

MATHEMATICS IN THE MUSIC OF TABALA AND HARMONIUM.

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Abstract:

Rhythmic melodious sound is Music. Man- made music is either vocal or instrumental. Tabala and Harmonium are the most popular instruments in music performance in India. Musical sounds can be natural music like the drumming of clouds, drizzle of Rain, roar of River fall, Blow of wind, Clinking of Birds, Crying of Foxes, and Sound of frogs and crickets at night. All plants and animal lives are influenced by music (*viz.* harassed by noise). In Indian philosophy, the meeting of Tune and Rhythm is music resonance in the mathematical equality of all playing instruments and vocals to make it music. This paper deals with the Mathematics in the Music of Tabala and Harmonium along with mathematical modeling of music and its application.

Keywords: Mathematics in Music, Tabala Harmonium, Modeling of music, Xronomorphy, Music of Nature.

Introduction:

Music is melodious harmonic sound, and sound is the mechanical energy of the vibrating medium developed from the mechanical energy of vibrating source. [1- 4] The vibration must within a certain limit of audibility, *i.e.* 20 vibrations per second to 20,000 vibrations per second (frequency). Less than 20 vibrations per second are ultrasonic and upper than 20000 vibrations per second is supersonic sound. [5, 6]. The science of sound is called Acoustics. The music is a melodious (interesting) acoustics.

Frequency $n = 1 / T$ Or $T = 1 / n$ or $n T = 1$.

Sound energy moves in the wave form in the medium with a definite wave length X

Speed of Sound $C = n X$. Or, Length of sound wave $X = C / n = C.T$

Rochelle Gutierrez (2023) made a connection with tabala and mathematics in both the long and short combinations. [7] Tall or beat is a musical meter of composition. There is a group of tall characterized by Matra, *i.e.* number of beats in a defined time cycle. Starting beat of each cycle is called Sama or slow, the double speed of beats is called Madhya or Theka (middle) and four times speed of beats is called Droot or fast. [8, 9]

Savarts Law: String Length is constant.

Frequency = $\sqrt{T/m}$.

Here, T = tension and, m = mass.

Therefore should thin wire and adjusted tension at calibration.[10]

Musical scale:

A musical scale is a series of notes (keys or reads) selected out of hundreds of notes available. Such that they produce harmonic effect, when, they are played together. It is combined of seven notes called Sargam= Saptaka = Octave. In Bharteeya music system, they are: *Sa, Re, Ga, Ma, pa, dha, Ni, Sa*. Generally, There are three octaves in harmonium. Slow octave (Mand), medium octave (Madhya) and tempered octave. (Teebra Saptaka) [11] Slowest normal vowel should be lower *Sa* of harmonium note = read =Key, next notes of sargam increasing frequency (intensity) reaching Eighth *Sa* Reaches at just double frequency n .

Musical Intervals:

Pitch of a musical note is expressed in frequency or number of vibration per second. The absolute frequency of the notes is immaterial because the ear can recognize only the ratio in which their frequency alters but not their numerical differences. Musical interval between two notes is expressed by the ratio of their frequencies. If the two notes frequencies m and m , the musical interval between them is equal to m/n . If, the two notes change in such a way that, their ratio remains the same to be harmonic (lyrics) Music.

Table3 represents a relation of ratio between the notes (keys) of an octave, (*Sa, Re, Ga, Ma, Pa, Dha, Ni, So*) and their Savart Units with their intervals. Savart divided Octave into Zero to 300 savart units (s). Where the First notes *Sa* has 0s. And, last notes of octave *Sa* has 300S. Sawart OS to 300S is in between six notes have their savart unit in the ratio of their wave frequencies. If three successive notes have their frequencies m, n, and p. the interval between the successive notes are m/n and n/p. The interval between the first and the third, m/p is obtained by multiplication of two intervals m/n and n/p. Therefore, any two intervals are said to be added logarithm of ratios, when their frequency ratio are multiply.

Thus, $\log M/p = \log m/n + \log n/p$.

Savart described the frequency of the string; $N_i^2 = N^2 + N_0^2$.

Where N_i = Actual frequency, N = ideal frequency, and N_0 = frequency due to stiffness of string.

The equation of motion of vibrating string is represented as

$$d^2y/dt^2 = T \cdot d^2y / m dx^2 = v^2 d^2y / dx^2.$$

Here, X and y are two points of string .T = stiffness and m is mass of the vibrating string.

Where $v = \sqrt{T/m}$

The interval between two notes is expressed in logarithm of any number of component intervals. Hence, a scale can be set up by dividing octave logarithmically.

The Logarithm to the Bas 10 of any two successive notes apart differs by 0.03103.

Any two notes are said to be a centi – octave apart, if frequency differ by $n \cdot 0.03103 / 100$,

Here, two notes are said to be *Sa-centi*.

If, logarithm of their frequencies differs by 0.03103 / 1200,

then it is called *Sa Cent*. *Sawart S* is the logarithm of their frequencies differs by *S/1000*.

Thus a whole Octave is equal to 100 centi octaves=*1200 cent octaves=301.03 S*.

Savart is a convenient size of unit, but it is very inconvenient to have friction for the octave.

Therefore a slightly modification of Sawart is 300S in an Octave.[12]

Harmony and Melody:

When three Notes of frequency ratio 4:5:6 are played together, they form a pleasant or concordant combination, and it is called *Triad*. Frequency Ratio 4:5:6 is called major triad. When the three notes of a triad has frequency ratio 10: 12: 15, it is Called Minor Triad. When a Triad and the lowest note of octave (*Sa*) are sounded together , this combination is called a *Chord*. In these ways, when two or more concordant notes are played simultaneously, The pleasant effect is called Harmony.

and Pleasing effect of two or more notes played in succession up and down is called Melody.[13]

The Octave is called *Sargam* in Indian music. And lessons of sargam in up down mode are practiced as following :

1 Up: Sa. Re. Ga. Ma. Pa. Dha. Ni. Sa. Down: Sa Ni Dha Pa Ma Ga Re Sa.

2. Up: Sasa Rere Gaga Mama Papa Dhadha Nini Sasa

Down: Sasa Nini Dhadha Papa, Mama Gaga Rere Sasa.

3 Up : Sarega, Regama, Gamapa, Mapadha, Padhani, Dhanisa, Down Sanidha, Nidhapa, Dhapama Pamaga, Magare, Garesa,

4. Up: Saregama, Regamapa, Gamapadha, Mapadhani Padhanisa,

Down: Sanidhapa, Nidhapama, Dhapamaga Pamagare, Magaresa.

5 Up: Saregamapa Regamapadha. Gamapadhani Mapadhanisa. Down: Sanidhapama Nidhapamaga Dhapamagare Pamagaresa.

There are many more Like SaReSa, ReGaRe ect. both side vowels (notes, reads) number increases and word count decreases. After fluently playing these octaves a learner get ready to play any song in harmonium. Voice, Tune and Lyrics make a Song = Raag. In both classical and Local music. Song + vowel (Harmonium) + Tabala = Music composition.

Here it is Bharat Natyam:

Tata thaiya tata thaiya...Nati Tina nadhi dhina (8 matras) mixed with Drupad (*Gadigandha*).

In classical music only classical lyrics and tall are composed. Bells or click is used to assist dancer and for a vibrant music.

Thus, $M = S + T \Rightarrow M = H.(S+T) \quad \text{or} \quad M = HS + HT + \dots$

Here, M= Music, S= Sargam, T= Tall, H= Harmony · I = instrumentation. Sargam in an octave have seven frequencies of sound played with pressing notes (read) The initial practical *sargam* forward and revert both ways like upward and downward.[14]

Time (OF):

Time is the mathematics of music. Time is taken for any tone (voice) or hit (beat). When any beat is double, or quadruple, bet time be half or quarter to complete in the equal time length. *Titkit= taka = tomb. TitKit or TiTKit* is main art of tall. *Titkit= Taka = Tomb.* Here equality refers the time of sounding beat. *Tata Kit Tomb, Dha Dha Kit Dham= 12* (ek tall)

Here equality refers the time of sounding beat.

Music is produced by hitting on leather surface In Tom-tom, Tabala, duff etc is called Membrane phone, when sound is produced by Air column like Pipe organ, Bigul ect. While, Music of Belles, Cymbals are called as Metal phone

F(M) = T { membranous phone, Aero phone , Metal phone }

=T { Tabala, harmonium, Cymbals/bells. }

Time epsilon tune limit of *Tan* or *Dham* should match with key of harmonium and click of cymbals. The length of any key (note) of octave (ditto, for voice) be in certain equal, double, or multiple. These applied as per lyrics (rag) and tall of tabala. Music composition should follow: Dancer->Singer-> Harmonium^Tabala-->Cymbal / Bell. So that, music cycle model could be a hypothesis. Music follows Ten law of time, Law of movement, low of opposite (up down), law of energy (being acoustic), law of universal. (Natural Music), law of infinite, expansion, (music is science), Law of particle, (tunes or beats combines to make a tall), law of life time.(Music therapy to plants and people) law of uncertainty (River music has certainty but bird music no fixed. Where to start where stopped. And lastly, law of quality makes music a melodious sound.[14,15, 16, 17]

Table. Tabala Classical tails:

Sri N°	Tall	Matra (Points)	Parts	Claps at matra	Gap at matra	Boll (Speaking)
1	Dadra	6	2	1	4	Dha Phi Na , Ta Ti Na
2	Roopak	7	3	1, 4, 6	x	Ti ti na, dhi na, dhi na.
3	Kaharawa	8	3	1	5	3lh age Na , Tu na ka, dhi na.
4	Kowali - theka	8	3	1,3,7	5	Dhi dheer na, dhi ki , dhi na
5	Jhap tall	10	4	1, 3, 8	6	Dhi Na , Dhi Dhe, Na , Ti na , Dhi Dhee Na
6	Bhajan Theka	10	2	1, 4, 6, 9	5	Dhin Na Dhin Dhin Na. TinNa Tin Tin Na.
7	Drupad	10	3	1,3, 5 , 7, 8	x	Ka tta, Ta ta, Ki Ta, Ga Di, Gan Dha
8	Ek Tall	12	6	1, 5, 9, 11	3, 7.	Dhin Dhin, Dha Ge , Tir kit too na. Tin Tin , Ta ge , dhir kit dhoo na
9	Chaotall (4 Tails)	12	6	1, 5, 9, 11	3, 7.	Dha dha , di ta , kit dha , Tin Ta Ga Di Gan Dha
10	Deep Chandee	14	5	1, 4, 11.	8	Dha Dhin , Dha Dha Dhin, Ta Tin, Ta ta Tin, ta ta kata
11	Dhamaar	14	4	1, 6, 11	8	Ka Dhi Te Dhi Te Te Dhan Dha tee Te Tin, Te Te Tan.
12	Jhoomar	14	4	1, 4, 11	8	Dhin Dha TitKit , Dha Dha Ge TitKit, Tin Ta TitKit , Dhin Phage Tit Kit ,
13	Tritall	16	4	1, 5, 13	9	Dha dhin Dhin Dha, Dha Tin Tin Ta. Ta, Tin Tin Ta, Dha dhin dhin dha

Table 2 Tabala Local tails :

Sri N°	Tall	Matra (Points)	Parts	Claps at matra	Gap at matra	Boll (Speaking)
1	Tamoor Tall	7	2	L i	6	Tin Ti Dhi , Na ka Dhi na
2	Dewi Tall	6	3	A	6	Ta Ka Taka Dham Dham
3	Chhattisgarhi Tall	6	2	1, 4	5	Tak Tin Zad, Dhag Dhin Jad
4	Surgujia Tall	16	4	1, 5, 9, 13	15	Tak ta, ta Gud , DhaK Ta , Dha Gud Takta TaGud , TaGudTaGud
5	Dandia	10	4	1,4, 6, 9	5,10	Dha Dhin , Dhu Nak Dhin , Ta Tin , Tu Nak Tin
6	Garba	8	2	1, 5	8	Dhin Ta Ki Tta, Ta Kidta Dhin dha (Starting : Dhin dhin Ta-3 Dha.)
7	Drut	10	2	2, 5, 7, 10	x	Ta ka Dhin Dha, Ta ka Tin Ta
8	Bhangada	8	2	1, 5	3.7	DhaGaDhaGa, Dha Ga Taka.
9	Gudum Tall	5	2	3	5	Dha Dha , Dhud Dha Dha

Table 3 Musical Scales and Intervals :

Sri N°	Scale Note Vocal Notation (Western)	Scale Note Vocal Notation (Indian)	Frequency	Frequency difference From next Note	Frequency Interval From First Scale Note	Frequency Interval From successive Note	Music intervals in Savarts above Sa	Savarts difference From next Note
1	Doh	Sa	264	0	1	9/8	0	0
2	Ray	Re	297	33	9/8	16/9	51.0	51.0
3	Me	Ga	330	33	5/4	16/15	96.6	45.6
4	Fah	Ma	352	32	4/3	9/8	124.5	27.9
5	Soh	Pa	396	44	8/2	10/9	175.5	51.0

6	Lah	Dha	440	44	6/5	9/8	221.1	45.6
7	Te	Ni	495	55	15/8	16/15	272.1	60.0
8	Doh	Sa	528	33	2	18/11	300	27.9

Number Theory:

Classical Tabala tails and Local Tabala Tall respectively are presented in Table 1 and Table 2. There is a relation between the number of beats and the time of lyrics in the composition matching with all instruments in repeating in continuation with rhythm and speed. Also, an art of tabala playing is alter the Tall and/or mixing of double or quadruple beats within (inside) the same time.

Musical Instrumentation:

Some Plants are used to construct musical instruments. *Bamboosa* is used to make pipe organ (Basuree). Jack fruit (*Arctocarpus integrifolia*) and Fig Stem *Ficus glomerata* is good for Tom tom, tabala, duff, Mridang and Drum. *Legeneria vularis* (Bottle Gourd or Lauki) is used for making Tamura,(tri string), Mono string, Tetra string , Kango, Gitar, Septa strings(Sitar) , Veena, Rudra- Veena. The wood of *Santelum* and *jambolana* are superb for making of harmonium pipe organ etc. From animals, leather of Monitor lizard, (*Varanus*) and *Amelion* are used to cover of duff (khanzannee) Skin of *Capra- Capra* (Goat)is used to make membrane of tom-tom, tabala, knoll, drum, ect. Strings wear in finger made up of metals for tightening of all those. *Acatia nilotica* (Babool), *Dulbergia sissu* wood are used to make key or note or reeds (button) of harmonium. The Thread of *Chorchorus capsularis* bast fiber is used to tight the tom-tom while cattle skin is used to fix in the construction of Tabala , Mridangam and their Tune needs an Yink of tabala is made up of flour, water, iron filings and other secret ingredients . Bronze metal is used to make Cymbals (jhanjha , Mazeera, clickers) Electronics is applied for mixer of music. The Dhamman {Lungs} and it's Valve of Harmonium are fixed specific gum of *Acatia nilotica* (babool) and *Egal mermelas* (bell) but nova days pest solution is available. Also, Casio is all in one made of electronic system in a plastic ceramics. *Chorchorus capsularis* bark fiber made thread is used for tight to tom-tom and (Clickers, Cymbals). *Povo cristatus* feather (Mayur pankh) is used for decoration of Tri-string (tamura) and *Antelocarpa* (Royal stage) horns are used to decorate Indian drum Gudamaa). Boll of Gudma is : " *Nagud nagud dhukku Ngud Nagud kick dhadam. And, Zaza. gud zaza gud.* ". This instrument is about to extinct. Constriction of musical instrument needs specific gum of *Acatia nilotica* (babool) and *Egal mermelas* (bell) ink of tabala is made up of Charcoal, Iron powder and Boiled Rice thin liquid.[18]

Significance of music:

- 1 Song of nature.
2. Medium of prayer.
3. Creating an Art.
- 4.Music Carrier.
5. Acoustics (sound science)
6. Botanical growth inducer/ retardate noise pollution
7. Entertainment and Music Therapy
- 8 Social Rituals cultural function high DJ and band at being wife husband
- 9.Education.
- 10.Identity and Quality.

Precaution for Tabala:

Tabala never be left to rest in its tightened situation. Since, at performing play, the Tabala was tuned at *Pa*, with the fifth vowel of Harmonium. It is also natural musical tone, So that cuckoo bird's sound is too fifth vowel. If sky lightening (as in rainy season) will be the resonance effect will rupture the leather of tabala. Therefore tabala should be at down tune at rest. At performing time it should be again tuned to fifth (Pa). and simply it should be safe and covered.[20]

Precaution for Harmonium:

Harmonium is kept to rest covered by its wooden cover. At performing time it would be separate and stopper reed opener knob be pulled open then the Bellows (Fan) be open but it must not be operated before pressing any key of Sargam. Without pressing any key or button, the move of bellows shall fill high air to damage bellows (dhamman) or can make air leakage in the sound box of Harmonium.

Cooperation in Music:

Music performance runs by Science Law. But nature of Game and Science differ. Match wins at the opponent's fault. But, success of Music is an additive nature. Thus, the music is both play an instrument with math of tails and science of matching. Thus music could be triangle of Art, Mathematics and Science. Obviously, lyre and tunes are connected with social sciences. At the same time belling music in temples especially in Buddha Temple long deep bell music connects with metaphysics, i.e. spiritual sciences. Group chants public number in same tuned spell is adopted e.g. ISKON and Global Gayatri Family Haridwar and group reading Ramayana.

Extra effort in Performance:

Some Artist does fix wooden fiat small 3 to 5 Cm long sticks with tread on forefinger and mid finger at playing tom-tom. It makes better tune to sound *Tannn- Tannn*. Generally thumb is not used in music. Exception is to give supports to pipe flutes etc. But, some Artists wear iron ring on thumb and hit it with wooded part of Tom-tom, at just out of leather tuning as *tock - tock*. Or If tabala is affixed with a bunch of bells. The same hit with ring of thumb to sound: *Chham - Chham*, mixed with the tabala tall. This is good idea to help to the dancer.

Factors of Music concert:

- 1 Audience: linguistics of song, new or listened, or unknown Music (e.g. For me Snake music of Rajasthan India is called as Kaalabeliya and western Cabre- Disco).
2. composing all artists are of same pattern of music. For example. Bihari dhun song will not be adjusts by a habitual Chhattisgarhi tabala player. Same with dancer be pre practice (rehulsal) before concert.
3. Homology (uniformity) of tune, melody and lyrics. So that music could be modeled as a triangle. Doubling of tall be mathematically twice within the same time.
4. Tuning at tabala on frequency equal to fifth note of octave *Pa*. The lyrics or melody (rag) = The tune of Tabala = Melody or dhun in all systems of music (classical/ local/ filmy/ western/ hybridization.)
5. Some time hybridization very good feels in western ISKON Bhajan. But local tabala tall should not be in classical song. Same with particular dance has definite music.
6. Music is called Sam- geeta : Music follow equality in all respect. Music team members should be friends or music helps to develop friend ship.
7. Social Culture: Music is beyond berries and universal natural gift. Some social rituals have special music, like Sohag song (Jhap tal and Deepchandi) at child birth, Sohag song (kaharwa tall) at marriage, and Kabiri bhajan (theka) at mortal ceremony. A singer should see the ceremony to select the song.
8. Musician must follow the Tradition of path in spiritual songs also different followers not like different song. Like in a fare of Ascetics of Shaivism, the love song of Radhe Krishna will be stopped. *Ditto*, The disco, cabre, and ballad songs are not allowed in sanctum ceremonies.
9. In a group music slow wrong harmoniums runs. But not Tom-tom, Therefore It must be practiced before performance.

Mathematical modeling of music:

If Melody = *Me* or entertainment, Music = *Mu* and Social response is *S*,

Then the difference *d* is: $d = S - Mu = -Me$.
 $\Rightarrow d < S = M = +Me$.

Mathematically negative could be positive by first doing square than under root the product. But, in Music it is not applicable. Experimentation, calibration and operation of music is followed by the simple rules of mathematics. Construction of musical experiments needs mathematical measurements. Calibration is tuning at fifth note of Octave, vowel *Pa*. tuned with tabala. Modeling and simulation of frequency of tune (hit for tall) is simply observer on amplifier of Mike system set the indicators height is in the proportion of frequency or intensity. Electronics, Computation, designing, make a new form, like *Pad* of tabala. There are studies of mathematical modeling of music. At writing epilogue of math epsilon music, Author found a term “**Xronomorphy**” It is mathematical modeling of homology of tall and voice tune by lyrics equal to one, or same ratio, follows the mathematical axiom of union.[21] Example Garcia, we can adjust by extra effort Athena Hymen in Hindi, i.e. *Jayati Jay jay ma Saraswat. Jayati weeda Wadinee*. Using all notes of octave and have an Octagon of Aluminum, make 8 angles V Sa to Sa\ And simple 8 beat *Na ti ti na. Na dhi. Dhi. Na*. it could equally lamp per beat per angle and move good looking simulation. The advanced music show program is light and sound, constructed with mathematical modeling and simulation to design the Xronomorphy in those programs.

Music of Nature:

Horror Music is Seismic Tremors [22] Natural sounds are any sounds produced by non-human organisms as well as those generated by natural, non-biological sources within their normal sound scopes. It is a category whose definition is open for discussion. Natural sounds create an acoustic space.

In Stone Henge, Serengeti, a wind blow, passes through a group of natural stone, and makes Music of natural Pipe Organ. Ups - downs naturally frequency fluctuation. Another Stone is naturally sounding with tunning like tabala. Example is Tintina stone at Darima Ambikapur CG India [23, 24]

Music is loving Continuous sound of nature like The roar of ocean , the drumming of cumulus clouds, the drizzling on nimbus Rain, and wind blow, the rustle of leaves Boe (*Ficus religiosa*), Gurgling sound of water fall, The burble sound of rippling flow of river water drainage ,rolling thunder sound.

Rattling sound of rattle snakes and whispering of *Naja naja* (King Cobra) snakes. There in deep forests animals sounds make a fear music by Owl, Fox, Coyote, Bat, Frog, Wolf, Bobcat, Raccoon, Even in night of agricultural site, Cricking of cricket and frogs makes a sweet music.[25]

Many birds use their songs as a warning call to other birds. They use their calls to declare that a certain territory is theirs. Birds sing a different melody at different times of the day and night. Their calls seem to change depending on when they are singing. In the morning, their voices carry the furthest, which is why they mostly sing at dawn. In the

Night, an ambient sounds of Cricket, Swamp and Fireflies are for calming the nature for night sleep and relaxation. In Morning, the Chirping voice of *Passer domestics* and *Columba levia* birds and their roundly are very interesting, A bird's songs range from crowing, chirping, and cackling to a sweet, unforgettable melody. Birds use songs for a variety of reasons – to attract a mate, to mark territory and even for fun. Nightingale, song thrush bird (*Turdus philomelos*), thrasher, cuckoo, and owl. Some Birds are found singing like Linnets, (*Linaria cannabina*), blackbird, (*Turdus merula*), mocking birds, (*Mimus polyglottos*), brown thrasher (*Toxostoma rufum*), black cap (*Sylvia atricapallia*), tanager (*Piranga rubra*), hermit thrush (*Catharus guttatus*), Parrot (*Psittacula sps*), and Maina (*Acridotheros sps*) copy human song and sing. [26]

Further Scope of Study:

Music is infinite and study of music can be source of carrier and prayer. Since, music is applied metaphysical and cultural medium. For monotonous man music is medium of social life. Some western music and fastest tabala tall (Tarram turn) and CG tall, like *Dudur dukku* and the *Tina bom tina*, etc. yet to be practice full and to educate boys girls to have music degree and make their carrier and hobby. Acoustics has two different unit of sound. First, Wavelength verses frequency of sound. Secondly, loudness by electric amplification of same music. I think this would be difference between decibel and frequency number. Although, There is a relation between frequency and db. (Decibel) of a same sound and at same condition [26]. One can measure frequency of his vocal at minimum intensity for lower *Sa*. And same apply with any keynote of harmonium separately. Then when equally frequency will sing with harmonium, the search of musical scale shall be resonance or vocal sound and harmonium sound will match. [27] Further scope of study is why frequency equally not added to successive keys of an octave: "*sa re ga ma pa dha ni sha*. Ditto, Sewart unit 00.00 to 300.00 too is not equally distributed. Yes, it is to read further. But, it could be for melody or harmony or natural musical law. For vocal music cleaving of rhizome of Kulanjan (*Alpinia galangal*) is best medicine [28] Music should be a hobby rather than carrier, Author devoted his hobby for Music and there is more work to do for Music [29-37] Music is a set theory of mathematics being cooperation among music party themselves and Audience themselves and with each other for music existence. Function of audience is entertainment and obtain what is melody, sense, and system whether it classical / local/hymen. It is function of Dancer to help by action and emotion. The objective of music is much more than Entertainment. Like, the waves of holy Azan or hymen of Holy Church or bhajan of The Temple. Philosophically origin of music is told to be from dumb bell (Damaru) and metaphysically, bell music is used for meditation in Buddhism. Also, It is applied for All for Music Therapy.(36) Reference 37 is collection of you tube by Author studying Music.

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Declaration: I firmly declare that the content used in this paper from external source is properly cited in references. And for any liability regarding plagiarism would my responsibility.

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