namaste SRUTI family!

It is my great honor and privilege to welcome you to the 2025 edition of our annual publication, Sruti Ranjani! As I look back on this year, I can't help but feel a deep sense of gratitude—for the incredibly supportive and involved community of rasikas, our youth, and the young at heart who truly make SRUTI unique; for the extraordinary performers who present India's unparalleled legacy of arts; for the generosity of patrons and granting organizations; and for the talented team of Board members I am fortunate to be surrounded by, who made it all possible.

SRUTI's reputation and organizational strength, built painstakingly over 39 years by the Boards preceding ours, have enabled us to present top notch talents over our spring and fall seasons. The full day Thyagaraja Aradhana celebrations were a joyous start to the year with our community of musicians paying homage by participating in Utsava Sampradaya and Pancharatna krithi renditions. Scores of children, many trained by local area teachers, performed individually as well. The dynamic flute duo Heramb-Hemanth, in their maiden concert tour of the USA, presented a very well-received program that was the featured concert of the Aradhana. Vidushi Amrutha Venkatesh graciously included a gem of a composition by the Philadelphia area composer, the late Vidwan T.N.Bala, at the request of one of his disciples! We were delighted to present Vidwan Saketharaman, well known for his intellectual and thought provoking Ragam Tanam Pallavis— in his first SRUTI appearance. Vidushis Ranjani and Gayatri's concert was a well attended event that featured an impressive Chaturkalai Pallavi, having four speeds in one rhythmic cycle with kalpanaswarams featuring grahabhedam (tonic shifts). Veena virtuoso Ramana Balachandhran capped off the spring season with a brilliant performance, one that moved and awed the audience in equal measure!

In the elegant setting of Goodhart Theater, Bryn Mawr College, we featured "Shaktya", a contemporary exploration on the unsung heroines of India by the Bharatanatyam exponent Vidushi Rama Vaidyanathan, along with her daughters Dakshina and Sannidhi Vaidyanathan. Vidwan Ashwath Narayanan, a torchbearer of the mellifluous KV Narayanaswamy bani of music, was accompanied by the legendary Mridanga Vidwan Trichy Sankaran and Vidwan VVS Murari and Vidwan Anirudh Athreya. SRUTI's audience is indeed fortunate to witness such illustrious artists as Trichy Sankaran. Vidwan Kalyanapuram Aravind is a worthy disciple of maestro T.N.Seshagopalan, having imbibed the best qualities of his Guru. Vidwan Aravind's concert featured an excellent set of krithis and Dwijavanti RTP, embellished with filigreed improvisations. Sanjay Subrahmanyam's concert, imbued with deep classicism and extraordinary flair, was yet another highlight of the season.

The newly instituted program, T Sarada Memorial Day of the Youth, enabled by Dr. T Sarada's endowment, concluded the year on a high note - it featured exceptional local talent, Akshara Samskrithi's concert, an enthusiastic, engaging and educative set of programming by our Sruti Youth Group and Balabhavam by Rasya Ramesh.

This year saw two fruitful collaborations. SRUTI partnered with the Fire Museum of Philadelphia to present the acclaimed violin duo Akkarai Sisters in spring and co-presented Vidwan C. S. Sajeew's performance during Bharatiya Temple's Philadelphia Ganesh Festival. As part of our outreach efforts, the Sruti Youth Group also participated in the Chester County Library's Diwali celebrations.

The Sruti Youth Group has had a remarkably successful year, demonstrating renewed vigor and creativity. The committee is now fully constituted with roles for co-presidents, social media leads, event coordinators, and content and publishing leads. SYG produced original content on Instagram to promote Youth Day and curated a thoughtful schedule of programs for the T. Sarada Memorial Day. They also played a major role in event logistics—assisting with coordination, ushering, and other key functions throughout the year.

In addition, SRUTI's various committees consisting of diligent and dedicated volunteers contribute many hours to activities like bringing out this publication, sharing thematic playlists from SRUTI's archives, helping write grant proposals, and marketing the events.

SRUTI owes its vibrant existence to the steadfast support of the Indian music and dance lovers of the Philadelphia region. We continue to remain on strong financial footing, thanks to the generous support of our donors, patrons, and sponsors. We extend special thanks to the National Endowment for the Arts, Paul M Angell Family Foundation, The Presser Foundation and the Pennsylvania Council on the Arts for their grants supporting SRUTI's current and future events.

SRUTI's sponsorship base continues to grow, a reflection of our reputation for presenting quality programming. Our social media presence and audience engagement have seen a healthy upward trend. The overwhelmingly positive feedback we receive—from audiences, artists, social media and surveys alike—confirms that SRUTI remains a preeminent presenter of Indian arts in North America and is poised to build upon its strengths as it enters its milestone fortieth year.

Ever since I moved to Philadelphia twenty five years ago, SRUTI has been an essential and irreplaceable part of our family's life. Serving on SRUTI's Board of Directors has been an absolute privilege, one that I will always remember with deep fondness. I am profoundly honored to have been a link in the continuum, entrusted with sustaining and nurturing this cherished organization for a year, and to hand it forward to the next cohort of able and dedicated volunteers. With great delight, I welcome the incoming board, helmed by Mrs. Uma Sivakumar and wish them every success as they guide SRUTI to new heights in the upcoming milestone year.

Musically yours,

Rajee Padmanabhan



From the Publications and Outreach Committee

Welcome to the 2025 edition of *Sruti Ranjani*. This year's issue opens with a striking cover artwork by Sruti Youth Group member Sai Sri Ravinuthala, created in honor of the 250th birth anniversary of Sri Muthuswami Dikshitar. In recognition of this milestone, we start off with a couple of articles exploring Dikshitar's life and musical legacy. Adding further depth to the edition, scholarly articles on topics such as *Grahabhedam*, the *Katapayadi* system, interesting information about the instrument mridangam and associated stalwarts, and heartfelt notes on T. Sarada, along with legacy insights and contributions from our youth members. We invite the readers to enjoy President-Elect Uma Sivakumar's preview of SRUTI's 40th anniversary year, offering an exciting glimpse into the landmark celebrations planned for 2026. We also present a comprehensive review of concerts held in 2025. Our sincere thanks to all contributors for their time and effort.

Beyond curating and producing this year's edition, the Publications & Outreach Committee advanced several key initiatives aligned with SRUTI's long-term vision for archival integrity and knowledge accessibility. These objectives, established at the start of 2025, include:

1. Expanding themed curated playlists from past SRUTI concerts
2. Advancing Project Concert Chronicle (pCC) to archive and organize concert recordings
3. Scanning and archiving missing *Sruti Ranjani* issues and TA souvenirs on the SRUTI website

I am pleased to share the progress and impact achieved in each of these areas.

1. Curated Playlists

Our curated audio playlists continue to be a favorite among rasikAs. Building on past themes such as *kharaharapriya*, *mOhanam*, and festival specials, we introduced nine new playlists in 2025, including:

- Women Artists & Composers (International Women's Day)
- Rama Navami (three parts: 1986–2000, 2001–2010, 2011–2020)
- Mother's Day Special (curated by Sruti Youth Group)
- Janmashtami, Ganesh Chaturthi, Navaratri, and Diwali editions

In total, we shared 175+ songs, spanning 30+ hours of music, featuring 50+ composers and a rich mix of vocal and instrumental performances. These playlists showcased legends such as MLV, Balamurali Krishna, Lalgudi Jayaraman, U. Srinivas, and Hindustani maestro Bhimsen Joshi. Importantly, we ensured minimal repetition, offering fresh content for every theme.

2. Project Concert Chronicle (pCC)

The mission of pCC is to document and preserve SRUTI's concert history through systematic archiving. Key milestones include:

- Standardized Naming Convention: Implemented a clear format – *SongNumber_SongName_Raga_Tala_Composer_RenderingArtist_Year* – to improve organization and retrieval.

- Database Expansion: Grew our repository from 770 songs to ~1,000 songs, enhancing discoverability and historical analysis.
- Centralization of Audio Files: Work in progress; storage costs remain a challenge given multi-terabyte requirement.

This is a multi-year initiative, and we are proud of the foundational work completed in 2025.

3. Archiving Publications

We successfully scanned and archived missing *Sruti Ranjani* editions and TA souvenirs on the SRUTI website, ensuring these valuable resources are preserved and accessible to all.

Outreach Highlights

- Diwali Event at Chester County Library: Led by Sruti Youth members (Kashyap, Krithi, Navneeth, Prisha, Sai Smaran), this event was well-received and showcased our commitment to community engagement.
- Go Green Initiative: Continuing to minimize printed materials and reducing costs by leveraging QR codes for event programs.
- Digital Access: *Sruti Ranjani* is available online for free, with printed copies offered for archival purposes and to members preferring hard copies.

Acknowledgments

Heartfelt thanks to the SRUTI Website Committee (Raman, Lakshmi) for keeping the site updated, and to Prabhakar Chitrapu, Jayram Sataluri, and Raman V for their invaluable support and ideas. Special appreciation to Jayram for proofreading and content curation. Finally, thanks to the Board of Directors for their unwavering support and teamwork.

P&O Committee: Ravi Iyer, Prabhakar Chitrapu, Jayram Sataluri, Raman Visweswaran

SYG P&O Youth Leads: Term 1 – Rasika Sivakumar | Term 2 – Rishi Swaminathan



Sruti 40 – Legacy and Beyond: Celebrating 40 Years of Indian Classical Music and Dance

By Uma Sivakumar, President-Elect 2025

Dear Friends

Warm greetings from the Sruti Board. Year 2026 marks a special milestone for Sruti as we celebrate 40 years of excellence in artistic programming – a truly remarkable achievement for a volunteer-run organization that is at the forefront of presenting Indian performing arts in North America. We are super excited to celebrate this occasion with several grand concerts, novel ensembles, educative workshops, lecture-demonstrations and carefully curated collaborations throughout the year. Our theme is aptly chosen as **“Sruti 40 – Legacy and Beyond - Celebrating 40 years of Classical Music and Dance”**.

Our Spring season (**see back cover for spring flyer**) kickstarts with the Thyagaraja Aradhana (TA) – this year’s TA will see increased engagement of our community teachers, musicians and students with wonderful thematic presentations, Thyagaraja-related talks, dance recitals and more. **Sangita Kalanidhi Dr.S.Sowmya** will present a grand concert on April 11 and we have a one-of-a-kind “Jugalbandi” when **Vocalist Abhishek Raghuram and Flautist Shashank Subramanyam** join hands to showcase their limitless and prodigious talents. **Vidwan Ramakrishnan Murthy**, the rising superstar in today’s Carnatic world and seasoned **Vidushi Gayathri Venkataraghavan** return to the Sruti stage as well. For the dance lovers, we are excited to present a traditional maargam **Bharathanatyam recital by Medha Hari**, a product of the much-reputed Anita Guha’s dance school. We will also collaborate with the Fire Museum (who incidentally celebrate their 25th anniversary) to present **Violinist Charumathi Raghuraman accompanied by Anantha R.Krishnan**. In addition to these programs, we are also planning for workshops and lecture demonstrations by visiting artists.

Highlight of our fall season will be **The Sruti-40 Fest during September 26-27, 2026**. Stay tuned for the exciting roster of performances that we will reveal soon. We are also in the process of finalizing a wonderful collaboration with **“Penn Live Arts – Annenberg Center”** to celebrate their **“India Fest”** - a sitar concert by **Maestro Niladri Kumar** which will be a *tribute to Tabla Legend Zakir Hussain*, and the world-renowned **“Nrithyagram” dance ensemble**. With our first Sruti Youth Day in 2025 turning out to be a huge success, planning is also in progress to further empower our youth with a day long **“T.Sarada Memorial Sruti Youth Fest”** in fall 2026 – which will feature youth concerts, presentations and more.

Thanks to the enterprising Sruti Resources team, we received our second federal grant from the “National Endowment for the Arts” to present a unique **Rhythm-centric production “GaJaNa” by Vidwan Patri Satish Kumar** which will include a prime concert, partnered presentations and a rhythm workshop.

Finally, the Sruti publications team will be busy implementing some special projects that we look forward to enthrall you with.

All of this will not be possible without your continued support for which we are immensely thankful. In addition to our regular sponsorship packages, Sruti has introduced attractive **Patron Sponsorship**

Packages for 2026. Details can be found at <https://www.sruti.org/membership/sponsorship-information/>. We strongly encourage you to sign up for these value packages to enjoy our special programs with added perks. We would also appreciate your donations which will go a long way in sustaining our mission and programming, amid the escalating costs of production. Do not forget to avail corporate matching through your employer on any eligible donations.

Sruti board excitedly looks forward to welcoming you all to the grand celebrations of our 40th year anniversary in 2026. **Go SRUTI!**



About the Cover Page

By Sai Sri Ravinuthala

This artwork beautifully depicts Muthuswami Dikshitar, one of the revered Carnatic Trinity, seated in meditative composure with his veena, invoking the presence of Goddess Kamakshi, the divine mother of Kanchipuram, against the backdrop of a majestic South Indian temple gopuram. A connection to this artwork is Dikshitar's celebrated composition on Kamakshi, "kancadaLaayadaakshee" in rAgA kamalaa manOhari. In this composition, Dikshitar describes goddess kAmakshi as "*Tripurasundari*" — the beauty who transcends the three worlds, "*Pankajamukhi*" — the lotus-faced one, "*Duritabhanjani*" — the destroyer of sorrow. This painting serves as a visual tribute to the legacy of Dikshitar, whose music continues to sing the glory of Goddess Kamakshi, through this composition and many others such as "kAmAkSi kAmakOTi pIThavAsini" in raga sumadyuti, portraying her as the sovereign of the sacred Kamakoti Peetam, the seat of spiritual wisdom; and "kAmAkSi varalakSmi" in raga bilahari, celebrating her as the bestower of boons and the embodiment of grace.



Sai Sri is a Junior at Central Bucks High School South, who learns Carnatic music and dance, and enjoys the artforms.

Year at a Glance



Muthuswami Dikshitar: A Timeless Luminary of Carnatic Music – Celebrating 250 Years

By Ravi Iyer, Jayram Sataluri, Prisha Parthasarathy, Shritika Sriram and Rishi Swaminathan

Introduction

In 2025, the world of Carnatic music celebrates a monumental milestone - the 250th birth anniversary of **Muthuswami Dikshitar** (1775–1835), one of the revered Trinity of Carnatic composers alongside Tyagaraja and Syama Sastri. Born in the temple town of Tiruvarur, Tamil Nadu, Dikshitar's life and work continue to resonate deeply with musicians, scholars, and spiritual seekers alike. His compositions, steeped in devotion, scholarship, and musical sophistication, remain a cornerstone of South Indian classical music.

Muthuswami Dikshitar due to his wide travels had exposure to different styles of music including Hindustani music and Western music, knowledge of the Vedas, Sanskrit and Yoga. This is reflected in his Carnatic music compositions. Many of his compositions are fusions of Hindustani music, as kritis like **Rangapura Vihaara is based on the Hindustani ragam, Brindavana Saranga.**

Be his nottuswarams for the young and novice or his heavy compositions such as the Navavarna krithis—which is still studied by the scholarly and erudite, Dikshitar's unique masterpieces continue to captivate and inspire a range of audiences.

It is our humble attempt to explore and bring forward to you a glimpse into the musical perspective of the renowned composer through his extraordinary works.

Early Life and Spiritual Awakening

Muthuswami Dikshitar was born into a scholarly and musically gifted family. His father, **Ramaswami Dikshitar**, was a respected musician and teacher, who imparted to his son a deep knowledge of the **Vedas, Sanskrit, astrology, and music**. A pivotal moment in Dikshitar's life occurred during a pilgrimage to **Varanasi (Kashi)** with his guru **Chidambaranatha Yogi**, where he immersed himself in spiritual practice and was exposed to Hindustani music and Dhrupad traditions.

Upon returning south, Dikshitar visited the **Subrahmanya Swami temple at Tiruttani**, where legend holds that the deity appeared to him and placed sugar candy in his mouth, inspiring his first composition - **“Srinathadi Guruguho Jayati”** in **Mayamalavagowla raga**. This marked the beginning of a prolific musical journey, with Dikshitar adopting the **mudra “Guruguha”** in all his compositions, symbolizing his spiritual lineage.

Nottuswarams – A western influence on Dikshitar's compositions

Nottuswarams are notable as an interaction between the East and the West during the East India company rule in Madras Chennai, being based on Western sources, mostly simple melodies inspired by Scottish and Irish tunes. His **Nottuswara compositions**, inspired by Western marches and harmonies, reflect his openness to musical synthesis and innovation. They are all composed with Sanskrit lyrics in the Western C major scale, whose pitch intervals correspond to that of the Shankarabharana rAgA scale in Carnatic

music. Though simple in structure, the Nottuswarams with their lilting melodies and Western-influenced charm, continue to captivate listeners across generations. Their catchy, breezy and elegant tunes have a universal appeal - easy on the ears, yet rich in tradition - making them especially delightful for young learners and seasoned rasikas alike. Once you hear one, you're drawn into the world of Dikshitar's genius, wanting to hear more and experience more.

Musical Contributions and Innovations

Dikshitar's oeuvre comprises of over **450 kritis**, which were primarily in **Sanskrit**, showcasing his mastery of lyrical poetry, raga structure, and spiritual philosophy. His compositions are known for their **slow tempo (chowka kala)**, intricate **gamakas**, and the **veena style** of phrasing, reflecting his deep connection to the instrument.

Some of his most celebrated thematic works include:

- **Navagraha Kritis** – dedicated to the nine planetary deities, blending astrology and music.
- **Kamalamba Navavarna Kritis** – a tantric and philosophical exploration of the **Sri Chakra**, composed in praise of Goddess Kamalamba.
- **Pancha Bhoota Sthala Kritis** – representing the five elemental temples of Shiva.
- **Guruguha Vibhakti Kritis** – eight compositions illustrating the eight grammatical cases in Sanskrit, each extolling the qualities of a guru.

Dikshitar was also a pioneer in composing in **all 72 Melakarta ragas**, a feat that underscores his encyclopedic knowledge of Carnatic music theory. He was a follower of the asampoorna melakarta system proposed by Venkatamakhin. This is different from the Sampoorana melakarta system which most of us are familiar with. In the asampoorna melakarta system, the aarohanam and avarohanam do not necessarily have the same exact notes and can follow a zig-zag pattern. For example, Nabhomani Chandragani was composed in raga Nabhomani, which is an asampoorna melakarta. However, other schools may refer to it as Navanitam.

Nabhomani

Arohanam: S G1 R1 G1 M2 P S

Avarohanam: S N2 D2 P M2 G1 R1 S

Navanitam

Arohanam: S R1 G1 M2 P D2 N2 S

Avarohanam: S N2 D2 P M2 G1 R1 S

Many of his compositions have unique tala structures. A popular and renowned example would be his famous **Navagraha Kritis**, where each of the nine compositions have different talas. Dedicated to the celestial and astrological deities, he fuses his knowledge of tala structure and planets. Starting off with **Suryamurte**, Dikshitar uses **Dhruva Tala**. As he goes on, he follows the structure of the **Alankarams**, which are a set of **simple tala and singing exercises**.

- **Dhruva Tala**
- **Matya Tala**
- **Rupaka Tala**
- **Jhampa Tala**
- **Tripata Tala**
- **Ata Tala**
- **Eka Tala**

All these talas are the foundations of many other talas that are found in varied compositions, and it's safe to say that Dikshitar did an exemplary job in this type of tala structure.

His syllable structures and patterns of rhythmic arrangements also dabble in complexity. In particular, 4 patterns are of note in his compositions: Gopucha Yati (starting with a large amount of syllables and narrowing down), Srotovaha Yati (starts with a small amount and then broadens), Mridanga Yati ((Starts narrow, becomes larger, and then going back to a small amount of syllables), and Damaru Yati (starting big, becoming smaller, and then increasingly larger again). For example, his Krithi Thyagaraja Yoga Vaibhavam exemplifies Gopucha Yati.

In tyAgarAja yOga vaibhavam

tyAgarAja yOga vaibhavam
agarAja yOga vaibhavam
rAja yOga vaibhavam
yOga vaibhavam
vaibhavam
bhavam
vam

The structure of the lyrics taper from 9 syllables to 1 syllable!

Now for Srotovaha in Thyagaraja Yoga Vaibhavam:

svarUpa prakAsham
tatvasvarUpa prakAsham
sakalatatva svarUpa prakAsham
shivashaktyAdi sakala tatva svarUpa prakAsham

The lyrical structure progressively expands from 6 to 16 syllables!

Legacy and Influence

Dikshitar's legacy is profound and multifaceted. His compositions are not merely musical pieces but **spiritual and philosophical treatises**, rich in symbolism and devotion. Unlike Tyagaraja's Telugu kritis and Syama Sastri's rhythmic brilliance, Dikshitar's works stand out for their **scholarly depth, architectural references, and pan-Indian spiritual vision**.

His influence extends beyond performance into **pedagogy, musicology, and spiritual discourse**. The **Sangita Sampradaya Pradarshini**, compiled by his grand-nephew **Subbarama Dikshitar**, remains a vital source for authentic notation and interpretation of his works.

In recent decades, there has been a resurgence of interest in Dikshitar's compositions, with musicians and researchers delving into their **structural elegance, devotional intensity, and cross-cultural elements**. His kritis are now central to Carnatic concerts, academic curricula, and spiritual gatherings.

Commemorating #Dikshitar250

The 250th birth anniversary has sparked global celebrations. Organizations like **Guruguhaamrta** have hosted festivals, concerts, and lecture-demonstrations (lec-dems) across India and abroad. These events feature leading artists, scholars, and students paying homage through performances, talks, and workshops. Check out these resourceful links for further insight: www.dikshitar.org and www.guruguha.org

Digital tributes such as the **#Dikshitar250 YouTube series** showcase legendary renditions by MS Subbulakshmi, DK Pattammal, Semmangudi Srinivasa Iyer, GNB, MLV, Madurai Mani Iyer, and T. Brinda to name a few offering a rich auditory journey through Dikshitar's musical universe. [\[www.youtube.com\]](http://www.youtube.com)



A commemorative postage stamp on the Birth Bicentenary of Muthuswami Dikshitar, an Indian poet, singer, composer and Veena player, issued by the Indian Postal and Telegraph department, issued on Mar 18, 1976

Source: [Muthuswami Dikshitar - iStampGallery](http://www.dikshitar.org)

Conclusion

Muthuswami Dikshitar's life and music embody the confluence of **devotion, intellect, and artistry**. As we celebrate his 250th birth anniversary, we are reminded of the timeless relevance of his compositions and the spiritual depth they offer. His legacy continues to inspire generations upon generations, reaffirming his place as a **strong pillar of Carnatic music** and a **significant beacon of Indian cultural heritage**.

Prisha Parthasarathy, Shritika Sriram, and Rishi Swaminathan are Sruti Youth Group members and disciples of Smt. Kiranavali Vidyasankar. Jayram Sataluri and Ravi Iyer are long time SRUTI supporters.



Exploring Carnatic Music Through the Compositions of Muthuswami Dikshitar

By Prisha Parthasarathy

Muthuswami Dikshitar was an extraordinary singer, poet, and vainika, as well as a major composer of Carnatic music. Born in 1775, Dikshitar is the youngest of the Trinity of Carnatic music, alongside Tyagaraja and Syama Shastri. Dikshitar is known for creating over 500 Carnatic compositions, each known for its elaborate details, descriptive lyrics, and captures the essence of the ragams through precise gamakas. Dikshitar's kritis are sung worldwide and help many musicians grow stronger in their Carnatic journeys.

Dikshitar is one of the most fascinating composers in Carnatic music with his vast collection of kritis. His compositions serve as beneficial tools for enhancing my level in Carnatic music. Dikshitar's pieces include a variety of unique details that can develop my knowledge and skills in music as I continue my creative and cultural experience.

Many of Dikshitar's kritis feature various rhythms and intricate details that challenge my skills as a current student in Carnatic music. Practicing many of his compositions allows me to explore many songs with different paces. The unique melodies and rhythms in his works give me an opportunity to refine my vocal abilities.

A few years ago, when I began my journey in Carnatic music, I started by learning simple compositions such as Shakti Sahitha and Santhatham Pahimam. Even these very basic nottuswarams helped me level up my musical complexity, as they improved my accuracy in swarams, rhythms, and melodies. Dikshitar's compositions have a unique style that allows me to get exposure to variety of kritis in Carnatic music. Each of his pieces have different details that benefit me as I continue to learn more complex songs.

2025 celebrates the 250th birthday of Carnatic composer, Muthuswami Dikshitar. His musical creativity allows many people in the world to enjoy listening to and learning this form of art. Dikshitar's ability to capture unique details even in his very simple compositions guide students of any age, through an exciting journey in Carnatic music. I still have years and years of learning and growing in my musical journey and I will continue to learn and listen to many of his compositions. We honor Muthuswami Dikshitar today, as he has kept the legacy of Carnatic music alive for many generations to follow. Thank you!

Prisha Parthasarathy is a Sruti Youth Group member and disciple of Smt. Kiranavali Vidyasankar.



Use of Graha Bhedam to Enumerate and Classify Janya ragas and to Establish Relationships among Melakarta Ragas

By Venkat Venkatakrishnan

Introduction

Graha bheda is a powerful concept that can be used to establish relationships among ragas and perhaps derive new ones. Using graha bheda, a methodology is outlined that allows for 305 symmetric pentatonic (audava) ragas to be derived. In the case of symmetric hexatonic (shadava) ragas, 426 ragas are derived. In a similar manner, 85 tetratonic (chaturswara) ragas are derived. The concept of graha bheda is also applied to nonsymmetric ragas as well as vakra ragas. Finally, graha bheda shows how melakarta (sampurna) ragas are related. While graha bheda is a well-known construct in Carnatic music, the aims of this article are to make the concept less mysterious for non-experts, and to demonstrate how it can be used to derive new ragas.

Graha bheda

The concept of graha bheda is well known to musicians and musicologists alike, and is discussed in famous texts such as the one by Prof. Sambamoorthy [1]. There is an excellent online tool called Graha Bheda explorer [2], but it does not specifically identify all the symmetric ragas that can be derived from a given raga.

Graha bheda is nothing but a transposition of notes. It relies on the fact that Sa, the adhaara shruti, is not fixed. The concept is most easily understood by using a keyboard or a harmonium. It is a harder concept to demonstrate using the human voice, but a trained vocalist will be able to do this as well. It'll be illustrated using the example of raga Mohanam, a symmetric pentatonic raga with the Arohana Sa Ri₂ Ga₃ Pa Da₂ Sa. The gap between Sa and Ri₂ is 2 intervals, the gap between Ri₂ and Ga₃ is 2, the gap between Ga₃ and Pa is 3, the gap between Pa and Da₂ is 2, and the gap between Da₂ and Sa is 3. Thus, raga Mohanam is identified by the sequence 2 2 3 2 3. If Ri₂ is used as the base note Sa, and the next five notes in Raga Mohanam are sung or played, one obtains the sequence 2 3 2 3 2. The sequence has thus been shifted, starting with the second number, following the sequence, and ending with the first number as the last entry. This is called cyclic permutation. This new sequence 2 3 2 3 2 corresponds to raga Madhyamavati with the Arohana of Sa Ri₂ Ma₁ Pa Ni₂ Sa. The next sequence is 3 2 3 2 2, which corresponds to raga Hindolam with the Arohana Sa Ga₂ Ma₁ Da₁ Ni₂ Sa. The next sequence in the cycle is 2 3 2 2 3 which represents Raga Suddha Saveri with the Arohana Sa Ri₂ Ma₁ Pa Da₂ Sa. The fifth and final sequence is 3 2 2 3 2, corresponding to Raga Suddha Dhanyasi with the Arohana Sa Ga₂ Ma₁ Pa Ni₂ Sa. Mathematically, starting with the sequence 2 2 3 2 3 representing raga Mohanam, the remaining four ragas are obtained by repeatedly applying cyclic permutation. Note that a musician has the option of moving the Sa note forward or backward to accommodate one's voice. For example, starting with raga Mohanam, one can move Sa forward by 9 intervals or backward by 3 intervals, both resulting in raga Suddha Dhanyasi but in two different octaves. The relationships among the ragas related via graha bheda are mutual. Within the group of 5 ragas, it will be possible to get from one raga to another by shifting the starting note the correct number of intervals.

On its face, graha bheda appears to be a confusing concept because different ragas are revealed even though the same notes are being sung or played. However, ragas related via graha bheda, e.g., Mohanam and Hindolam, don't sound alike. Per earlier discussion, if Ga_2 is used as Sa, and the remaining notes of Mohanam are sung or played, raga Hindolam is revealed, almost by magic. The reason for this is that in Indian music, the musician is able to make any of the notes to be the adhaara shruti, Sa and the listener is also able to do the same, perhaps intuitively so. A raga is not just a collection of notes. When one performs or listens to the raga, certain notes are emphasized (vaadi and sama vaadi), certain notes are oscillated in specific ways (gamakas), and others are fixed (achala swaras, Sa, and Pa), and certain prayogas are employed. In particular, the role of the adhaara shruti (and its higher and lower octave counterparts) cannot be overemphasized. This may be the reason why there is no hint of raga Hindolam when an artist renders raga Mohanam, and vice versa.

Derivation of pentatonic ragas

A pentatonic raga is represented by a sequence of 5 numbers. To derive all the pentatonic ragas, the number of ways 5 integers can be chosen that sum to 12 is computed. An important consideration is the largest gap between adjacent notes in the raga. There are established ragas with a gap of 6 intervals. An example is raga Deshyagowla, which has as its Arohana Sa Ri_1 Pa Da_1 Ni_3 Sa , represented by the sequence 1 6 1 3 1. There is even an obscure raga called Karunipriya having a gap of 8 intervals. Nevertheless, a conscious decision has been made to limit the maximum gap between successive notes to be 6 intervals. 61 sequences of 5 numbers (summing to 12) have been identified. From the 61 sequences, 305 pentatonic ragas are obtained via cyclic permutation. It has been verified that there is no repetition of ragas derived in this manner. All the 305 ragas, their sequences and corresponding Arohanas may be found in the longer version of this article [3]. Allowing the maximum gap to be 7 reveals another 20 ragas, and allowing the gap to be 8 intervals yields 5 more ragas, bringing the total count of symmetric pentatonic ragas to 330.

It is interesting to note that the only group of 5 ragas featuring familiar ragas is the one discussed in the last section. Among the 305 ragas, there are many groups of 5 ragas where only some are known. For example, one group comprises raga Valaji with the Arohana, Sa Ga_3 Pa Da_2 Ni_2 Sa , and raga Abhogi with the Arohana, Sa Ri_2 Ga_2 Ma_1 Da_2 Sa which are well-known. Two other ragas in the group, raga Kalaasaaveri with the Arohana, Sa Ri_1 Ga_2 Pa Ni_2 Sa , and raga Nivaaram with the Arohana, Sa Ri_2 Ma_2 Da_2 Ni_3 Sa , are relatively unknown. The fifth raga in the group has the Arohana, Sa Ga_2 Ma_1 Ma_2 Da_1 Sa . It has not yet been named, but it still sounds pleasant despite having two Mas. Of the 305 ragas, 89 ragas are as yet unnamed. Some of the ragas may not sound pleasant to the ear. One criterion by which to exclude ragas is that a raga should have no more than one each of Ri , and Ga , or Da , and Ni . There are 9 ragas with two Ris and one Ga , 10 ragas with one Ri and two Gas , 10 ragas with two Das and one Ni , and 9 ragas with one Da and two Nis . Omitting these 38 ragas brings the count from 305 down to 267. 36 ragas have two Mas but many still sound pleasant. Of these, 8 ragas feature the Pa note as well. If these 8 ragas are eliminated from consideration, the total count comes down to 259. If all the 36 ragas that have two Mas are excluded, the count comes down to 231 ragas. It is up to Carnatic music experts to make the final decision on the rules a raga must obey.

Hexatonic ragas

Symmetric hexatonic or audava ragas have 6 notes in their scales, starting with Sa. Thus, they possess six gaps from Sa to Sá, represented as a sequence of 6 numbers adding up to 12. There do not seem to be many established hexatonic ragas with a gap of more than 5 intervals. Under the constraint that the maximum gap between successive notes is 5 intervals, 9 groups of six numbers that sum to 12 have been identified, yielding 426 unique ragas, many of which are unnamed.

Of the 426 possible hexatonic ragas, it is possible to eliminate 222 ragas from consideration based on the following criteria:

- Having two Mas (84 ragas), including 8 that also have: {two Ris, one Ga} or {one Ri, two Gas} or {two Das, one Ni} or {one Da, two Nis}.
- 12 ragas that have {one Ri, two Gas} or {two Ris, one Ga} or {two Das, one Ni} or {one Da, two Nis}.
- 5 ragas that have {two Ris, two Gas}.
- ragas that have {two Das, two Nis}.

Excluding these 222 ragas, brings down the total number of hexatonic ragas to 204.

As an example, graha bheda is applied to raga Sriranjani which has the Arohana, Sa Ri₂ Ga₂ Ma₁ Da₂ Ni₂ Sá with the sequence 2 1 2 4 1 2. In Table 1, all the 6 ragas related via graha bheda along with their sequences are listed. Raga #5 has both Mas but still sounds pleasant, and is unnamed.

| Number | Sequence | Arohana | Raga |
|--------|-------------|---|--------------------|
| 1 | 2 1 2 4 1 2 | Sa Ri ₂ Ga ₂ Ma ₁ Da ₂ Ni ₂ Sá | Sriranjani |
| 2 | 1 2 4 1 2 2 | Sa Ri ₁ Ga ₂ Pa Da ₁ Ni ₂ Sá | Kaashyapi |
| 3 | 2 4 1 2 2 1 | Sa Ri ₂ Ma ₂ Pa Da ₂ Ni ₃ Sá | Saaranga Tarangini |
| 4 | 4 1 2 2 1 2 | Sa Ga ₃ Ma ₁ Pa Da ₂ Ni ₂ Sá | Karnataka Khamas |
| | | | |
| 5 | 1 2 2 1 2 4 | Sa Ri ₁ Ga ₂ Ma ₁ Ma ₂ Da ₁ Sá | |
| 6 | 2 2 1 2 4 1 | Sa Ri ₂ Ga ₃ Ma ₁ Pa Ni ₃ Sá | Vilaasini |

Table 1 . Raga Sriranjani and the 5 ragas related to it via graha bheda.

Application of Graha bheda to Asymmetric and Vakra ragas

Asymmetric ragas are considered next, where one note is left out in the Avarohana using raga Bahudari as an example. It has the Arohana Sa Ga₃ M₁ Pa Da₂ Ni₂ Sá and the Avarohana Sá Ni₂ Pa Ma₁ Ga₃ Sa, where Da₂ is omitted. Its Arohana has the sequence 4 1 2 2 1 2, and its Avarohana has the sequence 2 3 2 1 4. Note that the underlined combination 2 1 in the Arohana is substituted with 3 in the Avarohana. This combination cannot be split while carrying out the graha bheda. Under this restriction, only 4 more ragas can be derived via graha bheda. In Table 2, all the 5 ragas are listed. These are new ragas, although

many familiar ragas have either the same Arohana or Avarohana. For example, raga #4 has the same Arohana as raga Sriranjani and the same Avarohana as raga Varamu. All four ragas derived in this manner sound pleasing to the ear, including raga #2, which features both Mas.

| Number | Arohana sequence | Arohana | Avarohana sequence | Avarohana | Raga name |
|--------|--------------------|--|--------------------|--|-----------|
| 1 | 4 1 2 <u>2</u> 1 2 | Sa Ga ₃ Ma ₁ Pa Da ₂ Ni ₂ Sâ | 2 <u>3</u> 2 1 4 | Sâ Ni ₂ Pa Ma ₁ Ga ₃ Sa | Bahudari |
| 2 | 1 2 <u>2</u> 1 2 4 | Sa Ri ₁ Ga ₂ Ma ₁ Ma ₂ Da ₁ Sâ | 4 2 <u>3</u> 2 1 | Sâ Da ₁ Ma ₂ Ga ₂ Ri ₁ Sa | |
| 3 | 2 <u>2</u> 1 2 4 1 | Sa Ri ₂ Ga ₃ Ma ₁ Pa Ni ₃ Sâ | 1 4 2 <u>3</u> 2 | Sâ Ni ₃ Pa Ma ₁ Ri ₂ Sa | |
| 4 | <u>2</u> 1 2 4 1 2 | Sa Ri ₂ Ga ₂ Ma ₁ Da ₂ Ni ₂ Sâ | 2 1 4 2 <u>3</u> | Sâ Ni ₂ Da ₂ Ma ₁ Ga ₂ Sa | |
| 5 | 2 4 1 2 <u>2</u> 1 | Sa Ri ₂ Ma ₂ Pa Da ₂ Ni ₃ Sâ | <u>3</u> 2 1 4 2 | Sâ Da ₂ Pa Ma ₂ Ri ₂ Sa | |

Table 2. Raga Bahudari and the 4 ragas related to it via graha bheda.

Graha bheda also reveals relationships among several well-known audava-sampoorna ragas, e.g., ragas Abheri, Mohana Kalyani, Kedara Gowla, and Arabhi. More details can be found in the longer version [3]. The concept can also be applied to vakra ragas, such as Nalinakanthi, which has the Arohana, Sa Ga₃ Ri₂ Ma₁ Pa Ni₃ Sâ, and the Avarohana, Sâ Ni₃ Pa Ma₁ Ga₃ Ri₂ Sa. The Arohana sequence is 4 -2 3 2 4 1 and the Avarohana sequence is 1 4 2 1 2 2. Thus, the pattern 4-23 in the Arohana is replaced by the pattern 1 2 2 in the Avarohana. These underlined patterns cannot be split during the permutation. Thus, only 3 cyclic permutations are possible. Raga Nalinakanthi and the three ragas derived by graha bheda are presented in Table 3. It may be observed that the zigzag pattern (vakra) is shifted. All three unnamed ragas sound pleasant.

| Number | Arohana sequence | Arohana | Avarohana sequence | Avarohana | Raga name |
|--------|----------------------------|---|----------------------------------|---|--------------|
| 1 | 4 -2 <u>3</u> 2 4 1 | Sa Ga ₂ Ri ₂ Ma ₁ Pa Ni ₃ Sâ | 1 4 2 <u>1</u> <u>2</u> <u>2</u> | Sâ Ni ₃ Pa Ma ₁ Ga ₃ Ri ₂ Sa | Nalinakanthi |
| 2 | 2 4 1 <u>4</u> -2 <u>3</u> | Sa Ri ₂ Ma ₂ Pa Ni ₃ Da ₂ Sâ | <u>1</u> <u>2</u> <u>2</u> 1 4 2 | Sâ Ni ₃ Da ₂ Pa Ma ₂ Ri ₂ Sa | |
| 3 | 4 1 <u>4</u> -2 <u>3</u> 2 | Sa Ga ₃ Ma ₁ Da ₂ Pa Ni ₂ Sâ | 2 <u>1</u> <u>2</u> <u>2</u> 1 4 | Sâ Ni ₂ Da ₂ Pa Ma ₁ Ga ₃ Sa | |

| | | | | | |
|---|---------------------|--|--------------------|--|--|
| 4 | 1 <u>4</u> -2 3 2 4 | Sa Ri ₁ Ma ₁ Ga ₂ Ma ₂ Da ₁ Sá | 4 2 <u>1</u> 2 2 1 | Sá Da ₁ Ma ₂ Ma ₁ Ga ₂ Ri ₁ Sa | |
|---|---------------------|--|--------------------|--|--|

Table 3. Raga Nalinakanthi and the three ragas related via graha bheda.

Tetratonic ragas

Tetratonic or chaturswara ragas, have only 4 notes, starting with Sa. Including Sá, the Arohana and Avarohana have 5 notes with 4 gaps. Allowing a maximum gap of 5 intervals, 8 groups of 4 integers (summing to 12) have been identified, giving rise to a total of 85 unique ragas. Of these only 7 are named, raga Mahati being the most famous.

Relationships among Melakarta ragas

Corresponding to each melakarta raga, there are 6 cyclic permutations. Only some of these may result in other melakarta ragas. Many others will have issues such as possessing two Mas, missing Pa, and possessing more than one each of Ri or Ga and Da or Ni.

The melakarta ragas are classified into bins which indicate the number of melakarta ragas that are related via graha bheda. The largest group has 6 ragas, because in the 7th permutation, Pa is absent. These 6 ragas are Kalyani, Harikambhoji, Natabhairavi, Thodi, Shankarabharanam, and Karaharapriya. The bin with 5 ragas is empty. There are 3 groups of 4 ragas that are related, 6 groups of 3 ragas, 18 groups with 2 ragas, and 36 ragas that are isolated, i.e., it is not possible to derive another melakarta raga from any of them. Table 4 presents the melakarta ragas arranged into bins with the melakarta number indicated in parentheses, The symbol @ indicates that no melakarta results from that particular permutation.

| Bin | # Members | Ragas |
|-----|-----------|---|
| B6 | 1 | Thodi (M8), Kalyani (M65), Harikambhoji (M28), Natabhairavi (M20), @, Shankarabharanam (M29), Karaharapriya (M22) |

| | | |
|----|---|--|
| B5 | 0 | |
| B4 | 3 | Dhenuka (M9), Chitraambari (M66), @, Shanmukhapriya (M56), @, Shulini (M35), @ Naatakapiya (M10), @, Vaachaspathi (M64), Chaarukesi (M26). @, @, Gourimanohari (M23) Vakulabhhranam (M14), Kosalam (M71), @, Kiravaani (M21). @, @, Hemavati (M58) |

| | | |
|----|----|---|
| B3 | 6 | <p>Ratnaangi (M2), Gamanaashrama (M53), @, Jhankaraadvani (M19), @, @, @</p> <p>Gaanamurti (M3), Vishwambari (M54), @, Shyamalaangi (M55), @, @, @</p> <p>Senaavati (M7), Lataangi (M63), @, @, @, Suryakantham (M17), @</p> <p>Maayamalavagowla (M15), Rasikapriya (M72), @, Simhendramadhyamam (M57), @, @, @</p> <p>Chakravaakam (M16), @, @, Sarsaangi (M27), @, @, Dharmavati (M59)</p> <p>Naaganadini (M30), @, Bhavapriya (M44), @, Vaagadishvari (M34), @, @</p> |
| B2 | 10 | <p>Kanakaangi (M1), Panthuvaraali (M51), @, @, @, @, @</p> <p>Vanaspati (M4), @, @, Maararanjani (M25), @, @, @</p> <p>Maanavathi (M5), @, @, Kaantaamani (M61), @, @, @</p> <p>Kokilapriya (M11), @, @, Rishabhapriya (M62), @, @, @</p> <p>Gaayakapriya (M13), Dhaatuvardhani (M69), @, @, @, @, @</p> <p>Haatakaambari (M18), @, Ghavaambhodi (M43), @, @, @, @</p> <p>Varunapriya (M24), @, @, @, Raagavarhini (M32), @, @</p> <p>Gaangeyabhushani (M33), @ @, Neetimati (M60), @, @, @</p> <p>Chalanaattai (M36), @, Subhathuvarali (M45), @, @, @, @</p> <p>Shadvidamaargini (M46), @, Naasikaabhushani (M70), @, @, @, @</p> |
| B1 | 16 | <p>Taanarupi (M6), @, @, @, @, @, @</p> <p>Rupavati (M12), @, @, @, @, @, @</p> <p>Yaagapriya (M31), @, @, @, @, @, @</p> <p>Saalagam (M37), @, @, @, @, @, @</p> <p>Jalaarnavam (M38), @, @, @, @, @, @</p> <p>Jhaalavaraali (M39), @, @, @, @, @, @</p> |

| | |
|--|---|
| | Navanitam (M40), @, @, @, @, @, @ |
| | Paavani (M41), @, @, @, @, @, @ |
| | Raghupriya (M42), @, @, @, @, @, @ |
| | Suvarnaangi (M47), @, @, @, @, @, @ |
| | Divyamani (M48), @, @, @, @, @, @ |
| | Dhavaalaambari (M49), @, @, @, @, @, @ |
| | Naamanaarayani (M50), @, @, @, @, @, @ |
| | Raamapriya (M52), @, @, @, @, @, @ |
| | Sucharitraa (M67), @, @, @, @, @, @ |
| | Jyothisvarupini (M68), @, @, @, @, @, @ |

Table 4: Organization of melakarta ragas into bins. Key to symbol: @ — No melakarta raga resulting from graha bheda.

Conclusion

It is shown that graha bheda is a powerful concept that can be used to establish relationships among ragas. It is also used to derive comprehensive lists of symmetric pentatonic, hexatonic, and tetratonic ragas. The concept can also be applied to nonsymmetric as well as vakra ragas, giving rise to new ragas. Finally, it is used to establish relationships among the melakarta ragas. It is hoped the material covered will appeal to average listeners as well as to aficionados and connoisseurs of Carnatic music. Practitioners of the art of Carnatic music demonstrating graha bheda may benefit from having all the interrelated ragas listed in one place. It is further hoped that these artistes will be able to develop some of the ragas that have been uncovered via graha bheda, perhaps name them and even compose in them.

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Musings on the Numbering Scheme for Carnatic Ragams – The Katapayadi Scheme

By Ravi Sivasankaran and Nagarajan Sankrithi

Introduction

In Carnatic music (as in Hindustani music, albeit differently), ragas are classified into a rigorous scientific system of 72 melas and their janyas (derivatives). After learning the rules of this enumeration and the katapayadi Samkhya (system), our primary question was: Is there a musical significance to the flipping of the digits in the Katapayadi system for melakartas? Did the names come first and then the numbers, or vice versa? While discussing these topics, we began looking into the history of the Samkhya systems (Bhuta and Katapayadi) and their use in traditional Indian knowledge systems. While primarily interested in the utility of these theoretical frameworks, we will raise and answer these questions based on our research of existing scholarly works.

We have been fascinated with one aspect of the Indian knowledge system: starting from Vedas and epics to secular subjects like linguistics, science, and performing arts (such as music and dance) and even Kamasutra, subjects are often introduced by counting and classification. This imposition of order simplifies understanding and facilitates knowledge transmission. In this article, we will discuss these mnemonics and encoding / cipher schemes in detail.

Mnemonics in the Indian Sub-continent

An ingenious mechanism (mnemonic / encoding scheme) to preserve literature and ensure error free coding is the “*yamaataaraajabhaanasalagam*” schema / sutra / formula. Written in Sanskrit (Devanagari script), this sutra looks like: यमाताराजभानसलगम्. The sutra is attributed to *Acharya*¹ Pingala in his work, Chandashastra (छन्दशास्त्र) and is dated to around the 3rd – 2nd century BCE. The uniqueness of this sutra is that if you encode consonants with a short vowel ending as a 1 and those with long vowel ending as a 0, this encodes a binary sequence 1000101110 (ya (य) – 1, maa (मा) – 0, taa (ता) – 0, raa (रा) – 0, ja (ज) – 1, bhaa (भा) – 0, na (न) – 1, sa (स) – 1, la (ल) – 1, gam (गम्) – 0), which when grouped into overlapping sets of three bits starting from the left, generates all possible three bit combinations as so:

| Group | Threes | गण | गणाक्षराणि | Binary Sequence | Number of Syllables | Maatraas (Duration of group) |
|-------|-------------|------|------------|-----------------|---------------------|------------------------------|
| ya | ya-maa-taa | य गण | यमाता | 100 | 3 | 1+2+2 = 5 |
| ma | maa-taa-raa | म गण | मातारा | 000 | 3 | 2+2+2 = 6 |

| | | | | | | |
|-----|-------------|------|-------|-----|---|-----------|
| ta | taa-raa-ja | त गण | ताराज | 001 | 3 | 2+2+1 = 5 |
| ra | raa-ja-bhaa | र गण | राजभा | 010 | 3 | 2+1+2 = 5 |
| ja | ja-bhaa-na | ज गण | जभान | 101 | 3 | 1+2+1 = 4 |
| bha | bhaa-na-sa | भ गण | भानस | 011 | 3 | 2+1+1 = 4 |
| na | na-sa-la | न गण | नसल | 111 | 3 | 1+1+1 = 3 |
| sa | sa-la-gam | स गण | सलगम् | 110 | 3 | 1+1+2 = 4 |

So, what is the purpose of this formula and how is this used in Sanskrit Prosody? The genius of this system lies in its simplicity. Each meter is defined by the number of syllables that every line of the meter has, and the length (duration, also referred to *maatras* in Sanskrit) of each syllable. So, the sutra can be used to describe each meter very clearly such that there is no confusion in terms of the gait of the meter.

Take for example the *bhujanga prayaata* (भुजङ्गप्रयात) meter (chhand, छन्द) from classical Sanskrit prosody. The sutra or the formula for the *bhujanga prayaata* meter is *bhujanga prayaatam chaturbhir yakaaraih*, (भुजङ्गप्रयात चतुर्भिर्यकारैः) which translates to – the bhujanga prayaata meter has four ya group which is four 100 group. This means that each line of the bhujanga prayaata meter has 12 syllables and a total length of 20 *maatras*. Let us take an example to analyze this – we will use the first verse of the *Shaaradaa bhujanga prayaatashtakam* composed by Adi Shankara.

| Verse | Syllable breakdown | Syllable count | Maatraa |
|---|--|----------------|---------|
| <i>Suvakshojakumbhaam</i> <i>sudhaapoornakumbhaam,</i> | su-vak-sho-ja kum-bhaam, su-dhaa-poor-na kum-bhaamp- | 12 | 20 |
| सुवक्षोजकुम्भाम् सुधापूर्णकुम्भाम्। | 1 - 0- 0- 1 0- 0, 1- 0- 0- 1 0- 0, | | |
| <i>prasaadaavalambaam</i> <i>prapunyaavalambaam,</i> | ra-saa-daa-va-lam-baamp-ra-pun-yaa-va-lam-baam, | 12 | 20 |
| | 1- 0- 0- 1- 0- 0- 1- 0- 0- 1- 0- 0, | | |

प्रसादावलम्बाम्

प्रपुण्यावलम्बाम्॥

sadaasyendubimbaam Sa-daas-yen-du-bim-baam, sa-daa-nosh-ta-bim- 12 20
sadaanoshtabimbaam, baam,

सदास्येन्दुबिम्बाम् 1- 0- 0- 1- 0- 0, 1- 0- 0- 1- 0- 0,
सदानोष्ठबिम्बाम्।

bhaje Sharadaambaa Bha-je-shaa-ra-daam-baa-ma-jas-ram-ma-dam- 12 20
majasramadambaam. baam.

भजेशारदाम्बामजस्रम्मदम्बाम् 1- 0- 0- 1- 0- 0- 1- 0- 0- 1- 0- 0
॥

A second meter is the *Vasantatilaka* (वसन्ततिलका) meter, चतुर्दशाक्षरा ता-भा-ज-ज-ग-गैःवसन्ततिलका (*chaturdashaksharaa taa-bha-ja-ja-ga-gauh Vasantatilaka*) – which means, with fourteen syllables in the taa- bhaa- ja- ja- and ga- ga- pattern, this is Vasantatilaka. In this meter, there are four *ganas* or groups from the यमाताराजभानसलगम् sutra, which are the taa-bha-ja-ja (ता-भा-ज-ज) groups. But, in addition to these, there are two additional syllables that have been captured in the formula as ga-gauh (two *Gurus* or long vowels), to bring the total to 14 syllables. The bit pattern for Vasantatilaka will look like 001-011-101-101-0-0 which gives it 14 syllables that together are a total of 21 *maatras*.

Let us take an example in this meter to analyze this breakdown using a verse from Raja Bhoja's Champu Ramayana's Bala Kandam:

acchinna-mekhalamalabdha- acch-chin-na-me-kha-la-ma-lab-dha-dru-dho-pa-goo- 14 21
drudhopagoodham, dham,

अच्छिन्नमेखलमलब्धदृढोपगूढम्। 0- 0- 1- 0- 1- 1- 1- 0- 1- 1- 0- 1- 0- 0

apraapta- ap-raap-ta-chum-ba-na-ma-veek-shi-ta-vakt-ra-kaan-tim, 14 21
chumbanamaveekshita- 0- 0- 1- 0- 1- 1- 1- 0- 1- 1- 0- 1- 0- 0
vaktrakaantim,

अप्राप्तचुम्बनमवीक्षितवक्त्रकान्तिम्॥

kaantaabhimishra-vapuṣahkr̥ta- Kaan-taa-bhi-mish-ra-va-pu-shah kr-ta-vip-ra-lam-bhaa, 14 21
vipralambha, 0- 0- 1- 0- 1- 1- 1- 0- 1- 1-0- 1- 0- 0

कान्ताभिमिश्रवपुषः कृतविप्रलम्भा।

sambhoga-sakhyam iva paatu Sam-bho-ga-sakh-ya-mi-va paa-tu va-puh pu-raa-reh.
vapuh puraareh.

14 21

0- 0- 1- 0- 1- 1- 1- 0- 1- 1- 0- 1- 0- 0

संभोगसख्यमिव पातु वपुः पुरारेः ॥

One can see very clearly how the prosody and the inherent lyrical beauty of Sanskrit is enhanced by the structural element of the meter. In this section we looked at perhaps one of the foremost mnemonic patterns to have been codified and used in Indian linguistics, especially for Sanskrit prosody. Before we venture into how the system of mnemonics is prevalent in the field of Carnatic music, we will make a brief sojourn into how this system may have evolved and benefited other areas before coming into the world of music.

Mnemonics in Indian Science, Arts and Literature

As efficient as the “*yamaataaraajabhaanasalagam*” sutra is for the purpose of codifying the prosody structure of poetic meters, it doesn’t really serve the purpose of encoding the actual information that is being conveyed. In other words, while we can use the sutra and the concept it provides to describe a meter, say, the *bhujanga* meter, we will have no way of using this scheme to provide a way to remember numbers. For example, if we wanted to remember a special day, say like our own birthday, will this scheme be useful for me? It won’t because a birthday is not defined by syllables and *maatras*. So, how can one encode this information using mnemonics for easy memorization?

To do this, one would need a way to map numbers to consonants or sounds, so that one could convert a number or a set of numbers to a group of sounds (or words) for easy memorization. This thought gave rise to a second major innovation in mnemonics in the Indian subcontinent, and this schema is referred to as the “*Katapyadi*” scheme – and in Devnagari script, it is the कटप्यादि scheme. What this scheme is, is very simple – it maps each consonant in the Devnagari script to a number from 1, 2, 3, ... 9, 0 in a straightforward manner as follows:

| Symbol / Numeric Value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|---------------------------|-----------|------------|-----------|------------|------------|------------|--------------|-----------|------------|------------|
| क वर्ग (ka group) | क (ka) | ख (kha) | ग (ga) | घ (gha) | ङ (gna) | | | | | |
| च वर्ग (cha group) | | | | | | च (cha) | छ (chcha) | ज (ja) | झ (jha) | ञ (nga) |
| ट वर्ग (ta group) | ट (Ta) | ठ (Tha) | ड (Da) | ढ (Dha) | ण (Na) | | | | | |

| | | | | | | | | | | |
|--------------------|-----------|------------|-----------|------------|------------|--------------|------------|-----------|------------|-----------|
| त वर्ग (tha group) | | | | | | त (ta) | थ (tha) | द (da) | ध (dha) | न (na) |
| प वर्ग (pa group) | प (pa) | फ (pha) | ब (ba) | भ (bha) | म (ma) | | | | | |
| य वर्ग (ya group) | य (ya) | र (ra) | ल (la) | व (va) | श (sha) | ष (shsha) | स (sa) | ह (ha) | | |

Looking at the table above, the name for this scheme is just those consonants that appear in the first column, or *katapaya aadi* (कटपयादि) scheme, where *aadi* (आदि) in Sanskrit refers to ‘and more’ or ‘etc.’ Okay, so we have a mapping between consonants and numbers, then what? The beauty of this scheme are simple rules to encode, and these rules are enumerated as below:

1. For a given digit to be encoded, pick any consonant from that column
2. Repeat that for all digits to be encoded
3. Connect these consonants into meaningful words (or phrases) by introducing vowels (vowels have no numeric value) – that’s it!

Since the choice of consonants is not fixed, what makes this scheme beautiful is that different people encode the same number differently, based on the consonants of their choice. Since classical Sanskrit is primarily poetry, having this flexibility to choose consonants provides for great diversity of words to guarantee unique expressions. Also, couching the encoded numbers symbolically in a verse will also prevent the uninitiated from discerning the true purpose of the verse, providing a layer of encryption or secrecy as well.

Let us take a simple example, say we want to encode the number 25, and we pick the consonant ‘*ra* (र)’ for the number 2 and ‘*ma* (म)’ for the number 5. Now, using these two consonants, we could make any word such as *raama*, *ramaa*, (राम, रमा). One could have also picked the consonants *sha* (श) or *Na* (ण), instead, and could have come up with words like *ranee* (राणी) or *raashee* (राशी) to encode the same number 25! Let us take another slightly complex example and see how this scheme works. Say, we want to remember the following string of numbers 31415926. It may be hard for people to remember this the way it is here, but using the *katapayadi* scheme, we would convert this to a group of consonants as this: *la-ya-bha-ya-ma-dha-ra-tha*. Note that we have simply replaced the numbers with a consonant that encodes up to that number. Now, we may be able to create words such as ‘*laya bhaya madha ratha gaja gamanaa*’ (लय भय मध रथ गज गमना) as a line in some poetic verse. In doing so, we have cleverly couched an encoded number which is the value of pi up to 7 decimal places.

The *Katapayadi* system is traditionally attributed to *Vararuci*, a scholar astronomer from Kerala who lived in the 4th century CE and authored the *Chandravaakyas* - a collection of astronomical data encoded using this method. While the original text of *Vararuci* may not be available, references to his texts by subsequent

literary works do indicate the use of this encoding scheme, and consequently, the first use of this scheme is traditionally attributed to *Vararuci*. The *Katapayadi* system served as a sophisticated mnemonic technology in India's oral tradition by enabling - (a) Preservation of complex mathematical tables and formulas, (b) Transmission of astronomical data across generations, (c) Integration of scientific knowledge into poetry and religious texts, and (d) Creation of self-verifying numerical codes resistant to copying errors.

The 72 Melakarta Carnatic Scheme

Veena, an instrument so unique that it not only can produce the *dasha-vida gamakams* - the ten different vibrato techniques – but also lets the learner “visualize” the sound. Think about the power of that statement, by first “seeing” what the sound needs to look like by learning the proper string manipulation technique, one learns to “play” the actual *gamakam*, the vibrato, and **that** is what makes the veena uniquely suited for Indian classical music. The rules for generating the 72 Melakarta become very simple if you look at the frets on the veena, and follow these simple rules:

1. Fix the sa, ma, pa and Sa notes (the tonic first, fourth, fifth and the octave),
2. In between the sa and ma, pick two notes from the possible four fret position - this is the *purvanga* (पूर्वाङ्गम्) or the first part of the octave
3. Similarly pick two notes from the four fret positions between the pa and Sa – this is the *uttaranga* (उत्तराङ्गम्) or the final part of the octave
4. It doesn't matter whether the label of the fret position is r1 or r2 or g1 or g3 – simply refer to the note closer to the sa as ri, and the one closer to the ma as ga
5. Same logic for da and ni, the one closer to the pa is da, and the one closer to the Sa is ni
6. All ragams should have all 7 notes in the ascending and descending scales, and these must be in sequential order and symmetric between the ascending and descending scales

Using the method of generating scales of 7 notes in the ascending order and restricting the descending scale to have the same 7 notes, gives us a total of 72 *sampoorna Melakarta ragams*. How? Consider the four fret positions between sa and ma, label them as p1, p2, p3 and p4, where p is for position. Now, per rule 2 above, we need to pick two notes from these four positions, and the possible choices are: (p1, p2), (p1, p3), (p1, p4), (p2, p3), (p2, p4) and (p3, p4). There are 6 possible choices – since these choices are for the second and third note in the scale, namely ri and ga, we will label them as (r1, g1), (r1, g2), (r1, g3), (r2, g2), (r2, g3) and (r3, g3) – noting that r2 = g1 = p2, r3 = g2 = p3. Similarly, we have six choices for choosing two positions between pa and Sa, and these may be labeled as (d1, n1), (d1, n2), (d1, n3), (d2, n2), (d2, n3) and (d3, n3) – again, noting that d2 = n1 = p2 and d3 = n2 = p3. So, on the veena, the same fret position is sometimes referred to as r2 and sometimes as g1, or as r3 and g2, or as d2 and n1 or as d3 and n2.

Realizing that the positional choices for ri and ga are completely independent from the positional choices for da and ni, we have a total of $6 \times 6 = 36$ possible combinations of 7 notes that have sa, ma and pa fixed. Now, we also know that there are two fret positions for ma, m1 and m2, and that selection is independent from the other selections. So, combining all of that, we see that there is a total of $6 \times 6 \times 2 = 72$ unique symmetric combinations of these 7 notes (where symmetric implies that the same 7 note are chosen for the ascending and descending sequences). These 72 unique combinations are the 72 *Melakarta ragams* in the Carnatic music tradition.

Grouping the 72 Primary Ragams into Chakras

Between the early 17th century and late 18th, early 19th century, three eminent musicologists have played a significant role in organizing the *Melakartha ragams* into groups – the foremost amongst them was Venkatamakhin, who postulated the concept of a mela ragam, i.e. a parent ragam and began the work on scientifically categorizing the then existent ragams. A second prominent musicologist, Muddu Venkatamakhin (possibly a relative of Venkatamakhin), expanded on Venkatamakhin's work and catalogued the possible 72 *melas*. However, Muddu Venkatamakhin did not impose the last rule as listed in the previous section. So, some of his *mela ragams* were *asampoornam* - incomplete either in the ascending or descending scale, some were asymmetric, and some were non-sequential (i.e. had zigzag or *vakra* swara patterns). None of these were considered as disqualifiers in his scheme. He also took the first step at naming the *Melakartha ragams* in a manner that makes it easy to remember their position, using the, you guessed it, the *katapayadi* scheme.

While Muddu Venkatamakhin's work was revolutionary, it was Govindacharya, who in the latter half of the 18th century, is said to have created the currently existing set of *Melakartha ragams* as they are today, by imposing the last rule, i.e., sequential and symmetric choices for the 7 notes in both the ascending and descending scales. His work can be captured succinctly as shown in the table below, where we see very clearly the *swara* selection for each of the seven notes for all the 72 *Melakartha ragams*. (NOTE: for the ma, choosing m1 will give us the first set of 36 and choosing m2 will give us the second set of 36 *Melakartha ragams*).

| Mela Number | Choices for | sa | ri | ga | ma | pa | da | ni | Sa | Mela Number | Choices for | sa | ri | ga | ma | pa | da | ni | Sa |
|-------------|-------------|----|----|---------|----|----|----|----|----|-------------|-------------|----|----|---------|----|----|----|----|----|
| 1 37 | | | | | | | | n1 | | 19 55 | | | | | | | | n1 | |
| 2 38 | | | | | | | d1 | n2 | | 20 56 | | | | | | d1 | n2 | | |
| 3 39 | s | r1 | g1 | m1 / m2 | p | | | n3 | S | 21 57 | s | r2 | g2 | m1 / m2 | p | | | n3 | S |
| 4 40 | | | | | | d2 | n2 | | | 22 58 | | | | | | d2 | n2 | | |
| 5 41 | | | | | | | | n3 | | 23 59 | | | | | | | | n3 | |
| 6 42 | | | | | | d3 | n3 | | | 24 60 | | | | | | d3 | n3 | | |
| 7 43 | | | | | | | | n1 | | 25 61 | | | | | | | | n1 | |
| 8 44 | | | | | | d1 | n2 | | | 26 62 | | | | | | d1 | n2 | | |
| 9 45 | s | r1 | g2 | m1 / m2 | p | | | n3 | S | 27 63 | s | r2 | g3 | m1 / m2 | p | | | n3 | S |
| 10 46 | | | | | | d2 | n2 | | | 28 64 | | | | | | d2 | n2 | | |
| 11 47 | | | | | | | | n3 | | 29 65 | | | | | | | | n3 | |

| | | | | | | | | | | | | | | | | | | |
|----|----|---|----|----|---------|----|----|---|----|----|---|----|----|---------|---|----|----|--|
| 12 | 48 | | | | | d3 | n3 | | 30 | 66 | | | | | | d3 | n3 | |
| 13 | 49 | | | | | | n1 | | 31 | 67 | | | | | | | n1 | |
| 14 | 50 | | | | | d1 | n2 | | 32 | 68 | | | | | | d1 | n2 | |
| 15 | 51 | s | r1 | g3 | m1 / m2 | p | n3 | S | 33 | 69 | s | r3 | g3 | m1 / m2 | p | n3 | S | |
| 16 | 52 | | | | | | n2 | | 34 | 70 | | | | | | d2 | n2 | |
| 17 | 53 | | | | | d2 | n3 | | 35 | 71 | | | | | | n3 | | |
| 18 | 54 | | | | | d3 | n3 | | 36 | 72 | | | | | | d3 | n3 | |

Govindacharya and his predecessor, Muddu Venkatamakhin, seem to prefer the *uttarangam* portion of the ragam (notes from pa to Sa) to vary while keeping the *purvangam* part fixed, to create 12 groups of six ragams each. These groups are referred to as *chakra*, and as one can see, the 6 ragams in each chakra have the same *purvangam* (sa, ri, ga, ma) notes, and the *uttarangam* always has the same set of 6 choices for the da and ni. As we progress from one chakram to the next higher one, the *purvangam* moves up slowly from r1 to r2 to r3.

Just as a thought exercise, what if we flip the grouping order by changing the *purvangam* first? For this, we would simply swap the columns in the above table between (ri, ga) and (da, ni) and, of course, change the labels from ri to da and ga to ni, and vice-versa. There exists a neat mathematical relationship between the grouping shown above in the table and the new order – when written as a matrix of 6 rows and 6 columns, the two grouping orders are transposes of one another. So, what appears on one column in the first order will appear on one row in the second. But, the cool part is that there are 6 ragams along the main diagonal, ragams numbered 1, 8, 15, 22, 29 and 36 for the m1 group, and 37, 44, 51, 58, 65 and 72 for the m2 group, retain their positions regardless of the ordering. A more careful analysis of these ragams reveals that the “distance” between the four notes in the *purvangam* and the *uttarangam* portions are identical (or nearly identical, as the case for the m2 group) for these ragams, thereby giving them a symmetry between the bottom and top half of the octave.

Perhaps there is something more to be said about this symmetry? Look at these ragams, these include some of the most popular ragams in the *Carnatic* tradition, like – Thodi, Mayamalavagowlai, Kharaharapriya, Shankarabharam, Nattai, Pantuvarali, Kalyani etc. Does this symmetry between the *purvangam* and *uttarangam* for these ragams provide them with more scope for creative expressions?

Reuse of the Katapayadi Mnemonic Scheme and its Significance

It is not immediately clear if either Muddu Venkatamakhin or Govindacharya gave names to the 12 chakras (or groups) of six ragams each in their ordering, but today, there are 12 names used for these chakras that have some significance in the world around us. The naming follows the so called, *bhoota sankhya*, or numerical system based on the world around us. The chakras are named – 1. *Indu* (moon), 2. *Netra* (eyes),

3. *Agni* (fire), 4. *Veda*, 5. *Bana* (Arrow), 6. *Rtu* (Season), 7. *Rshi* (Sage), 8. *Vaasu* (deities), 9. *Brahma* (Creator), 10. *Dishi* (Directions), 11. *Rudra*, and 12. *Aditya* (Sun). One can see the universal or cultural significance of these numbers – such as the number of moons, eyes, seasons etc., and the concept of *ekadasha rudra* and *dvadasha Aditya* etc.

The two musicologists took the help of the *katapayadi* scheme for providing names to the *mela ragams* such that there was a unique way of identifying the *mela raga* number based on the name of the ragam itself. This ingenious scheme modified the first two syllables of existing names or appended two syllables to the existing name such that the two syllables now provide the *mela* number using *katapayadi* decoding. Let us take an example or two to understand the *katapayadi* inspired names of some common ragams and see how that can be used to identify the *mela* number in the list of 1 to 72. (NOTE: Knowing the *mela* number immediately conveys information about all the notes in the ragam).

Example 1: *Thodi*, a very popular Carnatic ragam, the scientific name of this ragam as proposed by Muddu Venkatamakhin is *janathodi* (जनतोडी), while that proposed by Govindacharya is *Hanumathodi* (हनुमतोडी). While the two names proposed by these two musicologists are different, they indeed added two syllables to the pre-existing name of this ragam, *thodi*. Muddu Venkatamakhin has added the prefix *ja-na*, which decodes to 8-0 - which when read from the left as the unit digit to right as the tens, is 08, the actual number of *thodi* in the *mela* scheme. Now consider the name given by Govindacharya, the first two syllables are *ha-nu* which decode to 8-0 again.

Example 2: *Pantuvarali*, another popular Carnatic ragam gets two different names from these two musicologists. Muddu Venkatamakhin refers to this as *Kashiramakriya* (काशीरामक्रिया), while Govindacharya refers to this as *Kaamavardhini* (कामवर्धिनी). Regardless, if we decode the first two syllables of either name, *ka-shi* and *kaa-ma*, they both decode to 1-5. Now, reading this from the left as the unit digit and the one to the right as the tens digit, we get $1 + 50 = 51$.

Some final thoughts

While the present day names for the 72 *melakartha ragams*, as codified by Govindacharya works great, there are some confusions in this naming scheme, especially for ragams where the first two syllables may include a compound consonant (सम्युक्ताक्षर or सम्युक्त व्यञ्जन). In the *katapayadi* scheme, treatment of compound consonants is not stated explicitly, leading to two possible Rules as shown in the table below, one where the vowel-less consonant is dropped altogether (RULE 1), and one where it is used (RULE 2). We will take some examples to underline this confusion by listing all raga names that have compound consonants:

| Name of ragam | RUL E 1 | <i>katapayad</i> i Decoding | RUL E 2 | <i>katapayad</i> i decoding | Actual Number | Possible rule |
|----------------------|------------|--------------------------------|------------|--------------------------------|------------------|---------------|
| Ratnangi (रत्नाङ्गी) | ra-na | 2-0 | ra-t- | 2-6 | 02 | RULE 1 |

| | | | | | | |
|---|------------|-----|------------|-----|----|--|
| Chakravakam (चक्रवाकम्) | cha- ra | 6-2 | cha- k- | 6-1 | 16 | RULE 2 |
| Suryakantham (सूर्यकान्तम्) | sa- ya | 7-1 | sa-r- | 7-2 | 17 | RULE 1 |
| Jhankaradhvani (झङ्कारध्वनि) | jha- ka | 9-1 | jha- n- | 9-5 | 19 | RULE 1 |
| Gaangeyabhushani (गाङ्गेयभूषणी) | ga- ga | 3-3 | ga-n- | 3-5 | 33 | RULE 1 |
| Shhadvidmaargini (षद्विद्मार्गिणी) | sha- vi | 6-4 | sha- d- | 6-8 | 46 | RULE 1 |
| Divyamani (दिव्यमणि) | di-ya | 8-1 | di-v- | 8-4 | 48 | RULE 2 |
| Vishvaambhari (विश्वाम्भरी) | va-va | 4-4 | va- sh- | 4-5 | 54 | RULE 2 |
| Shyamalaangi (श्यामलाङ्गी) | ya- ma | 1-5 | sh- ya | 5-1 | 55 | sh-ma should be used... RULE 3 |
| Shanmukhapriya (षण्मुखप्रिया) | Shh- ma | 6-5 | shh- n- | 6-5 | 56 | RULE 1 or RULE 2 (??) |
| Simhendramadhyama m (सिम्हेन्द्रमध्यमम्) | sa- ha | 7-8 | sa- m- | 7-5 | 57 | RULE 2 (Now, some people also refer to this raga as simmendramadhyamam , सिम्मेन्द्रमध्यमम्, which makes RULE 1 work too) |
| Dharmavati (धर्मवती) | dha- ma | 9-5 | dha- r- | 9-2 | 59 | RULE 1 |
| Kantamani (कान्तामणी) | ka-ta | 1-6 | ka-n- | 1-0 | 61 | RULE 1 |
| Chitrambari (चित्राम्बरी) | ch-ra | 6-2 | ch-t- | 6-6 | 66 | RULE 2 |
| Jyothiswaroopini (ज्योतिस्वरूपिणी) | ya-ta | 1-6 | j-ya | 8-1 | 68 | j-ta should be used, RULE 3 |

So, based on this table above, while the systems constituted by Muddu Venkatamakhin and Govindacharya are beautiful for their simplicity, they still create confusion by probably not explicitly calling out the rule to be followed in case of compound consonants. Maybe there is something out there that clarifies this, but we have not found any, yet. In addition to this, while we are all used to the modern way of writing numbers where the unit digit is the right most with the tens, hundreds etc. to its left; in the traditional Indian system, it is the other way around, where the unit digit is the left most, tens digit to its right and so on. Many examples of this abound, and we can see that clearly in simple day-to-day words like *Ekadashi*, *Chaturdashi* etc. (एकादशी, चतुर्दशी), which are $eka + dasha = 1 + 10 = 11$, or $chatur + dasha = 4 + 10 = 14$ etc. So, using this traditional way of reading / writing numbers, there is no “flipping” of consonants needed to arrive at the *mela* number.

Conclusions

Our exploration of the Katapayadi system, from its roots in Sanskrit prosody to its application in the 72-melakarta scheme, reveals more than just a clever mnemonic. It points to a foundational principle of traditional Indian knowledge systems: a unified, cosmological worldview where all subjects — be they art, science, or linguistics — are seen as interconnected.

This worldview fostered a methodology built on quantifiable and measurable concepts, driven by a strong desire for robust verbal transmission. The meticulous classification of the 72 melas, the grouping into 12 chakras named after universal concepts (bhoota sankhya), and the encoding of these numbers directly into raga names all serve this purpose. They are systems designed to impose order, simplify understanding, prevent corruption, and be permanently encoded for remembrance and oral transmission. The Katapayadi system, despite its minor ambiguities, is a perfect testament to this holistic integration of mathematics, language, and music.

Ravi Sivasankaran has been deeply influenced by the Mylapore music scene and the December music season. Ravi's interests are in linguistics, information theory, mathematics, Hindi poetry, Carnatic music among many things. He is learning to play the veena from Vidushi Smt. Durga Krishnan, a renowned Vainika and a prominent Carnatic music teacher in the Boston area.

Nagarajan Sankrithi's early exposure to Carnatic music was from listening to his mom and brother. He has pursued his interest in music by training himself on music theory and playing Carnatic, Hindustani and Western classical on Classical and acoustic guitar. Over the years, he has experimented on playing Sarod, Sitar and Tabla as well.

The Instrument Mridhangam and Associated Stalwarts

As told by Vidwan Kumbakonam Rajappa Iyer (*translated from Tamil by Umayalpuram Mali*)

It is very rare that we receive valuable firsthand information passed on from a legendary guru, Kumbakonam Rajappa Iyer, and shared by his direct disciple, Umayalpuram Mali. This excerpt provides that unique view about mridhangam and some of the legendary stalwarts associated with the instrument.

As per Sri Umayalpuram Mali recited by his guru Vidwan Kumbakonam Rajappa Iyer: “In my opinion, the mridhangam serves as the best suited accompanying instrument in Carnatic music in whatever form it be, Kutcheri, bhajanai, Harikatha, Bharatanatyam, etc.

The reason being the tuning aspect on its right side, the unison of meetu chaapu, the soothing base sound on its left side, etc. All of these put together jells well while accompanying a song.

Mridhangam exists right from the day this Universe came into existence. When Lord Shiva danced with his Damaru, it is said that Nandhi Bhagawaan played mridhangam for it.

Mridhangam finds place in the Vedic texts.

This instrument was made of clay initially. “Mrd” in sanskrit means clay and “angam” means body; that is how it got its name. Afterwards for convenience reasons, it was changed to wood. They experimented in 5 kinds of tree wood to suit the climatic conditions: Coconut, Neem, Karunkaali, Sandalwood, and Jackwood.

Coconut wood was suited but they couldn’t get the required shape of a mridhangam.

Neem wood has a Godly connection. Hence if used to make a mridhangam, it must be used only in Pooja rooms.

Karunkaali was not available much. Instead, they tried Semaram (Red wood), which is the wood used for doing Tirupathi Marapaachis. Mridhangam made in Semaram was good.

Sandalwood was very expensive.

Jackwood was very much available in Tamil Nadu and Kerala and was selected as the wood of choice. In the later years they tried in Sarakonni wood, and it was also good.

In the olden days, the instrument was 18 inches. Male artistes used to sing in 4 kattai (pitch). Even aged male musicians used to sing in 2.5 kattai. Nowadays since the pitch has come down, the width of the right-hand side increases. Hence the length also.

Mridhangam playing should be very accommodative and it should be like as if the mridhangam itself is singing.

So many Stalwarts have taken the Mridhangam to glory by their playing and information is available only about vidwans in the past 150 years.

Narayanaswamy Appa was a very able accompanist with perfect fingering. It is said that he used to safeguard his fingers with utmost care. He used to avoid lifting any weighty articles. He would ask his sishya to lift the water vessel and pour water in his hands for washing. He used to have bhajans in his house every Saturday attended by vidwans and rasikas of those days.

Tukaram was very famous for his meetu and gumki strokes. Vidwan Azhaganambi Pillai used to heartily praise Vidwan Tukaram's gumki.

Das Swamigal was the head of a Mutt. He would sit on a wooden plank and play the instrument. His araichaapu was very famous those days. When playing farans before the mora, Das Swamigal would include a lot of araichaapus which would please the ears.

Thanjavur Babu Rao was also known as Jatkavandi Babu Rao. He used to play a lot for Harikatha. In those days there used to be more Harikathas compared to concerts.

Nanimiyan Sahib was mainly a Dolak vidwan who used to play farans with clarity.

Kumbakonam Azhaganambi Pillai was a sought after mridhangam vidwan for about 45 years by the vidwans of those days. Accompanying art was a gift or varaprasadham for him. In whatever style the singer sang in, Pillai's mridhangam would align with it, His araichaapu would be in tune with the thambura strings, The strong point in his playing was his gumki. It is compared to several pigeons making sounds. Pillai played for 3 generations of musicians. For Patnam Subramania Iyer, then for his sishya Poochi Srinivasa Iyengar, and then for his sishya Ariyakudi Ramanuja Iyengar. In the same way, he accompanied Flute Saraba Sastrigal, then for Palladam Sanjeeva Rao and for the child prodigy Flute Mali. One interesting anecdote is that Pillai played 3 concerts on a single day. In a marriage he played for Ariyakudi in the morning, for Maharajapuram Viswanatha Iyer in the evening and for Palladam Sanjeeva Rao at night. Pillai's peers of those days used to look at his playing with awe. Azhaganambi Pillai earned the name 'Kaliyuga Nandhi'.

Pudukkottai Dakshinamurthy Pillai was a very knowledgeable Vidwan, well versed in playing both Mridhangam and Kanjira. He made the rasikas to look upon the instrument kanjira by his playing. He was very God fearing. His appearance would make others fall at his feet. The mridhangam vidwans of those days including Azhaganambi Pillai made him sit in front of them on the dais.

Sakkottai Rangu Iyengar was a Mathematics vidwan. He would always be thinking about and constructing new moras and korvais. Kanchipuram Naina Pillai was a vidwan of repute in those days. His concert would contain a lot of Math. When several laya vidwans hesitated to accompany him, Rangu Iyengar accompanied him, matching his laya talent. Rangu Iyengar has brought out a lot of intricate moras and korvais like korvais mixed with chatusram and thisram.

Umayalpuram Kothandarama Iyer was a mridhangam vidwan earning the name of asura saadhagi-meaning practicing for a long time. He accompanied Semmangudi Srinivasa Iyer a lot during the latter's initial years. Kothandarama Iyer later switched over to Ghatam.

Thanjavur Vaidyanatha Iyer's contribution for the mridhangam art is immense. A very knowledgeable man, laya thought was always in his mind. He constructed a lot of moras and korvais. He taught numerous sishyas; namely doyens Palakkad Mani Iyer, TK Murthy, Umayalpuram Sivaraman etc.

Thanjavur Ramadas Rao was very famous for his accompaniment technique and meetu chaapu aligned playing. It is said that one would be compelled to observe his fingering.

Kuthalam Kuppuswami Pillai was a busy accompanist of those days.

Kuthalam Sivavadivel Pillai was famous for his tekas. His style was followed by many aspiring mridhangam players of those days.

Then came the era of PMI, Pazhani and others who took the mridhangam to greater heights.”

I sincerely hope the younger generation becomes interested in learning more about the great past mridhangam stalwarts – Umayalpuram Mali

Kumbhakonam Rajappa Iyer was a Mridhangam vidwan and guru who fashioned his own bani where lessons were arranged, focusing on the fingering techniques. He was a disciple of Kumbhakonam Azhaganambi Pillai and Sakkottai Rangu Iyengar. He accompanied many legends like Ariyakudi Ramanuja Iyengar, Papanasam Sivan, TK Rangachari, MD Ramanathan, Dr. M Balamuralikrishna, Lalgudi G Jayaraman and Dr. N Ramani. He was the guru of numerous leading mridhangam and ghatam vidwans including his son KR Ganesh, Manoj Siva and Umayalpuram Mali.

Umayalpuram Mahalingam aka Mali is one of the leading practitioners of mridhangam. He is the disciple of Kumbhakonam Rajappa Iyer and Umayalpuram Sivaraman. An A grade artist of AIR, he has accompanied many past and present artists. A Rhodes Scholar in Residence at Amherst College, Mali has traveled around the world teaching the art of mridhangam and konakkol.



A Tribute To The Late Long Time SRUTI Supporter Dr T Sarada

(My Dear Chithi)

By Dr. Shivakumar Raman

My Sarada Chitthi (mom's younger sister) is the second daughter of two teachers: Shri Thyagaraja Iyer and Shrimati Ranganayaki Ammal. Sarada's parents named her and her siblings after careful thought in the memory of great celestial humans from the Hindu scriptures: Mythreyi, Chandrasekaran, Sarada, Parasaran, Gargi, and Bhavatarini.



Very little has been said about my Chithi, Dr. T. Sarada, and she liked it that way. Under the radar often, she was (past tense is difficult for me) quite fierce and spunky. She never backed away from an argument especially when it was backed by facts that she had assimilated through 93 years of meticulous reading, research, and discussion.

She was bold, decisive, and determined. One great thing my grandmother did was make all her four daughters fiercely independent and highly educated. During the age and times she mentored them, this was rare in rural India. She groomed them to lead, to teach, and all with great values, and humility. No one typified that better than Dr. T. Sarada.

Sarada Chithi is a scholar and served Pitney Bowes and Celanese in various capacities for 40 years. Not to forget the several years she spent in Padmavati College in Tirupathi as a Chemistry lecturer preceding her stint in the United States. A PhD in Physical Chemistry from American University, with much work done at Columbia University and MIT, she was a specialist in Liquid Crystals research and education. She is quite well known for her works that are visible through her literary publications and several US Patents. In addition, she has been a tireless board member of the Bharatiya temple in Southeastern Pennsylvania.

Quite importantly, she was the catalyst for the success of the Thyagaraja Iyer and Ranganayaki Ammal family amidst their poverty and hardships. The fact that the descendants of that family are so situated and facile as they are today in very large measure due to her innumerable sacrifices and discipline. For instance, she did not get married since she took the mentorship of her own younger siblings and all her cousins who were placed under her mentorship — both physically and financially, very seriously.

She coped with the loss of both her parents, her younger sister Gargi, her oldest sister Mythreyi, and her younger brother Parasaran with whom she had lived with for more than 20 years in the same house. She is very close to her family and did everything in her capacity to keep them motivated and happy. She is philosophical and led the life of an ascetic dedicated to the betterment of her fellow humans whether at the temple or society at large. She was a big fan of various genres of Indian Classical Music. At the same time, Western Classical Music and Opera always played in the background in her house. She attended several concerts of all genres, Eastern and Western, and discussed and dissected music ad nauseam, with experts and fans alike. She loved watching the big three of Tennis: Federer, Nadal, and Djokovic, and kept up with many sports quite keenly. She argued fiercely for the teams or players she rooted for.

Sarada has committed more than several tithes of her income and savings to several charities. She has continued to fund the education of several people at any and all times. But her humility and ‘never asking for credit’ qualities are quite simply put - unparalleled.

Now, her fierceness was not just limited to her piercing glance in family albums. In fact, she will never remain a snapshot in the family album. When you think of her, memories keep gushing out. What backed up her serious energy for arguments was her knowledge of so many things. The younger bunch of her siblings – Gargi, Bhavatarini and Parasaran never picked up arguments or even disagreements with her, out of extreme respect for her. My mom as the elder sister would argue for a while and then give up. The arguments that turned into Maharabharata Yuddhams were those between her older brother Chandrasekaran and her. Both are highly educated, with PhDs to boot, both extremely well read, both strong in their convictions and ideals, and yet they had epic arguments even of seemingly ‘simple’ topics. There would be some huffing and puffing during those tense moments. But the most endearing aspect was that they would both back down eventually and behave that none of this happened. They would act normal and revert to the ever-loving siblings in a matter of 15 minutes. So, that is a small snippet of the family banter and entertainment that all of us children dreaded and at the same enjoyed through the years. Together, they are very informative for the bystander. I have used quotes from their arguments on my own for years. Nowhere will you see or hear Shakespeare, Dumas, and Dickens, or the Alwars in a routine context. So many facts and figures will be thrown for all to gather. The decibels will rise to a crescendo and get back to a constant audible level in a matter of minutes. These are the two role models for the entire family.

She had expressed a desire to have a few verses from Gita and Prabandams recited in her memory. We have selected the most appropriate.

अनन्याश्चिन्तयन्तो मां ये जनाः पर्युपासते ।

तेषां नित्याभियुक्तानां योगक्षेमं वहाम्यहम् ॥ 22॥

*ananyāśh chintayanto māṁ ye janāḥ paryupāsate
teṣhām nityābhīyuktānām yoga-kṣhemam vahāmyaham*

There are those who always think of Me and engage in exclusive devotion to Me. To them, whose minds are always absorbed in Me, I provide what they lack and preserve what they already possess.

कर्मण्येवाधिकारस्ते मा फलेषु कदाचन ।

मा कर्मफलहेतुर्भूर्मा ते सङ्गोऽस्त्वकर्मणि ॥ 47 ॥

*karmaṇy-evādhikāras te mā phaleṣhu kadāchana
mā karma-phala-hetur bhūr mā te saṅgo ’stvakarmaṇi*

You have a right to perform your prescribed duties, but you are not entitled to the fruits of your actions. Never consider yourself to be the cause of the results of your activities, nor be attached to inaction.

ஊரிலேன் காணி இல்லை உறவு மற்றொருவர் இல்லை
பாரில் நின் பாத மூலம் பற்றிலேன் பரம மூர்த்தி
காரொளி வண்ணனே என் கண்ணனே கதறுகின்றேன்
ஆர் உளர் களைகண் அம்மா அரங்க மா நகருளானே (29)

UrilEn kANI illai uRavu maTRRovar illai
pAril nin pAda mUlam paTRRilEn parama mUrtti
kAroLi vaNNanE en kaNNane kadaRuginDREn
Ar uLar kaLaikaN ammA aranga mA nagaruLAnE

O Supreme Lord, I am of no town, I have no land, I have no other kin in this world. I have not even been able to access Your feet! O Lord with the complexion of brightly lit clouds! O my Kanna (Krishna)! I cry in despair! Who is there to support me like a mother! O Ranganatha!

துப்புடையாரை அடைவதெல்லாம் சோர்விடத்துத் துணையாவ ரென்றே*
ஒப்பிலேனாகிலும் நின்னடைந்தேன் ஆனைக்குநீ அருள்செய் தமையால்*
எய்ப்புஎன்னை வந்துநலியும்போது அங்குஏதும் நானுன்னை நினைக்க மாட்டேன்*
அப்போதைக்கு இப்போதே சொல்லிவைத்தேன் அரங்கத் தரவணைப் பள்ளியானே!

Thupudayaarai Adaivathellam Sorvidathu Thunaiyavarendre
Opilenagilum Ninadainthen Annaikku nee arul seithamaiyaal
Eippu ennai vanthu naliyum pothu angu ethum nan unnai ninaikka matten
Appothaikku ippothe solli vaithen arangath tharavanaip palliyane

People generally depend on persons whom they think will help them when they become weak and old. Even though I am not a qualified and eligible person, I have surrendered unto You, Oh my Lord. The other day You saved the Elephant Gajendra when it was caught by an alligator and cried out for Your help. At the old age when I am fraught with disease, I may not be able to call nay even think of You. Hence, I would prefer to call You now itself when I am hale and healthy so that You can save me at my odd hours. Oh my Lord Ranga Natha, who is in reclining pose at divine Sri Ranga Kshetra.

Dr. Shivakumar Raman is Morris R. Pitman Professor, David Ross Boyd Professor, and Director of Industrial and Systems Engineering at the University of Oklahoma. He is the nephew of the late Dr. T Sarada, who was a long time, ardent supporter of SRUTI and was the Librarian and Director of the Publications and Outreach Committee in years past.



Appreciating Carnatic Music Concerts

*By Prabhakar Chitrapu**

Prakasam and Krishi were close friends who shared a deep love for Carnatic music. They were also remarkably honest with each other — the kind of friends who could debate ideas freely and warmly, without the slightest prejudice.

One evening, they attended a vocal Carnatic concert organized by their local music association, SRUTI. After the performance, they lingered for a while, chatting with fellow rasikas. The opinions they heard were fascinatingly diverse. Some declared it one of the best concerts they had ever attended; others found it merely average. A few admired the selection of songs, while some were drawn to the musical intricacies. Yet others expressed reservations about the singer's voice quality.

The next morning, over their usual coffee chat, Prakasam and Krishi revisited those discussions.

“How can the same concert evoke such different reactions?” Krishi wondered aloud.

Prakasam smiled. “Because Carnatic concerts touch people along several dimensions. Each listener is affected differently.”

“Yes,” Krishi agreed, “and there's also a difference between how “good” the concert was and how much one “liked” it. The first is an objective assessment, the second a subjective opinion. People often mistake one for the other and get into unnecessary arguments!”

“True,” said Prakasam thoughtfully. “But being completely objective about something as aesthetic as a Carnatic concert is tricky — perhaps even impossible.”

“Be that as it may,” Krishi continued, “maybe we can at least identify these different dimensions. That way, we can organize people's reactions instead of getting caught up in who's right or wrong.”

Prakasam liked the idea. “Let me take a stab at it. Perhaps we should start by recognizing that Carnatic music is largely composition-based. This is quite unlike Hindustani or Western classical music, where a large part of the repertoire is purely instrumental — and even when lyrics exist, they often play a simple, supporting role. In Carnatic music, however, compositions — and hence lyrics — take center stage. They are often filled with moving outpourings of devotion, deep philosophical ideas, playful expressions of romance, and even stinging criticisms of cruel or dishonest social practices.”

Krishi interrupted playfully, “Well said, but is it completely true that all Carnatic music is composition based? What about RTPs and Tillanas? They're not really driven by lyrics — people enjoy them for their rhythmic and melodic beauty, right?”

“True,” said Prakasam. “But to keep things simple, let's focus on composition-based pieces. That probably covers, say, ninety percent of Carnatic music?”

Krishi chuckled. “I’m sure someone could argue about that number — maybe an AI engine can check it someday!”

Prakasam laughed. “Let’s not get hung up on the percentage. It’s secondary to the issue we are trying to address.”

“Agreed,” said Krishi. “Let’s see – I think, at a high level, a Carnatic music rendition can be viewed along three key dimensions — Music, Lyrics (of Compositions), and Emotion. Or in Sanskrit terms: Sangeeta, Sahitya, and Bhava. What would you say?”

“Nice taxonomy,” said Prakasam approvingly. “Though we should probably elaborate on what we mean by each term, so that our intentions are clear. To start with, I would like to include under Music all aspects such as melody, rhythm, pacing, and the like.”

Krishi added, “And also how the various artists in the concert collaborate and co-create that single, artful experience — whether for one song or the entire performance.”

“Indeed!” said Prakasam. “So we’re really including all the musical elements in the concert except the lyrics of the composition.”

“Absolutely,” Krishi nodded. “All of that together — essentially the entire technical and structural Prowess.”

“Let’s now elaborate on lyrics,” Prakasam continued. “We already agreed that compositions are a central and distinguishing feature of Carnatic music. So the lyrics — and the ideas they express — form an essential part of a Carnatic composition.”

“So you’re saying that the performing musician must pay particular attention to the composition,” said Krishi, “ensuring that pronunciation and delivery of the words align with their meaning and intent.”

“Exactly,” said Prakasam. “This is especially important since Carnatic musicians come from different parts of South India, each with their own mother tongue. It’s therefore a musician’s responsibility to render the compositions with due respect for the language, the meaning, and the sentiment being expressed.”

“Good,” said Krishi. “Shall we move on to the last dimension — Emotion (Bhava)?”

“This is a very intangible attribute,” Prakasam reflected, “but it is, in my opinion, the core of art. The purpose of any and all art, if I may simplify, is to communicate something beyond the medium of the art itself — whether it’s painting, music, or theatre. A painting should be more than a photograph; it has to convey what a camera cannot capture, even if it means that the painting is not a realistic depiction of the object. Similarly, a musical piece should use its structure and lyrics to lead the listener to a space beyond them. That is art — that is aesthetics — that is how art elevates us.”

“Wow,” said Krishi softly. “So without bhava, a musical rendering is just mechanical — with no heart in it.”

“Yes,” Prakasam agreed. “It’s the difference between a newspaper article and a poem.”

“Great,” Krishni concluded. “So we have our three dimensions — Music, Lyrics, and Emotion — whether we apply them to a single piece or an entire concert.”

Then, with a spark in her eye, Krishni said, “Hey, why don’t we create a composite score — an MLE score! Music, Lyrics, Emotion — each rated on a scale of 1 to 10 (with 10 being the best).”

“That’s brilliant!” said Prakasam. “But remember, we’d need two such scores — one objective and one subjective.”

“You mean to capture the answers to the two similar but very different questions: Is the Concert good? And do you like the Concert?” Krishni clarified the concepts.

“Yes!” Prakasam went on. “So now we have two scores: an Objective MLE score and a Subjective MLE score. For example, one can rate a musical aspect of a rendition ‘objectively’ by considering how faithfully it adheres to the rāga, tāla, laya, and other core principles of Carnatic music. The subjective score, on the other hand, would depend on how one personally appreciates the music.”

“Similarly,” Krishni continued, “we could think of objective and subjective scores for how the ‘lyrics’ were rendered. But what about Emotion — Bhava? Isn’t that always subjective? Is there any objective way to assess it? That seems tricky!”

Prakasam paused, thoughtful. “True — that’s a slippery one. But perhaps we can distinguish between the emotional hues the artist puts into the rendition and how the listener responds to it.”

“Yes,” Krishni agreed. “There is a subtle but real distinction there. But I can easily imagine people getting confused.”

Prakasam chuckled. “Well, no one said it’s easy to score musical renditions! Let’s leave it at that. In any case, with both Objective and Subjective MLE scores, people can express their views without arguing over whether a concert was ‘good,’ ‘great,’ or just ‘OK.’”

“That’s a peace-making approach,” Krishni applauded. “So very you!”

“Some might say it’s diplomatic,” Prakasam replied with sunken seriousness. “Not always meant as a compliment!”

Krishni smiled. “Let them say what they will. You are who you are — labels are their prerogative.”

“By the way,” Prakasam added after a pause, “what about instrumental concerts? There are no lyrics to score! How do we handle that?”

“Easy,” Krishni said with a grin. “Just skip the Lyrics part!”

“Of course,” Prakasam nodded.

After a brief silence, he mused, “Do you think this MLE score will catch on? Maybe critics will start using it. Perhaps we’ll become famous!”

Krishi laughed heartily. “Dream-On, my friend, dream-on. More likely, we will be able find some friendly publisher to print it in some online channel and after a week or two, it will get swallowed by the next wave of blogs and podcasts and articles!”

“Oh well,” Prakasam sighed, smiling. “I had fun coming up with it. You?”

“I had fun too,” Krishi said warmly. “As always.”

“That will suffice, no?” concluded Prakasam – having finished the coffee and getting up to get the day done.

* This essay was refined in conversation with mantriNi (an AI engine), my patient writing companion and super-woman. True to her name, she corrects me and advises me like a mantri (court-counsel). Our dialogues have helped shape the style and tone of this article while keeping the original ideas and most of the language intact.

Prabhakar Chitrapu is a lover of music, language and philosophy. He often contributes to SRUTI publications and has served the organization in various capacities. He maintains a website www.Thyagaraja.org.

Flautist Twins' Sparkling Debut at Thyagaraja Aradhana

By Jayram Sataluri

Live at Mahalakshmi Devasthanam Auditorium, Hokessin, DE (March 22, 2025)



Heramb and Hemanth – flute

Thanjavur Murugabhoopathy – mridangam

N Guruprasad- ghatam

Rasika Sivakumar- tambura

Duration: 2 hours

Song List

1. nannu brOva nlkinta- AbhOgi, dESAdi
2. enta muddO- bindumAlini, Adi
3. jnAnamosaga rAdA- pUrvikalyANi, rUpakaM
4. manavinAlakinca rAdaTE- naLinakAnti, dESAdi
5. dorakunA iTuvaNTi sEva- bilahari, Adi (2 kalai)
6. nagumOmu ganalEni- AbhEri, Adi (2 kalai)

The first time I attend concerts of musicians, I try to be a [tabula rasika](#) (a rasika with a clean slate) so that I can evaluate their music. Hence, I have been fortunate to listen to intelligent, forward-thinking artists like Pantula RamA, Sunil Gargyan, and Kiranavali Vidyasankar. And now two names have been added to my growing list: twin flute maestros, Heramb and Hemanth.

With the support of Thanjavur Murugabhoopathy and N. Guruprasad, Heramb and Hemanth made a sparkling debut (with four flutes no less!) at the annual SRUTI Thyagaraja Aradhana. Heramb started off with an alluring AbhOgi AlApana while his brother followed on a bansuri at a lower sruti. What intrigued me was that Heramb did not go beyond tAra shadja, focusing only on madhya sthAyi. Following the short yet sweet AlApana was nannu brOva nlkinta. Hemanth's lower sruti playing made me not miss the violin at all! Murugabhoopathy and Guruprasad maintained the kAlapramANa. The swaraprastAra showcased the twins' mettle.

BindumAlini brought back memories of Dr. N Ramani's rendition as they played it at a slower kAlapramANa. At the caranam line "dutta pAla ruci teliyu sAmyamE", Heramb presented an impressive flourish in tAra sthAyi, emphasizing G and M whereas Hemanth played five notes below (D and N) on his bansuri. Applause promptly and deservedly came.

Next on the same flute, Hemanth played a pUrvikalyANi AlApana with Heramb supporting on the lower notes on a different flute. Like his twin, Hemanth fleetingly touched tAra shadja and ably added upper mandra. JnAnamosaga rAdA was the chosen kriti and their rendering reminded me of Voleti's version. Eschewing neraval at "paramAtmuDu jlvAtmuDu padu nAlugu lOkamulu", they went straight into a spirited swaraprastA; playing longer, slower rounds, while bringing out new contours of pUrvikalyANi. During the faster swaram portions, they introduced their captivating chord playing skills which mesmerized the audience. Their stylish and elegant ending kOrvai cut every swara note one by one until it was simply a 3 one note pattern "SPS" before returning to "paramAtmuDu jlvAtmuDu". The percussionists ended the kriti using the same kOrvai and added a theermanam to finish it off.

ManavinAlakinca rAdaTE was briskly rendered, yet the brothers did not treat it as a filler and rightly so. They aptly integrated some western notes in naLinakAnti which sounded so pleasant.

Next came the main rAgam, bilahari. Like the earlier renditions, the brothers focused on mandra and madhya sthAyis. Then suddenly in the middle of the AlApana, they switched to tAnam, which was a pleasant surprise. I especially liked how they alternated between the nIshadas when going down the avarOhanam; a characteristic of bilahari. Heramb even switched to a piccolo whereas Hemanth played on the longest flute. They didn't forget to incorporate their chord playing, enthralling the audience.

I expected nA jlvadhAra, but the twins chose dorakunA iTuvaNTi sEva, a better choice reminding me of the renditions of Nedunuri and the Hyderabad Brothers. One striking facet is that during their transitions from the Pallavi to the anupallavi/last charanam, they played around with the kAlapramANa in the pUrvangam by playing the first couple of notes at a slower kAlapramANa, then increasing it by 2 then 4 until the uttarAngam. There was no neraval, but the audience got a nice treat when the brothers did swaraprastAra at "kAmita phala dAYakiyau" instead of the usual "rAma brahma tanayuDaU".

After a few rounds of swaraprastAra, they announced that they would do grahabhedam at G3 (madhyamAvathi), M1 (hindOlaM) and P (Suddha sAveri). I believe what they did was more of a Dr. Balamuralikrishna inspired thAya, based on the famous [thAya rAgamAlikA thillAnA](#). Suddha sAveri was not clear at first, but when they announced they would go in reverse to return to Bilahari, I could identify it before they transitioned to hindOlaM and madhyamAvathi. Once the grahabhedam portion was over, they launched into an enjoyable ride of faster swaraprastAra where they added extra swarams to end at "slta kAntuni." One of the brothers would sing the line while the other played. Pa was chosen as the nyAsa swaram for the koraippu where they switched to tisram, displaying their dexterity. Their ending kOrvai was in tisram which brought smiles to the laya-inclined.

The thani was a spirited affair. Murugabhoopathy's first round was longish (about 7 to 9 mins) where he played 2 versions of the famous Karaikudi Mani kOrvai (thomkithalangu thomkithomki thalangu thatham thatham thatham...), then a familiar Thanjavur kOrvai in the middle where he started between the 11th and 12th beat and finally the famous "misram in tisram" kOrvai popularized by Palghat Raghu. Guruprasad responded very well in his round (4 to 6 minutes); at some points it seemed he wanted to play khandam for the gathibhedam but stuck to tisram. After Guruprasad's round, the two percussionists had a gala koraippu time; some sollus were in tisram, some were in khandam before combining in the farans, mohara and kOrvai.

nagumOmu ganalEni provided a gratifying end to the concert. They mostly stuck to the usual version but mixed some bhimpalAsh and Dr. BMK-esque sangatis, due to their love for muraLi gAnam. Murugabhoopathy and Guruprasad ended the concert in style and the audience applauded enthusiastically, showing their appreciation for the quad.

Observations:

I notice that Heramb plays more than Hemanth, but the latter shines when he plays the lower sruti on the longer flutes. This not only complements his twin but also displays his own manodharma. In addition, I notice some influence of the Alathur Brothers and Malladi Brothers where both sets of vidwAns' strengths combine as a cohesive whole. Coming from a musical lineage, Heramb and Hemanth are doing their best to maintain the standards set by Flute Mali, Dr. N Ramani, Sikkil Sisters and Shashank to name a few.

The twins complement each other throughout and elicit bhakti and bhAvam. They have good control over breath and kAlapramANa. One can hear flat western notes which enhance the rAgams, especially chords. They are inspired by Dr. BMK in terms of their spontaneity and unpredictability, and I like how one brother sings the sAhitya while the other plays the flute.

I advise that the twins not engage in gimmickry and continue developing their distinct style. If they plan to sing as well, they should focus on improving their sAhitya pronunciation in all languages to bring out more bhAvam. I hope they perform longer duration concerts during their tour so that they can display more of their manodharma. They have a promising future, and we rasikAs must do our part to encourage them to reach greater heights. I look forward to hearing them again at SRUTI.

The senior vidwans, Murugabhoopathy and Guruprasad highly encouraged and provided marvelous support to the twins. It is good to hear the familiar and not so well known sollukattus played by Murugabhoopathy. This is the second time I have seen Guruprasad perform, and he has added more to his arsenal as the laya influence of Vikku Vinayakram and V Suresh is apparent in his playing. Yet like his father, the late ghatam vidwan K Nagaraja Rao, he does not overdo the phrases/kOrvais.

One memorable concert down in the 2025 SRUTI concert season! Onward to the rest!

Jayram Sataluri is a rasika and an ardent supporter of SRUTI.



Concert Review: Amrutha Venkatesh and Ensemble

By Balaji Raghothaman

Amrutha Venkatesh’s Carnatic concert on April 5, 2025, at E.N.Pierce Middle School in West Chester, was



a fine balance of depth, polish, and sensitivity — an evening that revealed both her technical assurance and her instinct for aesthetics. It was also a testament to her growth into a primetime artist, an ascent that the SRUTI audience has delighted in witnessing in person over the years.

She was accompanied by **L. Ramakrishnan** on the violin, **Arjun Ganesh** on the mṛdaṅgam, and **Chandrasekhara Sharma** on the ghaṭam, each

contributing meaningfully to the concert’s overall texture.

The concert began with a **Tōḍi varṇam** by Dr. Balamuralikrishna — a delectable composition that omits the pañcamam entirely, and is filled with elegant *svarākṣarams*. Amrutha’s rendition highlighted the piece’s melodic ingenuity, with the *sāma nigama* phrase standing out for its beauty and precision.

A crisp **“Dinamani Vamsha” (Harikāmbhōji, Tyāgarāja)** followed, a fitting nod to Rāma Navami. Her measured approach, clear diction, and deft voice modulation lent the kriti warmth and vitality. The succinct *neraval* and *kalpanaswarams* sparkled, with Ramakrishnan’s violin and Arjun’s firm, melodic *nādam* on the mṛdaṅgam enhancing the flow.

In **“Āḍidum Muruganai” (Kīravāṇi, composed by T.N. Bala)**, Amrutha explored the rāga’s emotive core through a well-shaped ālāpana and subtle *kārvais* on *karpanaikkadangā kadirvezhalagan*. The interplay between Arjun and Chandrasekhara was particularly engaging, their rhythmic dialogues marked by clarity and balance. This was followed by a serene **“Sāmagaṇalōle” (Hindōḷam, GNB)**.

The concert’s centerpiece was **Tyāgarāja’s “Nivera Kaladhanamu”**, one of the *flagship* compositions in **Bēgāḍa**, elaborated with poise and imagination. Begada is a quintessential rakti raga, defined by characteristic oscillations, the gentle shifts of gait, and the subtle emotional depth, and Amrutha and Ramakrishnan did ample justice to it. The *neraval* on **“Tyāgarāja vara hrdaya nivēśa”** brought out the rāga-lakṣaṇa in all its splendour. The thani by the two percussion maestros was tremendous.

The concluding section offered variety and repose: **“Ramanai Bajithal” (Māṇḍ)**, **“Tīrada Vilaiyāṭṭu Pillai” (Sindhu Bhairavi)**, and **“Koḷalanūḍutha Banda” (Yaman)** were rendered with charm. The concert culminated in a lively **Tillānā** by Lalgudi Jayaraman in **Madhuvanti**, a Hindustani-origin raga with a haunting aura that left us wanting for more.

Amrutha's concert stood out for its thoughtfulness — every piece carefully chosen, every phrase measured and meaningful. It was a rewarding evening that reaffirmed her stature as one of the most discerning and musically mature voices in today's Carnatic landscape.

Balaji Raghothaman is a rasika first and foremost, and a past president of SRUTI.



A Celebration of Music

By Lata Suresh

It was truly a **celebration of music** on April 26, 2025, at the Fugett Middle School Auditorium, where **Saketharaman** presented a high-energy and unforgettable Carnatic concert. He was ably accompanied by **Kamalakaran Vinjamuri** on the violin, **Sai Giridhar** on the mridangam, and **Sowmiya Narayanan** on the ghatam — a team that collectively elevated the musical experience.



The concert opened with *Paripāhimām Siddhi Vināyaka* in **Vakulābharanam** (14th Melakarta rāgam), in Ādi tālam, composed by **Jayachamaraja Wodeyar**. Saketharaman rendered a brisk *kalpanā swaram* for the line *gakāra (Omkāra) bījākṣara nilaya* in the *caraṇam*, setting the tone for the evening.

Next came a brief raga sketch of **Kedāram**, leading into the *anupallavi* *Nāgarāja śayana*, followed by the *pallavi* of *Tyāgarāja gurum āśrayē*

by **M.D. Ramanathan**, set to **Rūpaka tālam**. The composition then crescendoed through its *cittaswarams* in medium and fast speeds, with Saketharaman presenting a seamlessly woven *kalpanā swaram*.

An exquisite **Vijayanāgari** (a janya of **Dharmavati**, the 59th Melakarta), composed by **H.N. Muttiah Bhagavathar** (*Vijayāmbikē Vimalātmikē*), followed. The essence of the rāgam was beautifully captured through voice and instrument. The phrase *Saṅgīta rūpiṇī* served as a lilting focal point during *neraval*. The *kalpanā swaram* section was especially notable for its *koraippu* in third speed.

Saketharaman then moved into **Syāma rāgam**, rendered with an emphasis on the dominant Sa and Ma notes. This segued into a meditative rendition of *Śāntamu lēka*, composed by **Saint Tyāgarāja** in **Ādi tālam**.

The accompanists truly shone throughout. **Kamalakaran Vinjamuri** (violin), **Sai Giridhar** (mridangam), and **Sowmiya Narayanan** (ghatam) provided soulful and intricate support, enriching the concert's emotional and rhythmic layers.

aTu kārādhani in **Manōranjani rāgam** followed, with a brief *kalpanā swaram*. Saketharaman then subtly transitioned into **kAmbhOji**, beginning with the *viruttam Mānāda*. This was followed by the emotive *Āḍum Deivam Nī aruḷvāi*, a composition by **Papanasam Sivan**, which danced in the minds and hearts of the audience. A brisk *neraval* explored the raga's richness and lyrical expanse. The *kalpanā swaram* that followed, portrayed amazing *naDais*, and patterns, culminating in a well-crafted *theermānam* that set the tone for the **Tani Avartanam**.

The **Tani** by **Sai Giridhar** and **Sowmiya Narayanan** was a vigorous display of rhythmic interplay, keeping up with the momentum built by the preceding performance.

The next delight was the **Rāgamālikā Kannanai kāṇbadheppō** in Tamil, featuring rāgams **Hamsānandi**, **Nāṭṭakurinji**, **Śuddha Dhanyāsi**, and **Abhōgi**.

Ragam-Tānam-Pallavi began with a delicate **Nalinakānti** raga sketch, enhanced by Kamalakaran's subtle lower-octave playing that perfectly complemented Saketharaman's vocal timbre. He then transitioned to **Bindumālīni**, and eventually to a blend of both rāgams. The tānam was creatively presented with an interplay of both the rāgams. The imaginative label for this blend, **NalinaMālīni**, was coined by Saketharaman himself!

The *Pallavi* that followed was set to **Tisra jāthi aTa tāḷam**, with the **pūrvāṅgam** in **Tisra naDai** and the **uttarāṅgam** in **Khanda naDai**. Saketharaman demonstrated the tāḷam pattern (1-2-3 followed by 1-2-3-4-5) for the audience. The *Pallavi* line — *Sāgarī Kṛpākari Nalinakānti, Sāgarī Kṛpākari Bindumālīni* — cleverly used *Sa-Ga-Ri* as **swarākṣarams**.

He further explored rāgams such as:

- **Ānandabhairavi**
- **Dhanyāsi** (*Dhanyōsmi* – "I am fortunate")
- **Varālī** (*Varālī Vēṇi*, referencing *Māmava Mīnākṣi*)
- **Sakethapriyā** — introduced innovatively by integrating the *ṣaṭ-śruti riṣabham* into the *Sa-Ga-Ri* framework.

This section was a perfect blend of **intellectuality, innovation, and tradition**.

The audience was then treated to a **rāgamālikā Kṛṣṇa Kṛṣṇā Mukunda Janārdhana**. This was followed by the ever-famous **Purandara Dāsa's Jagadōdhārana** in **Kāpi**, a moving portrayal of Yashoda's love for Krishna, unaware of his divinity.

The concert concluded with a flourish of the following items:

- *Tilang Tillānā* of **Lalgudi Jayaraman**
- *Karpagame Kaṇpārāi* in **Madhyamāvatī** by **Papanasam Sivan**
- Traditional *Maṅgaḷam*

The evening left every attendee with hearts full of **bhakti**, **bhāvam**, and **musicality**. Kudos to **Saketharaman**, his ensemble, and **SRUTI** for presenting such a soul-stirring experience.

Appearing for the **first time on the SRUTI stage**, Saketharaman showcased his **proclivity to explore, clarity in musical expression, precision in delivery**, and **delectable laya** — a performance that left an indelible impression on all who witnessed it.

Lata Suresh is a Carnatic vocalist, teacher and ardent supporter of SRUTI. She served as the President of SRUTI in 2024.



RaGa spring delight!

By Sudha Moorthy and Prasad Subramani

Steve Lacy, a soprano saxophonist, who was influenced by Sidney Bechet, the great exponent of the instrument, once in an interview for *Jazz Panorama* said:

[Music] can be regarded as excited speech, imitation of the sounds of nature, an abstract set of symbols, a baring of emotions, an illustration of inter-personal relationships, an intellectual game, a device for inducing reverie, a mating call, a series of dramatic events, an articulation of time and/or space, an athletic contest...A jazz musician is a combination orator, dialectician, mathematician, athlete, entertainer, poet, singer, dancer, diplomat, educator, student, comedian, artist, seducer....and general all-around good fellow.



One could replace the word Jazz with Carnatic with no loss in meaning. Ranjani, Gayatri and their fellow artistes, Rajeev, Manoj and Krishna exemplified all the characteristics of being a musician and great

musicianship in the concert on 10th May 2025 at B. Reed Henderson High School in West Chester, PA. It was a beautiful day outside and inside the auditorium.

The concert started with a formal introduction of the artists. The usual would have had the artistes just start the concert and end with a felicitation for the performance. Thus we got an early sign on the concert structure! A controlled start and a clean swift finish were in the air and did they deliver?!

As if triggered by a memory of their childhood, the concert started with a kriti in Atana. Now, geographically speaking, The Sisters home is in Maharashtra and they had chosen Karnataka as a start point, with Purandaradasar's composition, before moving down to Thamizhnadu to explore not just Carnatic tradition

but also the pan-Indian influence of music and ended the concert appropriately back at their home state with an Abhang.

How can a thousand years of words and music be compressed into two hundred minutes? The Sisters response was to start roughly in the 15th century, move on to 19th century with Ramalinga Adigalar's words, then shift to 18th century to show their love for Tyagaraja and pay respects to Muthuswami Dikshitar, and then to 7th century with Gnanasambandar's words which seemed to add special resonance to the sister's delivery. They then rushed forward to the 19th century with a Gopalakrishna Bharathi composition and wrapped up with a 17th century devotional! The artistes on stage had fun and that added to the audience's pleasures. (We maintained a running count of Ranjani and Gayatri's "Besh Besh," and the numbers quickly reached high double digits!)

The second kriti, Vallalar Ramalinga Adigal's words set to Pantuvaraali, was a sign of transition from childhood to formal musicianship with a bow to their guru, P S Narayanaswamy, who had composed the piece. (One of the writers here has lived in Vadalur for twenty years. "Arutperum jyoti thani perum karunai", The light of divine grace and boundless compassion, are words that are branded in the mind). It was indeed a gift to hear Vallalar's words. A formal elaboration of Pantuvaraali and then a silky-smooth transition to the third kriti. The casual elegance and confidence, nonchalant is another word that suggests itself but does not communicate the weight of the beauty of delivery, of starting with the anupallavi of Mokshamu galada, as if to say the ecstasy of music might be the path to nirvana!

This set the stage for the slow and steady hike into the hills of Mohanam. Rajeev's violin was like a gentle breeze around Ranjani with the rhythmic "aha" from Gayatri pushing, not rushing, Ranjani to adventure more for the listener's pleasure. The meditative close of the raga was like a cottonwood seed gently fluffing down to settle on earth. Dikshitar's elaborate and alliterative Narasimha aagacha, does not want for embellishments and is not provided any. But the kriti was the platform on which the thani Avarthanam added a special color to the composition. Manoj's mridangam was unhurried, measured, regal is the word. Krishna's ghatam work was a mellow wrapper around the violin.

A quick interlude with Tyagaraja's composition Padavi Ni in Salagabhairavi confirmed that the sisters were cutting forward with a strong wind on their sail!

Gayatri's Kalyanavasantham over the next 20 minutes was a journey across India from Carnatic to Hindustani and then some more, towards the destination of embracing the spirit of Tyagaraja. Pallavi in chatur kaalam and then closure through a well explained grahabedham (Neelamani to Shivaranjani to Revathi to Sunadavinodini) was a gift like the vernal green of spring.

Ranjani and Gayatri have mentioned in the past about their love for the free form, Viruttham, and this day saw another soulful presentation. The way the sisters caressed the words directed to Shivam made the listener carefully consider every sound uttered. The choice of "Idhu thano thillai", Gopalakrishna Bharathi's composition, was a nice surprise. Viruttham and the follow through reminded one that surprise is a key element in any concert, not just in concerts, in life too. When Gayatri said they will sing an Abhang and end the concert, it felt surprisingly intrusive and then one must come to terms that the artiste finally determines the extent of pain and pleasure.

Greatness is demonstrated when any moment in time reflects all that is past. The concert was anchored deep in southern Thamizhnadu and there were moments in the concert when you could hear other artists, of the last 30 or 40 years, who practiced their art living across the southern peninsula of India, but the concert was imbued with the confidence and sensibilities of the sisters and the sisters only. We can only

wish that the sisters keep surprising each other on the stage while the audience gains from this musical engagement.

Confucius said: “He who lives in the past walks backward into the future.” On 10th May 2025 on a beautiful day at B. Reed Henderson High School, Ranjani and Gayatri explored the past and shaped a future. The beautiful and casual re-casting of a traditional Kriti and exceptional exposition of a Marathi devotional echoes in our mind. Bhakti is a key stone in any music passed down generations but the occasional nod to the ecstasy of music and other worldly pleasures is a highlight of Ranjani and Gayatri’s concert.

Sudha and Prasad live in South Jersey. They have been known to drive long distances for a kutcheri with their son and daughter in tow.



Tongue-Tied By His Strings

By Tyagarajan Suresh

Ramana's concert began with a bright BehAg Varnam composed by Sri T R Subramaniam as he recognized TRS Sir's son sitting in the audience. The rendition had a judicious spread of varying lyrical expressions in



LayA (Rhythmic patterns). One could see the abundance and fluency of Ramana's musical talent right off the bat. We then had the pleasure of experiencing a short Kannada essay for Shri mAturbhUtam in cApu tALam, composed by Muttuswaamee Dikshitar in Sanskrit. 'SadAsivam Paramasivam' was the focal point for the kalpanA swaram compartment.

A true Sound Alchemist, Ramana (on the Veenai) consistently followed the practice of singing along with his presentations. Another highlight throughout Ramana’s concert was the tuning of tALam strings of the Veenai to a dominant note of the ragam other than the panchamam or madhyamam thereof. This approach added more creative color to the rendition.

Vidwan Patri Satish Kumar, who always enthralls the avid Carnatic Music fans with his creativity, accompanied Ramana on the mridangam. Young and talented Samyuktha Sreeram accompanied him on the Ghatam.

We were then treated to a mukhAri rAgam essay. It had creative patterns even in the fast-paced phase. The composition was ‘talacinantanE’ of Tyagaraja with a tremendous flash of kalpanAswaram. This also had

liberal splashes of colorful naDais. The instrumental "conversation" between Samyuktha Sreeram and Patri Satish Kumar, with their body language, was not only a treat to the ears but also to the eyes. Then came 'lalitE mAm pAhi' in yadukulakAmbhOji by Ceyyoor Cengalvaraaya Shaastree set to rUpaka tALam. The subsequent rendition was the solemn yet brisk 'aTu kArAdhani' of Tyagaraja in Manoranjani.

The central RTP (rAgam - tAnam - pallavi) segment was a magnificent one in KhamAs. One should mention that it was a unique style with a Hindustani Music flavor and adopted a [strumming style of Sitar](#). It was in Adi tALam khandA naDai, eDuppu - 2 syllables and arudhi - 8 syllables. Guruparane Kumarane Neeye ThuNai (in praise of Lord MurugA). The Pallavi was designed with a captivating ending of the verse for the tALam cadence with the syllables for the lyrics "ThuNai." The reincarnations of the Pallavi continued with hindOlaM, AtANA and BrindAvani. Then there was an accelerated revert into KhamAs and a theermAnam completion to end the crescendo. At the end of it all, before the Tani, Satish Kumar gave a beautiful explanation of the way '5's concept' was built into this Pallavi's design: "Five facets of Khandam, S-R-U-T-I = 5 letters (Sruthi (drone) in D# (2 1/2 kaTTai), in turn matching with the tALA structure and the offering of 1 1/2, 2, 2 1/2, 3 & 4 which eventually becomes 2x (i.e.) 3, 4, 5, 6 & 8. The rhythmic pattern that Samyuktha and Satish Kumar wove during the Tani was fascinating in itself. The way it unfurled started by them taking turns and embedding various tempos with half-speed increments into the major tALA cycles. They then continued with other ingredients of the Tani's anatomy to entrench us in a LayA delicacy.

We were then drenched in a shower of Jog in the form of the composition, "Idhenna Adisayam Guru Ramana" - by KBS Thatha (favoritely called GrandpA in ThiruvannAmalai). The audience then entered North-Western India with Ramana painting "Tejo NidhilOhagOla" in a combination of rAgAs Lalit, Puriya and Bhatiyar tuned by [Pt. Jitendra Abhisheki](#). SivaperumAn Kripai Vendum in suraTi by PapanAsam Sivan in Thamizh was presented next. suraTi, that came next, was an indicator that we were (reluctantly) coming to a close of this gem of an event hosted by SRUTI. The concert concluded with praising Lord ArunAchaLA of ThiruvannAmalai. It was no surprise to witness a long, standing ovation by everyone present at the end in recognition and appreciation of the team on the stage.

We were just in awe of the speed and accuracy of Ramana's execution of the phrases. One could directly feel the magnificence of packing in ample syllables / swarAs into the completion of every phrase without deviating from the LakshaNam (grammar). One just runs out of words to describe the genius - thou art Ramana Balachandran.

We look forward to more and more of Ramana Balachandran with Patri Satish Kumar and Samyuktha Sreeram in future SRUTI events.

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Tyagarajan Suresh is a music lover and a Vainika. He has been part of the SRUTI for several years.



Shaktya: A Tribute to Womanhood Through Bharatanatyam By Rama Vaidyanathan and her daughters, Dakshina and Sannidhi

By Dr. Madhavi Ratnagiri

It was a delight to watch Rama Vaidyanathan and her daughters, Dakshina and Sannidhi, present *Shaktya*. Breaking away from the conventional *margam* structure, they offered a thought-provoking thematic work centered on women, illuminating the quiet strength that empowers them to nurture and uphold the moral fabric of society.

The introductory piece effectively highlighted the intricate rhythmic patterns that are integral to Bharatanatyam, while adding a contemporary dimension through their seamless integration with the spoken word penned by Meera Khanna. The spoken word was an ode to Devi, the quintessential woman, who embodies both beauty and bravery and it was only fitting that the presentation opened with her invocation. Rama and her daughter Dakshina alternated between reciting the *sollukattus* (vocal renditions) and executing the corresponding rhythmic movements, while Sannidhi on the *mridangam* anchored the dialogue between dance, spoken word and percussion with effortless precision. The absence of melodic accompaniment was never felt; instead, this minimalist approach lent the piece a strikingly contemporary sensibility, while staying true to the roots of Bharatanatyam. It was a refreshing reimagining of the timeless narrative extolling Devi. What made it particularly relatable was how they portrayed her not as a distant goddess, but as a woman who balances her innate yearning for beauty with the profound responsibility of protecting the vulnerable. What I found particularly creative was how Rama, while dancing a traditional jathi sequence, skillfully weaved in the imagery of walking on a tightrope.

This was followed by Dakshina's deeply moving portrayal of Mai Phago, capturing with great sensitivity the essence of her bravery and courage. Dakshina's **abhinaya** was so poignant and expressive that the entire



story was conveyed with clarity that even a layperson could grasp and feel its depth. Though the music and lyrics were in Punjabi and Hindi, languages some of us couldn't fully understand and the audio clarity wasn't ideal, Dakshina's powerful expression and nuanced storytelling brought the narrative to life. A few examples in the choreography and Dakshina's presentation that were particularly striking - When Mai Phago hears of the warriors' betrayal and their return,

her rush towards them and the disbelief she conveys are palpably felt. The scene where she remarks that, since they have relinquished their *kara*, the sacred bracelet worn by Sikhs as a symbol of their commitment to their *Gur*, they might as well wear her bangles instead, was delivered with just the right balance of sarcasm, anguish, and restrained anger. It was neither exaggerated nor disrespectful, yet powerfully suggestive. Dakshina's performance exemplified a deep understanding of *abhinaya*, while her meticulous

attention to detail coupled with how impactful the entire narrative was underscored her command over the craft of choreography.

We know that a dance number is never just the performance alone. This piece was brought together through the guidance and scholarly input of **Dr. Arshiya Sethi**, with lyrics in Punjabi by **Shri Pritam Rupal** and lyrics in Hindi by **Dr. Himanshu Srivastava**. Musical composition and vocals were rendered by **Shri Onkar Singh**, while the *jathis* were composed by **Karaikudi Sivakumar**. The performance was further enriched by **Nasir Khan** on the sarangi, **Nishit Gangani** on the tabla, and **Sannidhi Vaidyanathan** on the mridangam. Special thanks were extended to **Smt. Ramanpreet Kaur** and **Dr. Gurshan Gill**

Then came Rama's sensitive and evocative portrayal of **Janabai**. Born into a lower caste and orphaned at a young age, Janabai's life was marked by hardship and social prejudice. Yet, rather than succumbing to societal constraints, she chose the path of unwavering devotion to the Lord. Rama skillfully illustrated Janabai's struggle against rigid norms through subtle yet powerful imagery, such as her repeated attempts to adjust her *ghunghat* even as it impeded her daily chores. As Janabai's faith deepened, Rama depicted her growing defiance with striking clarity, culminating in a moment where she walked freely, unrestrained by the *ghunghat*, symbolizing liberation from imposed boundaries. What stood out especially was Rama's nuanced portrayal of Janabai's uninhibited love for her Lord as she stood at the doorstep with sensual grace, fearlessly expressing her longing for divine union while dismissing the advances of mortal men. The performance beautifully encapsulated Janabai's humility, devotion, and spiritual audacity, revealing the profound intersection of surrender and strength in her character.

Musical support and vocals were provided by **Kathik Hebbar**, with **Sumod Sreedharan** on the mridangam, **Mahesh** on flute and morsing, and **Dr. S. Vasudevan** on nattuvangam, enriched the performance and complemented the choreography.

Rama and Dakshina concluded the evening's presentation with a poignant tribute to the enduring bond of friendship between two women; a connection defined by empathy, strength, and an unspoken understanding that only women share. This theme was explored through three distinct narratives: a contemporary portrayal reflecting the dynamics of modern-day companionship; a mythological depiction of the friendship between goddess Parvati and goddess Lakshmi; and finally, a moving segment illustrating the bond between two women separated by boundaries imposed by society, yet united through shared struggle and compassion. Each vignette was thoughtfully conceived and gracefully executed, capturing the many shades of female friendship - from joy and solidarity to resilience and quiet strength.

In the modern-day vignette, Rama and Dakshina depicted a delightful companionship between two women. How one teasingly mocked the other's choice of literary preferences, their playful banter, occasional bickering, and the affectionate way they resolved differences even cheering each other up with something as simple as a shared saree-shopping trip or a play in the rain - this segment beautifully captured the essence of friendship.

In the episode depicting the friendship between Goddess Parvati and Goddess Lakshmi, they both express contrasting views, while Lakshmi considers wealth to be her source of power, Parvati values strength as

her greatest asset. Despite their differences in outlook and temperament, they ultimately find common ground, celebrating the harmony that arises from mutual respect and understanding.

The most profound and captivating segment of the evening was the portrayal of **Phoola** and **Gulabi**, two women whose lives were upended amid the turmoil of India's Partition. Gulabi, once affluent, is forced to abandon her grand home and wealth to start anew across the river, while Phoola moves into the vacated house and enjoys the comforts of a life that once belonged to Gulabi. From afar, Gulabi experiences jealousy and frustration as she observes Phoola inhabiting the life that was hers. From afar, Gulabi is consumed by anger at her misfortune and jealousy as she watches Phoola inhabiting the life that was once hers. Yet when adversity later strikes Phoola, it is Gulabi who comes to her aid. A deeply moving testament to how compassion and shared womanhood can transcend political divisions and human suffering. A segment of the performance that was especially striking was Dakshina's portrayal of jealousy, conveyed not through overt gestures but through the sheer intensity of her gaze. Standing silently at the far end of the stage, she embodied emotion with such restraint and power that the scene became utterly riveting, a masterclass in subtle yet commanding **abhinaya**.

The musical composition and vocals, expertly rendered by **Smt. Sudha Raghuraman**, further enriched the performance, with the choice of ragas for each episode thoughtfully reflecting the mood, context, and historical period of the narrative with remarkable precision. The Sanskrit script for the vignette on the goddesses was authored by **Dr. Divyanand Jha**, while the Hindi script for the story of Phoola and Gulabi was penned by **Meera Khanna**. The orchestral accompaniment was provided by **G. Raghuraman** on the flute, **Lavanya Kumar** on the *aiyar*, **Shambhunath Bhattacharya** on the tabla, **Prafulla Mangaraj** on the pakhawaj, and **Sannidhi Vaidyanathan** on the mridangam, creating a rich and evocative musical backdrop that beautifully complemented the choreography and narrative.

In *Shaktya*, Rama, Dakshina, and Sannidhi offered far more than a dance performance, they created a profound reflection on womanhood in all its complexity. Through rhythm, expression, and storytelling, they celebrated women not as ideals or symbols, but as real, multifaceted beings - vulnerable, yet resilient, sensitive, yet defiant, and divine.

*Dr. Madhavi Ratnagiri, is an exponent of Kuchipudi and Bharatanatyam, trained under Padma Bhushan Dr. Vempati Chinna Satyam and Padma Vibhushan Dr. Padma Subrahmanyam. Combining artistic excellence with academic distinction, Madhavi holds a PhD in Electrical Engineering and Artificial Intelligence. Through her dance school, **Kalaananda**, she nurtures the next generation of dancers and encourages young women to excel in both arts and science. She is a longtime supporter of SRUTI and has served on its board.*



Celebrating Diwali – A SRUTI Outreach Activity at Chester County Library (October 19th, 2025)



Top (Left to Right): Prisha Parthasarathy kicking off the event with Bharatnatyam performing “shrIman nArAyaNa ”; Sai Smaran Narasimhadevara singing “raNgapura vihAra”; Krithi Iyer singing “kaRpaga manOhaRa; Kasyap Tumuluri singing “mArubalka”; Anirudh Venkatesh singing “Dhanasri Thillana”

Bottom (Left to Right): All ending the event with “maitrIm bhajata”; Group Picture

All singing performances were accompanied by Navneeth Gopinath and Ravi Iyer

Ashwath Narayanan Concert Review

By Dr. Pitchumani Sivakumar

Ashwath Narayanan's concert for SRUTI on September 20, 2025 was marked by a rich and well-cultivated tonal clarity, brisk brigAs, sharp swaraprasthArAs and commendable improvisations while staying rooted in classical tradition. Ashwath was accompanied by Sri V.V.S.Murari on the violin, the legendary vidwan "Sangeetha Kalanidhi" Trichy Sankaran on the Mridangam and Sri Anirudh Athreya on the Kanjira.

The concert started with a slOkam in Hamsadhwani, SadA bAla rUpApi (first verse of Adi ShankarA's Subramanya Bhujanga stOtram) followed by the evergreen bEgadA varnam, Inthachala by Veena



Kuppaiyar. Ashwath then rendered Dikshithar's masterpiece, SwAminAtha ParipAlayAsumAm in nAttai with fast-paced swarams at the Pallavi line crisply culminating with a triplet of "thathikitathoms" in the end. A wonderful exposition of ShanmughapriyA was followed by an optimally-paced MarivErE Dhiikkevaraiyya" of PaTnam Subramanya Aiyar. Ashwath took up neraval on the charanam line, SannuthAngasri, bookended by some elegant swarams and a simple 8-beat kOrvai from eduppu (1 ½ after). The MS-popularized "RangapuravihAra" in

BrindAvana sArangA was rendered with great appeal. Expectedly, the next number was a dhuritha kAla Krithi and Ashwath chose "sObillu sapthaswara" where his tutelage under KVN was clearly showcased. The swaram exchanges took place at "sapthaswara" half off the first beat and Sankaran mAmA, the doyen of Mridangam picked on it with consummate ease exuding great class, the arithi so beautifully aligned with the pattern presented – a reductive 6 beat finishing and a "dhin,, dhin,, tha thAm" to align with "sap,, tha,, swa ra".

The day being the birthday of MahAvidwAn T.R.Subramaniam, Ashwath suitably rendered one of TRS sir's compositions in Hamsadhwani, "Nigama vEda vEddyam". The main piece of the evening was in Bhairavi, with the soulful alApana nicely shadowed by Sri V.V.S.Murari. In a refreshing change, Ashwath chose to render the vintage "KAmAkshi" swarajathi of ShyAma Sastri. Ashwath reminisced the legendary rendition of this kriti in a 1970s concert by Sri Semmangudi Srinivasa Iyer accompanied by none other than Sri Trichy Sankaran sir himself, going on to mention what an out-of-the-world accompaniment that was. Ashwath's own rendition bore the undeniable stamp of Sri KVN both in sowkhyam and kAlapramAnam. As expected, Sri Sankaran sir and Anirudh Athreya presented a lovely and well measured thani in Misra ChApu. Sankaran sir's first round in particular had a powerful punch with a great naDai theermAnam encompassing khandam, thisram and misram. Hailing from a rich musical lineage with "Sangeetha Kalanidhi" Papa Venkataramaiah as his great-grandfather, Anirudh has evolved into one of the frontrunning kanjira players of the modern era. The sharpness of his "thakkitathom" strokes were commendable, his finger control was

admirable, and his playing showed unmistakable shades of Shri V. Nagarajan as well as traces of Sri Harishankar. Notably, Anirudh respectfully stayed in the background, honoring Sankaran sir's seniority.

VandE Mukundam, a virutham, was rendered in rAgaa HamsAnandi, Sindhu Bhairavi and mAnd followed by Sri PurandaradAsA's "bArO KrishnayyA". SwAti tirunAL's kriti in Kurinji, alivEni enduceyu was followed by the delightful Jenjuti thillAnA of Sri Veene Seshanna. The concert ended with the "rAmachandrAya Janaka" MangaLam by BhadrAchala RAmadAsu.

Overall it was a fulfilling concert by Ashwath ably supported by Sri V.V.S.Murari. The icing on the cake was the opportunity to listen to Sri Trichy Sankaran sir (well into his 80s) whose rhythmic brilliance and magic never ceases to amaze rhythm enthusiasts around the world.

Dr. Pitchumani Sivakumar is an avid classical music enthusiast, a mridangam player and teacher in the Philadelphia area. He is a long-time member and supporter of SRUTI.



Aravind Makes a Superb First Splash at SRUTI

By Jayram Sataluri



Live at Fugett Middle School, West Chester PA
(October 11th 2025)

Kalyanapuram Aravind- vocal

HN Bhaskar- violin

Delhi Sairam- mridangam

Rasika Sivakumar & Samyutha Srinivasan - dual
tambura

Duration: 2 hours 55 mins

Song List

- 1) vanajAkSA ninnE (varNam)- rItigauLa, aTa, Veenai Kuppayya
- 2) gaNapati tALaik karuttidai- nATa, Adi, Subramanya Bharathi
- 3) bhuvini dAsuDanE- Srlranjani, dESAdi, Thyagaraja
- 4) udyadbhānusahasrakōṭisadrśām (virutham- first SLOkam from Adi Shankaracharya's Meenakshi Pancharatnam) followed by mAyAmmAyani nE- Ahiri, Adi (2 kalai), Shyama Sastri
- 5) charaNamulE nammiti- kApi, miSra cApu, Bhadrachala Ramadasu
- 6) rAma (X 5) ennirO- vasantA, rUpakaM, Purandaradasa
- 7) kamalAmbAM bhajarE- kalyANi, Adi (2 kalai), Muthuswami Dikshitar
- 8) dvijAvanti RTP (dASarathE mAm pAlayA dayA SaradhE inakula thilakA)- khanda thrlputa (starts after 5 Edam- 2 kalai) w/ rAgamAlikA swarams (bahudAri, rEvati)
- 9) siRuviralkaL thadavip parimARach (periyAzhvAr thirumozhi [3.6.8]) – rAgamAlikA (cArukeSi, kAmbhOji, hindOLaM, aThANA, khamAs and hamsAnandi) followed by punnagai onrE pOdumE- hamsAnandi, Adi, Ambujam Krishna
- 10) nAn oru viLaiyATTu bommaiYA- navarasa kannDa, Adi, Papanasam Sivan
- 11) chandrakauns thillAnA (thOm dri dA nI ta da ra dAni ta na dhIranA dru dru X4 dA nI), Adi (tiSra naDai), Madurai TN Seshagopalan
- 12) pEravA varA vAimai (thiruppugazh)- rAgamAlikA, miSra jhampa, Arunagirinathar
- 13) nI nAma rUpamulaku- saurAshTraM, Adi, Thyagaraja flwd by mangaLam slokam

With the co-artistry of HN Bhaskar and Delhi Sairam, Kalyanapuram Aravind made a wonderful debut at SRUTI on October 11th. When one listens to Aravind, the influence of his guru Madurai TN Seshagopalan is clearly evident. He commenced the concert with a TNS famous hit and one of my favorite varNams, Veenai Kuppayya's vanajAkSA ninnE in rItigauLa. Next was a krithi of Subramanya Bharathi I was hearing for the first time, gaNapati tALaik karuttidai in nATa. I'm glad such rare krithis are being performed. Next was an

AlApana in Srlranjani where Aravind and HN Bhaskar performed snippets of krithis like gajavadana karuNA sadana and mArU palkagunnAvEmirA. Aravind chose bhuvini dAsuDanE which hasn't been rendered at SRUTI since 2008. I appreciated that he did not overdo the brigAs. The neraval and swaraprastAra were at "padamuLE gati tyAgarAja nuta".

Next was Ahiri where Aravind did a brief AlApana, then sang the first slokam of Adi Shankaracharya's Meenakshi Pancharatnam virutham style. From this, most of us knew that Shyama Sastri's mAyAmmAyani nE would be the krithi and Aravind sang it in the way his guru would have done without picking up the pace, especially at the line "sthiram(a)ni nammiti nammiti nammitini" which was heartrending. Following that was a short kApi AlApana where Aravind transitioned to the anupallavi line of Bhadrachala Ramadasu's caraNamule nammiti in miSra cApu. Though he didn't sing the entire krithi, Aravind made sure Ramadasu's pleas to Sri Rama came through. Next, he sang the famous Purandaradasara Devaranama, rAma (X 5) ennirO in vasantA in a faster kAlapramAna. He rapidly polished off the anupallavi and last caraNam and sang a couple rounds of swarams at the Pallavi.

After hearing a lot of suddha madhyama rAgams, I was longing to hear a prati madhyama and Aravind chose kalyANi as main. He sang a lot of TNSisms, especially a long briga-laden stretch before going up to tAra shadja. He didn't sing tAra sthAyi for very long and went back to madhya and mandra. HNB's response was delightful, echoing whatever Aravind did and bringing a few Yamanish elements. Our long time SRUTI supporter and rasika, Dinakar Subramanian texted me privately that since Dikshitar hadn't been rendered yet, he believed bhajarE rE citta would be the main, whereas I replied kamalAmbAM bhajarE and I was proven right by Aravind. Not performed at SRUTI since 1989 and since it's my favorite out of Dikshitar's navAvarna krithis, I silently sang along. He sang in the way the past greats sang with some brigAs here and there and added the cittaswaram composed by Dikshitar himself as part of the Sangita Sampradaya Pradarshini. We received a nice surprise where he sang the neraval and swarams at "kamalA pura sadanAM mRdu gadanAM kamanlya radanAM kamala vadanAm". His neraval was gratifying and the swarams even more so. The nyAsa swaram was tAra shadja and he did a bunch of TNS mathematical inspired rounds which gladdened the TNS fans and the laya inclined. His ending koraippu was another TNS inspired one. Delhi Sairam played a splendid thani reminiscent of his guru Thiruvarur Bhakthavatsalam with chatusram, sankeernam and tisram dominating and final koraippu matching the neraval line. Thankfully the mic wasn't raised to a loud volume.

Next was another favorite rAgam, dvijAvanti and we knew it was going to be an RTP. Aravind displayed his tAra sthAyi range and the North Indian elements were intelligently brought in. HN Bhaskar's response had more North Indian elements and he alternated between staccato and long notes. Aravind then launched into a tAnam with some gratifying elements in tAra sthAyi, while HN Bhaskar provided some one string sangatis. The Pallavi line was dASarathE mAm pAlaya dayASarathE inakulathilaka at kanda thriputa (2 kalai) where the samam started after 5 Edam (thanks Sriram Sadagopan!). The control Aravind displayed was captivating, especially when alternating between the trikAlam in the same Avarthanam. The rAgamAlika swarams were well done in bahudAri and rEvatl, especially the latter which had a Vedic approach in the beginning. HN Bhaskar brought in a bairAgi bhairav approach in his response.

Next was siRuviralkaL thadavip parimARach, 3.6.8 of Periyazhwar Thirumozhi which pleased virutham lovers and Srivaishnavas alike. Like his guru and his famous Harikatha practitioner uncle Kalyanapuram Aravamudhan, Aravind did total justice to the pasuram by bringing to life Periyazhwar's description of Lord Krishna playing the flute. He sang cArukeSi, kAmbhOji, hindOLaM, atANa, khamAs and hamsAnandi. At one point, he imitated Lord Krishna's flute during a long brigA stretch in hindOLaM, leaving us awestruck. The virutham is alive and kicking! Ambujam Krishna's punnagai onrE pOdumE in hamsAnandi, a marvelous ode to Narayana followed. I enjoyed how Aravind sang the Madhyama kAla sAhitya. Next was the famous Papanasam Sivan krithi in navarasa kannada, nAn oru vilaiyatta bomayya.

Next was TNS's Chandrakauns thillAnA which was requested in advance by yours truly and Aravind did complete justice to it. All the sollukattu phraseology was full of gurubhakti. The last thillAnA portion after the sAhitya was just magical; he did not miss a single beat. Following the thillAnA was Arunagirinathar's pEravA varA vAimai in rAgamAlika, nI nAma rUpamulaku and a mangaLam. The audience got up to their feet and applauded for over 30 seconds.

Well done, Aravind-Bhaskar-Delhi Sairam! Onwards to Sanjay and Akshara!

Jayram Sataluri is a rasika and an ardent supporter of SRUTI.



An Appreciation of Sanjay Subrahmanyam's Concert for SRUTI on Oct 25, 2025

By Dr. V. Swaminathan



At the outset, it is no easy task to review any of Sangeetha Kalanidhi Sanjay Subrahmanyam's concerts. Each one is a benchmark in itself. When something extraordinary defies comparison, a familiar Sanskrit phrase comes to mind — *rāmarāvaṇayoryuddham* *rāmarāvaṇayoriva* (रामरावणयोर्युद्धं रामरावणयोरिव) — “The battle between Rāma and Rāvaṇa is like the battle between Rāma and Rāvaṇa.” Likewise, every concert of Śrī Sanjay Subrahmanyam can only be compared

with another of his own. Every *rasika* leaves with a sense of complete musical fulfillment after his concert.

Having listened to Carnatic music for over six decades, I have witnessed the unique features that defined the styles of many stalwarts of the past who shaped today's Carnatic tradition. What amazes me is how Sanjay's music seems to seamlessly weave together the finest aspects of those great masters. The thoughtful choice and sequencing of *kritis*, his perfect balance of *lakṣaṇa* and *lakṣya*, his *tāla nirṇaya* as well as the *kāla-pramāṇa* of renditions, the attention to the words of the *sāhitya*, imagination balanced with *prāchīnatvam* (classicism) — all these mark his performances. Add to that the camaraderie he shares with his accompanists, and you have music that appeals equally to the novice listener and the connoisseur.

The song list for the concert was published on Sanjay's Facebook page. In addition to the *kritis* in the list a few others were presented including the opening *Śrī rāga varnam*, *Sāmininnēkōri*, of Garbhapurivāsar. This was followed by a beautiful composition of Gopalakrishna Bharathi, Hara hara śiva śaṅkara in Gambhīranāṭṭai, Ādi tāla in Tisra naDai. The cadence of Tisra naDai lifted the whole rendition as a *puṛappāṭu mallāri* (புறப்பாடு மல்லாரி) and served as a harbinger of a festive mood sustained through the entire concert of three hours.

The brief *rāga-vinyāsa* of *Dēvagāndhārī* and *Ābhōgi*, preceding *Kṣitijāramaṇam* and *Manēyulgādō*, respectively, were exquisite, showcasing Sanjay's mastery in presenting a *rāga* compactly yet completely. In contrast, the elaboration of *Kāmbōji* spanned its full range — lower, middle, and upper — culminating in a majestic rendering of Dikṣita's *Śrī Subrahmaṇyāya namaste*. The diction was impeccable, and I particularly appreciated the care in rendering the phrase *vīra nuta guruguhāya ajñāna dhvānta savitrē*. Instead of choosing a line from the *kṛiti* for *niraval*, Sanjay took up the *pallavi* line for rhythmic improvisation — a refreshing and engaging choice.

The songs – *Mahārājā's Jaladhisudharamaṇēna* (sung in *Chalanata*) and *Saint Tyāgarāja's Haridāsulu* - that followed after the weighty *Kāmbōji kṛiti* were charming in their meaning and the way they were rendered. For the RTP that followed, *Kāpi rāga* was chosen with the *pallavi* line, “tirumurukā tiṇamum uṇ tiruvaruḷ tā; tiruttanikai vaḷar (திருமுருகா தினமும் உன் திருவருள் தா; திருத்தணிகை வளர்)”. The *tānam* was expansive, exploring *Kāpi* in all its colors, leaving one wondering if there was still more to discover in the *rāga*. The *rāgamālikā swarams* were sung in *sahānā*, *ānandabhairavī* and *nāgavallī*.

The post RTP songs consisted of *Rāmasvāmi tūtaṇ nāṇ aṭā* (ராமஸ்வாமி தூதன் நான் அடா) (*Aruṇācala kavirāyar's Rāmanāṭaka kṛiti*) in *Bahudhārī*, *Ēnumādidarēnu* in *Sālakabhairavī*, *Gōpāla bhaktim mē dēhi* in *Bhāgēśrī*, and *Pāpanāsa Śivan's Karpakāmpikai* in *Bēhāg*. The concert ended with Sanjay's signature song of *Bhāratidāsan's tuṇṇam nērkaiyil yāl eṭuttu* (துன்பம் நேர்கையில் யாழ் எடுத்து).

Sanjay was accompanied in this concert by his inseparable partners, *Śrī Varadarajan* (violin) and *Śrī Neyveli Venkatesh* (mridangam). These two seasoned artists know every nuance of Sanjay's music and elevated the concert beautifully. Their sincerity and energy never waned. They were *pakka vādyam* (பக்க வாத்தியம்) not just in seating, but in spirit — their hearts were completely in the music. *Śrī Varadarajan's* accompaniment

was gentle yet inventive — shadowing Sanjay when needed and at other times exploring fresh shades of Kāmbōji and Kāpi. Śrī Venkatesh, true to the school of his gurus (Śrī M.N. Kandaswami Pillai and Pazhani Subramania Pillai), played **for** the *kṛiti* — not merely mimicking the *sangatis* but enhancing their meaning. His *thoppi* playing during the *thani* was mesmerizing — tonal, balanced, and full of life. The synergy between the right and left hands brought out rhythmic tonal beauty that enriched every piece.

The choice of Śrī Subrahmaṇyāya namaste and the *pallavi* lines were appropriate for the occasion of *Skanda Śaṣṭhī*, which fell on the following Monday. I would be remiss if I do not end this review without mentioning the magnificent *Vṛttams* that Sanjay sang before Hara hara śiva śaṅkara, Gōpāla bhaktim mē dēhi and Karpakāmpikai. He chose a song from Māṇikkavācakar’s Kovil Thiruppadikam which was a perfect prelude to Hara hara śiva śaṅkara. The *Vṛttam* of Arunachala Mudaliar’s karpagavalli ammai padhigham *pūraṇi maṇōṇmaṇi tayāpari parāpari* (பூரணி மனோன்மணி தயாபரி பராபரி) vividly brought the Goddess Karpakāmbikā before one’s eyes, as if Pāpanāsa Śivan was echoing our feelings. Similarly, Sanjay rendered the beautiful verse from the Śrīmadbhāgavatam in the words of Śrī Rukmiṇī expressing her love for Śrī Kṛṣṇa which perfectly introduced the enchanting *kṛiti* Gōpāla bhaktim mē dēhi.

Sanjay’s emotive rendering of the *Vṛttams* simply mirrored the sentiments of the *sāhityas* giving a new dimensions to their musical interpretations. It was an evening where dedication, hard work, artistry, and scholarship merged seamlessly — a concert that will linger long in memory.

References

¹ The review is penned by Dr. V. Swaminathan, Bethlehem, PA.

² Śrīmad Vālmīki Rāmāyaṇam, 6.107.53

³ One of the kritis from the Kucēlōpākhyānam of Mahārāja Svāti Tirunāl.

⁴ The *pallavi* line is very similar to a composition of Tanjore S. Kalyanaraman, *tirumurukā tiruvaru! tā tiruttāṇi malai mītu tirumaṇak kōlam koṇṭa* திருமுருகா திருவருள் தா திருத்தணி மலை மீது திருமணக் கோலம் கொண்ட.

⁵ Sanjay announced the name of the *rāga*. He began with the note R2, lingered on it for several seconds as if deciding what to sing and followed with the *ārōhaṇam*, S R2 M1 D2 N2 S. The *avarōhaṇam* is S N2 D2 M1 R2 S. The *rāga* shares the *avarōhaṇam* of āndōlikā. There is a composition in this *rāga* of Sanjay’s guru Śrī K.S. Krishnamurthi, *varavēṇum vaṭivēlaṇē*, வரவேணும் வடிவேலனே.

⁶ The balanced mridangam playing reminded me of the great Ramanathapuram Śrī Murugabhupathi Ayya.

Dr. V. Swaminathan has been a student of Pūjya Swami Dayananda Saraswati and of the other ācāryas of the Arsha Vidya Gurukulam for over three decades. He has a deep commitment to study the philosophical meaning and to explore the literary grandeur of the compositions of the great vāggeyakāras including Saint Tyagaraja, Muthuswami Dikshitar, Maharaja Swati Thirunal, Arunachala Kavirayar and others. Dr. Swaminathan is a retired scientist.



Celebrating T. Sarada Youth Day 2025

By Shritika Sriram

On November 8th, 2025, the SRUTI community united to celebrate T Sarada Youth Day. This event featured a vibrant lineup of activities which made the day even more memorable. Commencing with a graceful bAla bhAvam performed by Rasya Ramesh, the program set a devotional tone for the day. Her expressions, precise rhythms, and poised movements beautifully captured the essence of BharatanAtyam right from the beginning. This captivating art form from India tells stories without words! A few notable components that took place during her performance were changes in tempo. From slow, controlled movements, it jumped to rapid, energetic sequences. Each beat of her feet was mirrored by the resonant strokes of the mridangam. The flute carried the whispers of the story, echoing with emotion



The next event was a jambUpathE presentation. This divine composition by Sri Muthuswami Dikshitar was sung by an angelic choir made up of the Sruti Youth Group members. The choir brought harmonies to life with artistry, creating a blissful listening experience for everyone. The performance was so engaging that the audience eagerly tapped the tALam along with the beat! Their dedication and passion shone through, making the performance thoroughly enjoyable.



The third event was the tALavAdhyam performance, played by aspiring mridangists. Their skillful rhythms and precise beats created an electrifying atmosphere, captivating the audience with every stroke. Each mridangist played in a different naDai, which are the divisions of the beats within a tALam. For example, chatushra naDai would mean there are '4' subdivisions of beats within a tALam. Our 5 mridangists each played a different naDai, exchanging turns for an electrifying recital. Once finished, they joined and played together, leaving the audience in awe.

Following this was a lec-dem (lecture-demonstration) presentation. Three of our Sruti Youth Group members created a slideshow about Dikshitar's 250th anniversary, important compositions and accomplishments, and shared insights into his life and legacy. But they didn't just talk; they also sang a few lines of each composition to demonstrate his class in Carnatic music. Some were:

Shree nAtAdi guruguH jayati jayati (mAyAmALavagowLa)

MeenAkshI mE mudaM (gamakakriyA)

shrI dakshiNA mUrthI (phEnadyuti)

With every note and explanation, the presenters brought history to life, conveying the significance of Dikshitar himself.



After the lec-dem, there were a few other events mainly organized by the Sruti Youth Group:



Carnatic Music Jeopardy - Our Sruti Youth Group members organized this friendly competition to test our carnatic knowledge! Splitting up into two teams, the audience was given the choice of picking any question. You answer it right, you gain points for your team!

Emoji Challenge - Our Sruti Youth Group members created a colorful slideshow filled with emojis! Each slide featured a combination of emojis that—when interpreted together—represented a specific raga, turning the presentation into a fun and

interactive musical puzzle.

Escape Room - Once again, our Sruti Youth Group members made a challenging and interactive experience where participants had to find clues hidden around the room, solve the clues—which meant solving for a specific composition—and find & decode all 5 clues before the other team got to it!

All of these fun activities kept the audience busy and entertained, fostering learning and friendly competitions for friends and family! As each participant collaborated with another, it was a step to success.

The last event of the Youth Day was a mesmerizing carnatic vocal concert performed by Akshara Samskriti Iyer. Accompanied by Myan Sudharshan on the mridangam and C. S. Chinmayi on the violin, she began with an upbeat KAnaDa aTa tALa Varnam, captivating the audience in just a few minutes. Devotional pieces like Tyagaraja's padhavi ni sadhbhaktiyu, Tyagaraja's sompaina manasuthO, and Chitraveena N.



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Ravikiran's shashadhara enthralled the audience. Highlights included her special RTP, pahADi thillAnA, and a ragamalika which included 9 rAgAs! The RTP started off with a SarasAngi aApana, leading into a tAnam. The Pallavi had immense creativity and intelligence. It followed a specific structure: vam, bhavaM, vaibhavaM, yOGa vaibhavaM, rAja yOGa vaibhavaM, tyAgarAja yOGa vaibhavaM – in khanda tripuTa tALam in khaDa naDai with ateeta eDuppu. Akshara demonstrated her grasp on not just the

complex tALa structure, but also on the melodic complexity by showcasing grahabhedam for the chosen Pallavi. She did this by taking the shuddhamadhyas as the point of Grahabhedam for the following ragas: sarasAngi → Dharmavati; priyadarSini → vijayanAgari; nATTai kurinji → nIlAmbari; ABhOGi → valaji. The audience was amazed, yet shocked at the same time! Myan Sudarshan played a dynamic thani Avarthanam.

Next followed the rAgamAlika, titled, “vElan varuvAraDI”. Composed by Anayampatti AadisEsha Aiyar, 9 ragas were beautifully blended in this rAgamAlika:

jOnpuri
kAmbhOji
saraswati
bilahari
sAvEri
kEdAra gowLa
kApi
dhanyAsi
mOhanaM

Akshara perfectly highlighted each raga, transitioning between each one while maintaining the perfect rhythm. She finished the concert with nl mAtalE mAyEnura in pUrvikalyANi (audience request), Lalgudi Jayaraman's pahADi thillAnA and Purandaradasa's DashavathAra mangaLam. The three experts united in a masterful performance, leaving the audience brimming with happiness and making it a spectacular finale to our Youth Day.

T. Sarada Youth Day 2025 was a fun-filled celebration of music, dance, and creativity. From a beautiful Bharatanatyam performance to an engaging vocal concert, the day was packed with talent and energy. This event is a day that everyone will truly cherish.

Shritika Sriram is a Sruti Youth Group member and disciple of Smt. Kiranavali Vidyasankar



This is the inaugural **Sruti Youth Day** which will be held annually from now on, enabled by a generous bequest from T Sarada, who was a long-time supporter, board member of SRUTI, and a strong advocate for youth participation. SRUTI deeply appreciates her largesse and is thankful for including SRUTI in her will as a beneficiary for a very generous endowment. Her benefaction has made this event free for everyone to attend

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Starts with Thyagaraja Aradhana on Mar 28

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Apr 11



Abhishek Raghuram Vocal and
Shashank Subramanyam Flute
Apr 25



Ramakrishnan Murthy
May 9



Charumathi Raghuraman and
Anantha R Krishnan
May 17



Medha Hari
May 30



Gayathri Venkataraghavan
May 30



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