Original Research Paper

Music

MUSIC AND ITS ORIGIN WITH RELEVANCE TO ITS EVOLUTION IN HUMAN CIVILIZATION

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ABSTRACT Music has undergone a long journey to take up its current form of modern music. Music has a huge impact on culture and human progress. The progress of music could be evidently observed in line with evolution of civilization. Music lessons that evolve different ragas have impact on civilizations. Raga music has been utilized from prehistoric era even till the presence of Bollywood. Ragas are formed by written rules as well as intuitive raga mala. The requirement for preparing a raga is the spirit of music and the beats to produce the music. To tune the music for specific purpose, various factors could be taken in to account such as *avarta, tali, khali, aaroh – avroh*, etc. Different ragas utilize different pitches of notes, the notes could be modifies as *shuddha* or *teevra*. The formation and combination of notes would form a *tala* as per the *laya* that could be sung in an *alaapa* and played on instruments.

1. Music and its History

Historically and prehistorically, music has been around for millennia(Sachs, 2006). Moreover, Music has evolved over time like humans and their civilizations(Brown, 2000). However, music predates people("Oxford Handb. Music Educ. Vol. 1," 2012). Incidentally, music has progressed from the Stone Age through the copper period to the modern day(Higgins, 2009; Parkington, 2007). Music has developed alongside humans and has become a part of their culture, behavior, and customs(Wallin et al., 2000). So we can establish many aspects of music and its function in shaping humanity. Many scholars have linked the evolution of music to the evolution of civilizations using facts and reasoning(Bod, 2013; Langer, 2009; Savage, 2019). Subsequently, the development of music may teach us about human evolution and variety.

By definition, the evolution involves heritable change(Durrant, 1962; Ellner et al., 2011; III et al., 2015; Klironomos et al., 2013). Properties of groupings of organisms changing throughout generations, is the definition provided by Doughlas Futuyma (2005)(Futuyma, 2017). "It includes everything from tiny changes in gene proportions within a population to the modifications that led to dinosaurs, bees, oaks, and humans."

2. Raga

Indian music is based on raga(Achary et al., 2009; Chordia & Şentürk, 2013; Pandey et al., 2003). Almost every component of Indian music is related to raga in some way(Arnold, 2017b; Gitanjali, 1998; Manjabhat et al., 2017). Despite being described as a notion, raga defines the categorization of music(Jacob, 2012; Pyasi & Bandopadhyay, 2021; Roy et al., 2021). Additionally, it is the rules and formats of producing music that the raga is so intertwined with music""(Arnold, 2017a; Beck, 2012; Leante, 2014; Linden, 2021; Qureshi, 1986; Schippers, 2010). Incidentally, the raga is an instrument that is found in poetry (*dhyana mantra*) as well as art (*raga mala*)(Charak, 1998; Deva, 1995; Schelling & Waldman, 2020). This picture embodies the essence of the raga and its omnipotence in music.

A raga specifies note resonance, duration, and sequencing(Chakraborty et al., 2014; Miryala et al., 2016; Nandekar et al., 2021). Ascending (*Aroha*) and falling (*Avaroha*) scales with varying phrase lengths(Clarke, 2013; Rao et al., 2014). Also, the overall arrangement of the notes is constant(Clarke, 2013; Rao et al., 2014). Its basic melodic ambiance is best expressed through repeats (*mukhya svarupa*)(Clarke, 2013; Rao et al., 2014). Consequently, the universal law for tones is quickly recognized and thoroughly followed(Schultz & Waibel, 2001). The songs are composed by following the rules of tones to prepare prepositions of Low and medium ranges (*sthayi bhaga*) and intermediate and high ranges (*sthayi bhaga and antara bhaga*)(Cruttenden, 1997; Gussenhoven, 2004). Accordingly, the purpose is to divide the raga into four to six pieces and then formulate it to achieve the aim and emotion generated through it–(Juslin & Sloboda, 2010; Kamoche et al., 2003; Mohn et al., 2010). However, some raga phrases are obligatory, whereas some are not. It is important to be mentioned here that these two parts make up the core of the raga.

Its distinctiveness is enhanced by harmonic progressions.

Many experts emphasize particular sounds in a raga–(DRĂGULIN & ENIU, 2015; Juslin & Sloboda, 2010; Kamoche et al., 2003; Mohn et al., 2010; Rowell, 1992). The phrase structure can be used to extract rest (*nyasa*), sonant (*vadi*), or dominant notes (*amsa*). This leads to a limited understanding of the raga and is unsuitable for live performance. For both learners and listeners, the idea that each note has its own significance varies greatly. In recent years, historians have emphasized the importance of specific tones"""(DRĂGULIN & ENIU, 2015; Feld & Fox, 2003; Girard, 2010; Meyer & Meyer, 1996). In other words, raga music is derived from literal music(Feld & Fox, 2003). Additionally, compositions and chord progressions can be classified as ragas(Achary et al., 2009). Musicians must compose and improvise around the raga tunes(Jacob, 2012). Famous raga compositions generally focused on the melodic characteristics of the Indian raga(Clarke, 2013). Compositions were frequently employed to produce raga-like musical qualities(Nandekar et al., 2021). The raga count is unknown in totality. The repertoire of most performers includes forty or fifty well-known songs. It is estimated that there are 500 different ragas(Belle et al., n.d.; Ranjani et al., 2011). It is true that specialists seldom recognize variations as different terms. Only a few minor variations and raga combinations exist. A meaning of raga varies based on the situation and institution. Each raga must express a different musical idea. In certain situations, slight variations of a raga might be considered separate ragas. A technical and philosophical aspects of a characteristic raga must always be linked. This is a major point of contention among artists. Besides, it is disappointing that most writers treat these issues individually. Furthermore, focus on the complex webs of musical and aesthetic components is regarded as vital.

3. Tala and Laya

Tala and *Laya* are essential in music creation. They are musical time representations divided into *matra* or beats. Further, music is made up of smaller parts called beats. There is no difference in *matra* count or arrangement. This cycle of *matras* is commonly represented by mnemonic devices that utilize repetitive clapping and palm pounding to promote memory recall (*avarta*). The number of *matras* and internal structure of the *tala* may be easily determined by handclapping equal or uneven portions. The *tali* beat follows the same beat. Waves introduce the *khali* beat to keep the hand action flowing. When combined, the mnemonics are easy to remember and recite.(Chordia & Şentürk, 2013; Clarke, 2013; Cruttenden, 1997; DRĂGULIN & ENIU, 2015; Durrant, 1962; Ellner et al., 2011; Feld & Fox, 2003)

Most spontaneous vocal compositions deviate from *tala* framework. The first sentence of *tala* (evidently called as *mukhra*) must be translated correctly, which subsequently is also not a compulsion. The song begins in the cycle and concludes on the first beat. An initial beat of the song may lack melodic, rhythmic, or textural impact. While the drummer improvises a beat, the vocalist sings the composition of the piece. The artists improvise, changing pace and tone to meet in the center. The vocalist handclaps the *tala* while the percussionist uses his

foot. In music, a *laya* (pulse). The *alapa* (without percussion) tries to provide enough time for phrases and reflect note length according to raga norms. This *tala* is used to generate a strong raga atmosphere. Incidentally, poor *tala* handling produces and results in meaningless noises in the slow. Consequently, syncopes and rubato can hide pulse. Faster portions feature a strong pulsing sensation, emphasized by percussion. *Laya* means "tempo." Finally. 30-60 MM, 60-120 MM, and 120-140 MM are the brackets for producing melodic songs and compositions (MM = beats per minute). They both begin with the letter ***ati*** and mean 'very or large in amount'. Each part of the song has its own *laya*, which should be followed. It is compulsorily known that songs have tempo and tone. The singer can sing them fast or slow depending on the mood of the raga or the situation that is required to be produced in the atmosphere. However, a faster tempo allows the artist to perform in bursts.'(Parkington, 2007; Pyasi & Bandopadhyay, 2021; Qureshi, 1986; Ranjani et al., 2011; Rao et al., 2014; Rowell, 1992; Roy et al., 2021; Sachs, 2006; Savage, 2019)

4. Scales

North Indian music has seven notes (*svara*), two fixed and five movable by a semitone. *Gandhara, madhyama, panchama, dhaivata* and *nishada* alludes to the other nodes in that sequence. Because *Sadja* pitch may be chosen arbitrarily, the voice can dip a fifth. The *Suddha* (pure) scale notes are major scale notes. In Indian musical notation, *kamala* is one semitone lower than *rishabha, gandhara, dhaivata,* and *nishada*. The temple of *Tivra* is a semitone above *Madhyama*. It has been trimmed to *SaRe GaMaPaDhaNi*. Understanding the lower, middle, and higher octaves (*tara saptaka*). Each *saptaka* begins with the letter *Sa* and finishes with the letter *Ni*, indicating that they are not standard octaves. *Svarasthana*, is on the other hand, an arrangement of notes on a staff.'(Sachs, 2006; Savage, 2019; Schelling & Waldman, 2020; Schippers, 2010; Schultz & Waibel, 2001)

Indian music scales are highly diverse. The work of scholars who have concentrated significantly on the structures and systematics of scales has made *raaga* classification much easier now. However, intricacy is not the primary raga feature, and categorizing ragas only on this basis would almost certainly result in errors. A raga is a continuous musical idea that may be identified by the atmospheres created by singing the notes that comprise the raga itself. However, we are still struggling to understand the secret to the *ragini-raga* method. The *raga-ragini* approach gained popularity as musicians struggled to comprehend the conventional *grama-murchana-jati* method. These old and historic methods have led to various scale-based categorization systems emerged in the eighteenth century. Its adoption is credited by many academics including the pioneering work by the late V.N. Bhatkhande, a famous twentieth-century professor who wrote extensively on the scale system. His *thata* scales were used to categorize ragas and are still utilized today. Despite its subjective character, his categorization system had great practical value due to its base in the largest music collection of the world at the time. Additionally, there are several great contributions by the scholars and practitioners of music such as G.B. Achrekar, K. Muley, and F. Framjee. They have cooperated in the early 1900s to modernize the *grama-murchana* while gaining validity for their own viewpoints. Many academics have studied Sanskrit treatises to comprehend the intricacies of intonation and scale construction in Indian music. Many academics have tried to analyze scales scientifically, but have been unable to tell the scale from the raga. These people lose track of the fact that they are listening to live music. A basic understanding of North Indian music's melodic scale is also required, regardless of raga. In any research, deeper understanding and analysis into the usage of scales in constructing ragas is important. Nevertheless, the vital part is noting which scales are common, uncommon, and underused.(Achary et al., 2009; Beck, 2012; Durrant, 1962; Fink, 2020; Higgins, 2009; Meyer & Meyer, 1996; Pandey et al., 2003; Parkington, 2007; Qureshi, 1986; Sachs, 2006; Schelling & Waldman, 2020; Trehub, 2003)

An interval is a specific way of organizing distances in computer science. North Indian music has three basic intervals: the octave, the perfect fifth, and the major third (5/4), all of which are required to learn and master scales and intervals. Due to the nature of these intervals, it is difficult to build a scale with perfect tones. A major sixth made of fifths clashes with the harmonic major third, *suddha* and *gandhara*. Interval composed of major third and perfect fifth (inverted fifth). Bose shows how to resolve discordant intervals by decreasing pitches, focusing on particular melodic themes, and enriching musical compositions. Certainly, this becomes an important fact to be mentioned here that the western ear accepts equal temperament, while the Indian ear does not. The raga, in modern expert's opinion, is the solution to define and realize temperaments. The melody hides the poor scale. Pitch is

connected to timbre, loudness, and even performance embellishments in a song. Aside from hearing pitch in context, the ear should not be conceived of in terms of frequency ratios. While the *Ni* of *Miyan ki Malhara* is regarded low, the meaning of its *Sampoorna-Shadav jati (Re Ma Re Sa, Ma Re Pa Ni Dha, Ni Sa')* is complex enough to be understood as a piece of music. The difficulty is exacerbated when written in notation since the notes are presented individually. Alternatively, sickness has no set pitch ratio. It is more important for this learner to memorize the overall tone of the song than the exact pitch of this note. *Sruti* refers to minute variations in pitch. Firstly, *Sruti* is a tonal system, not a variation on a predetermined pitch ratio. The overall tone of the raga is affected by the scale, melodic rhythm, and *sruti*. As a result, a raga is best taught through listening to it and practicing it. Because of this, it is believed that the following argument will answer two points stated by D.C Vedi that other writers have missed. Fifth consonance comes first, followed by pentatonic scales. The study will examine the link between theory and practice. Further, it is because four-tone scales are rare, this analysis is simplified. Those with more than seven tones are obviously heptatonic scales, with one or more extra tones. Hexatonic scales can also be deleted because they are produced from heptatonic scales. Although pentatonic scales are essentially similar to heptatonic scales, which lack two tones, they are constructed differently. The missing tones cannot be categorized as *suddha* or *vikrita*, therefore they cannot be distinguished (altered). The majority of popular ragas are on the pentachord scale, and the missing note is pa. The addition of the *suddha* and *vikrita* variants of a single note in heptatonic scales, both of which are rare in their presentation, may also be simplified.(Boltz, 1998; Brown, 2000, 2000; Gussenhoven, 2004; Higgins, 2009; Kamoche et al., 2003; Sachs, 2006; "Oxford Handb. Music Educ. Vol. 1," 2012; The Oxford Handbook of Music Education, Volume 2 - Google Books, n.d.; Wallin et al., 2000)

5. CONCLUSION

Eventually, it could be clearly derived that the music has been existing prior to the humanity. Subsequently, the development of music has seen the stages of evolution of human race. It could be evidently stated that the development of music compliments the evolution of humanity. This leads us to the indication that the categorization and deeper understanding of music and its components would enable us to understand the origin and evolution of human beings and humanity.

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