

MUSICAL FEATURES OF LULLABIES- IMPORTANCE OF RAGA PERSPECTIVE

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Abstract

Lullaby is a unique musical compositional form. It is a song of coziness and comfort. Every culture has its rich repertoire of lullabies. There have been many studies on the cultural aspects and therapeutic aspects of these songs. However, a comparative musical study of lullabies of different cultures from 'Raga' perspective is a less explored area. 'Raga', is a unique melodic concept of Indian music that encompasses multiple features. 'Lullaby', being one of the most aesthetic musical genres, has many more performative possibilities using the raga perspective, if we disengage it from the cultural context. The research problem is to study the musical features of 'Lullabies' of different cultures using 'Raga' as the basic comparison tool. The study aims to highlight the importance of a 'Raga' approach, to enrich the variety in the performance of these songs. The melodic structures of selected popular lullabies of different cultures are studied and compared to the scales of existing ragas. Although a scale refers specifically to the skeletal structure of a raga, it encapsulates the unique combination of notes that define the raga and therefore the songs are intricately related to ragas. Data collection is through sources that include research papers, books and audio recordings. The study results in identifying different ragas/ scales from the selected lullabies. The findings include, projecting the ragas/scales common across these songs, comprehending the ornamentations, rhythmic features and specific musical features like those based on octaves and modulations. The comparative study results in highlighting the immense scope of the melodic variety in the lullabies that follow the Indian raga system. Applying a 'Raga' perspective can open the doors for different melodic contours and emotions to pitch into the genre, to enhance its melodic scope, as a performative form.

Keywords

Emotions, Lullaby, Ornamentation, Raga

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Introduction

Lullabies are the most popular songs of any culture. Along with their utility in the regular context, these songs have also gained importance in the performance scenario. There is a huge repertoire in this genre. The melodies of these songs are intentionally simple suited to their specific purposes. However, when these songs enter into to the performance space, the beautification aspects take a major role, while retaining their natural features. Different studies on lullabies explored the many uses of these songs from cultural, social, psychological and other health perspectives. Though the main objective of lullabies is to put babies to sleep, the situations involved with these songs are not always joyous. The songs also highlight the pain of the mothers who spend sleepless nights, whose husbands stay far away from them and of those who do not want to celebrate the birth of the child for instance. These situations contribute to building the suitable melodic framework of the songs. The representation of all such songs in performances communicates lot of information about the culture and context of the songs. The common observation regarding the music of lullabies is that they are simple tunes, slow in tempo and use glides to generate the necessary warmth in them. A systematic study of the musical features of lullabies is necessary to go beyond the common understanding and delve deeper into the maximum features that contribute to the essentialities of the musical form. Adding to this study, research into the possibilities of enhancing the variety in the tunes of the lullabies, brings the concept *raga* into the forefront. This becomes important when the lullaby is staged in a performance.

*Raga*² has aesthetics in its very definition and its variety is immense. Henceforth, in this study, it shall be used as a tool to study and analyze the music of lullabies of distinct cultures, opening up various possibilities in the melodic construction of lullabies. Ornamentations being indispensable to *raga*, take a strong position in the study as one of the most important musical features that give meaning to any musical genre. The richness of the concept *raga* thus brings in so many natural features along with it, that become important to this study.

Raga and Lullaby

A study of musical features which presents a raga perspective clarifies the objective of looking at lullabies as one of the performative compositional forms. The music of the lullabies is based

² Raga is the unique melodic concept in Indian classical music which adheres to strict rules. It is the combination of specific variety of pitch positions called swarasthanas that are arranged in ascent and descent and are order specific. It has many rules pertaining to ornamentations called Gamakas, characteristic phrases, beginning notes, end notes of phrases, important notes and so on

on the musical style prevalent in a particular region. The songs in the West obviously involve the musical features of Western music. The usage of the term *raga* clearly indicates the Indian music approach, of *raga* as being one of the foundation pillars of that system of music. There are numerous lullabies from different cultures within India. The music of these songs naturally reflects the music culture of that region. Raga is not a natural or necessary feature of the songs unless they belong to the classical genre of music, nonetheless the songs having a large portion of the tune based on a raga is a common feature in this culture. There are North and South Indian ragas based on the respective musical styles. Studying these songs by mapping them to the closest possible scales/ragas helps to identify the common ragas popular in the specific regions pertaining to lullabies. Though *raga* is not a musical feature in the other systems of music of the world, it is always possible to map the tunes of the songs to the closest possible scales of the ragas. From the scale level comes the *raga* by considering ornamentations and some more important features that convert scales into ragas. As ragas are numerous in variety, the possibility of incorporating more ragas into the tunes of lullabies increases the scope of their melodic structure for the purpose of performance.

Methodology

The lullabies from different countries are collected for analysis. The larger part of the data includes popular songs from the Indian music system. This is followed by the songs from diverse countries such as Italy, Turkey, France, Sri Lanka, Scotland, Norway, Ethiopia to name some. The resources for those lullabies are the research papers of various journals. Most of the papers discussed the cultural, psychological, linguistic and therapeutic aspects of lullabies. There is no reference to the melodic content of the songs other than the renditions by popular artists on YouTube. The melodic line of the songs is notated in the Indian notation system. Different musical features are analyzed like the note variety, octave, tempo, modulations, ornamentations and rhythmic structures. The variety of notes in the songs is compared to those of the scales of ragas of the Indian classical system of music. The results are limited to the data collected. There is a comparative analysis across the songs to study which set of notes is regularly used in which culture. The lyrical content of the songs is not taken into consideration for analysis. For some songs, multiple melodic versions available online are analyzed. The references to the songs taken for analysis are given in the Google Drive link cited in the references section.

Analysis of Some Popular Lullabies from the Raga-Based Music System (Indian Music)

Classical composers like Saint Tyagaraja composed lullabies in strict ragas and talas³. Some of the ragas including Nilambari, Ritigowla and Kedaragoula. Nilambari is known for their gentleness because the natural glides like those from gandhara⁴ to shadja and nishada to panchama for instance, to induce the required sense of coziness.

- “Uyyalaloogavayya” and “Lali yugave” in Nilambari are the best examples. Uyyalaloogavaya is a song in five patterns. It is structured as Khandachapu talam, whereas Lali Yugave goes in four patterns set to a tala called Rupaka tala.
- “Jo Jo Rama” and “Badalika Dira” in Ritigowla also convey specific emotions because of the gentle use of ornamentations in the raga. ‘ndm’ phrase with a glide from dhaivatha to madhyama and glide from shadja to madhyama, sphurita gamaka⁵ in ‘ggm’ are examples of emotive phrases. The characteristic phrase of Ritigoula ‘ṇṇ n ns’ in the lower octave naturally conveys the necessary mood.
- In the composition ‘Lali lali yani Oochera’ of Kedaragoula raga, emotions are brought out by the kampita gamaka⁶ on madhyama and so on. These lullabies are sung for Lord Rama by Tyagaraja. These examples demonstrate that skilful employment of ornamentations can create essential aesthetics from any combination of the notes.
- ‘Palne Jhulave’ song of Surdas describes Yashoda who tries to put Lord Krishna to sleep. This song has different versions and two of them are in the ragas Marubihag and Jaijaiwanti. The one in Marubihag follows seven pattern and the one in Jaijaiwanthi follows a four pattern. The play in the lower octave notes and the natural glides in these ragas fit well into the context of a lullaby.

³ Tala is a unique rhythmic concept of Indian classical music where rhythm is structured into cycles.

⁴ Gandhara is the third swara in the list of seven swaras, the Indian musical notes. The seven are Shadja, Rishabha, Gandhara, Madhyama, Panchama, Dhaivata and Nishada. The first note Shadja is a relative pitch which determines the rest six notes. Every swara has lower and higher variety like flat and sharp except for shadja and panchama. These varieties are called swarasthanas, the pitch positions

⁵ Gamaka is the term for ornamentation in Indian classical music. The theory of Panchadasa (15) gamakas is popular in the South Indian classical music among which Sphuritha is one variety that is the spark on one of the notes in a pair of same notes

⁶ Kampitha is another variety of gamaka in the 15 gamakas which is oscillation of the note

- The most popular Malayalam lullaby “Omana thingal kidavo” is also tuned into different versions among which the one in Kuringi raga and the other in Desh raga are popular. Kuringi is a unique raga based on single octave. This song is set in seven patterns.
- The most popular song ‘JoAchyutananda’ of Annamacharya is tuned in two different versions, one in Navroja and the other in Kapi raga. This song follows a five pattern. Navroj and Kuringi are the child ragas of Dheerasankarabharanam melakarta⁷, which has all the major notes. These ragas have gentle glide-like movements natural to them like in Nilambari. The sphuritha and kampita gamakas of Kapi raga fulfill the requirements of a lullaby. The significant point of observation here is that these ragas are not employed in lullabies alone, but the above-discussed features of lullabies are handled carefully through these ragas to justify the mood of the songs.

Analysis of Lullabies that follow Different Music Systems using Raga as the Tool

A) Lullabies that fall under the ragas Narabhairavi and Kiravani

(i) Ushuru (Eshururu) my baby- Ethiopian lullaby:

This song uses the notes of Narabhairavi, though not in the regular order as in the raga.

s, g, m, , , m, , , p, m, g, , , , ,

s, g, m, , , m,,, d, ś, ř, , ř,

(ii) Shlof Mayne Feygele- Yiddish lullaby: Four pattern song

The tune has the notes of Purvabhaga(only srgmp) of Narabhairavi

p, s, s s s, p, s, s s s, g, g, rs sr g, , ,

g, g, p, m, gr, m, g, r, r, m m gg, r, S,,,,,

p, p, gg rs p,

(iii) Nana- Lullaby of De Falla- Spain: Four pattern song

⁷ Melakarta is a parent scale which gives birth to child ragas called janyas. The child ragas inherit some swarasthanas of the parent scale. There are 72 melakartas in South Indian Classical music. The twelve semitones of the western scale can be represented as sa, r1, r2, g1,g2, m1,m2,p, d1, d2, n1 and n2 where sa is the first note.

p, p, p, p, n2, r, grsns, s g,,,, gp,,, mgr,,, s,rsn, _s,s s s, m,, gr, grsn1 d,,,dnr,,
sndp,,,,

These notes belong to Narabhairavi and Kiravani scales, the two being different in nishada, this song uses both nishadas.

(iv) *Nami Nami- Arabic Lullaby* : Four pattern

This song is also based on Narabhairavi notes. The entire song is sung in the higher registers.

g, mr g, rs s s s s s,,,,, g, mr g, rs s s s s s,,,,,
p, p, , p p, dpm,,, Later p, dp d, n, dpppp,,,,

The Arabic lullaby has the typical fast oscillations on the notes which is a natural Arabic singing style.

(v) *Dandini dandini- Turkish Lullaby*: Four pattern song

The notes belong to Narabhairavi and Kiravani.

m,pp m,pp nsrns,,, sssnd,d, d,nd,

If the shadja of above tune is transposed to madhyama, we get the tune as

n,ss n,ss gmpgm,,, mmmgr,r, r,g,r,,, with notes of Vakulabharana raga.

(vi) *Nani Nani: Romanian Lullaby*: Three pattern song

The notes of this song belong to the scale of Kiravani raga.

p, s,,, g, r,,s nsr,, gr,s,s, g, g, p, m, g, mg g, ,

There is no use of 'da', dhavatha note in the song. The song starts in the lower octave 'pa' and goes up till 'pa' of middle octave. There is very limited range of melody and the same melody just gets repeated.

All these songs are largely based on the notes of raga Narabhairavi and mix of Kiravani when a higher variety of nishada is used.

B) Lullabies based on major scale - Sankarabharanam

Notation of the beginning phrases is given for the songs.

(i) *Angels through the night- English*

gsgp msmd prpn sdms. s,,n d, s, r,, s n, p, d,,, n,,, s,,,

The song is based on four patterns

(ii) *Onye merenwa Igbo Lullaby:*

p,ś, p d, d g, d,p,,, r, p, p, p, r, g, s,,,

This is also a song based on four patterns.

(iii) *Fais Do Do Colos mon- French- three pattern*

g,r s, s rsr g,s g,r s,s rgr s,,

This song is based on three patterns.

(iv) *Onna Babo Athinniya- Srilankan Sinhala language*

p, pd m,,, mp, mg, , , rgrsr,,, rmgrs , , , This is based on four patterns.

(v) *Puthe Nube Loku Amma- Sinhala:*

s,, r s,,, srsrg,,, gmgrs,,,srs r g.mg ,r,s, // p s, n s,,, srsrg,,, gmgrs,,,srs r g.mg ,r,s,

This is also a song based on four patterns.

(vi) *Doi Doi Doya Babo- Sinhala:* This is based on three patterns.

pp, dp, mm,,, mm, dp, mg,,, rg, rs, rg, rg, mg r, r, s,

(vii) *Hee Balou- Robert Burns Scottish English lullaby:* A three-pattern song

g,s g,s g,s gp, m,g m,p d,p ds, s,g s,g m,p r, g,gp,, rm, g,,

(viii) *Fola Fola Blakken- Norway:* Four pattern song

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

C) Lullabies sung in the higher registers like in Opera singing

Sephestia's lullaby - Weep not my Wanton: Four pattern song

This song has Keeravani, Narabhairavi notes plus many other notes like prati madhyamam . Since it is in opera style, it is focused on words and modulations.

The nurse's song - Lullaby baby: Free flow

This song incorporates notes from Keeravani and its pratimadhyama counterpart Simhendramadhyamam showcasing distinctive features similar to pitch shifts. This style is characterized by significant vibratos and occasionally incorporates chromatic notes.

Discussion

The General Musical Features that Constitute a Lullaby

- A simple melody that repeats across the stanzas
- Simple rhythmic structure in slow tempo.
- Modulations that enhance softness and gentleness.
- The importance of the lower octave to bring a sense of coziness except for those sung in opera style
- Glides as the most common ornamentations.
- More emphasis on the plain notes
- Trisra (3) and Chaturasra (4) are the most common rhythmic patterns in non-Indian lullabies whereas any pattern from the existing common five patterns is comfortably considered in Indian music-based lullabies
- The most commonly used notes are from a major scale
- The music culture of the region dominates the tunes and their renditions.

Musical Features of Lullabies that follow Raga-Based Music

The songs that follow raga-based music showcase many more features along with the general musical features of a lullaby.

1. The characteristic phrases of raga become important in the raga-based lullabies. The characteristic phrases of some ragas go well with the essentialities of a lullaby. Lullaby songs composed in those ragas use these phrases to generate the necessary emotions.
2. Along with Trisram and Chaturasram, Khandam (5) and Misram (7) patterns are also common in these songs.
3. Along with the glides, there are many other gamakas(ornamentations) in these songs which are intrinsic to the ragas like sphuritha, kampitha, and meend of Hindustani music.
4. Longer oscillations like vali are also common.
5. Songs composed in audava (5-note raga) and shadava (6-note raga) naturally have scope for more glides with the absence of few notes in them.
6. The most commonly relatable ragas are Sankarabharanam and its janyas like Nilambari, Kuringi and Navroj.

7. The choice of ragas is vast as the ragas in vogue are many and every raga can exhibit the required features of the lullaby employing the specific musical features.

The first set of data includes lullabies that follow tunes from the background of Indian music. This set is followed by those collected from different research papers and are categorized into; a) those based on major scale which is Sankarabharana raga, b) those that are mapped to other ragas, and c) those that are sung in higher registers like Opera style.

It is clear that lullabies that follow Indian music are composed based on a wide range of ragas like Sankarabharanam, Navroj, Nilambari, Kurinji, Kapi, Desh, Jaijaiwanthi, Marubihag, Kalyani etc. There is an obvious understanding that there is a natural scope of composing songs with numerous varieties of tunes that follow *raga*, since *raga* is a multi-dimensional concept with a structure that includes scale, ornamentations, characteristic phrases, octave specifications, emphasis on certain notes, which are all part of *raga lakshanas* and the number of ragas in vogue are in hundreds. With the notes of Sankarabharanam alone there are lullabies in Nilambari, Kurinji, Navroj, etc. as these are the ragas generated from the parent melakarta Dhira Sankarabharanam. That is the advantage of the raga approach.

Table of the ragas mentioned in the study and their swarasthanas with ascent and descent structures: The swarasthanas are marked from 12 swarasthana perspectives. A dot above indicates a higher octave and a dot below indicates a lower octave.

Sankarabharanam:	s r2 g2 m1 p d2 n2 ṣ́- ṣ́ n2 d2 p m2 g2 r2 s
Nilambari	: s r2 g2 m1 p d2 n2 ṣ́ (s r2 g2 m1 p d2 p n2 ṣ́-)- ṣ́ n2 p m1 g2 r2 g2 s
Navroj	: p d2 n2 s r2 g2 m1 p- m1 g2 r2 s n2 d2 p
Kurinji	: s n2 s r2 g2 m1 p d2- d2 p m1 g2 r2 s n2 s
Kapi g2	: s r2 m1 p n2 ṣ́- ṣ́ n1 p m1 g1 r2 s(ṣ́ n1 d2 n1 p m1 g1 r2 s) It also has and d1 as foreign notes
Desh	: s r2 m1 p n2 ṣ́ - ṣ́ n1 d2 p m1 g2 r2 g2 n2 s

Jaijaiwanthi	: s r2 r2 g1 r2 s n1 d2 p r2 g2 m1 p n2 ś - ś n1 d2 p d m1 g2 r2 g1 r2 s
Marubihag	: s g2 m2 p n2 ś- ś n2 d2 p m2 g2 r2 s This raga also has m1 in some special phrases.
Kalyani	: s r2 g2 m2 p d2 n2 ś - ś n2 d2 p m2 g2 r2 s
Narabhairavi	: s r2 g1 m1 p d1 n1 ś - ś n1nd1 p m1 g1 r2 s
Keeravani	: s r2 g1 m1 p d1 n2 ś - ś n2 d1 p m1 g1 r2 s
Simhendramadhyamam:	s r2 g1 m2 p d1 n2 ś - ś n2 d1 p m2 g1 r2 s
Vakulabharanam:	s r1 g2 m1 p d1 n2 ś - S n2 d1 p m1 g2 r1 s
Ritigoula	: s g1 r2 g1 m1 n1 d2 m1 n1 n1 ś- ś n1 d2 m1 g1 m1 p m1 g1 r2 s
Kedaragoula	: s r2 m1 p n1 ś -ś n1 d2 p m1 g2 r2 s

Frequently used Scales in Lullabies

Analysis of the songs from the data set shows that certain scales are largely used across the cultures of the world. The songs were not selected from a scale perspective, but those selected based on the research papers showed interesting results.

Sankarabharanam, the Major scale is the most regularly chosen scale for the lullabies. Pundit Bhatkande who systematized Hindustani music of present day, named the notes of this scale as Shuddh swaras. This set of notes is generally regarded as the most pleasant and energetic combination. This scale is commonly used in the children's rhymes too. Next to this scale, notes from Narabhairavi and Kiravani are among the most frequently used combinations. However, in lullabies based on Indian music, a wide variety of scales are employed due to their raga-based approach.

Lullaby and Musical Style

Lullabies are the songs that every culture in the world embraces. The main factor that confirms any song as a lullaby is its lyrical content which mostly contains words that indicate sleep, cradle, swing, dreams, moon, night, mother's love, etc. The musical arrangement of these songs is also unique with respect to the features discussed above. With all these common aspects of lullabies, the musical style that accompanies them is entirely based on specific music culture.

Lullaby as an important genre in performance has classical, semi-classical, and folk variety within every culture. For any compositional form, the classical songs adhere to the strict rules, semi-classical ones deviate to a certain extent and folk songs incorporate rustic elements comprehensively. Lullabies based on Indian music have all the raga-based features, those based on Western style have features like vibrato, use of head voice, and heavy modulations. Those based on Arabic and Turkish music have the typical oscillations and use of microtones natural to the style. Lullabies sung in an opera style characterized by music in the higher registers, contrast with one of the general features of lullabies: the importance of lower octave notes. However, this musical style emphasizes emotional expression within its format adapting the lullaby's emotions accordingly. So in such a style of singing the sustenance of the notes, frequent note elongations, and dynamics applied on the notes become important factors to convey the necessary emotions of lullaby. While most of the lullabies are songs of celebration, some have a darker shade and such lullabies depict complex emotions through words as well as music.

The Indian music-based lullabies are generally performed in the peculiar Indian concert style with a vocalist accompanied by melodic instruments like violin, veena, flute and rhythmic instruments like mridangam, ghatam, kanjira and tabla. The instruments are based on the category of music like classical, semi-classical or folk. This is true of the lullabies of any culture. Usually lullabies based on Western music have a vocalist or group of vocalists with piano, guitar and violin accompaniment. There may or may not be a rhythmic accompaniment. As harmony is an important component of Western music, even lullabies performed in concerts include multiple layers of harmonies. The concept of fusion involves integrating or interchanging elements from different sources or styles.

Conclusions

The study explores common features and scales of lullabies across cultures, highlighting the potential for enriching performances by integrating ornamentations from diverse musical styles. By incorporating different ragas, there is significant scope to enhance the melodic variety and rhythmic patterns of lullabies, drawing from the structured combinations of notes unique to each raga. This adaptation not only introduces new musical colors to non-Indian lullabies but also underscores the cultural significance embedded within musical frameworks. The prospect of exclusive lullaby concerts featuring global compositions emphasizes the genre's rich diversity. Moreover, the study underscores music's pivotal role in shaping compositional identity and fostering cross-cultural appreciation through the adoption of raga approaches. This approach expands listeners' musical horizons, encouraging them to embrace a broader spectrum of melodies beyond their regional familiarity. The study also emphasizes the importance of music in giving compositional forms their identity, highlighting how cultural influences shape musical frameworks. Analyzing various songs in this study underscores the relevance of culture within the musical context, presenting clear guidelines for composing or creating new lullabies. By adopting a raga approach, listeners' experience of music can evolve, allowing them to appreciate a variety of tunes not regularly exposed to them. As raga is integral to culture, this study contributes to cross-cultural appreciation and adaptation, promoting understanding through music.

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