

Designing a Hypothetical Model of Fourfold Vedic Music Therapy (FVMT) from the *Aśvamedhic Uttaramandrā-Gāthā*

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Abstract

Music, as a therapy, is more than often effectively administered across the globe. Interestingly, the roots of the music therapy are found in the *Uttaramandrā-gāna* or *Gāthā-gāna* which is a part of the *Aśvamedha* rite. In order to perform the *Aśvamedha* rite, the king needs to transfer the authority to a priest for a year. Without his sceptre or the rod of authority, he might undergo psychological stress. During this period, two musicians would pour out self-composed strains of valour to the accompaniment of an arched harp. This would keep the king motivated and confident until the period is over. From that perspective, it can be postulated that *Uttaramandrā* is the basis of Indian music therapy. Since this process helps to evoke positive emotions, we have tried to develop an outline of a fourfold therapeutic model of Indian music therapy for this modern era with a connection to the Vedic lineage with reference to the *rasa* theory of Indian aesthetic, Ayurvedic principles, and ancient accounts of Indian musicology.

Keywords: *Aśvamedha*, *Yajur-Veda*, *Uttaramandrā*, *Gāthā*, *Rasa Theory*, *Ayurveda*, *Abhinavagupta*, *Music Therapy*.

Introduction

There was a quest for distinguishing inherent evidence in the Vedas, which may serve in establishing music as a therapeutic technique. Kallinātha (ca. 1400 AD.) at 1.1.30 in his commentary on *Saṅgītaratnākara* (SR), referred to an excerpt of Vedic prose as evidence that *dharma*, the first object of human pursuit (*puruṣārtha*), could be achieved through music. The line is “*brāhmaṇau vīṇāgāthinau gāyataḥ ... brāhmaṇo'nyo gāyeṭ*” i.e., “two *brāhmaṇas*, who are experts in singing with *vīṇā*, should sing... another *brāhmaṇa* should sing.” Kallinātha says that these words are occurring in *Aśvamedha-prakaraṇa*, i.e., the section on *Aśvamedha*, the rite of horse sacrifice. Accounts of *Aśvamedha* rite are in the *Brāhmaṇa* texts, related to the *Yajur-Vedas*, both black and white. It is found that the quotation by Kallinātha is from a context, called *Uttaramandrā-gāna* or *Gāthā-gāna*.

For one year, when the sacrificial horse is set free to meander, *abrāhmaṇa* and the royal personage, who takes a vow to perform the rite of horse sacrifice, sing self-composed strains. The compositions known as *gāthās* are sung every day in the morning and evening, to be relieved from overpowering ennui and despair triggered by the suspension of opulence and kingship. It is said that a votary of *Aśvamedha* loses his empire and kingship as he has to transfer his power to an *adhvaryu*, a priest. Now it is very enigmatic to think how listening to some particular musical pieces can subdue the sense of loss.

Analyzing the astronomical aspects of *Śatapatha Brāhmaṇa* (SB), Prof. Subhash Kak (2004, pp. 53-55) concludes that the probable time frame of *Aśvamedha* is almost 3rd to 4th millennium BCE. Hence, the analysis of an event of that time is more hypothetical. Still, with the help of established related theories, we get a constructive logic out of it.

We investigated the aspects of the *Gāthā-gāna* event, i.e., the form of music, the importance of particular musicians and their instruments, the timing of renditions philosophically and historically. The history of Indian music and the theories of ancient Indian musicology, viz., the history of *vīṇā*, the concept of *mūrcchanā*, etc., helped us a lot. Indic aesthetic theories and Ayurvedic concepts also play a critical role in decoding the inherent science of that event. In the end, we concluded that the essential purpose of the *Gāthā-gāna* event is to prevent a king's psychological condition with music, which led us to propose an outline of a hypothetical model of Indian music therapy that has an association with the Vedic heritage too.

Essence from two *Brāhmaṇas*

Both in two forms of the *Yajur-Veda*, black (*śukla*) and white (*kṛṣṇa*), ritualistic music of *Aśvamedha* is mentioned. In the *Taittirīya Brāhmaṇa* (TB) of the black *Yajur-Veda*, the topic of this paper is placed in the fourteenth *anuvāka* of the ninth *prapāṭhaka* of the third *kāṇḍa*. In the SB of the white *Yajur-Veda*, the same is in the fifth *brāhmaṇa* of the first *adhyāya* of the thirteenth *kāṇḍa*. As the *Kāṇva* branch of SB has almost the same lines^[1], we shall not mention that. Here is the gist of them.

Taittirīya Brāhmaṇa, 3.9.14

According to the *Aśvamedhic* rules, when a king takes the vow^[2] to perform the same, he is not treated like a king until the completion. He has no right in his realm too.^[3] The kingship is transferred to the *adhvaryu*, one of the priests.^[4] Hence, the king is far from his royal treatment for a year, which indicates that *śrī*, prosperity, is gone off from the king.^[5] In this condition, as the real king regain his *śrī*, which herself (as *śrī* is a noun in the feminine gender) is his kingship and realm, the Veda prescribes to sing songs with *vīṇā*, by one *brāhmaṇa* and one royal personage (*rājanya*, a synonym for *kṣatriya*).^[6]

In *Aśvamedha*, when the sacrificial horse is set free to roam for a year, several daily rituals are ordered to perform. Two of them are *Sāvitrī Iṣṭi* (sacrificial ceremony to the Sun God) and *Sāyaṃdhṛti* (sacrificial ritual of evening time). A *brāhmaṇa* should sing with a *vīṇā* in the morning at the last part of *sāvitrī iṣṭi*, i.e., *sviṣṭakṛt-homa*.^[7] While the *sāyaṃdhṛti*^[8] is performed, a royal personage should sing with a *vīṇā* in the evening. Both have to sing three self-composed songs each, a total of six songs.^[9]

Subjects of songs of a *brāhmaṇa* should be related to *iṣṭāpūrta*, the performance of pious or charitable deeds, by which he endows the king with brāhmaṇic qualities,^[10] and the subject of the royal personage is war, by which he blesses the king to sustain his heroic virtues.^[11]

Śatapatha Brāhmaṇa, 13.1.5

From the narrative aspect, passages of this *Brāhmaṇa* carry the same account as described above. Of these, quite a few points have a particular significance in this paper:

1. Apparently, the form of the songs is known as *Gāthā*.
2. The name of 13.1.5 in SB is itself called *Gāthāgāna* (chapter of *Gāthā* song).
3. Songs should be tuned in *Uttaramandrā mūrchanā*.^[12]
4. The mentioned singers should compose *Gāthās* (a genre of composition) by themselves.^[13]

In this context, it becomes imperative to discuss the concept of the mind and mental health from the Indian perspective.

Indic Perspective of Mind and Mental Health

Fundamentally, since ancient times, Indian physicians have classified diseases into two kinds: *śārīraka* (conditions related to the constitution) and *mānasika* (conditions associated with the psyche). Aggravated *Rajas* (passion) and *Tamas* (inertia/stolidity) are the two fundamental causes of psychological disorders, whereas the qualities of *Sattva* are to bring back homeostasis. As Caraka (Sharma, 2014) says:

vāyuḥ pittaṃ kaphaścoktaḥ śārīro doṣasaṅgrahaḥ |
mānasah punaruddiṣṭo rajaśca tama eva ca^[14]

Vāyu, Pitta, and Kapha are, in short, somatic doṣas, and Rajas and Tamas are the psychic ones (p. 8).

Mental Health was a widely known concept in Ancient India

In the *Āśvamedhika-parvan* of the *Mahābhārata*, Kṛṣṇa observes that Yudhiṣṭhira has become restless, due to mental upheaval. He is in distress for the near extinction of his foes, who were his own kith and kin, including his beloved grandfather Bhīṣma; it further intensifies because of the financial crisis in the realm. In such a depressing state of Yudhiṣṭhira, Kṛṣṇa advises him to curb his feeble impulses and regain his composure. He motivates Yudhiṣṭhira to identify the real antagonists residing in his body:

*naiva te niṣṭhitam karma naiva te śatravo jītāḥ |
katham śatruṃ śarīrastham ātmano nā'vabudhyase? ||^[15]*

“Your job is not yet over. Your foes are yet to be triumphed. How come did not you realize the real enemies dwelling in your mind?”

Then, Kṛṣṇa narrates a story of Vṛtra and Indra related to the context of Yudhiṣṭhira, and metaphorically suggests rooting out the mental problems. In the narrative, Indra rigorously tries to search for Vṛtra in the five gross elements without any fruition, but eventually finds Vṛtra hiding in his own body.

Metaphorically speaking, the demon Vṛtra represents the human mind. Indeed, the actual sentence is *mohah samabhavan-mahān*, i.e., Indra was in a quandary!^[16] Quandary or perplexity (*moha*) is a type of *tamas*,^[17] and *tamas* is said to be one of the root causes of mental disorders. Therefore, it is impossible to realize by the one who is in a perplexed condition due to the influence of *tamas*.

However, all matter that exists in this universe is the product of five gross elements only. It is also established that the mind is a matter in nature. When the mind is perplexed, it fails to trace its inherent root cause; this is when *buddhi* (intellectual faculty)^[18] intervenes and tries to mend the flaw:

*tato vṛtram śarīra-stham jaghāna bharataṣabha |
śatakratur-adṛśyena vajreṇetiha naḥ śrutam ||^[19]*

“O the great among Bharatas, thus we hear in this context: then Indra had killed Vṛtra, who was in his constitution, with his invisible vajra.”

Here the suggestive word *adṛśya*, meaning invisible, is noteworthy. The weapon, invisible *vajra*, using which Indra destroys his enemy, is nothing but *buddhi*. Accordingly, Kṛṣṇa emphatically suggested Yudhiṣṭhira to achieve victory over his mind by employing *buddhi*.^[20]

The relevance of *buddhi* in the medical context

Caraka (4.1.22-23)^[21] defines the role of *buddhi* in his compendium (Sharma, 2014), “The sense-object is received by sense organs along with mind. Then the mind analyses it in forms of merits or demerits and forwards it to *Buddhi* (intellect) which produces decisive knowledge by which one proceeds to speak or to do something with full knowledge (p. 399).” To perceive the exact knowledge and analytical thinking, the purest state of mind, *buddhi* is essential. Hence, Suśruta (3.1.18)^[22] considers *buddhi* to be one of the characteristics of *sattva* quality. He says (Bhishagratna, 1911), “An absence of all killing or hostile propensities, a judicious regimen of diet, forbearance, truthfulness, piety, a belief in God, spiritual knowledge, *intellect*, a good retentive memory, comprehension, and the doing of good deeds irrespective of consequences, are the qualities which grace the mind of a person of a *Sāttvika temperament* (p. 120).” This is a direct indication that *buddhi* as *sattva* can subdue the *rajas* and *tamas*, the causes of mental disorders. In the upcoming sections, this aspect will help us in contextual understanding.

Be it the *Mahābhārata* or ancient Indian medical literature, the importance of mental health has always found prominence.

Analysis of *Gāthā-gāna* from a therapeutic perspective

Integral cause and effect relation of applying music

So far, it is observed that a king who is a votary of *Aśvamedha* is not treated as a king by the Veda as the realm no longer belongs to him during the period of the sacrifice. Hence, such a mental condition of the king demands a thorough study. *Aśvamedha* is an expensive and majestic *yajña* and most kings will not muster the courage to perform. In the words of Prof. Kak (2004):

The Aśvamedha is performed by a consecrated king, who is assisted by his four wives, the Mahiṣī (the senior queen), the Vāvātā (the favorite), the Parivṛktā, and the Pālāgalī. The Mahiṣī is addressed by the Brahmin, the Vāvātā by the Udgātṛ, the Parivṛktā by the Hotṛ, and the Pālāgalī by the kṣattṛ. These four queens are served by hundred daughters each of the rājās, the rājanyas, the sūtas and the grāmaṇīs, and the kṣattṛs and the saṃgrahītṛs, respectively.

Since one would not expect every king, desirous of performing this rite, to have four wives, this number is merely emphasizing the four-fold classification of the world that forms the basis of this rite. This classification indicates that all the classes of subjects are equal participants in it. The description is normative and it is clear that modifications to it could be made (pp. 30-31).

Hence, as a votary of *Aśvamedha*, a king, despite being a man of great prowess and habituated to a grandiloquent ambience, finds himself in an abyss of depression for not having his regular life.

In order to prevent such a mental condition and to bring solace, the Veda refers to singing songs with *vīṇā*, though there exist several other means to boost the morale of the votary.

One may ask if the rendition merely serves entertainment. Scriptures do not validate such a postulation since music as a tool of mere entertainment is prohibited in most of the Hindu texts.^[23] Music is considered a journey from physical consciousness to spiritual consciousness with the objective to reach the ultimate realization.^[24] So, the scope of music does not remain limited to entertainment as people conceive today. Nevertheless, music for entertainment purposes is exaggerated as follows:

*yo vittalobhena sukkena vāpi haṭhena vā gāyati gītāmātram/
sa vartate varṣasahasram īśapurogamaḥ sarvagaṇāgraṇīśaḥ*^[25]

“Even if one who sings for the desire of wealth, or for entertainment itself, one becomes the leader of the leaders of all the divine groups of the great Lord for thousand years.”

In this context, music is preferred to address two basic problems: (i) the temporary absence of kingship and (ii) the temporary suspension of his realm. *Vīṇā* is considered to be the embodiment of prosperity.^[26] When one becomes wealthy, *vīṇā* is played to him.^[27] Hence, listening to *vīṇā*, played by a *brāhmaṇa* and a royal personage, maintains the mental state of the king.

Nonetheless, the cause-and-effect relationship in terms of *vīṇā* playing and subsequent reinstatement of homeostasis is not the purport of the Veda as it has a poetic nature. The engagement ensures that the king remains mentally fit to regain his suspended realm and kingship. So, music ensures his mental fitness and gives him the confidence to realise his ultimate goal (see Figure 1).



Figure 1. Music as a tool to achieve goals

Significance of two singers

Initially, the Veda suggests that two *brāhmaṇa* should sing with *vīṇās* before the king. Immediately it refutes this idea because only *brāhmaṇa* cannot tune according to the mental state of a king since he never prefers the equation of wealth and keeps himself devoted to teaching and devout austerities.^[28]

Thereafter, in this context, the SB suggests that two royal personages should sing with *vīṇās* before the king.^[29]

Wealth is the most important factor for any king.^[30] *Brāhmaṇas*, who are intellectual by nature cannot inspire the proper temperament of the king, but can only guide him in administration. Hence, it is decided that royal personages are suitable in that situation.

Notwithstanding, Veda refutes this statement too. A king should acquire wealth for the welfare of his subjects with the proper guidance from the *brāhmaṇas* who are wise and erudite. A king who is endowed with wisdom, supremacy, and wealth, should become a bridge between the learned and the authority.

In order to reconcile the situation, the Veda finally ordains to employ *abrāhmaṇa* and a *rājanya* who sing with *vīṇās* before a king.^[31]

Gāthā: An Ancient Poetic Genre

The concept of our previous point, i.e., the significance of two singers, makes an idealistic sense rather than a proper practical one. It is to be comprehended here how the singing performances of a *brāhmaṇa* and a *rājanya* help to stabilize a king's mental condition. The point here is that the self-written lyrics by the singers, expressing the qualities of valour and authority resuscitate the confidence levels of the king and hence, his mental condition becomes stable throughout the ritualistic process.

Unequivocally, the Veda dictates that a *brāhmaṇa* should sing the songs related to *iṣṭāpūrta* implying the performance of pious or charitable deeds, and the royal personage should sing the tracks related to battles and advance. While the sacrificial horse unleashed to roam across states, the *brāhmaṇa* and the royal personage would sing three songs each with *vīṇās* in the morning and during the first half of the night, respectively.

The *brāhmaṇa* sings the glories of kings' charity, sacrifices, pious deeds, etc.^[32] The royal personage would sing the glories of the king in such a way that he recalls all his powerful authority and victorious deeds as he will resume the kingship after the *Aśvamedha*'s completion. Since the king is the only saviour and protector of the subjects, he should control his depressing mind with discretion (*buddhi*) to keep himself motivated and focussed.^[33]

It was mentioned that the genre of these songs is *Gāthā*. Etymologically, *Gāthā* means something which is sung.^[34] The word *Gāthā* is generally used in three senses:

1. Name of a metre.^[35]
2. Various independent poetic verses written in *Prākṛta* or in *Apabhraṃśa* languages, for instance, *Gāthā-sattasāi*

(Sanskrit: *Gāthāsaptasatī*), etc.

3. Various independent poetic verses, which form primarily express the sense of:

1. Legendary stories (like kings, a great poet, an author, or an erudite scholar - this form is more relevant to the present context)
2. A universal truth that is originated from one's full wisdom

From the Vedic to the mediaeval period, the form of *gāthā* is significant in terms of its attractive style. For instance, a famous verse in the *Mahābhārata* – ‘*na jātu kāmānām upabhogena*’ etc., has been referred to as *gāthā* in several *Purāṇas*.^[36] It is a *gāthā* that expressed a universal truth blessed upon by King Yayāti as the pearls of wisdom. *Jātaka* stories were also sung in the *gāthā* form. In the *Aṭṭhakathā*, one of the famous commentaries of the *Tipiṭaka*, stories related to *Jātaka Gāthās* were finely expressed.^[37] Not limited to Indian literature, the forms of *gāthā* were popular in the *Avesta*, wherein *gāthā* means a hymn. The *Avesta* accounts for 17 *gāthās* which are believed to be composed by the Zarathustra himself. This collection is also called the *Gāthā*. In the words of Jatindra Mohan Chatterji (1967), “The Gatha is the cream of the Avesta (p. iv).”

However, we can see that the tradition of *gāthā* is old enough, and it has always been connected with music from its etymology. In the context of *Aśvamedha*, *Śatapatha* contains several *gāthās* related to the legends, mostly of the Bharata dynasty, who performed the *Aśvamedha* rite viz. King Bharata, the son of King Duṣyanta and Śakuntalā, King Janamejaya, the son of King Parīkṣit, and others. These *gāthās* are in 13.5.4 of SB, subjects of which are not related to our present contextual *gāthās* as the descriptions are of the concluding ceremony of *Aśvamedha*, not of *Aśvamedhi* preambulatory. In 13.4.4 of SB, there is an account which declares that when the *Aśvamedha* rite comes to a conclusion, which means the king regains his realm and kingship with victory and the main sacrifice ceremony is over, a group of singers sing the king's glory with their *viṇās*. Since this part is not associated with our present context, and there is no example of our present contextual *gāthās*, we shall not go far with it.

Perfection regarding the application

The Veda only says that day is a symbol of *brāhmaṇa* and night is of *kṣatriya*.^[38] Sāyaṇa elaborates on the philosophical aspect behind this:

tatra ujvalatvād agrimabhavatvāt ca brāhmaṇasya rūpam ahaḥ | andhakārāvṛtatvāt corādibhayayuktatvāt ca rakṣāyām adhikṛtasya kṣatrasya svarūpaṃ rātriḥ |

“As the day time is bright and comes first, it reflects *brāhmaṇa*, whereas night is overspread by darkness and there is a fear of bandits and thieves, *kṣatriya* is a symbol of night.”

The Vedic injunction and words of Sāyaṇa indicate the time of singing leads to perfection in its application. Here, the *brāhmaṇa*'s singing of *gāthā* increases the *sāttvikas* quotient, whereas the singings of royal personage evoke the *rājasika* quotient, predominantly.

Having discussed the above, it becomes necessary to state the exact timing of recitals and a subsequent connection with medical aspects of the whole process.

Time of rendering the daily recitals

In *Kātyāyana-śrautasūtra*, five different Vedic rituals must be performed daily in a year!^[39] Out of these five, the *Sāvitrī Iṣṭi* (sacrifice to *savitr*), the *Dhṛti Homa*, and the *Uttaramandrā-gāna* are relevant to the present context. The *sāvitrī iṣṭi* is performed thrice in a day – in the morning, at noon, and in the afternoon as elaborated in 3.8.12 of SB (in ed. Upadhyaya, 1970). Sāyaṇa makes it clear that the *sviṣṭakṛt* sacrifice, related to the *sāvitrī iṣṭi*, a *brāhmaṇa* should render the *gāthās*.^[40] *Sviṣṭakṛt* sacrifice is a generic term for a sacrifice that is meant to worship *Agni* at the end of any important sacrifice. In other words, three *sviṣṭakṛts* related to three *sāvitrī iṣṭis* should be performed in day time only. As it is understood that the *brāhmaṇa*'s renditions should occur in the daytime only, but it is not clear whether it is morning, noon, or afternoon. To solve this, we could take resort to a popular *Mīmāṃsā* maxim, '*prathamātikrame mānābhāvaḥ/kāraṇābhāvaḥ*' i.e., there is no cause to skip the first. Hence, the rendition should take place in the morning.

From the 3.8.12 of TB, it becomes clear that *dhṛti homa* has to be performed in the evening. Sāyaṇa clarifies that the rendition of a royal personage should occur, during *sāyaṃdhṛti* ritualistic performance.^[41]

According to Ayurveda, day and night have a clear impact on human constitution. The impact of the rendition of music on one's psyche could be connected with the medical principle. But, the music of *Aśvamedha* needs to be discussed first.

Uttaramandrā-gāna: Music Unheard

There are seven standard/pure notes, aka *śuddha svaras* on the ancient 22 *śruti*-scale: 1. *Ṣaḍja* (Sa), 2. *Ṛṣabha* (Ri), 3. *Gāndhāra* (Ga), 4. *Madhyama* (Ma), 5. *Pañcama* (Pa), 6. *Dhaivata* (Dha), and 7. *Niṣāda* (Ni) (See Figure 2).^[42]

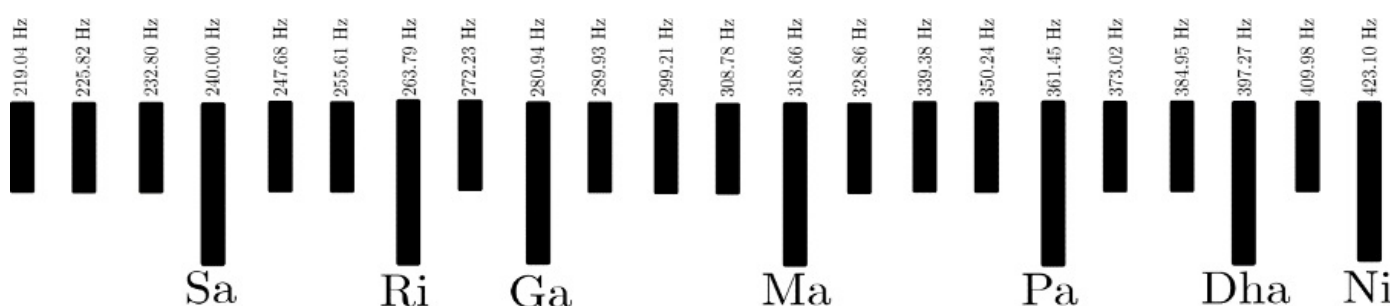


Figure 2. Seven pure notes on 22 Śruti-scale of Saḍja-grāma. The frequency values of śrutis are based on the research of Prof. Vinod Vidwans.

Figure 2. Seven pure notes on 22 shruti-scale of ṣaḍja-grāma. The frequency values of shrutis are based on the research of Prof. Vinod Vaidyan (2016, pp. 93-106)

With these seven standard notes, the basic scale of ancient Indian music is created, known as ṣaḍja-grāma.^[43]

According to ancient Indian musical texts, *Uttaramandrā* is the first *mūrcchanā* of ṣaḍja-grāma. It has seven *mūrcchanās*: (1) *Uttaramandrā*, (2) *Rajanī*, (3) *Uttarāyatā*, (4) *Śuddhaṣaḍjā*, (5) *Matsarīkṛtā*, (6) *Aśvagrāntā*, and (7) *Abhirudgatā* (see Figure 3).^[44]

R. K. Shringy aptly described the concept of *mūrcchanā* in his note on SR 1.4.9 (trans. 1978, p. 167-168):

The concept of mūrcchanā is quite important in this system of music, and should therefore be understood quite adequately.

The word 'mūrcchanā' is derived by Mataṅga from the Sanskrit root 'mūrcch' – to faint or to increase. Thus he defined mūrcchanā as: "mūrcchyate yena rāgo hi mūrcchanā ityabhisāñjñitā" i.e., "That by which the rāga develop is called mūrcchanā." Basically, it is the movement, ascending as well as descending of the seven notes which is called mūrcchanā in the text. However, 'S^[45] quoting Mataṅga in his support makes it clear that it is in fact the seven notes arranged in regular order of ascent and descent which stand to be called mūrcchanā i.e., in other words, the action of ascent and descent, that is, the tonal movement is not to be called mūrcchanā, as it is said by Mataṅga:

"The unite of seven notes in regular order of ascent and descent is known to be the referent of the word mūrcchanā by the experts of the subject."

Having known the above, it becomes contextual to quote the perfect meaning of *mūrcchanā* that was nicely defined by Nānyabhūpāla (ca. 900 AD.)^[46] –

tatra yena eva svareṇa tu ucchrāyaḥ gītānām ugrāhaḥ pravartate, tenaiva svareṇa yadā apohaḥ samāptiḥ api bhavati, tadā sa-ri-ga-ma-pa-dha-ni-sa iti svarasanniveśe sati| evaṃ niṣāda-svareṇaiva udgrāhasamāptau kṛtāyām ni-sa-ri-ga-ma-pa-dha-nīti sanniveśe| tathā dha-ni-sa-ri-ga-ma-pa-dha iti, pa-dha-ni-sa-ri-ga-ma-pa iti, ma-pa-dha-ni-sa-ri-ga-ma iti, ga-ma-pa-dha-ni-sa-ri-ga iti, ri-ga-ma-pa-dha-ni-sa-ri iti sanniveśe kramādetāḥ ṣaḍjagrāmikāḥ sapta mūrcchanā jāyante Mūrcchanāḥ jāyante|

Mūrcchanā happens when from one svara (musical note) ascending (ucchrāya/ugrāha) starts (also in the case of musical rendition), and it stops (apoha/samāpti) at the same note (in the case of musical rendition too). For instance, (from ṣaḍja) if the arrangement of notes is like sa-ri-ga-ma-pa-dha-ni-(sa), (from niṣāda) ni-sa-ri-ga-ma-pa-dha-(ni), (from dhaivata) dha-ni-sa-ri-ga-ma-pa-(dha), (from pañcama) pa-dha-ni-sa-ri-ga-ma-(pa), (from

madhyama) *ma-pa-dha-ni-sa-ri-ga-(ma)*, (from *gāndhāra*) *ga-ma-pa-dha-ni-sa-ri-(ga)*, and (from *ṛṣabha*) *ri-ga-ma-pa-dha-ni-sa-(ri)*, – these are called the seven *mūrcchanās* of *ṣaḍja-grāma*.

Though the descent of notes is not observed in the words of Nānyabhūpāla, the seriatim movement from each note with the other six notes are there, which is the heart of constructing a *mūrcchanā* (see Figure 3). In the present context, the word *Uttaramandrā-gāna* is related to *Uttaramandrā* in which the *gāthās* are sung.

	note	with next 6 notes ascent→					
<i>Uttaramandrā</i>	Sa	Ri	Ga	Ma	Pa	Dha	Ni
<i>Rajanī</i>	Ni	Sa	Ri	Ga	Ma	Pa	Dha
<i>Uttarāyatā</i>	Dha	Ni	Sa	Ri	Ga	Ma	Pa
<i>Śuddhaṣaḍjā</i>	Pa	Dha	Ni	Sa	Ri	Ga	Ma
<i>Matsarīkṛtā</i>	Ma	Pa	Dha	Ni	Sa	Ri	Ga
<i>Aśvagrāntā</i>	Ga	Ma	Pa	Dha	Ni	Sa	Ri
<i>Abhirudgatā</i>	Ri	Ga	Ma	Pa	Dha	Ni	Sa

Figure 3. *Ṣaḍja-grāma's mūrcchanās and their names*

In *Abhinavabhāratī*, the renowned commentary on *Nāṭyaśāstra* (NS), the able commentator Abhinavagupta (ca. 940-1015 AD.) states that *mūrcchanās* are unlike *jātis* which have a performance component related to *Gāndharva* form of music.^[47] *Gāndharva* tradition has been lost for thousands of years. Hence, one can only hypothetically identify *jātis*:

mūrcchanāḥ tāvat jājjati-(jāti?)-grahabhāṣāvat na prayogopayoginyah^[48]

“Like *jāti*, *graha* and *bhāṣā*, *mūrcchanās* cannot not be performed.”

mūrcchanānām yadyapi iha āgame nāsti upayogaḥ, tathāpi dr̥ṣṭasāmakriyāyām vā sphuṭa eva upayogaḥ^[49]

“Though in the present digest (NS) and its usability, there is no practical use of *mūrcchanās*, they are performed in the *Sāma* Veda rendition, as is seen.”

From these historical viewpoints, the following are the problems and possible solutions to analyse the present context:

1. We are dealing with a form of music that is quite ancient. Even in the tradition of NS, no textual evidence is found for *mūrcchanā* to be a tool of rendition.

2. In spite of Abhinavagupta's mention of the performance of *mūrcchanās* in the context of the *Sāma Veda*, no clear textual evidence is found about its rendition till now. Interestingly, he refers to a *purāṇic* verse that means, "Three *gāthās* with *uttaramandrā*"^[50], which could be hardly tressed in the *purāṇas*.
3. Though the *Gāndharva* and *Deśī* forms are derived from the *Sāma Veda*, it is most likely implied that the theory of Indian music has its roots in the foundational concepts of NS.

Before we go to discuss the *uttaramandrā*, let us give a brief note on the arched harp of ancient India, called *vīṇā*.

A Brief Note on Vīṇā: Arched Harp of Ancient India

Historically, from time immemorial, the musical instrument *vīṇā* has been misinterpreted only as a lute. Ananda Coomaraswamy (1930) was probably the first scholar who identified *vīṇā* to be some type of arched harp^[51] With a minute observation in the *Suttapiṭaka*, which is a part of the *Tipiṭaka*, explicit mentions seven-stringed *vīṇā* (Pāli: *Sttatanti*; Sanskrit: *Saptatantrī*; which is related to the *Citrā vīṇā*^[52]) that is tuned in good *mūrcchanā* in the context of the *Guttila Jātaka* story (the location is previously mentioned). Harp is the only possible instrument in which each string could be adjusted in a particular note, with no exception to tuning the *mūrcchanās*. From the above, it can be inferred that the rendition of *gāthās* along with a *vīṇā* in *Aśvamedha* is a good indication of arched harps' usage while referring to an exact *mūrcchanā*, *Uttaramandrā*.^[53]

Rasa Evocation from Uttaramandrā: Its Psycho-cognitive Effect

In Indian music, from the ancient time till now, the theory of *vādin* (sonant), *saṃvādin* (consonant), *vivādin* (dissonant), and *anuvādin* (assonant) is much significant. Fundamentally, a specific scale of rendition can be a heptatonic, hexatonic, pentatonic, or mixed in nature, and obviously with a *vādin*, and a *saṃvādin* note. For instance, in *Darbārī rāga*, 'Ri' is *vādin*, and 'Pa' is *saṃvādin*. In this *rāga* the most predominant note that occurs is 'Ri', and its corresponding *saṃvādin* note is 'Pa'. It means that a sonant note is the dominant one or the king note of that particular rendition. A consonant note is like a minister who follows the kinglike dominant note.^[54] Though this practice is not very strict nowadays, musicians followed these characteristics thoroughly in the ancient music system. If we observe the notation of *Ṣāḍjī* and *Āṛṣabhī jāti* in SR, we will find that 'Sa' occurs 37 times as a *vādin* note in *Ṣāḍjī*, and in *Āṛṣabhī*, 'Ri' comes 29 times as a *vādin* note, which is more than any other notes.^[55]

Bharata says two notes with a difference of 9 or 13 *śrutis*, become *saṃvādins* with each other.^[56] For instance, if 'Sa' is *vādin*, then 'Ma' is one *saṃvādin* as the distance of *śrutis* is nine between them, and 'Pa' is the other *saṃvādin* of 'Sa' as the distance is 13 in the scale (see Figure 2). When two notes are placed between 2 *śrutis*, they are called *vivādins*, 'Ri' and 'Ga' for instance (see Figure 2). When *vādin*, *saṃvādin*, and *vivādin* are fixed, all remaining notes are called *anuvādins*. Now the question is how we can decide the *vādin* note in our present framework. According to Bharata, *vādin* note is common to the starting (*graha*), the resting (*apanyāsa*), or the ending (*nyāsa*) note of a rendition in general.^[57]

In this context, it is observed that *Uttaramandrā mūrcchanā* starts with 'Sa' and it does mean that the *vādin* as the

dominant note in the rendition of *gāthās* should be ‘Sa’ only.

In the 29th chapter of NS, Bharata says that the *vādin* is the cause of *rasa* evocation in any rendition. For instance, in *Śāḍjī*, ‘Sa’ being a *vādin* evokes *rasas* such as *vīra* (heroic), *adbhuta* (marvellous), or *raudra* (furious). A verse in NS is given below as an example of the heroic sentiment rendered in *Śāḍjī*:

*śāḍjī tvath-ārṣabhī caiva sva-svarāṁśa-parigrahāt/
vīra-raudrādbhuteṣvete prayojye gāna-yoktṛbhiḥ*||^[58]

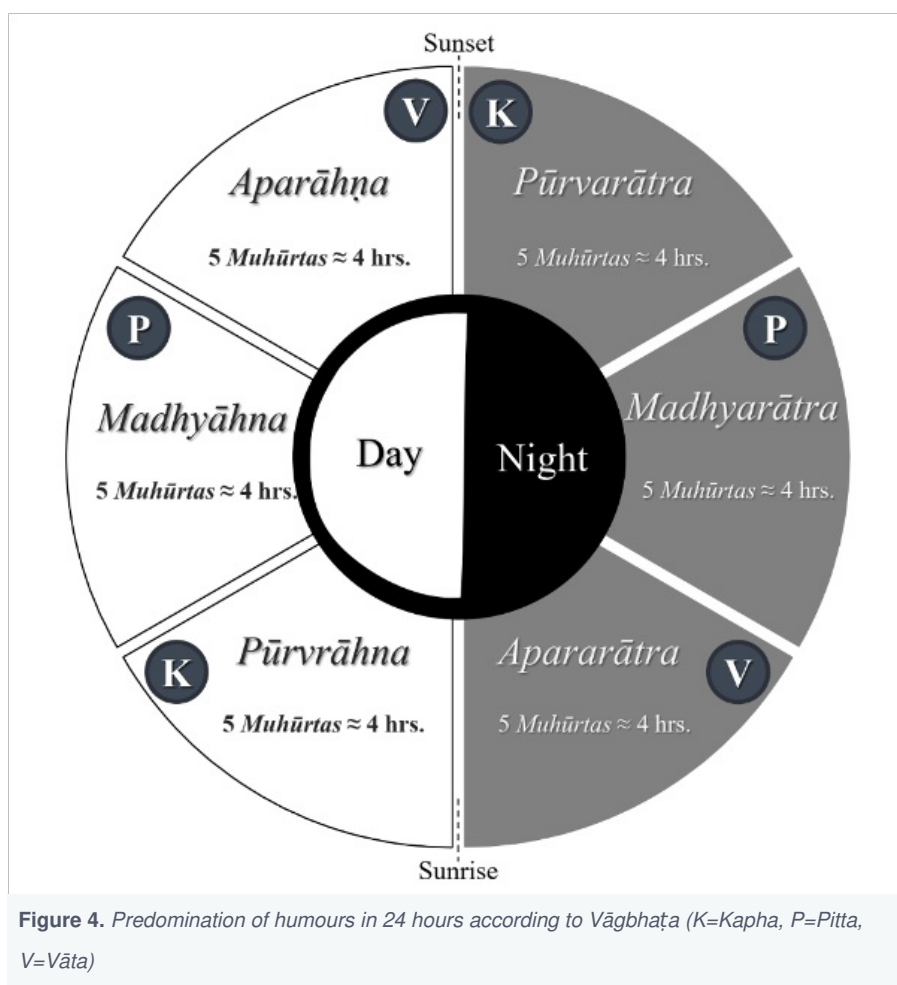
“*Śāḍjī* and *Ārṣabhī*, both are named after the *āṁśa* note (*vādin*). Hence, singers should use these for the manifestation of *rasas* like *vīra*, *adbhuta*, and *raudra*.”

In the present *Aśvamedha* context, *gāthās* should be composed conveying the *vīra rasa*. Here, one may ask, how a *brāhmaṇa*, unlike a royal personage, could compose *gāthās* that evoked *vīra rasa*. Here, we need to understand that the *rasas* are the effect of some stable emotions known as *sthāyī-bhāvas*. For instance, *rati*, love, is a stable emotion in all human beings. Aesthetically it is experienced as erotic emotion, *śṛṅgāra rasa* is evoked by artistic or poetic works. Due to the stability in feelings, *rasas* could be experienced. For *vīra rasa*, energy, i.e., *utsāha*, is the stable emotion. Thus, a composition that is coupled with energy would produce *vīra rasa*. Earlier, it was already explained that the content of the *gāthās* of *brāhmaṇa*, consisted of courageous words to glorify the good deeds of a king to inspire him to get the *vīra rasa*.

Medical aspect of the timing of rendition

Everything that exists in this world is made of five gross elements, known as *pañca mahābhūtas*.^[59] These elements are represented by the three somatic humors, known as *tridoṣas*. Every human constitution may either belong to *vāta* or *pitta* or *kapha* phenotypes, conceptually known as *tridoṣas*. *Vāta* (air) is the combination of the space and air elements, *pitta* (bile) is the combination of fire and water, and *kapha* (phlegm) is the combination of the water and earth elements (Lad, 1985, pp. 29-35). These *tridoṣas* are *dhātus* in a state of equilibrium and *doṣas* in a state of aggravation.^[60]

According to Ayurvedic principles, predomination of *doṣas* is seen during the day and night times.^[61] Suppose, we divide both day (*ahan*, in compound *ahna*) and night (*rātra*) into three parts, i.e., first (*pūrva*) of a day/night (*pūrvāhna/pūrvārātra*), middle (*madhya*) of a day/night (*madhyāhna/madhyārātra*), and end (*apara*) of a day/night (*aparāhṇa/aparārātra*), *kapha*, *pitta*, and *vāta* occupy the time periods respectively (see Figure 4). A day is of 15 *muhūrtas* and so a night too. A *muhūrta* is set to be 48 minutes approximately (Gupta, 2010, p. 5). Hence, the first half of a day means approximately 4 hours, i.e., five *muhūrtas* from sunrise and so on. The same is applicable to the night periods, and calculation should begin from the time of sunset. Therefore, the time of renditions of *gāthās* twice a day would fall in the *kapha* predominant time, i.e., first parts of day and night.



A king, who is *rājasika* in nature and endowed with qualities like heroism, boldness etc.,^[62] would never allow the aggravation or the depletion of *kapha* that would affect his *rājasika* nature. In case of aggravation, it would create health problems such as excessive weight, weak bones, etc. (Lad, 1985, p. 33-35). Furthermore, *kapha* which is inherent with *tamas*, may cause the king to experience mental distress. The king's natural quality, *rajas*, is connected to *vāta* and *pitta* (Sastri, 2009, p. 37). In order to prevent the *kapha* aggravation, one has to balance the *vāta* or *pitta*. Interestingly, *sattva* and *rajas* are connected with *pitta*. Accordingly, the king should be facilitated to listen to the songs centering around the theme of his good deeds, sung by a *brahmaṇa*, and the songs glorifying his valour sung by a *rājanya*.

Gāthās sung by a *brāhmaṇa* predominantly focuses on *sattva* quality, but not without evoking the quality of *rajas*. The songs of a royal personage primarily promote only *rajas*. So, in such a condition, one may ask how *rajas* as a *doṣa* of mind can protect one's mental health. According to the *rasa* theory, unless the *sattva* is invoked, no *rasa* could be manifested.^[63] Hence, in this context, *rajas* is dependent on *sattva*.

Can we implement it in the present?

Neither we are in support of the *Aśvamedha* sacrifice, nor against it. But we undoubtedly benefited from the information related to the *gāthā-gāna* in *uttaramandrā* that could be established as the basis of the music therapy considering the musicological, aesthetic, and Ayurvedic parameters. Inherent potential found in *gāthā-gāna* in *uttaramandrā* leads us to model a holistic approach to Indian music therapy rooted in the Vedic heritage. The crux of this whole discussion is about the mental health of an individual who comes out of his/her daily routine (See Figure 5).

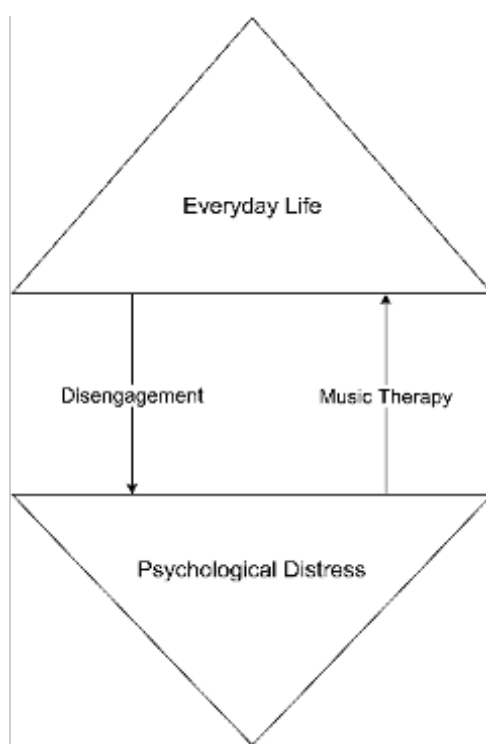


Figure 5. Music as a therapy implied in Vedic Wisdom

This ancient Vedic model of music therapy is safe and non-invasive in the entire process explained. An individual's daily life activity must at least benefit him/her if not the society.

Out of the identified and discussed Vedic wisdom (see Figure 5), we suggest a hypothetical model (see Figure 6) of Fourfold Vedic Music Therapy (FVMT) as follows:

1. **Identification:** The first step is to identify the predominant somatic humour of the subject/s. This step would help a researcher/therapist to select the suitable scale which should have a connection with the somatic humour, as seen in the present *gāthā-gāna* context. If somatic humour correlated as *dhātu* rather than *doṣa* then the advice is to take care of it (in the case of a king). Otherwise, it is advised to cure the *doṣa*.^[64]

2. **Composition:** It means music composition is devoid of lyrics and percussion instruments. From the therapy part, we exclude lyrics because *gāthā*-like eulogistic compositions in this era have little or no impact. We exclude percussion since it is not at all relevant in the present context. Pure music is the fundamental approach to making an impact on one's psyche, adding percussion instruments to the therapeutic model would invite a total distraction. As part of the 'care' approach, the dominant note, *vādin*, should be chosen according to *doṣa* predominance and connected to an aesthetic emotion and as part of the 'cure' approach, the dominant note, *vādin*, should be chosen in accordance with *doṣa* aggravation and be connected to an aesthetic emotion.
3. **Execution:** Compositions should be executed with the help of well-versed musicians. Without their involvement, the practical application will not fetch the result as it is linked to the evocation of aesthetic emotions. A rendition that is not aesthetically executed cannot accomplish the desired objective.
4. **Effect:** The practical application rests on the choice of perfect timing and place in relation to aesthetic emotions and the predominance of the bodily humour.

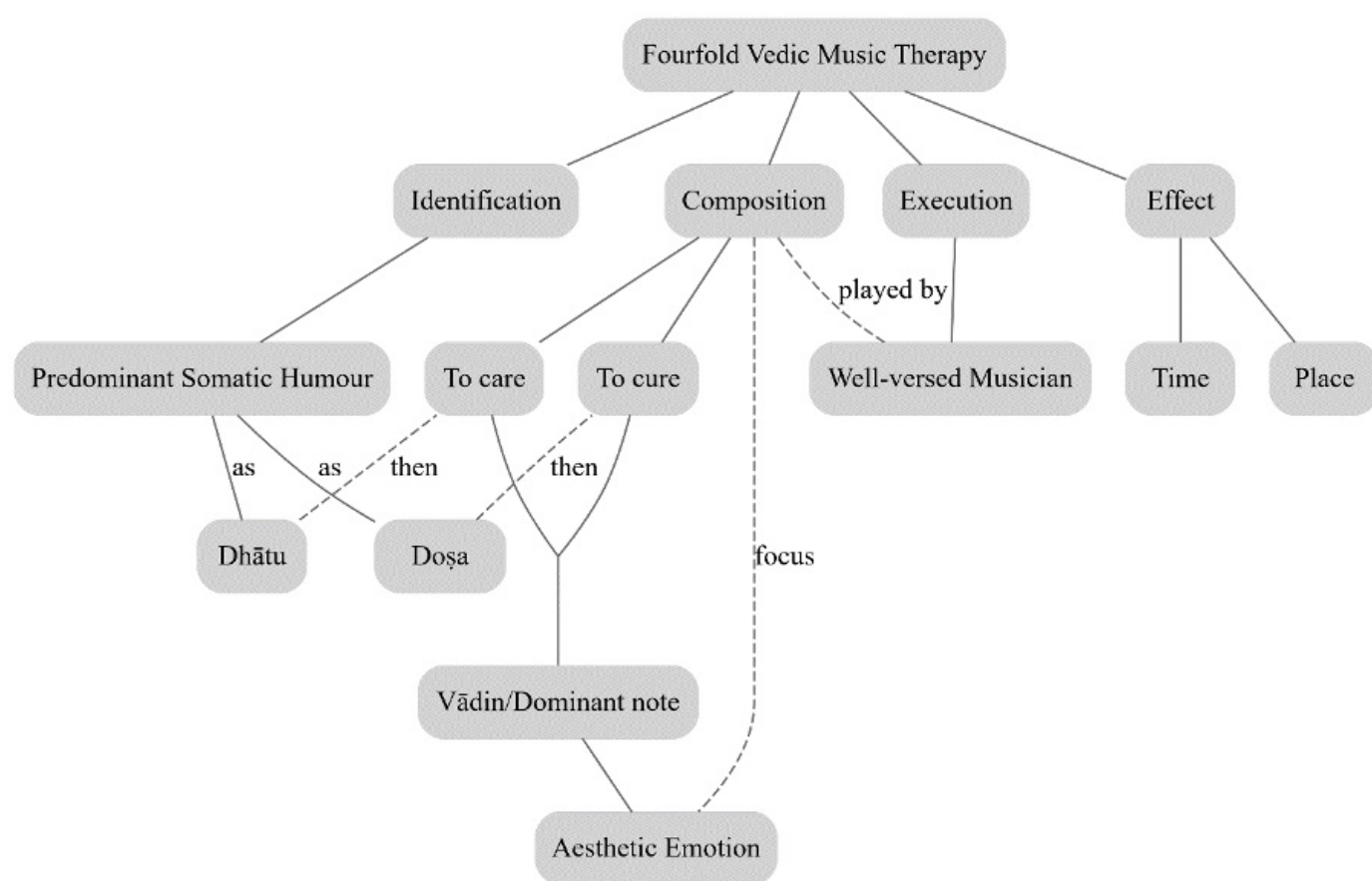


Figure 6. An Outline of the FVMT model

Music therapy has its impact based on cultural and social standards (WFMT, 2011), the two most important factors. Therefore, the FVMT model proposed here bears a holistic approach exclusive to the Indian subcontinent. In terms of the modern music therapy, the proposed model belongs to the *receptive* method. However, this approach needs further discussion.

Conclusion

Of late, because of the COVID-19 situation, people have faced the compulsion to move away from their regular regimen. Due to this, people were reportedly under stress during the forced lockdown period (Xiong et al., 2020; Anand et al., 2021; Oppenauer et al., 2021). Psychological distress was also developed due to social distancing, that even led to reported deaths (Kim & Jung, 2021). Disengagement from the daily routine is the root cause of these disastrous consequences.

Besides situations like the current pandemic, problems encountered by adolescents are equally important. Unmonitored adolescence could increase the risk of sexual harassment, unhealthy family bonds, and criminal activities, which would lead to an unhealthy society. One's manifestation mostly depends on this stage only (Sawyer et al., 2012). Therefore, there is a greater scope to imply the FVMT model pragmatically.

In this paper, the analysis of the *Uttaramandrā-gāna* of *Aśvamedha* reveals that the ritual is basically a therapeutic approach of music, and the deduced inner science of music as a therapeutic technique, with the help of *mūrcchanā* concept, *Rasa* theory, *tridoṣa* theory etc., paves the way in developing the FVMT model.

There is a vast scope for explaining the FVMT model pragmatically. Though the dominant *orvādin* note is a key to identifying the aesthetic emotion of music, it also demands an extensive study to explore the exact logic of the evocation of *rasas* from pure Indian music. Factors that evoke *rasas* are well discussed in the doctrine of poetics and dramaturgy, but there remains a lot to explain in the context of pure music.

Ethical Statements

Conflict of Interest: Hereby it is declared that there is no conflict of interest.

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Data Availability: The research data is accessible under the Data Availability statement.

Footnotes

[1] See *Kāṇva Śatapatha Brāhmaṇa*, 15.1.5

[2] It must be understood that the main ritual of *Aśvamedha* happens if the ritualistic horse comes back within one year. For this one year, a king must take *Niyama*, a vow, where he should declare that he would perform the *Aśvamedha*. Initiation, *Dikṣā*, for the main ritual happens after one year if the horse comes. This is the difference here between an

initiated king and a king with a vow, a votary.

[3] See TB, 3.9.14.1 (in ed. Godbole, 1898)

[4] See *Vedārthaprakāśa*, commentary on TB by Sāyaṇa, p.1286 (in ed. Godbole, 1898)

[5] *ibid* p. 1285 (in ed. Godbole, 1898)

[6] See TB, 3.9.14.2 (in ed. Godbole, 1898)

[7] See *Vedārthaprakāśa* of Sāyaṇācārya p.1287 (in ed. Godbole, 1898)

[8] *ibid*

[9] See TB, 3.9.14.4 (in ed. Godbole, 1898)

[10] See TB, 3.9.14.4 (in ed. Godbole, 1898)

[11] *ibid*

[12] See SB, 13.4.2.8 (in ed. Upadhyaya, 1970)

[13] *ibid*

[14] See *Caraka Saṃhitā*, 1.1.57

[15] See *Mahābhārata*, 14.11.5 (2072 Saṃvat)

[16] See *Mahābhārata*, 14.11.18 (2072 Saṃvat)

[17] See *Suśruta Saṃhitā*, 3.1.18 (with the commentary of Ḍalhaṇa) [here the word *viśāditva* is synonymous with *mūḍhatā* (word from same verbal root \sqrt{muh}), perplexity, according to Ḍalhaṇa, author of celebrated *Nibandha-saṅgraha* commentary of *Suśruta Saṃhitā*.]

[18] Knowledge of a subject evokes thus: a matter connects with its sense, sense connects to mind, the mind connects to *ātman*. *Buddhi*, exquisitely, is defined as *nīścayātmakāntaḥ-karaṇa-vṛtti*, a power/force of mind which leads us to gain accurate (*nīścaya*) understanding. Hence, if the *buddhi* factor is absent accurate understanding could not be happened.

[19] *Mahābhārata*, 14.11.19 (2072 Saṃvat)

[20] *Ibid*, 14.12.11-14

[21] *indriyeṇendriyārtho hi samanaskena grhyate| kalpyate manasā tūrdhvaṃ guṇato doṣato'thavā|| jāyate viśaye tatra yā buddhirnīścayātmikā| vyavasyati tayā vaktuṃ kartuṃ vā buddhipūrvakam||*

[22] *sāttvikāstu ānṛśaṃsyam saṃvibhāgarucitā titikṣā satyam dharma āstikyam jñānam|buddhirmedhā smṛtirdhṛtiranabhiśaṅgaśca*

[23] Music as an activity, influenced by the desires born out of *rajas* cannot help us to establish music as a therapy. It is considered as one of the ten *kāmaja-vyasanās* i.e., addictions ('vices' as translated by Manmatha Nath Dutt, 1909, p. 227) that originate from desire; see *Manusmṛti*, 7.47. In *Bhagavadgītā*, 3.37 (trans. 2018), Bhagavān says to Arjuna, "This desire, this anger, born of the quality of *rajas*, is a great devourer, a great sinner. Know this to be the enemy here." As we saw that mental health is related to the stability of *sattva*, music in relation to *rajas* could not fulfil the goal here.

[24] For details see verses 163cd-168ab of the 2nd section and verses 1-6 of the 3rd section of the 1st chapter of SR with the translation and notes of R. K. Shringy (1978).

[25] See *Pañcamasārasaṃhitā*, 2.3 (Singh, 1984, p. 5)

[26] *śriyā vā etad rūpam| yad vīṇā|* TB, 3.9.14.1 (in ed. Godbole, 1898) on which Sāyaṇa comments *vīṇā hi śriyaḥ svarūpam – a vīṇā is indeed an embodiment of prosperity*.

[27] This line is based on the statement of Sāyaṇa which convey the idea of how *avīṇā* could be an embodiment of prosperity: *Vīṇāyāḥ śrīrūpatvaṃ loke prasiddham. Daridro'pi yadā śriyaṃ prāpnoti tadānīm asya sukhārthaṃ gāyakair vīṇā vādyate. – It is a well-known fact that vīṇā is an embodiment of prosperity. When a poor becomes rich, musicians play vīṇā to please him (as he is prosperous now).*

[28] It is notable that, here, the term *Brāhmaṇa* is used ideally. A group of qualities naturally exist in human beings. Based on those one becomes *brāhmaṇa* or *kṣatriya* or others. *Brāhmaṇic* qualities as stated in *Bhagavadgītā* 18.42 (trans. 2018), “The natural duties of the *brāhmaṇas* are the control of the internal and external organs, austerity, purity, forgiveness, straightforwardness, knowledge as also wisdom [Knowledge refers to the understanding of subjects presented by the scriptures; wisdom means making them matters of one's own experience.] and faith.” This is why Sāyaṇa says in his commentary, *Brāhmaṇo hi tapaḥsvādhyāyādaṃ pravṛttaḥ śriyaṃ pālayituṃ na kṣamate – a brāhmaṇa is indeed inadequate to maintain prosperity as he uses to be busy with austerity, self-study etc.*

[29] See SB, 13.1.5.3 [*yadubhau rājanyau* etc.] (in ed. Upadhyaya, 1970)

[30] As Kauṭilya (1992) says, “In the happiness of his subjects lies his happiness; in their welfare his welfare. He shall not consider as good only that which pleases him but treat as beneficial to him whatever pleases his subjects. Hence the king shall be ever active in the management of the economy. The root of wealth is [economic] activity and lack of it [brings] material distress (p. 149).” (1.9.34-35)

[31] See SB, 13.1.5.4 [*brāhmaṇo'nyo gāyati rājanyo'nyaḥ* etc.] (in ed. Upadhyaya, 1970)

[32] See SB, 13.1.5.6 (in ed. Upadhyaya, 1970). Lines go thus, *ayajatetyadadāditi brāhmaṇo gāyati*, i.e., “He performed such and such sacrifices, such and such he gave etc.”

[33] *ibid*

[34] \sqrt{gai} (to sing) + *sthan* = *Gāthā*. *Sthan* is a suffix which transforms a verbal root into nominal form. This is an *uṇādi* suffix and the rule is *uṣi-kuṣi-gārtibhyaḥ sthan* (see *sūtra* number 2.4 of T. R. Chintamani ed., 1992, p. 59). In the commentary of this aphorism Śvetavanavāsin says, *gīyate iti gāthā kāvyaprabandhaḥ – which is to be sung is called gāthā, stands for poetic composition.*

[35] For more details see the *Gāthāprakaraṇa* (Section on *Gāthā*) in the commentary on *Vṛttaratnākara*, 5.12 (ed. K. Śarmā, 1962, p. 140 & pp. 145-147) by Nārāyaṇa Bhaṭṭa (ca. 1545)

[36] See *Brahmāṇa-purāṇa*, 2.68.96-97; *Liṅga-purāṇa*, 1.67.15-17; *Brahma-purāṇa*, 12.39-40 (in GREIL database, 2020)

[37] For instance, *Guttila* (Sanskrit: *Gupṭila*, name of a *vīṇā* maestro, a previous birth of Bodhisattva) *Jātaka* in *Tipiṭaka* is of two verses [this is the 3rd *Jātaka* of 9th *Vagga* (*upāhanavagga*) of 2nd *Nikāya* (*dukanikāya*) of 1st *Jātakapāli* of *Khuddanikāya* of *Suttapiṭaka*]. *Aṭṭhakathā* elaborates the whole story of Guttila based on those and in middle of the story it recalls the first verse, *sattatantiṃ sumadhuraṃ* etc. as “... *vatvā paḍhamam gātham āha – sattatantiṃ ...*”

[38] See TB, 3.9.14.3 (in ed. Upadhyaya, 1970) [*divā brāhmaṇo gāyet/ naktam rājanyaḥ/ brāhmaṇo vai rūpaṃ aha/ kṣatrasya rātriḥ/ (Brāhmaṇa should sing in day time and royal personage at night. Brāhmaṇa is an embodiment of day. The night is of kṣatra (another synonym for royal personage).]*

[39] See *Kātyāyana-śrautasūtra*, 20.3.5 (in ed. D. P. Miśra, 2015) [*vāvātāsaṃ veśana-sāvītry-uttaramandrāgāna-pariplava-dhṛtiḥ saṃvatsaram*]

[40] See the commentary of Sāyaṇa on TB, 3.9.14.3 (in ed. Godbole, 1898, p. 1287)

- [41] See the commentary of Sāyaṇa on TB, 3.9.14.3 (in ed. Godbole, 1898, p. 1287)
- [42] See Śārṅgadeva, trans. 1978, pp. 130-146 to understand the standard and modified/non-pure notes on the ancient system of 22 *śruti*-scale.
- [43] The natural ordered scale with standard/pure notes is called *Ṣaḍja-grāma*. Suppose, *svaras* are like living beings and they live in a village, *grāma*. On the other hand, there is another *grāma*, which has some modified/non-pure notes, is called *Madhyama-grāma*. See SR 1.4.1-3ab (trans. 1978, pp. 160-163).
- [44] See *Nāṭyaśāstra*, 28.27-28; also see SR 1.4.12-15 (trans. 1978, pp. 169-172)
- [45] This initial is used by Shringy for 'Siṃhabhūpāla', one of the famous commentators of SR.
- [46] See *Bharata-bhāṣya*, 4.46-47 (in ed. C. P. Desai, 1961)
- [47] *Gāndharva* was also called *Mārga*. See Tarlekar, 1991; also see *Bṛhaddeśī*, 1.1.14-16 (trans. 1992, pp. 4-7)
- [48] In the commentary of NS, *Abhinavabhāratī*, Chap. 28, p. 29
- [49] Ibid, p. 30
- [50] *uttaramandrayā tisro gāthāḥ*, ibid
- [51] Also see Becker, 1967; Knight, 1985; Zin, 2004
- [52] See NS, 29.118 and 34.14
- [53] It is to be noted that Nānyabhūpāla (in ed. C. P. Desai, 1961) in 1.84 of *Bharatabhāṣya* mentions that *vīṇā* is of three in kind: *Vakrā* (bent/arched), *Kaurmī* (of tortoise) and *Alābū* (of gourd). The first one i.e. *vakrā vīṇa* is arched harp as we can find that in the verities of that, given by him, are *vipañcī*, *citrā*, and *mattakokilā* which are also mentioned in NS (29.118 and 34.14) and by Abhinavagupta in his commentary of NS, 28.4. Though the name *mattakokilā* is not properly mentioned in NS, according to Abhinavagupta the term *vaiṇika* (maestro of *vīṇā*) is specifically for him who plays *mattakokilā*, he mentions that *vipañcī* is *apūrṇatantrikā* i.e., which is deficient regarding its strings, but which is *vīṇa* is with 21 strings (only where 7 standard notes in all upper, middle and lower octave could be found) and complete in nature (*vīṇā tu ekaviṃśatitantrikā*). In the commentary of 29.112 of NS, Abhinavagupta specifically mentions that *mattakokilā* is the primary *vīṇā* because *mattakokilā* is only able to express all notes in lower, middle and upper octaves (*tatra mattakokilā pradhānabhūta | ekaviṃśatitantrikatvena anyūnādhikam tristhānasvarasāraṇājātigativīṇāśarīram ucyate*). Hence it makes clear the reason why a player of *vipañcī* is called *vaipañcika*, while *vaiṇika* i.e., maestro of *vīṇā* is referred to as a player of *mattakokilā*. It elucidates that the main *vīṇa* of NS is *mattakokilā* itself and the explanations of 22 *śrutis* and others are based on that only.
- [54] See SR, 1.3.50 (trans. 1978, p. 149)
- [55] See Śārṅgadeva, trans 1978, pp. 300-307
- [56] *yayoḥ ca navakatrāyodaśakam antaram tau anyonyam saṃvādinau* NS (Chap. 28, p. 15)
- [57] *graha-nyāsāpanyāsāḥ tāvat vādinā eva prāyeṇa grhītāḥ*, Abhinavagupta in *Abhinavabhāratī*, (in Chap. 28, p. 16)
- [58] See NS, 29.2
- [59] See *Suśruta Saṃhitā*, 1.17.13; also see Lad, 1985, pp. 22-23
- [60] In the commentary of *Caraka Saṃhitā* 1.9.4, Cakrapāṇi Datta says that air etc. (*vātādayaḥ*) i.e., three doṣas, rasa etc. i.e., seven *dhātus* and *rajas* etc. i.e., three guṇas are *dhātus* itself (as they collectively one's constitution if they are not aggravated) [*dhātavo vātādayo rasādayaśca tathā rajaḥprabhṛtayaśca*]. Also see Wujastyk, 1998, p. 33

[61] See *Aṣṭāṅgahṛdaya*, 1.1.8ab and its *Āyurveda-rasāyana* commentary of Hemādri

[62] See *Bhagavadgītā* 18.43 (trans. 2018)

[63] It is noted that Bharata says, “The stable emotion itself becomes aesthetic emotion, and the stable emotion should be presented with the redundancy of *sattva* by a performer and composer.” See NS, p. 379 [in extra verses after NS, 7.119, “*sthāyyeva tu raso bhavet*,” d part of 3rd verse, and “*sthāyī sattvātirekeṇa prayoktavyaḥ prayokṛbhiḥ*,” ab part of 4th verse].

[64] This care and cure policy is also the *prajojana* (object) of Ayurvedic doctrine. Says Caraka (Sharma, 2014), “The object (of Ayurveda) is to protect health of the healthy and to alleviate disorders in the diseased (p. 240).”

(*Caraka Saṃhitā*, 1.30.26)

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