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### Nāda-Brahma: The universal source of music

#### Swapan Kumar Adhikari

#### Abstract

Music is universal language beyond words, a language of heart that connects us to the divine. Natures reverberates with sounds and vibrations of subtle and prominent frequencies. Every being in the creation pulsates at a rhythm and synchronises with universal harmony. Sound has a profound influence on our body, mind and spirit. All of us have intrinsic ability to access the inherent power of sound through our voice.

In ancient India, music (saṃgīta) was defined as combination of Gītam (vocal melody), vādyam (playing on instruments) and nṛttam (dancing)<sup>1</sup> where dancing was guided by instrumental music which in its own turn follows the vocal practice. Therefore, the vocal melody (gītam) being the main constituent (of saṃgita) is expounded in the first instance<sup>2</sup>.

Śāraṃgadeva (মাংস্থাইব) in his Saṃgitaratnākara³ (মঙ্গানংলাকং) expressed the importance of  $n\bar{a}da$  as:  $N\bar{a}da$  is the very⁴ essence of vocal music, instrumental music as these is enjoyable⁵ and these are the manifestation of  $n\bar{a}da$  where dance (নৃথা) follows⁶ both. Therefore, all three together are the constituent of  $n\bar{a}da$ 

Most important element in Indian Classical Music is  $N\bar{A}DA$  as it is basically a musical sound which involves melodic or æsthetical sound as well as it is the basic element of the entire universe as it denotes the emergence of expressive utterance. On Indian concept  $N\bar{A}DA$  means Mukti or liberation from materialism.

Keyword: nāda-brahma (नाद-ब्रह्म), svara (स्वर), śruti (श्रुति)

#### Introduction

According to Indian concept of Musical notes (svara, स्वर) evolved from umbilicus/navel (নার্ট,  $n\bar{a}di$ ) i.e., from  $N\bar{a}da$ -Brahma<sup>7</sup> (নার্ট-রূম). Sound is the creator of the world as  $N\bar{a}da$  means 'sound' and Brahma means creator of the universe:

यदुक्तं ब्रह्मणः स्थानं ब्रह्मग्रन्थिश्च यो मतः। तन्मध्ये संस्थितः प्राणः प्राणाद्वह्निसमुद्भवः॥ वह्निमारूतसंयोगान्नादः समुपजायते।

<sup>1</sup> I/v-21 of Ref.11: गीतं वाद्यं तथा नृत्तं त्रयं सङ्गीतुच्यते। gītan vndyan tathā nṛttan trayan saṃgītamucyate

² I/v-24 of Ref.11: नृत्तं वाद्यनुगं प्रोक्तं वाद्दं गीतानुवित च॥ अतो गीतं प्रधानत्वादत्रादावभिधीयते। *mtta*n vādyānugan proktan vādyan gītānuvati ca∣ato gitan pradhānatvādatrādāvabhidhīyate∣

³ II/1: गीतं नादात्मकं वाहं नादव्यक्त्या प्रशस्यते। तद्वयागतं नृतं नादाधीनमतस्त्रयम्॥ gītan nādātmakan vāddan nādavaktyā prašasyate | taddvayānugatan nṛtyan nādādhīnamatastrayam ||

<sup>&</sup>lt;sup>4</sup> i.e., the intangible substance which manifests itself through the articulate sound. The manifest refers to the unmanifest by implication.

<sup>&</sup>lt;sup>5</sup> praśasyate (प्रशस्पते) literally means is praised but indicates to attains the excellence of beauty, or to attain enjoyable as beautifu.

<sup>&</sup>lt;sup>6</sup> In ancient India, aesthetic concept of rasa and beauty and music (samgṛta) comprises the three arts of vocal, instrumental music and dance.

 $<sup>^7</sup>$  A primal word (i.e., OM) that refers to India's great classical music which was known to Indian sages from three-thousand years before our times. The Nāda-Brahma, cosmic sound and synonymous with परावाक parāvaāk, means sound is God or God is sound.

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yaduktan brahmanan sthānan brahmagranthiśca yo matah |

tanmadhye sansthitah prāṇah prāṇādvihnisamudbhavah|| vahnimārūtasanyogānnādah samupajāyate |

On Brahma we should consider Brahma-gland <sup>8</sup> (ब्रह्मग्रन्थि) where Prānah exists (प्राण: i.e., vital air).

न नादेन विना गीतं न नादेन स्वरः। na nādena vinā gītan na nādena svaraḥ |

Without evolution of sound/vibration (nāda, नाद), music and musical notes are not possible.

It indicates creation of the cosmos, of the world is sound i.e., sound is the creator of world.

According to Saṃgītaranākara of Śāraṃgadeva It is the small interval of time and are like the words of poetry or gesture of dance where śrutis are expressed in different sentiment and feeling in a group of five as moderate (मध्या, madhyā), keen (दीप्ता, dīptā), large (आयता, āyatā),compassionable (करुणा, karuṇā) and tender (मृद्ध, mṛdu)<sup>9</sup>. He also expressed that sound is first heard as śruti and through resonance it expands into a note (svara) to create an expression in mind of accepter.

According to *Harmonologia Musica* of 1702 by Andreas Werckmeister<sup>10</sup> we find relation of golden section<sup>11</sup> among cosmos<sup>12</sup>, human body<sup>13</sup> structure and music<sup>14</sup>.

Pythagoras <sup>15</sup> had used his experiences on music in cosmology methodically with intuitive subjectivity to use uniform string to divide in the ratio  $1:\frac{3}{4}:\frac{2}{3}:\frac{1}{2}$  or 12:9:8:6 <sup>16</sup> (which were known to be four stationary notes as Hypatē-Mi-12, Masē-La-9, Paramesē-Si-8 and Nētē-Mi-6) producing harmonious sounds where ratios of the vibrating numbers are 12:6, 12:8 and 8:6 producing intervals as octave <sup>17</sup>, fifth <sup>18</sup> and fourth <sup>19</sup>. This is known as harmonic

mean<sup>20</sup>. Here fifth and octave of a note by fixing musical bridges at  $\frac{2}{3}$  and  $\frac{1}{2}$  of the length of a musical-string <sup>21</sup> respectively where these make harmonic proportion as:

$$1: \frac{1}{2} = 1 - \frac{2}{3}: \frac{2}{3} - \frac{1}{2}^{22}$$

which indicates that he was inventor musical science or musical canon<sup>23</sup>. The numbers 12, 8, 6 mentioned above are in harmonic progression <sup>24</sup> and also called as geometric harmony <sup>25</sup>. He also believed that separation of heavenly spheres was determined by the laws of musical harmony and the planets emitted different notes in harmony which is the doctrine of harmony of sphere<sup>26</sup>. Pythagoras commented that the universe sings and is constructed in accordance with harmony and motions of seven heavenly bodies to rhythm and songs<sup>27</sup>.

Assuming that the world is a large structured like a macrocosm where human beings are microcosm having relation between them. Then, well-proportioned human body with its limbs display in proportiones musicae<sup>28</sup>.

Thus, the human body is structured by the golden section, by musical proportions as its shape is dominated the most perfect mathematical proportions.

From Ancient time, Indian music used to designate/recognised as gāndharva<sup>29</sup>

# गन्धर्वस्तु नभश्चरे पुंस्कोकिले गायने च । मृगभेदे तुरङ्गमे अन्तराभवदेहे च ॥

gandharvastu nabhaścare punskokile gāyane ca | mrgabhede turamgame antarābhavadehe ca ||

Gandharvas were said to move in the firmament<sup>30</sup> ( $\bar{A}k\bar{a}\acute{s}a$ , প্রাকার), they were singer like male-cuckoo, speedy like deers and tough like horse which indicates that they

 $<sup>^8</sup>$  Prāna (air) energy travels the body through channels called naḍis (नािंड्) i.e., sound originate from it.

<sup>&</sup>lt;sup>9</sup> पञ्चजातिषु सप्तसरेषु च सनाम श्रुति विभाजनम् - I-3- 27 to39.

<sup>&</sup>lt;sup>10</sup> A German musicologist, Born: 30 November, 1645 – Died: 26 October, 1706

<sup>&</sup>lt;sup>11</sup> A line divided into two segments or the length and the width of a rectangle and their sum. In numbers it follows Fibonacci's Numbers as: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34 etc. [Leonardo Bonacci (1170 CE –1240–50 CE) commonly known as Fibonacci, was an Italian Mathematician from the Republic of Pisa.] <sup>12</sup> The sound is rather dry, but it starts to get lively as soon as one imagines that the golden section is a phenomenon involving the sixth, an interval of particular importance in music as well as in the cosmos. <sup>13</sup> As per Thomas Michael Schmidt of University of Michigan said: There

<sup>&</sup>lt;sup>13</sup> As per Thomas Michael Schmidt of University of Michigan said: There exists golden section in (a) The navel divides the entire body length; (b) The nipples divide the entire width of the human body with stretched arms; (c) The loin divides the distance from the ground to the nipples; (d) The knee divides the entire leg; (e) The eyebrows divide the head; (f) The elbow joint divides the entire arm including hand.

<sup>&</sup>lt;sup>14</sup> The proportions of the golden section vascillate [fluctuate] around the major (3:5) and minor (5:8) sixths and around the so called ecmelic [In the context of musical intervals, ecmelic refers to intervals that are considered non-melodic or discordant, especially those with ratios beyond the superparticular ratios (e.g., 4:3, which is a fifth). These intervals are not as pleasing to the ear as emmelic (melodic) intervals, which are considered concordant where intervals are of the form 8:13, 13:21, etc.]

concordant where intervals are of the form 8:13, 13:21, etc.]  $^{15}$  Pythagoras of Samos, (Ancient Greek philosopher: Πυθαγόρας; 570BCE – 495 BCE). He used a simple apparatus, consisting of a string (monochord), could be stopped at different intervals using movable bridge to make experiments to have a simple ratio on the lengths of the string. On that the concordant intervals of the scale was in numerical ratios 2:1,3:2 and 4:3.

<sup>&</sup>lt;sup>16</sup> These re the four stationary notes and are gamut in ascending order.

<sup>&</sup>lt;sup>17</sup> The interval between two notes where one has double the frequency of the other. When Pythagoras took a length of the string double that which gave high Mi, it gave the low Mi. That is octave. Greeks called it as diapason (διαπασων, sc. χορδων). It expressed in the ration 2:1 (διπλάσιος λόγος).

<sup>&</sup>lt;sup>18</sup> It is the interval between the first and fifth notes of a major or minor scale i.e., tonic and dominant. Pythagoras took a length of string half as long again as that which gave the high Mi, it gave La. The interval we call the fifth i.e., dia pente (δμιόλιος λόγος). It expressed by ratio # 3: 2 (ήμιόλιος λόγος).

<sup>&</sup>lt;sup>19</sup> It is an alternative guitar tuning where each string is tuned a perfect fourth interval apart. Pythagoras took a length of string one-third again as long as that gave the high Mi, it gave Si. This interval is fourth diatessaron (διάτεσσάρωυ, sc. χορδωυ). It is expressed by ratio 4 : 3 (έπίτριτος λόγος). <sup>20</sup> 6/12 + 6/8 = 8/12.

<sup>&</sup>lt;sup>21</sup> Greeks and other ancient peoples had already acquired familiarity of musical-string-instruments. Then every cithernist (player of ancient stringmusical instrument) knew to obtain different sounds and pleasing combination sounds by pinching the string at certain place or changing the length of vibrating parts.

<sup>&</sup>lt;sup>22</sup> The compass (μέγεθος) of the octave is a fifth and a fourth  $(3/2 \times 4/3 = 12/6)$  and the note which is a fifth from nētē is a fourth from the hypatē, and vice-versa. The interval between the fourth and the fifth is expressed by the ratio 9 : 8 (ἐπόγδοος λόγος). This is tone (τουος) or pitch par excellence. As there is no (numerical) mean proportional between 1 and 2, neither the octave nor the tone can be divided into equal parts.

<sup>&</sup>lt;sup>23</sup> His love of music and number made him to produce harmonic proportion.

 $<sup>^{24} 1/8 - 1/12 = 1/6 - 1/8.</sup>$ 

<sup>&</sup>lt;sup>25</sup> A cube has 12 sides, 8 angles and 6 faces.

<sup>&</sup>lt;sup>26</sup> The Pythagoreans conceived the musical scale as a structural element in the cosmos i.e., The firmament was, moreover, pictured as a kind of harmony or harmony of spheres.

<sup>&</sup>lt;sup>27</sup> According to Hippolytos (480 BCE - 406 BCE).

<sup>&</sup>lt;sup>28</sup> musical proportion

<sup>&</sup>lt;sup>29</sup> Applied to the Science and art of Music. The word was derived from Gandharva, a race of semi-divine beings settled in Gāndhāra or Khaṇḍahār of Afghanistan, who were artist with ability to be imaginative, intuitive of artistic creations.

<sup>&</sup>lt;sup>30</sup> They used to live away from the local people i.e., on the small-mountain of Afghanistan which was considered to be the place between earth and heaven (semi-divine).

associated with music i.e., Nāda-vidya/Nāda also attributed

Gāndharva 31 was sacred music as it had grown and developed as a musical expression of the ancient seers towards the divine origin and ritual dedicational experience. They were also known as anādi32 that it evolved from Sāmaveda. Therefore, Sāma is the penultimate cause of all musical forms<sup>33</sup>.

#### गान्धर्ववेदवत स्वयमनादिर्व सामवेदप्रभवतऽपि वा।

gāndharvavedavat svayamanādirvā sāmavedaprabhavate'pi vā |

Gandharva-Veda<sup>34</sup> itself, or from the origin of the Sāma Veda i.e., a part of Sāma Veda.

All songs (musical notes) were originated from Sāma<sup>35</sup>. Therefore, gāndharvas defined as:

### <u> दृष्टादृष्ट्रफलसमवेदप्रभवानादिकालनिवृत्तम्</u>

drstādrstaphalasāmavedaprabhavānādikālanivrttam |

From the time of the origin of the Vedas and the results of the visualised and the non-visualised had been expressed by gandharvas as musical notes.

Here smell of tones<sup>36</sup> (gandha of svara, रवर-गन्ध) had been considered which includes harmonic tones<sup>37</sup> and resonance<sup>38</sup>. We find the activities and existence of gandharvas as Gandharva-sattva (गन्धर्व-सत्त्वा):

Bharata's *Nātya-*Śā*stra* (XXII-107): गान्धर्व वाद्दे च नृत्ते च रता हृष्टा मृजावती । गन्धर्वसत्त्वा विज्ञेया स्निग्धत्वकेशलोचना ॥ gāndharva vādde ca nṛtte ca ratā hṛṣṭā mṛjāvatī | gandharvasattvā vij<br/>ñeyā snigdhatvakeśalocanā  $\parallel$ 

Gandharva woman takes delight to involve in gandharva (gīta, गीत), Vādya (वाह्र) and dance (nṛtta, नृत्त) and they were fond of cleanliness and neatness (snigdha, स्निग्ध) in skin, hair and eyes i.e., they maintained their beauties. Bharata's *Nātya-*Śā*stra* (XXVIII-8):

यत्तु तन्त्रीकृत प्रोक्तं नानातोद्दमाश्रयम् । गान्धर्वमिति ३९ तज्ज्ञेयं स्वरतालपदात्मक ॥ yattu tantrīkrta proktan nānātoddamāśrayam | gāndharvamiti tajjñeyan svaratālapadātmak ||

31 It actually indicates Gandharva type of music and this is devised and artistically practiced by the talented and art-lovers who lived in the prehistoric Indus cities long before the advent of Vedic Aryans. <sup>32</sup> existing since beginning of time i.e., like Vedas.

33 सामभ्यों गीतमिति कथितम्, सामानि चात्र कारणकारणानि, गान्धर्वं हि सामभ्यस्तस्माद्भयं गानं sāmabhyo gītamiti kathitam, sāmāni cātra kāraṇakāraṇāṇi, gāndharva hi sāmabhyastasmādbhayan gānan | Songs from the Sāmas, therefore, the Gandharva is a song from the Sāmas.

34 It deals with gandharvas.

35 सामभ्यो गीतम् sāmabhyo gītam.

36 According to Nātya-Śāstra and Rāmāyaṇa we find a gandharva named Tumburu who was expert in Dhaivata Rāga, Niṣāda Rāga.

37 Upasvara, उपस्वर

<sup>38</sup> Anusvara, अनुस्वर

All the string-instruments consist of notes (svara, स्वर) and was known to Gandharva. They were also acquainted with time-measure (tāla, तील) and verbal themes (pada, पद). Bharata's *Nātya-*Śā*stra* (XXVIII-9):

### अत्यर्थिमष्टं देवानां तथा प्रीतिकरं पुनः । गन्धर्वाणामिदं यस्मात् तस्माद् गान्धर्वमुच्यते ॥

atyarthamistan devānān tathā prītikaran punah gandharvāṇāmidan yasmāt tasmād gāndharvamucyate || Gods desired to show much pleasure to gandharvas 40 for their superiority.

Gāndharva is combination of vocal music and instrumental music as explained in the following Śloka:

Bharata's *Nātya-*Śā*stra* (XXVIII-10):

### अस्य योनिर्भवेद् गात्र वीणा वंशस्तथैव च । एतेषां चैव वक्षामि विधिं स्वरसमुत्थितम् ॥

asya yonirbhaved gātra vīņā vanstathaiva ca | eteşān caiva vakṣāmi vidhin svarasamutthitam || Human source of expressing musical notes (svara, स्वर) by human throat, Vīṇā (Stringed musical instrument, वीणा) and flute (Vanstī, वंशी).

गान्धर्व त्रिविधं विद्वात् स्वरतालपदात्मकम् । त्रिविधस्यापि वक्षामि लक्षणं कर्म चैव हिः॥ gāndharva trividhan viddāt svaratālapadātmakam trividhasyāpi vakṣāmi lakṣaṇa karma caiva hiḥ ||

So, Gāndharva was of three kinds<sup>41</sup>. that of notes (svara,), that of tāla (time-measure) and that of verbal theme (pada). Ultimately as per Brahmāṇḍa Purāṇa (ब्रह्माण्ड पुराण)/Brahma Purāṇa (ब्रह्म पुराण) It has been expressed that on the way of singing songs Brahmā gave birth of Gāndharva and has been expressed in following Śloka:

गायते गां ततस्तस्य गन्धर्वा जिज्ञरे सुताः ॥ धयेति धातु कविभिः पानार्थे परिपठ्यते। पिबतो जिज्ञेरे वाचं गन्धर्वास्तेन ते स्मृताः॥

gāyate gān tatastasya gandharvā jajñire sutāḥ || dhayeti dhātu kavibhiḥ pānartha paripaṭhyate pibato jajñire vācan gandharvāstena te smṛtāḥ||

Who exercise for smell<sup>42</sup> are known to be gandharva i.e., who were able to make them and neighbours to be delighted with vocal as well instrumental music were gandharvas.

Methods: Use Sanskrit literatures.

Result: Music evolved from Nāda-Brahma.

<sup>&</sup>lt;sup>39</sup> गान्धर्वो मितिर्मानं वर्तनम् अन्तर्भवो यस्य। Gāndharvo mitirmānaṅ vartanam antarbhavo yasya | Gandharva keeps friendship from their innermost heart.

<sup>&</sup>lt;sup>40</sup> Vedic Aryans recognised them as GODs as they were experts in music, dancing, drumming, architecture and the master-arts of city building, sanitary

system etc. because they were developed class of civilised artistic peoples.

41 The three of gāndharva seems to be three kinds of musical performances in which individual notes, beating time, or songs respectively play their principal or any part.

<sup>&</sup>lt;sup>42</sup> गन्ध अर्व्वति इति। gandha arvvati iti| i.e., persons admire, smell of music, musical notes (through throat and instrument) as well express delight of it.

#### Discussion

Nāda manifests the letters (alphabets) where letters consttute the words and words make sentences 43. Therefore, entire business of life is carried on through language, particularly music. Therefore, the whole phenomena (i.e., the world) is based on nāda.

As per following Śloka: (II/3 of Ref.10) Nāda is two fold, produced (āhata, अहित) and unproduced (anāhata, अनाहत). It manifested in the human body which is known as embodiment.

#### आहतोऽनाहत चेति द्विधा नादो निगद्यते। सोऽयं प्रकाशते पिण्डे तस्मात्पिण्डोऽभिधीयते॥३॥

āhato'nāhata ceti dvighā nādo nigadyate | so'yan prakāśate piņde tasmātpiņdo'bhidhīyate ||3||

Nāda two-fold (produced/āhata unproduced/anāhata 45). As it manifests itself within the human body which known as embodiment. Music is the elevated form of āhata nāda. Two kinds of nāda are very closely related where śruti represents their joining.

Nāda is the basis, not only of music and dance, though specially related to it, but also of the entire business of life; since it constitutes the very substance of speech which is the only means of communication.

Definition of svara: When a string of a vīṇā is plucked, the very first sound produced is śruti and the very next sound following it i.e., resounding of śruti is called svara. As per III/24b-25a of Ref.10:

# श्रुत्यनन्तरभावी यः स्निग्धोऽनुरणनात्मकः॥२४॥ स्वतो रञ्जयति श्रोतचित्तं स्वर उच्यते।२५।

śrutyanantarabhāvī yaḥ snigdho'nuraṇanātmakaḥ ||24|| svato rañjayati śrotrcittań sa svara ucyate |25|

Immediate consequence upon śruti to make it creamy46 and resonating 47 the sound to create delights at the minds of listeners is called svara. That is svara is that which by itself pleasing the ear and the mind; which permeates the śruti-s<sup>48</sup> and which is tender and harmonic.

So, svara is the basis of music

Now, we want to express the etymology of the word svaras कथ्यते <sup>49</sup> /Svaraśabdasya (स्वर) [स्वरशब्दस्य व्युत्पत्तिरिह *vyutpattiha kathyate*]

a) Derived from rājṛ (বাড়া) meaning brilliance with prefixing the word sva [रिव] indicating self, appearing as selfbrilliance or shines<sup>50</sup> by itself<sup>51</sup>.

- b) It is dhvani [ध्वनि] or sound of that type which is the progenitor of raga [राग] indicating colourful delight<sup>52</sup>.
- In the very beginning music was designated as gandharva (गान्धर्व) where Nārada 53 (नारद) was the creator who brought music to earth<sup>54</sup>.
- Svara is collection of notes which is based on words i.e., pada (पद) accompanied with time-measurement i.e., tāla (तील) executing carefully/attentiveness<sup>55</sup> is called music or gāndharva (गान्धर्व)<sup>56</sup>.

Dattilam-6-7 : (दत्तिलम)-६-७:

श्रुतयोऽथ स्वरा ग्रामौ मूर्छनास्तानसंयुताः। स्थानानि वृत्तयश्चैव शृष्कं साधारणे तथा॥६॥ जातयश्चैव वर्णाश्च नानालङ्कारसंयुताः। एष स्वरगतोद्देशः संक्षेपेणाथ निर्णयः॥७॥ Śutayo'tha svarā grāmau mūrchanāstānasanyutāh | Sthānāni vṛttayaścaiva śuṣkan sādhārane tathā ||6|| Jātayaścaiva varņāśca nānālamkārasanyutāh

Eşa svaragatoddeśah sankşepenātha nirnayah ||7||

The topics included within svaras (स्वर) are śrutis (श्रुति), grāmas (ग्राम), mūrchanās (मूर्छना), tānas (तान), sthānas (स्थान), vrttis (वृत्ति), śuskas (शक्ष) and sādhāranas (साधारण).

According to Śrī Pārśvadeva (श्री पार्शदेव) Sthānas<sup>57</sup> (स्थानानि) are places within the human body from where evolution of svaras (स्वर) take places and these are three folds.

Śrī Pārśvadeva-I/9: (श्री पार्शदेव)-१/९:

# तान्यहं नाममात्रेणानिरूक्ति सहितं कथम् (कथयामि) । स्वरादिनाम् उत्पत्ति तुत्वात् स्थानम् ॥९॥

Tānyahan nāmamātrenānirūkti sahitan katham (kathāmi) /

Svarādinām utpatti tutvāt sthānam ||9|| Here etymology of Sthana is indicating the birth places of

Śrī Pārśvadeva-I/10: (श्री पार्शदेव)-१/१०: त्रीणि स्थानानिहृत्कण्ठशिरांसीति समासतः। एकैकमपितेपु स्याद् द्वाविंशतिविधायुतम्॥

Trini sthānānihrtkannthaśirānsīti samāsatah |

Ekaikamapitepu syād dvāvińśatividhāyutam ||10||

These are three-fold which are heart, throat and head (lower<sup>58</sup>, middle 59 and upper 60 register respectively) which are intensified with 22 (twenty) grades i.e., microtones<sup>61</sup>.

<sup>&</sup>lt;sup>43</sup> accumulation meaningful words.

<sup>44</sup> means struck i.e., produced by striking or friction of two objects. So, it is created or object of sense-perception or perceptible sound.

<sup>&</sup>lt;sup>45</sup> means unstruck i.e., not-created or matter of mystic experience or absolute sound used in Yoga.

<sup>46</sup> It signified as snigdha (सिगध) which is soft and capable of heard at a distance in physics it signified as viscous (highly resistance to flow) but here it used as quality of musical sound (slow changing the flow of vibrating

<sup>&</sup>lt;sup>47</sup> It is post-sound from ran (रण) to ring or resounding.

<sup>&</sup>lt;sup>48</sup> The svara permeates the śruti-s means svara-s are involved in śruti-s.

<sup>&</sup>lt;sup>49</sup> From Bṛhaddeśī by Śrī Mataṃga Muni - 53 (श्रीमतङ्गमुनि प्रपीता बृहद्देशी-श्लोक ५३)

<sup>&</sup>lt;sup>50</sup> From Vyākaraņa-Mahābhāṣya of Patañjali - I.2.29 we find कथं हलो नाम स्वर प्राप्तिः स्यात्। (kathan halo nāma svara prāpti svāt) means voice creates svara [page.203]

<sup>&</sup>lt;sup>51</sup> rājṛ dīptāviti ghātoḥ svaśabdapūrvakasya ca | svayan yo rājate yasmāt tasmādeṣa svaraḥ smṛtaḥ || राजृ दीप्ताविति घातोः स्वशब्दपूर्वकस्य च। स्वयं यो राजते यस्मात् तस्मादेष स्वरः स्मृतः॥

<sup>&</sup>lt;sup>52</sup> rāgajanako dhvanih svara iti∣ रागजनको ध्वनिः स्वर इति।

<sup>53</sup> He was self-evaluator Svayanbhū (स्वयंभ्) and co-sharer of creating music were gandharvas (गान्धर्व).

<sup>&</sup>lt;sup>54</sup> gāndharvan nāradādibhyaḥ prattamādau svayambhuvā | vidhivan nāradenātha pṛthivyām avatāritam || गान्धर्वं नारदादिभयः प्रत्तमादौ स्वयंभ्वा। विधिवन नारदेनाथ पृथिव्यां तारितम॥

<sup>55</sup> Here this word attentiveness indicates bringing right understanding into practice.

padasthasvarasanghātas tālena sumitas tathā | prayuktaś cāvadhānena gāndharvam abhidhīyate || पदस्थस्वरंघातस् तालनसुमितस् तथा। प्रयुक्तस् चावधानेन गान्धर्वम अभीियते॥

<sup>&</sup>lt;sup>57</sup> Here it is the birth places of svaras (स्थानानि).

<sup>&</sup>lt;sup>58</sup> mandra (मन्द्र).

<sup>&</sup>lt;sup>59</sup> madhya (मध्य).

<sup>&</sup>lt;sup>60</sup> tāra (तीर).

Śrī Pārśvadeva-I/11: (श्री पाश्चिव)-१/११: द्वाविंशतिविधो मन्द्रो ध्वनि संजायते हृदि । यथोत्तरमसौ नादोवीणायामधरोत्तरम् ॥११॥ Dvāvinsatividho mandro dhvani sanjāyate hṛdi | Yathonttaramasau nādoviņāyāmadharottaram ||11||

Twenty-two sound appears from heart (lower register). The sound grows louder as it moves upwards in human body whereas it appears louder in Vīnā<sup>62</sup> when moving downward (Indian string instruments).

Śrī Pārśvadeva-I/12: (श्री पार्शदेव)-१/१२: स एव द्विगुणोमध्यः कण्ठस्थाने यथाक्रमम् । स एव मस्तके तारः स्यानमध्याद द्विगुणःक्रमात ॥१२॥ Sa eva dviguņomadhyaḥ kaṇṭhasthāne yathākramam Saeva mastake tāraḥ sthānamadhyād dviguṇaḥkramāt||12||

This appearing sound becomes twice higher when reaches throat and in Indian context it is known as Madhya position afterwards that sound reaches head to becomes again twotimes higher i.e., at the Tāra-sthāna or at the higher register where intensity of sound progresses louder in Geometrical Progression with common ratio 2 or loudness moves in multiple of 2 i.e., twice or doubled.

Śrī Pārśvadeva-I/13: (श्री पार्शदेव)-१/१३: इति स्वरगता ज्ञेयाः श्रुतयः स्वरवेदिभिः । अन्तरस्वरवर्तिन्यो ह्यन्तरश्रुतयो मताः ॥१३॥ Iti svaragatā jñeyāḥ śrutayaḥ svaravedibhiḥ | Antarasvaravartinyo hyantaraśrutayo matāḥ ||13||

Śrutis (श्रुति) form svaras (स्वर) i.e., notes and exist between notes which are known as antaravartani )अनतरवर्तानां (.e., lying between notes.

Śrī Pārśvadeva-I/14: (श्री पार्शदेव)-१/१४: । वीणायां श्रतयः । नाभौ यद व्रह्मणः स्थानं यत्कण्ठेन परिस्फृटम । शक्योऽदर्शयित्ं तस्मादवीणायाम्तन्निवोधतः ॥१४॥ | Viṇāyāṅ śrutayaḥ | Nābhou yad brahmaṇaḥ sthānan yatkanthena parisphuṭam Śkyo'darśayitun tasmādavīnāyāmtannivodhatah||14||

According to Indian concept of Classical Music, Naval is the residing place of Śrutis (श्रुति) i.e., Brahma (ब्रह्म) 63 these frequencies propagated towards throat.

Śrī Matamga Muni in his Brhaddeśī expressed details of anatomical process through which vibration/sound or nāda is

<sup>61</sup> Microtones are pitches in music that sit outside the standard notes of a Western music scale. They are not found on a standard Western piano keyboard but can be expressed in TANPURA (The tanpura does not play a melody, but rather creates a meditative ambience, supporting and sustaining the performance of another musician or vocalist, as well as for musicians accompanying a dance performance.), and should instead be imagined as any of the infinite possibilities of notes you might hear in between any two consecutive piano notes, or notes in standard scales. Śrutis (श्रीत) are the microtones in Indian Classical Music; It has 22 divisions (recognised as infinite in number in Indian Classical Music). Microtones are a fundamental part of the Indian melodic system, creating a rich and nuanced sound.  $^{62}$  All types of string-instruments such as Vīṇā, Sitar etc.

produced within human physique at Brahmagranthi 64 (ब्रह्मग्रन्थि). This had been recognised as Brahma-nāda.

देहस्य शरीरस्य कन्दो विस्तारकारणम्। उत्सेधो दीर्घोच्छायः। नाभिस्थितश्चत्रङ्गल प्रमाणकः। तस्य नाम ब्रह्माग्रन्थिरिति। तन्मध्ये इति। तस्य ब्रह्मग्रन्थेर्मध्ये नाभिचक्राख्यंचक्रं द्वादशदलमस्ति।

dehasya śarīrasya kando vistārakāranam | utsedho dīrghocchāyaḥ | nābhisthitaścaraṃgala pramāṇakaḥ | tasya nāma brahmāgranthiriti | tanmadhye iti | tasya bramagranthermadhye nābhicakrākhyancakran dvādaśadalamasti |

The trunk of the body indicates expansion of the body i.e., elevation. The navel is called the Brahma-Granthi. Within the middle of that Brahma Granthi there exist twelve-petalled chakra called the navel chakra or nābhi-cakra.

The exact location of Brahma-Granthi within human body was explained by Śāraṃgadeva (सारङ्गेदेव) in his Samgītaratnākara (सङ्गीतरताकर) witin The Genesis of the Human Embodiment.

Samgītaratnākara (सङ्गीतरत्नाकर); Section-3/3-4:

On the physiological aspect, propagation of musical notes from navel to mouth(किन्ठmay be expressed as (: vital force (prāṇaḥ, प्राण: (stationed around the root of the ,navelrising upwards<sup>65</sup>n gradually manifests ā-navel to pass from the da the cavity of the mouth as it -the cerebrum-the throat-the heart passes through them.

Within Brahmagranthi resides the vital breadth i.e., prāna. It gives rise to a vital fire i.e., vahni, where conjunction of this fire and breadth produces nāda: Brhaddeśī-18-19

यदुक्तम ब्रह्मणः स्थानं ब्रह्मग्रन्थिश्च यः स्मृतः तन्मध्ये संस्थितः प्राणः वह्निसमद्रमः वि्हमारुतसंयोगान्नादः समुपजायते yaduktam brahmanah sthanan brahmagranthisca yah tanmadhye sansthitah prānah vahnisamudgamah vahnimārutasanyogānnādah samupajāyate

n nāda 66 be subdivided into syllable we na 67 of nāda represents the vital-force and da 68 of nada represents fire. Thus, product of these two syllables, as union, create nāda<sup>69</sup>. This nada indicates the consciousness of sound, which leads us to produce musical notes i.e., melodic sound.

The nada has been differentiated into twenty-two grades as śruti-s70 according to pitch of its audibility. These produce twenty-two graded sounds of the octave. The lowest position nādī (नाडी) produces lowest pitch and pitch gradually rises as

~ 313 ~

<sup>63</sup> It is origin of Śrutis (श्रुति). It is the small interval of time and are like the

words of poetry or gesture of dance.

 $<sup>^{64}</sup>$  It is situated at the centre of the human-body, known as abode of Brahmā, near navel i.e., at nābhi-cakra (निभ-चक्र) according to Tāntric anatomy (तान्त्रिक शारीरस्थान)

<sup>&</sup>lt;sup>65</sup> The region below the navel pertains to anāhata-nāda (अनाहत-नाद) i.e., unmanifested sound.

<sup>66</sup> It indicates perception on sound in undifferentiated form of subject and object as well i.e., consciousness of sound.

<sup>67</sup> refer to prāṇaḥ.

 $<sup>^{68}</sup>$  refer to agni.

<sup>&</sup>lt;sup>68</sup> Śaṃgītaratnākara of Śārṃgadeva (सङ्गीतरत्नाकर); Section-3 / 6: नकारं प्राणनामानं दकारमनलं विदुः। जातः प्राणाग्निसंयोगात्तेन नादोऽभिधीयते॥ nakāran praṇanāmānaṅ dakāramanalaṅ viduḥ | jātaḥ prāṇāgnisaṅyogāttena nādo'bhidhīyate ||

<sup>69</sup> refer to agni.

<sup>70</sup> audibles.

the struck by the vital breadth (mārutahāti, मारुतहाति) and ultimately twenty-two śrutis resides at throat and another at head. So, śrutis <sup>71</sup> are that distinction between two is cognisable by the ear<sup>72</sup>.

Therefore, there are three registers of seven notes where each of them twice or double the previous one comprising twenty-two grades of sound. So, Śrutis ( $\Re \Pi$ ) are the smallest grades of sound analogues to microtones forming *Svaras*. These twenty-two microtones are too much closer with aminute difference and as per clarifications of Indian Classical music concept these cannot be expressed properly by human voice and can only shown through  $Vin\bar{a}$ .

It was believed of ancient Munis<sup>73</sup> that śrutis give rise to svaras but not vice-versa. They describe the relation between them as: "through the process of deduction (arthāpatti <sup>74</sup>, अर्थापत्ति), inference (anumāna<sup>75</sup>, अनुमान) and through direct perception, śrutis are found to be the cause that manifests svaras"<sup>76</sup>.

अर्थापत्त्यानुमानेन प्रत्यक्षज्ञानतोऽपि वा। गृह्यन्ते श्रुतयस्तावत् स्वराभिव्यक्तिहेतवः॥ arthāpattyānumānena pratyakṣajñānato'pi vā | grhyante śrutayastāvat svarābhivyaktihetavaḥ ||

So, they used two standard pramānas<sup>77</sup> by words arthāpatti and anumāna.

The materials of music are sounds, tones and vocables with all their qualitative richness and also perhaps silence or rests. They are both physical <sup>78</sup> and psychological in a complementary sense. In Indian exoteric<sup>79</sup> music, śruti is the elemental spiritual sound which constitutes the primary approach of this art. In Āgamani (आगमणि), śruti is defined as sound of self-expression<sup>80</sup> i.e., not dependent on any other support. Similarly, svara or tone is defined<sup>81</sup> as esoteric tone is self-delighting or self-luminous independent of any aid or support, physical or psychological.

#### Conclusion

*Nāda-Brahma* is the primal word of Indian Spirituality to represent India's great Classical music<sup>82</sup> as well as this is the spirituality of humankind. In wider sense the word is spirituality of the world will correspond with the findings of modern science<sup>83</sup>, cosmology<sup>84</sup>, morphology<sup>85</sup>, biology<sup>86</sup>,

<sup>71</sup> Different kinds of musical tones distinguishable through the ear.

<sup>74</sup> negative inference i.e., expressing the inference in negative way: Example - pīno devadatto diva ne bhukte (पीनो देवदत्त दिवो न भुक्ते) which means that Devadatta does eat during the day which leads to deduce that he must be eating at night.

mythology or metaphysical <sup>87</sup>, harmonic studies <sup>88</sup>, astrophysics <sup>89</sup> and nuclear physics <sup>90</sup> as per Asian sages, particularly Indian sages, because they knew many of these things, expressed hypothetically, two or three thousand years before our era and these were established by modern scientists.

Rendering *Om* in a proper way develops *breath-control*, *voice-sustainability*, *quality of sound* makes improvement in music.

 $N\bar{a}da$ -Brahma means not only the God (Brahm $\bar{a}$ ) along with involvement of sound<sup>91</sup>.

Gītādi (गीतादि) means singing or songs but gīta (गीत) or vocal music is basic to Indian music as it has already been mentioned. Moreover, gīta also used in general sense of music whereas saṃgita, (सङ्गीत) includes instrumental music, vocal music and dance.

Theoretically, *octave* could be divided into not only in twenty-two Śrutis but into an infinite number of intervals. Then that pitch can be lowered over infinitesimal i.e., atomic intervals where such extremely subtle distinctions in pitch will be beyond grasping<sup>92</sup>. as human ear has range of capacity to hear frequencies.

According to vrtti in  $Brhaddes\bar{i}$  different metaphysical views concerning  $\dot{s}ruti$  and profounds a monistic view regarding the nature of  $\dot{s}ruti$  which, apparently, indicates one in reality where its plurality is an illusory phenomenon connected with the fact that a single indivisible  $n\bar{a}da$  arising from the navel ascends up in the human frame in distinct specific steps such that each of these steps of the  $n\bar{a}da$  appears as a different  $\dot{s}ruti$  but it is one.

Ultimately, I am eager to mention the comments by the Gottfried Wilhelm Leibnitz, the great seventeenth-century philosopher and mathematician: *Music is a hidden arithmetic exercise of the soul, which does not know that it is dealing* 

movements of the planets. British chemist John Newlands pointed out that elements of the same group appear in musical intervals. It is recognizable that the numbers of analogous elements generally differ from each other by seven or one of its multiples. Therefore, it can be designated as to follow proportion of LAW OF OCTAVE

of LAW OF OCTAVE.

84 Johanns Kepler as a musician said six-part harmony motet (Then six planets were known to him as after his death three other planets discovered.). It is very interesting that Uranus, Neptune and Pluto are rhythmic planets and beat relative to each other. He ultimately correlated the musical tones and intervals with the movements of the planets and their astrological functions which was Cosmo-theological view.

85 As per American Psychologist George Leonard: At the root of all power and motion there is music and rhythm, the play of pattern frequencies against the matrix of time. More than 2600 years ago, Pythagoras told to his followers that stone is frozen music and this intuition has been fully validated by modern sciences as we now know that every particle in the physical universe takes its characteristics from the pitch and pattern and overtones of its particular frequencies, its singing.

<sup>86</sup> The science of harmonics knows that any form of organic life such as fish, flower, leaf fruit, beetle and any creature create sound.

<sup>87</sup> A. Schopenhaur (1819) said: music is the purest incarnation of the absolute will and the expression of the human feelings, love-joy-horror etc., in their abstract interpretation as metaphysical idea.

<sup>88</sup> Pythagoras expressed Harmony of spheres; Plato in his Timæus and Harmonice Mundi by Johannes Kepler.

89 The giant planet Jupiter produces his own peculiar noise. The sun makes its own noise too (hisses and crackling) when it is at relative quietude and roars of alarming intensity when spews giant portions of matter far out into space.

<sup>90</sup> The edge of galaxy creates hissing cacophony of sound, this sound produced by quick shifts in molecular and atomic energy levels in gases made hot by newly born stars.

91 creation is sound, cosmos is sound, sound is joy, emptiness is sound, spirit and soul is sound.

92 Nāṭya-Śāstra - XXVIII / 27-28: यद्यपि परमाणुतोऽप्युक्करषप्रकर्शो वा भवेद धनेविशेषस्तथापि नासौ गृहीतुं पार्यते॥ yadyapi paramāṇuto'pyutkarṣaprakarśo vā bhavet dhanerviśeṣastathāpi nāsau gṛhītuṅ pāyate ||.

<sup>&</sup>lt;sup>72</sup> Nātya-Śāstra - XXVIII / 24: श्रुतिश्च नाम श्रोत्रगम्यं वैलक्षण्यं यावता शब्देनोत्पाद्यते

l śrutiśca nāma śrotragayan vailakṣaṇyan yāvatā śabdenopādyate

<sup>&</sup>lt;sup>73</sup> Mataṃga Muni & Dattilā Muni.

<sup>&</sup>lt;sup>75</sup> inference: Where fire, there smoke exists - yatra dhūmastatrāgniḥ (यत्र धमस्तत्राग्निः).

<sup>76</sup> There exist different opinions on this relation but I think this is most admissible.

valid means of knowledge.

 $<sup>^{78}</sup>$  pulsations in the air.

<sup>&</sup>lt;sup>79</sup> suitable for communicate to general public.

<sup>80</sup> निरपेक्ष स्वरः nirapeks svara.

<sup>81</sup> स्वतो रञ्जयति इति स्वरः or स्वतो राजते इति स्वरः

<sup>82</sup> Plotius, a Hellenistic philosopher, wrote: All music, based upon melody and rhythm, is the earthly representative of heavenly music.

<sup>83</sup> Thomas Michael Shmidt said: The concept held in antiquity that all terrestrial music in only a pale reflection or kind of substitute for harmony in the sky; thus, becomes true in a concrete sense, because the same mathematical proportions are the basis of both our musical sounds and the

with numbers, because it does many things by way of unnoticed conceptions which with clear conception it could not do. Those who believe that nothing can happen in the soul of which the soul is not concious are wrong. For this reason the soul, although not realising that it is involved in mathematical computation, still senses the effect of this unnoticeable forming of numbers either as a resultant feeling of well-being in the case of harmonies or as discomfort in the case of disharmonies. He paved the way for the psychological method of musical aesthetics by interpreting music as the unconscious exercise in arithmetic.

Music originated from the sound  $(n\bar{a}da)$  which is the product of ether  $^{93}$  ( $\bar{a}k\bar{a}\acute{a}\acute{a}$ ). Sound originates in the living-beings from the friction  $^{94}$  of air and heat energy  $^{95}$ . First it evolves in a casual form (अनाहत,  $an\bar{a}hata$ ) and then in a gross form (आहत,  $\bar{a}hata$ ) to emanates through vocal chord  $^{96}$  as sweet and soothing.

The way by which music works is also the way the world of objects and events works. The deep structure of music is the same as the deep structure of everything else.

					T
Sanskrit	Transliteration	Sanskrit	Transliteration	Sanskrit	Transliteration
अ	A, a	आ	Ā, ā	इ	I, i
ई	Ī, ī	ত	U, u	ক্ত	Ū, ū
羽	Ŗ, ŗ	ए	E, e	ऐ	Ai, ai
ओ	O, o	औ	Au, au	क	K, k
ख	Kh, kh	ग	G, g	घ	Gh, gh
ङ	М, m	च	C, c	छ	Ch, ch
ज	J, j	झ	Jh, jh	ञ	ñ
ਟ	Ţ, ţ	ਰ	Ţh, ţh	ਭ	D, ф
ढ	Дh, ḍh	ण	Ņ, ņ	त	T, t
થ	Th, th	द	D, d	ध	Dh, dh
न	N, n	Ч	P, p	দ	Ph, ph
ब	B, b	भ	Bh, bh	甲	M, m
य	Y, y	₹	R, r	ल	L, l
व	V, v	য	Ś, ś	ष	Ş, ş
स	S, s	ह	H, h		'n
:	ķ	•	ṁ		

Transliteration chart

#### References

- 1. Berendt JE. The world is sound (Nāda Brahma). Rochester (VT): Destiny Books; 1991.
- Burnet J. Greek philosophy: from Thales to Plato. New York: Macmillan & Co. Ltd; 1960.
- Ghosh M, editor. Nāṭyaśāstram (A treatise on ancient Indian dramaturgy and histrionics), Vols. I-II. By Bharata Muni. New Delhi: Chaukhamba Surbharati Prakashan; 2020.
- Jugnū Ś, Dr. Gāndharva Veda. New Delhi: Āryāvartta Sańskrti Saństhān; 2018.
- 5. Lath M. A study of Dattilam: a treatise on the sacred music of ancient India. New Delhi: Impex India; 1997.
- 6. Nijenhuis ET. Dattilam: a compendium of ancient Indian music. Leiden (NL): E.J. Brill; 1970.
- 7. Sarton G. Ancient science through the golden age of Greece. New York: Dover Publications Inc.; 1952.

- 8. Sharma PL. Bṛhaddesī of Śrī Mataṅga Muni. New Delhi: Indira Gandhi National Centre for the Arts in association with Motilal Banarasidass Publishers Pvt. Ltd.; 1998.
- Sharma PL. Indian aesthetics and musicology: the art and science of Indian music. Vol. 1. Varanasi: Āmnāya-Prakāśana, Bharata-Nidhi; 2000.
- Shringy RK, Sharma PL. Samgītaratnākara of Śārngadeva. Vol. 1. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.; 2018.
- 11. Smith DE. History of mathematics. Vol. 1. New York: Dover Publications Inc.; 1958.
- 12. Stevens D, Robertson A. The Pelican history of music. Vol. 1. Harmondsworth (Middlesex): Pelican Books; 1960.
- Swāmi Prajñānānda. A history of Indian music. Vol. 1. Calcutta: Ramkrishna Vedanta Math; 1989.
- Swāmi Prajñānānda. The form and function of music in ancient India. Vol. 1. Calcutta: Ramkrishna Vedanta Math; 1989.

<sup>93</sup> शब्द आकाश सम्भवः । śabda ākāśa sambhavaḥ |

<sup>&</sup>lt;sup>94</sup> प्राण-बायु / *pr*āṇa-vāyu - vital-breath.

<sup>&</sup>lt;sup>95</sup> अग्नि / agni - will power.

<sup>96</sup> It is known as sound.