



Chapter - 5

Origin of musical instruments



Origin of Musical Instruments CHAPTER –5

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5:1: Origin of Musical Instruments

5:1:1: Indian Concept:

Information about the body of musical instruments in any culture is recognizing from its past and present shape. Historical development and stage of evolution can be obtained from four types of sources. First from ancient treatises on music theory; second, from iconographical evidence; third from collection of musical instruments in museums, and fourth from the recorded sound of musical instruments, a source that has become available to us during the present century thanks to the progress of technology. For further study, all four sources provided rich material. Scriptural evidence is contained in a long number of musicological treatises written over the past 2000 years, and these do not limit themselves to the mere mention or description of musical instruments, but with the *Natyasastra* of Bharata, India is in possession of the oldest existing classification system, whose categories are still relevant as the basis of modern organology. In iconographical sources, too abundant material is found. Scriptures, depictions and archaeological findings from different periods of history give detailed information about the shape of musical instruments, the way and context of playing, and about performance practice in earlier times. As regards museum collections and recordings, these sources, too contain much material for the geographical region of India.¹

Terms for musical instruments are applied based on different criteria. The names may refer to material of which the instrument is made, such as 'Vans' (bamboo tube) to denote plain bamboo flutes; here only the material is taken into consideration, not the way of playing. Another category of names describes details of construction, e.g. 'Ektantri' (eke=one and trantri=string) referring to an instrument with one string. Furthermore, the terms may indicate the mode of playing and the purpose of the instrument, as it is the case with *tala* denoting the act of beating or clapping; the name 'tala' is commonly used for a pair of small cymbals. Sound characteristics, too, may be described.

Thus, the term *Chitra* (bright, clear, sounding & colorful i.e. pleasantly sounding) was applied to a string instrument with seven strings (presumably a

¹ Page: 84- The Music of South Asia by: Celina Tiedemann, Pub: A.D.H. Publishing corporation, Delhi-1999

type of harp) described in the Natyasastra; later on the instrument was called 'Chitra-Veena' i.e. colorfully sounding string instrument. Finally, the instrument may borrow its name from the nature of its player. The string instrument Kinnari represents an example of this type. Depicted in sculptures of the second half of the ancient period, the instrument is playing by male figure called 'Kinnara' (literally 'which man?') whose appear body is that of humans while thighs and feet are as of birds. Despite the fact that the names of musical instruments contain much information about shape and construction, not necessarily present time characteristics are implies in the name. In the course of evolution, musical instruments are often modifying in their constructional feature without the name being changing. This is particularly the case when instrument is introducing to a geographic region other than that of its origin.

The general expression for musical instruments in Sanskrit terminology is 'Atodya', a compound of a (a prefix to verbs with the sense of near 'to', towards) and the verbal root 'Tud' (to push 'to' strike) chapter 28 of the Natyasastra, discusses musical instruments under the heading 'Atodya vikalpanam' i.e. classification (diversity) of musical instruments. The later term 'Vadya', which is still in use today, is derived from the verbal root, 'Vad' (speaking) or causing to sound, playing hence 'Vadya', something to be sounded or played. Another word for musical instruments in general is 'Vana', sounding this term is further more associated with an ancient type of harp with 100 strings. ²

5:1:1:1: Ancient Musical instruments of India

Music is divides into two sections, vocal and instrumental, and this division was prevalent even in the most ancient time in all the civilized countries of the world. In India, musical instruments are broadly dividing into four classes: (1) 'Tata' or stringed instruments, played by fingers or plectrums; (2) Vitat or musical instruments, covered with skin and played by hands or sticks; (3) Ghana or musical instruments which produced resonance by concussion of two solid bodies; and (4) Sushir or wind instruments. Sometime the musical instruments are divided into three classes like 'Tata', 'Vitat' and 'Tata-Vitata' but regarding the divisions of the musical instruments of India, we find the most of the authors of drama and music

² Page: 86 – The Music of South Asia by: Celina Tiedemann, Pub: A.D.H. Publishing corporation, Delhi-1999

have divided into four kinds 'Tata', 'Sushir', 'Avanaddha' and 'Ghana'. Some have also divided them into three classes, as we have said before. As for example, Bharat has said in the Natyasastra,

ततम् क्लेवधनम् च घनम् सुषिरमेव च।

चतुरविधम् तु विनयम् अतोध्यम् तु विनयम् अतोध्यम् लक्सनावितन ॥

ततम् तानग्रीगतम् विनयम् अवनधन तु पुष्करम् ।

घनम् तालस्तु विज्ञेह सुषिरम् वामसमुच्यते ॥ ³

If we study the history of music of all nations of the world, we find that they possessed the musical instruments to accompany their songs, or to play them separately, and it is a fact that their musical instruments were dividing into the, two-three or four main classes. The ancient Hebrew had a variety of musical instruments. In the Bible, the musical instruments have been divided into three main groups.

(1) Instruments of percussion

(2) Wind instruments

(3) Stringed instruments

Mr. Wan hope Stewart is of opinion that the instruments of percussion used to keep rhythms in dances and songs and would probably be the first in order of development, the rhythmical element in music being the feature, which makes the strongest appeal to the primitive mind. The Toph, Tabret or Timbrel was kind of hand-drum, formed of a frame of wood, with a piece of skin, stretched over it. The usual shape of it was circular. The Mesiltraim and Seleslim were made of brass and they were using mainly for religious and magical purposes.

The stringed instruments of the Hebrews and played either with the hand or with plectrum. The bow instrument, the precursor or forerunner of the lute or Indian Veena was almost unknown to the ancient Hebrews.

The ancient Greeks and Romans also did not know the use of the bow-instruments. Their lute types of stringed instruments are using to be plucks

³ Page:-74, – Historical Study of Indian Music by: Swami Prajnanand, Pub. By: Munsiram Manoharlal

with fingers or beating with the small spectrum, make⁴ of bone or wood. Their stringed instruments were divided into two main classes, the older simple and the instruments with large square sounding board. The original numbers of stringed were seven like those of the Indian 'Chitra-Veena', as described in Bharata's Natyasastra. Besides the seven stringed lyres, there were also in common use a number of strings. Among other instruments, cymbals, kettledrums and castanets were in use.

In ancient Babylon and Assyria, musical instruments were divided into three classes, percussion, and wind and stringed. The instruments of percussion like drum (Sumerian 'Ata' and Semitic 'Alu') would seem to have been used. Mr. T.G.Piches has said that the earlier forms of percussion were very large, and were found indeed in one relic of about 2500 B.C. The stringed instruments like harp, the earliest example of which goes to 2500 B.C., the dulcimer, the primitive form of which goes before 2500 B.C., lyre, cithara, guitar etc. were also in use, the wind instrument like pipe, whistle or flute, trumpet, horn etc.

The early musical instruments of American musical instruments were divided into three main classes, percussion, and wind and stringed. Mr. Brinton has mentioned about four classes of stringed instruments of primitive type in the hand of American aborigines. The most important musical instruments of the Native American were the drum. H.B.Alexander has said that the drum varied in type from the Eskimo tambourine, like hoop with taut skin, though single and double headed instruments, great or small, culminating in the huge snake skin drum, whose booming from the temple of the Aztec war-god, brought dread to the heart of the Spaniards. The Teponaztli of the ancient Aztecs was the most interesting of the native drums. In addition, it consisted of a hollow block, in which were cutting two tongues of differing thickness. Whose vibrations produced tones commonly in the interval of a third, although drums have been found containing interval of a fourth, of a fifth of a sixth and of an octave.

Mr. Alexander has further said that next to drum the native instrument was the Indian flageolet or flute, which seemed to evolve from the bone whistle with a single vent or stop. In its developed form, it was providing

⁴ Page: 75 – Historical Study of Indian Music by: Swami Prajnanand, Pub By: Munsiram Manoharlal

with a mouthpiece and had three, four, five or six finger holes. Again while discussing about prehistoric art Mr. T. Wilson has written that the whistles and flutes made of ⁵ human or animal bones, have been found in the deposits of the Paleolithic and Neolithic ages, the flutes being pierced with holes at regular intervals or consisting of two holes, which when joined would make modulated tunes. Although these discoveries seem to give priority to wind instruments, it is obvious that others e.g. drums of wood with skin covering being more perishable material, were less likely to be preserved.

The most ancient musical instruments of India were Veena, Venu or Vamsa and Puskaru or 'Mrudang'. Nevertheless, controversies rage round the question as to which of the musical instruments, drum bow instruments or flute (Pipe) was the most ancient. Some are of opinion that flute or pipe was the most ancient type of musical instruments, while others maintain that drum was anterior to flute as well as bow in date. The later view seems to be more rational and historical.

J. V. Macculloch is in favor of the latter view. He has said that nearly every tribe or race has musical instruments of some sort, the exceptions being found at the lowest stage of culture. "As the instances among peoples without musical instruments would seem to show, instruments to percussion some form of drum, which is well-nigh universal may have been invented first stringed instruments probably came next – the hunter's bow, as with the Dammars, being easily convertible in to primitive form of these. Wind instruments, at least in the more elaborate forms, were probably inventing last. In the most ancient 'Vedic' literature, we find descriptions of erudite earthen and wooden drum, covered with the skins of the wild animals. In the Rigveda, Samveda, Yajurveda and Athervaveda and in different Brahmins, we get references of drums like 'Bhumi-Dudumbhi', 'Dudumbhi', 'Panava', 'Bhanda', 'Karkari' etc.

The Bhumi-Dudumbhi was perhaps the most ancient form of the drum in India. The sound of the Bhumi-Dudumbhi was very grave, loud, and far reaching. It used to be carved out in earth in the form of a hollow or pit and covered with the thick skin of any wild animals. It used to be struck with one or two logs of wood, and the resulting deep resonant sound used to be heard from very distant places. During the 'Brahmana' period, the Bhumi-

⁵ Page: 76, – A historical study of Indian Music by : Swami Prajnanand, Pub: Munshiram Manoharlal

Dudumbhi used to be striking by the tails of the animals. The sound of 'Bhumi-Dudumbhi' was often using as means of signaling some dangers or ⁶ approach of the enemies. The 'Dudumbhi' was some times shapes out of the hollow trunk of a tree, the upper part being covers with the skin of the animal. From the 'Brahmana' literature, we come to know that different kinds of beats were offering in different sacrifices and rites. Especially in the 'Mahavrata' sacrifice, beasts were offers to the presiding deities and their skin was using for making the drums like 'Bhumi-Dudumbhi' and 'Dudumbhi'. Well has it been said by Dr. A.B.Keith, in connection with the 'Vedic Mahavrata'. The Mahavrata is by no means a bloodless sacrifice. There fall to be offers either one beast to be sacrificed to Indra and Agni or eleven animals; and in either case there is an additional sacrifice of a bull to Indra or to Prajapati, and in the former case of a goat to Prajapati. Now the skin of the sacrificed animals were removes and used to form the drum (Bhumi-Dudumbhi), on which with the tail of the victim, the priest made solemn music. The drum, 'Vanaspati', was also making in the same way. The 'Dudumbhi' was somewhat a refined form of the 'Bhumi-Dudumbhi', and it was uses to be making out of mūd or log. The 'Puskara', 'Mridanga' and 'Bhanju Vadya' of the later date and the modern 'Pakhavaj' and 'Khol' are the prototypes of the ancient 'Dudumbhi'. ⁷

Mr. Batuk Diwanji has also described the event of inventing Bhumi-Dudumbhi in his book 'Sangit na Prerak Prasango' (in Gujarati). that, after the assassinated of Vatraser demon, lord Ganesh had removed the skin of Vatraser and make a hole in the earth and covered hole with Vatraser's skin. In addition, beating that skin surprised it produce the sound and thus the Avanaddha musical instrument have been inventing by lord Ganesh, it is believed that lord Ganesh was the master of Pakhavaj instrument. ⁸

The bow-instrument came in to being perhaps after the drum. It was knows as the Dhanuryantram. The bow was the most important weapon of the nomadic primitive tribes. They used to live in the hills, dales, forest, and caves of the mountains. Their main food was the raw or half-roast flesh of the hunted animals, and so they used to hunt all kinds of wild animals with the

⁶ 77, – A historical study of Indian Music by : Swami Prajananand, Pub: Munshiram Manoharlal

⁷ Page- 78 – A historical study of Indian Music by: Swami Prajananand, Pub: Munshiram Manoharlal

⁸ Page- 98 – Sangit Na Prerak Prasango (Gujarati) by: Batuk Diwanji, Nav Bharat Sahitya Mandir, Mumbai- Ahmedabad-1998

help of the bows and the arrows. They were also using as means to produce high sound for signaling dangers like those of the Bhumi-Dudumbhi⁹ and Dudumbhi. It has already been stated in book 'Development of Indian Music' by G.U.Thite, that when the primitive savage

Men became familiar with the iron, they began to hunt the wild animals and fight their enemies with the help of the bows and the arrows. Besides, other implements, the bows of bamboo used to serve the purpose of signaling the advent of the enemy or any other danger, as uses to be serves by the blazing flames of the fire. They used to produce the reverberating grave sound by pulling the gut string of the bow (Jai Sabada or Dhanushatankar). The sound might be regarding as the source of their inspiration for designing and constructing the musical instrument of the primitive people. The curvature of the bow supplied the idea of the method of constructing the body of their crude 'Veena' and the connecting gut string. It is interesting to note that the shape of the primitive Veena was curves like the body of the bamboo bow. It was like the ancient lyres and harps, to some extent. The primitive men made the string of the Veena out of the intestines of the wild animals, fastened them to the two extremes of its bent body and used to play it by plucking the string of the bow with fingers. It seems that in the beginning, a single gut string was using to produce a mono sweet but grave sound. Gradually additions and alterations were making to improve the structure of the Veena and to increase the number of its sound, together with their tonal qualities. The primitive men sometimes connected two horizontal bars of bamboo or wood, fastened a gut string to the two ends of the bars, thus forming a triangle. This type resembles the ancient Georgia, Caucasus and Finland types of lyre to some extent, in the third stage, evolved the flute or pipe. It is saying that the sound produced from the friction of air against the hollow part of trunks of the trees. Especially bamboo gave rise to the flute or pipe. The pipe was probably making out of the reed by making holes in it. Gradually it was fashioned out of wood and bone. The hole in the pipe was in imitation of the hollow part of the trunk of three. In the early stage, there was only one hole in the pipe and gradually with the evolution of the tones, the holes were increased generally the pipes, in the primitive period, possessed only two or three holes to produce two or three tones, low or high, or low,

⁹ Page- 78 – A historical study of Indian Music by: Swami Prajnanand, Pub: Munshiram Manoharlal

medium and high. All the songs, produce at that time, were in downward trend (Avrohan-gati), as we find in the Sangam.¹⁰

Not it can be imagined that drum being the most ancient form of musical instruments of the world, the primitive savage men used it with their simple songs with two tones, upper and lower in accompaniment of the drums only, to maintain rhythm and tempo in their songs and dances. They used to sing and dance as a means to break the monotony of their work-a-day life. There was certainly a starting basic tone in their songs, and most probably, that basic tone used to be tempering with the tune of the drum.

In the Vedic, times the samans were sing to the accompaniment of different kinds of musical instruments like lute, pipe or flute, bow instrument and drum. It has already been says that in the primitive period, the bow and pipe of reed, wood or bone had already been evolved and were used by the primitive men. From the prehistoric mounds of the Indus valley cities, crude form of bow or lutes, pipes or drums have Benn discovered and they certainly substantiate the facts mentioned above. With the development of intellect, the skill and propensity of the Vedic people became mōre advanced and keen, and as such, they gave shape to more developed form of lutes out of bamboo or wood for their bodied, Munja grass or intestines of animals for strings etc. The scale of the songs of the Vedic people was extends and it consisted of four, five, six and even seven tones, the starting tone if the song was always in the upper or high pitch and the songs had the tendency to flow downward, as has been said before. The Vedic music, being more develops than the primitive and prehistoric ones, possessed three registers (Sthana), a fixed scale, rhythm and tempo. Te basic tone of the Vedic song as well as the tone or tunes of the lutes (Veena) and pipes (Vamsa) were tempering with that of the drum or drums, and this tradition has been handing down from the primitive and prehistoric times.

During the time of Bharata (3rd Century B.C. – 2nd Century A.D.), we find the method of tuning (Marjan) with the help of tree drums or Puskara. Bharata has dull described the ancient traditional method if tuning (Marjan) in the Natyasastra.¹¹

¹⁰ Page- 79 – A historical study of Indian Music by: Swami Prajnanand, Pub: Munshiram Manoharlal

¹¹ Page- 80 – A historical study of Indian Music by: Swami Prajnanand, Pub: Munshiram Manoharlal

In the rock-cut temples of different places of India, carved in different ages, we find two or three drums of small size, engraved by the side of Shiva-Natraja in dancing posture. Those drums are but the replicas of ancient Puskara. Three drums (Puskara) are also to be shown carved in the Muktesvar temple of the 6th-7th century AD., at Bhuvaneshvar and three others in the cave-temple of Baclami, Mumbai of the 6th century AD. Some are of the opinion that two of these drums represent the two parts of a long drum, which used to be played horizontally, and the third one was as small like the modern table. The small drum, known as Alinga used to be placed on the lap of the player. Some of the drums represented in the sculptures of the 6th-7th century AD were chiseled in the different way. The modern table and Banyan were perhaps shaped in imitation of the ancient Puskara. Some erroneously believe that the time of Sultan Ala-ud-din Khilji in the 14th-15th century AD, cutting the ancient Mridanga (for Pakhavaja) into two halves. But this view is untenable, and is absolutely conjectural, as the sculptural evidence of the ancient rock-cut temples of India disclose the fact that two or three drums (Puskara) of different size were used in music and dance in India long before Mohammedans rule. The ancient method of tuning with the help of the Puskara came to be gradually replaced by the respicing of the string instruments, but exactly when and how¹² the new method was adopted, we do not know.

Valmiki (Ramayana) has informed us that the Gandharva type of songs in his time used to be practiced in accompaniment of the musical instruments like Veena, Venu and Mridanga. The tunes of the musical instruments, together with that of the songs used to be tempered with the basic or standard tone of the drums.¹³

5:1:1:2: The origin of Bowing:

“The first clear literary and artistic reference to the bow as a means of drawing sound from stringed instruments occur at the beginning of the 10th century,” concluded Werner Bachmann in his major study on The Origin of bowing... “At that time the area within which bowing was practiced corresponded roughly to the territories of the Islamic and Byzantine Empires. Outside this territory there is no evidence that any stringed instruments was

¹² Page- 82 — A historical study of Indian Music by: Swami Prajnanand, Pub: Munshiram Manoharlal

¹³ Page- 83 — A historical study of Indian Music by: Swami Prajnanand, Pub: Munshiram Manoharlal

played with the bow before AD 1000, either in Europe or in Eastern Asia: the theories that the bow originated in northern Europe or India have not been confirmed by recent research.” Bachmann does admit, however, “The Indian theory has not yet been factually disproved and is still the subject of discussion.

Today, we found the compiled the existing data on the development of bowed instruments up to the 13th century, no fundamental research in this area has emerges. The idea that playing bow originated in India is so deeply rooted in the ancient myth, which few Indian authors seem to be seriously question it. Mostly recently for instance, Suresh Vrat Rai remarked; “Leaving aside the shape and structure of instruments, sculptures, wall carvings and paintings of the 6th to 13th century provide adequate evidence testifying to the existence of bowed instruments.” B.C.Deve also believed that, “Instruments of this class can be found in sculpture are relief from about the 10th century AD.”

However, both writers failed to provide pictorial evidence to support their claims A.K.Kumarswamy, on the other hand, observed, “No Indian Veena wither ancient or modern, was ever played with a bow.” Whilst C. Marcel – Dubois reached similar conclusions. G.H.Tarlekar also made a though investigation of the iconography of ancient musical instruments. In the temple sculptures of Badami and Pattadakal, however, Tarlekar recognized “the precursor of the violin type.” And in a personal communication he wrote: “There is a sculpture in the Virupaksha temple (Pattadakal - 7th-8th century AD) in which the playing stick is used as a bowing stick like that of a violin such a playing stick appears also in the Ajanta sculpture in cave no-4 (4th-6th century AD). Nevertheless, there is not any ‘Sastriya’ reference to bowed instruments earlier that the 11th century AD.

Although the origin of the musical bow has long provoked conjecture and contentions, the bow itself is generally regarding as one of the most ancient stringed instruments. Even the goad of music, Apollo and Shiva, under the magical spell of the twang of the bowstring, would use their powerful weapons as musical ¹⁴ instruments. Thus according to the myth, the

¹⁴ Page: 39- The voice of Sarangi by: Joep Bor. (Quarterly Journal) Sep-Dec. 86 March-87 Pub. By: National Center for the Performing Arts.

archer's bow was transforms into musical bow and accorded a super natural status.

In epic literature, we come across Shiva in Pinakin, the bearer of invincible bow Pinaka but nowhere has he been portrays playing his bow as a musical instrument. However, the ancient Pinga, mentioned in the Rigveda, may have been a musical bow, while Pinga was another name used to address the multifaceted god Shiva. Thus, long before Shiva played the seven stringed Harps, the musical bow must have been his favorite instrument. It was also the instrument played by the mythological demon king of Lanka, Ravan, who was a great devotee of the Shiva and an expert in the field of Music, like his master. The Ramayana recounts how this powerful ruler abducted Sita and challenged Rama to a fight.

Although a description of the Ravanashahasra is not included in the only existing manuscript of Bharatbhasya, Nanyadeva alludes is the above passage to the fact that the instrument was closely related to the Pinaka. The latter Veena consisted of two bow shapes and the strings were stopping by a piece of cōconut shell worn on the forefinger of the left hand. The playing bow (Kona) was string with horsehair. ¹⁵

Musicologist after Nanyadeva also paid a great deal of affection to the musical bow. Haripal a Gujarati King writing in the second half of the 12th century, was of the opinion: "The Pinaki Veena is undoubtedly considered the most important instrument." According to him, the bow was made of bamboo and sinew was using for the string. The playing bow (Karmuka) was string with got hair, which was treating with resin powder.

The very fact that this 13th century scholar takes credit for having intended a bowed instrument, which he calls Nishana Veena, indicated that certain types of bowed instruments were highly respected and belonged to the realm of classical music. According to Vemabhupala 14th Century, however, the Pinaki Veena was only a prominent folk instrument. Obviously the held a low opinion of such instruments because he writes; "They will not be elucidated by me since they are notorious amongst villains."

Although the Pinaka was gradually pushing back into the background, it was not totally ignores by later musicologist. Indeed, this wonderful relic of

¹⁵ Page: 40- The voice of Sarangi by: Joep Bor. (Quarterly Journal) Sep-Dec. 86 March-87 Pub. By: National Center for the Performing Arts.

antiquity managed to survive until the beginning of the 19th century. The Belgian, Francois Balthazar Solvyns (1810), was probably the last person to give a long description of the instruments, accompanied by an etching.¹⁶ The Veena is the instrument with the longest pedigree there are seven main stages in its evolution.

5:1:1:3: Origin of Harp Stage:

When the primitive man shot an arrow, he heard the fascinating sound emanating from the string of the bow. The bowstring or VilYazh is the earliest stringed instrument in the history of human culture. The Dhanustrantr or the twanging of the bowstring is referred to in early literature. The Jayghosha or the sound of the bowstring is referred to in the Athervaveda. (A musical note is heard when the cotton cleaner twanged his cotton cleaning bow.)

The archer's bow paved the way for the emergence of the musical bow. In the bowstring, vegetable fiber or gut was used. Twisted bark and standard of grass root twisted together were also used as strings. By typing string of different lengths to the same bow and plucking them, he heard note of different pitch. The Harp instrument was the natural result.

Strings of Manja or Drabha were used in early times. Unlike the western harp, the Indian harp had no front pillar. In the Vedic harp, the strings were struck successively in the Arohana karma by a piece of the Udumbara wood. In the later harp, the string was plucked and played.¹⁷

5:1:1:4: Harp with a resonator:

In the second stage, a gourd or calabash was fixed to the bow to amplify the sound. The gourd was replaced by a boat-shaped resonator later on and the sound of the monochord was amplified tuning pegs.

The invention of the tuning peg constitutes an important landmark in the evolution of stringed instruments.

¹⁶ Page: 41– The voice of Sarangi by: Joep Bor. (Quarterly Journal) Sep-Dec. 86 March-87 Pub. By: National Center for the Performing Arts.

¹⁷ Page:-212, – History of Indian Music, by: Prof. P. Sambamurthy. 1994.

5:1:1:5: Lute Stage:

Instead of having different string lengths for producing the different notes, the idea of producing the different notes, by artificially decreasing the string length by damping a single string at various points with the fingers, naturally suggested itself to man and the lute emerged as a consequence.

In the Vedic lute for example, two guts were tying round the Dandi to indicate the Svarita and Udatta Swaras, the Anudatta, Swara being giving by the open string.

The bowl of the Vedic Veena was covers with leather.

The lute and the harp continued to develop side by side and Manickavachagar in his Tiruppalliyezhuchchi. (verse-4) significantly refers to the fact that there were players on the Veena and the Yazh.¹⁸

1:5:1: Veena with Resonator:

Veena with two string long gourds is shows for the first time in the Elorra caves (8th Century).

5:1:1:1:6: Types of Lute:

6:1: Nissari Veena:

Instrument with plain fingerboard (i.e. without frets) later come into existence. They were plays with a bow as in sculpture in 'Tirumagudala' in Mysore state (10th century) or plucked and played as the mandolin type of instrument depicted in the Udaygiri caves and Ajanta Paintings.

6:2: Sari Veena:

Fretted Veena with frets for the left half of the fingerboard came next. These are shows in the Halebid and Belur sculptures.

6:3: Modern Veena:

Frets for the entire fingerboard were fixes. In this arrangement, one can play two octaves on a single string. This is the latest development and is representing by the modern 'Tanjor' Veena.

¹⁸ Page:-21, – History of Indian Music, by: Prof. P. Sambamurthy. 1994.

Herein, there are the Ekragra Veena and the Sarvaraga-mela Veena type, Veena was played with a Kona according to the Amarkosha, Danta Kona, was an ivory plectrum.¹⁹

5:1:1:7: Veena in ancient literature:

In the Ramayana, it is mentioning that Narada sung the praises of Vishnu to the accompaniment of the Mahetti Veena. Narada is the Veenadhari Sura Rishi and gives Veena recitals in heaven. In the Virat parva of Mahabharata, it is said that the faultless Panchali, addressed Bhimsen to voice sweet as the sound of the Veena, emitting the Gandharva [F] note”

The Veena is refers to as Madhuralap and Sukhsabada.

Parvati in the aspect of Matangi plays the Veena. Laxmi plays the Veena as per the old Gita in Mohan raga, Vara Veena the Shymala Dandaka, starts with the words: Manikya Veena – Mupalalayanti.

Visvvasu, a revered Gandharva was performer on the Veena. Pannchasikha the well knows musician in Buddhist legends played a harp, which had Vaiduryadanda. Turya Ghosha was collective tone of orchestra. Jati Veena referred to in Jalaka II was a Veena designed to play a particular Jati or raga.²⁰

The Vedic literature shows a wise variety of musical instrument, which were current then. The instruments of percussion were represents by the ordinary drum known as Dudumbhi an earthen drum made by digging a big hole in the ground and covered with a hide called as Bhumi Dudumbhi, Vanaspati a wooden drum and Aghati a symbol. Stringed instrument, mainly four types of lutes that were in used then were known as Veena a lute with hundred strings, Kanda Veena a kind of lute, Karkari another type of lute and lastly the Veena the modern Veena of the same name in India. This very instrument alone is sufficient proof of the development of art even in those early days. There were also a number of wind instruments such as, the Turava as bamboo flute. The Nadi a reed flute, the reed was making up of palm leaf, Bakura and the conch. All these instruments were using to accompany the Samag, i.e. the singer of Sam-Veda. The voice is prior to any kind of musical instrument. This is prima facie and hardly need any proof. Hence, it is

¹⁹ Page:-214, – History of Indian Music, by: Prof. P. Sambamurthy. 1994.

²⁰ Page:-216, – History of Indian Music, by: Prof. P. Sambamurthy. 1994.

doubtful to say whether these instruments had, at that time, any special feature of their own for their individual use as solo as it is doing today²¹

In the Mahabharata epic, there is mention of the different forms of music and of the names of various musical instruments, giving as ample evidence of the use of music in its various aspects – vocal, instrument and dance. It goes without saying that with the passing of time, many old forms of music, musical instruments went out of vogue, and new ones came in their place.

In Harivansh, a later addition to Mahabharata, there is mentions of Gandharva Gan and Samgana. The text of Samgana, here was different from older Samgana. Form as it was mainly base on the praise and adoration of lord Vishnu. Mention of musical instrument like Tumi-Veena, Mridanga, flute, cymbals is also making in this work. In other words, even during this period we find the existence of all the four families of musical instrument viz. Tantu (stringed), Sushir (wind), Avanaddha (Drumetic) Ghana (Cymbals and bells).²²

Vera Shiva literature in Kannada ranging from the 12th to 20th century, abound in ancient myths and legends.

Some even include historical figures of their own, or slightly earlier times transformed from religions dogma into myth or legend. Some of these may be listing here from Shama Rao's compilation.

* Anainaru delights Shiva by musical sing the five-syllable mantra on the flute.

* Kakkayyal Makes Shiva dances to his own accompaniment on the percussive instrument viz. * Kankari and excels Shiva in rhythm.

* Kankari, Bramayya is professional performer of the Kinnari Veena. He pleased Shiva with his music.

* Gurdyya plays rhythms on the earthen pot and is a potter; he attracts Shiva-Parvati and devotees with music.

²¹ Page: 8 – Indian Music Though Ages by: S. Bandopadhyay, B.R. Publishing Corporation, Delhi-1985

²² Page:8- Fundamental of Raga & Tala with new system of Notation by: Nikhil Ghosha

* The demon Dakka obtain the namesake percussive instruments as boon from Shiva and persecutes the world. Shiva slays him and plays on Dhakka.

* Marayya is a professional Dhakka player. He makes a living by accompanying the dance of goddess Mavi-amma. He defeats her in contest through devotion to Shiva.

* Devasrman receives the percussive instrument Damaru as boon from god Bhairava of Kapalsketra.

* Narada pleases Shiva with his performance on stringed instruments.

* Bacale worship Shiva with her drum music and obtain grace.

In another legend, from Adbhuta Ramayana (Sarga VII), Narada is jealous of Tambura for the esteem he received from Narayan, Laxmi and their attendants in Vainkuntha for his musical excellence coupled with humble devotion. Kaushik is also similar esteemed. In order to excel them and earn similar esteem, Narada learned the excellence of music from Ganabandhu, king of owls. Then he is drunk with arrogance at his musical powers. He is taken to the house of humble Tamburu where Swara-s, Raga-s and Ragini-s are found mutilated and miserable. They woefully explain their condition as due to Narada's very poor and inept singing. Narada is humbled. Narada tries to earn Narayan's esteem for his music repeatedly. Narayan promises Narada musical fulfillment during his own incarnation as Krishna. The Narada receives Musical instrument from Krishna's consort,²³ Satyabhama and assessment from Rukmani, another consort of Krishna. Even Rukmani's servant house cleaners again pronounce him as very inept. However, when Narada joins humility, faith and devotion to his technical excellence in music, Krishna pronounces him equal to Tumburu.²⁴

The motif of Veena suggests Sarsvati relation to music. This relation might have been raised to the tradition to use devotional music in Indian temple of different gods. Music this way becomes an individual help in invoking and pleasing gods. The ancient Indian tradition of blending music with devotional songs and prayers reveals a fact that the path of spiritual

²³ Page: 8: Music and Mythology (Essays) Edited by: R. C. Mehta, 8-9 – Essay-1: "Indian music and Mythology" by: R. Sathyanarayana

²⁴ Page:9: Music and Mythology (Essays) Edited by: R. C. Mehta, 8-9 – Essay-1: "Indian music and Mythology" by: R. Sathyanarayana

enlighten is paved with pleasant sound and notes that help concentration and elevation of mind and at tune with the divine.²⁵

5:1:2: Western concept:

5:1:2:1: Origin of instruments: Western concept:

Mythical genesis of musical instruments patterned on animal bodies is by no means contained to Membranophone e.g. Mrudang, Dhaka, or to Hindu culture. Two version of a similar myth for a chordophone are available from two other ancient cultures.

Osiris is an Egyptian god who is the mythical progeviter of music and instruments. His secretary Hermes Trimegistus is credits with invention of the lyre on the model of tortoise. In Greek mythology, he is the son of Zeus and Maia. He corresponds to Mercurial in Ravan Mythology. He served as a messenger of the gods and carried a herald's wand as insignia of his office. He also conducted the head Hades. According to myth, once Nile was in spate and overflowed, leaving many dead animals on its banks. Among them was a tortoise. Its flesh dried up in the hot sun. Thus, only the shell with nerves and cartilages was leave. These became taut due to expansion by heat, and became sonorous in breeze. When Osiris was walking along the bank, his foot struck the carapace by accident and thus literally kicked up a pleasing sound. He was so pleased with it that he constructed the lyre like a carapace using sinews of dead animals for strings.

According to the Roman version, mecurius had stoles some oxen from Apollo and went to the floor of mountain in arcadia to escape detection and retribution. He found a tortoise there. He killed and ate it. He played with the shell and discovered a pleasing sound emanating from it. He then cut several thongs from a bull hide, stretches them tautly across the carapace, and invented the new music. However, his invention of performing methods is ascribes to Apollo in Greek mythology.²⁶

The Egyptian, Greek or roman version of the carapace legend bear some correspondence with the Puskara legend and Mura-myth. Stimulation

²⁵ Page:70: Essay-8: Swaraswati A study..." by: R. T. Vyas

²⁶ Page: 43: Music and Mythology (Essays) Edited by: R. C. Mehta, Book-1, Title: Indian Music – myth and legend-III by: R Sathyanarayana, Pub : Indian musicology Society, Baroda-1989

from the physical components of a natural situation, their extrapolation by an attentive supernatural to a musical situation, development of musical and acoustical parallels to physical components culminating in the invention of a new musical instruments are some common elements. Further in the Roman version, Mercurius kills and eats the tortoise and only then modifies the remaining of the animal into the lyre; he does not find it already dead as in the Greek version. There is thus a parallel in the Roman myth to the Mura myth. In both, the instrument is conceived by the inventor in a playful experimental mood. However, these versions lack the elements of victory and its celebration. The early Greek myth of Apollo however supplies these elements also: when Apollo killed the serpent demon Python his victory was commemorated with music and poetry. (cf. Krasna's victory over the serpent demon 'Kalinaga'). This came to be enshrined as collective rituals in Pythian Games dedicated to Apollo.

However, by and large, Chinese, Egyptian or Greek Myths relating to Music and dancing do not appear to reveal an expression and/or sublimation of deep, human instincts, fear, hopes or other profound universal emotions as Indian myths and legends on music and dance.²⁷

The first mention of music or musical instrument in the Bible is made in Genesis, where in connection with the enumeration of the posterity of Cain, it is said, "Jubal was the father of all such as handles the harp and the organ." Padre Martini supposes that Adam was instructed by his creator in every art and science including music and that he utilized his knowledge in praising and adoring the Supreme Being. The Genesis further informs us that in the days of Seth, about the period of the birth of Enos (3664 B.C.). "Men began to call upon the name of the Lord." Padre Martini considers this the first introduction of music into religious rites. The Alexandrian Chronicles say that the "Sons of Seth did according to the angels, in evoking in the angels hymn." This is nearly all that is known of music before the flood. According to Archbishop Usher, the Deluge took place A.M. 1656 and 2348 B.C. the son of Noah, after the waters had passed from the face of earth first settled in the plains of Shinar, part of the ancient Mesopotamia, the modern Diarbekr. The first migration of Noah's descendants took place about 2281 B.C., when several of the younger branches of the family of Ham, if not Ham himself,

²⁷ Page: 44: Music and Mythology (Essays) Edited by: R. C. Mehta, Book-1, Title: Indian Music – myth and legend-III by: R. Sathyanarayana, Pub : Indian musicology Society, Baroda-1989

traveled to wards the west and south, and settled in Phoenicia and Egypt, taking with them, as some say, Noah himself. Others, soon after, migrated to the east and the empires of Assyria, Babylon, India, Persia and China were founds. The Egyptian is generally supposed to be the fountain whence the arts and science were diffuses over the greater part of Europe. Certain authorities attribute to them the invention of music, amongst other arts. The earliest account of African countries as indeed of all ancient countries, is enveloped in a myth; and if any records existed, as in all likelihood they did, they were destroyed by 'Cambyses', who conquered Egypt in about 525 B.C. and over threw the temples, where such record were likely to be deposited, and saw the priests. Some writers suppose that Noah reigned in Egypt and identify him with Osiris, he invented the lyre as we mentioned previously. The first instrument of the kind he made was in form of a tortoise, and as strung with the sinews of dried animals. Athenaeums (a Greek grammarian born in Egypt in the third century after Christ) ascribe the invention of the flute to Osiris himself. Kircher however, supposes that the Egyptians²⁸ very early formed flutes and pipes from the rushes, which grew upon the shores of the Nile.

The varieties of representation in sculptures and paintings as well as specimens discovered give an idea of the musical instruments of Egypt. Among these are following.

5:1:2:2: Origin of West earn` Harp

The name of the Harp was Buni or Beni. In the Egyptian paintings, the word Sek and ben (scraper` on the Harp) has been founding written in hieroglyphs over the figure of a Harper. The number of strings varies in different specimens. Some of the harps were place on the hand when played; other was putting on stands. Two harps, one mounted with band the other with 10 strings and both excellently carved and elaborately decorated, were fist noticed by Bruce. These were paints in fresco on the wall of an ancient sepulcher at Thebes, which is supposed to be the tomb of Raneses III, who reigned about 1250 B.C. A drawing of one of these harps appeared in Dr. Burney's "History of Music", soon after, engravings of both were published in Bruce's "Travels" Vol-I. A kind of harp with twenty-one strings was

²⁸ Page: 126: Universal History of Music by: Surendra Mohan Tagore, Pub : Law price publication, Delhi-52, 1990

discovers in a well preserves condition and deposits in the Parish Museum. The absence of the front pillar is peculiarity common to all specimens.

2:1: The Lyre:

These instrument also very in shape and in the number of Strings. The Herman lyre is said to have been mounted with three strings representing the three recognized seasons of the year, and producing an acute, a mean and a grave sound, corresponding, respectively, to the summer the spring and the winter. Some lyres were hold perpendicularly.²⁹ Other instrument knows as Tamboura (nofre), the Pipe, and the Flute, Double pipe (mam), Trumpet (Bliccina) The Drum (Durabukkeh), Tambourine (similar to Hebrews Toph and Arabian's Duff), the sistrun (similar to as Ethiopian sanasel and Hebrew's Tzeltzelim).³⁰

5:1:2:3: Primitive wind instrument:

After discovering the percussive effects of stick on tree trunk, or hand on body man may have made his first musical (sound) by blowing on a conch shell, notice the seashore. With this and the discovery of the possibilities of blowing on hollered animal horns, early man had hit on the principal of an air column set in vibration directly by the lips. All the instruments of the Horn and Trumpet families sprang from this. Primitive trumpets of ancient South America and Modern Africa include side-blown varieties with shaped mouthpieces.

The great family of reed instruments may have originated from simple hollow reeds with a loose lip at one end formed by two parallel cuts. The double reed as used on the modern oboe was probably discovers royal tomb at urn in ancient Samaria, the flute, in which the air column is vibrated by part of the wall of the instrument itself, was also developed early and nowhere more fully than in the ancient civilization of South America. Amongst certain tribes there, deep sounding flutes played by initiates or priests in part of ³¹ the forest remote from the village, are believed to the voice of the gods, and only men are allowed to look on them. Elsewhere the bull-Rorer is holding in similar respect. It consists simply of a piece of

²⁹ Page: 127: Universal History of Music by: Surendra Mohan Tagore, Pub : Law price publication, Delhi-52, 1990

³⁰ Page: 130: Universal History of Music by: Surendra Mohan Tagore, Pub : Law price publication, Delhi-52, 1990

³¹ Page: 8: Musical Instruments by: Geoffrey Hindly, Hamlyn all color paperbacks, United Kingdom.

shaped wood attached to a thong or cord. When it is whirled round the head, the resultant turbulence setup in the air produces a deep harsh roar.

However, the most fascinating of all these early wind instruments must surely be the Australian aboriginal 'Didgeridoo'. It is again simple, consisting merely of a wooden tube sounded by being blown across one end so that the player's breathe vibrates the opposite side of the rim. Only two notes are available; the fundamental note of the whole air column and another about one-tenth about it. Nevertheless, these two notes are enough for the best performers who, displaying considerable virtuously, use them to set up elaborate and throbbing counter rhythms.³²

5:1:2:4: Music in the ancient world:

The people of the ancient Mediterranean world had a deep semi religious respect for the power of music. The Hebrews love of music is clear from the many references to musicians and instruments in the Old Testament. David, the most famous Jewish king, was a renowned singer and player on the harp (the Hebrew Kinnor should in fact be translating as lyre). The Greek god Apollo, whose emblem was the lyre, was as jealous of his skill as musician, that when the muses had awarded him the victory in flute playing on tests with satyr Maryssa, his fluid him alive for presuming to challenge a god. Most famous of all is Orpheus who.... Made trees and the mountaintops that freeze, bow themselves when he did sing and whose skill on the lyre charmed the god of Death himself.

5:1:2:5: Early stringed instruments:

One of the oldest models of stringed instruments is arrived by the little statuette of a harpist illustrated on this page. Despite the stylization, we can tell that his type of instrument, used in Greek Cycladic Island about 2500 B.C., has a rigid frame, unlike the bowed harp being plays by the Egyptian girl musician. A harp was founded in the royal tomb at Ur, and this kind of instrument was used for ceremonial and social occasions n the civilizations of Samaria and Egypt. The Egyptians also had a long necked lute with two strings and an oblong body, and a six stringed harp that enjoyed pride of place among the stringed instruments of ancient Egypt, where it was plays by royal women and bards, who sung songs of love and of the legend of the

³² Page: 9: Musical Instruments by: Geoffrey Hindly, Hamlyn all color paperbacks, United Kingdom.

gods. In addition, from Egypt too we first here of blind musician, whose virtuosity has astonished their listeners from time to homer to the present day.

Homer himself probably accompanied his performances of his great epics on an early form of the cithara, the bardic³³ instrument par excellence of classical Greece. It was a large instrument held against the player's body and kept in position by a sling passing round the left wrist and the body of the instrument. The strings were plucking with a heavy plectrum probably in a sweeping motion, while the fingers of the left hand damped the unwanted strings.

5:1:2:6: Early wind and percussion instruments:

Although used in temple rituals in ancient Samaria, the wind instruments of the ancient world seem to have remained closer to their humble origins in the shepherd's pipe, essential for keeping the folk together, than the bobble stringed instruments. This may well have been because the mode of playing, particularly of the reed instruments, may have been considered unbecoming to gentle folk. To this day in Africa and in some folk traditions of Europe, the wind player develops grotesquely distended cheeks to serve as wind reservoir.

The Egyptian so pre dynastic time used a type of three hole flute, but the classical world knew a variety of other flute, including the panpipes (a group of short rim-blown flute, bound together, each providing a separate note). However, it seems that the most thrilling wind instrument of the Greeks was the aulos. This was sounds by a double reed (as is the modern oboe) and most has had a raucous sound, since vase³⁴ paintings shows it being using to lead troops into battle. It has commonly played in pairs by a single player.

The elaborate roman 'Hydraulous' organ consisted of rank of pipes sounded by wind from a bellows, and controlled from a keyboard by sliders, it had three or four ranks of different kinds of pipes. The name derives from the fact that a steady air pressure was keeping up by water pressure. The wind chest was partly fills with water and connecting to an outer reservoir; air entering the wind chest forced the water level down and that in the outer

³³ Page: 10: Musical Instruments by: Geoffrey Hindly, Hamlyn all color paperbacks, United Kingdom

³⁴ Page: 12: Musical Instruments by: Geoffrey Hindly, Hamlyn all color paperbacks, United Kingdom

reservoir up; the water level tended to stabilize itself and the wind pressure was maintains.

Numerous types of trumpet and horn were using in ancient civilizations. The Romans had long war trumpet one straight and one curving in a huge circle around the player's body. The Shofar, used in temple music of Jerusalem and still heard in the modern synagogue, was a simple ram's horn. Among ancient percussion instruments was the 'Sistrum', a hoop shaped iron frame with three or four iron bars slotted though holes in the side. As can be shows from the illustration small cymbals and tambourines were also using as, of course were various types of drum. ³⁵.

5:1:2:7: Development of Musical Instruments:

Music exists in all human societies of the world. It may be in the most primitive stage of development or in UN ultra modern stage, the music has its own essential functions in all societies. The universal emergence of music has given development to many types of musical instruments. However, the language and vocal music might have come later but the construction of musical instruments evidently dates with the earliest inventions, which suggested them to human ingenuity. Even in the most primitive tribes of Australia and South America variety of musical instruments of their own contrivance exist, with which they accompany their songs and dances.

Wood, metal and the hide of animals are the most common substances used in the construction of musical instruments. In tropical countries bamboo or some similar king of cane and gourds are especially make use for this purpose. The ingenuity of man has³⁶ contrived to employ in producing music, horn, bone, glass, pottery, slabs of sonorous stone, in fact almost all-vibrating matter. The strings of instruments have been made of the hair of animals of silk, the runners of creeping plants, the fibrous roots of certain tree of cane, catgut (which absurdly referred to the cat is from the sheep, goat, lamb, camel and some other animals metal etc.

The mode in which individual countries tribes are in the habit of embellishing their musical instrument is sometimes as characteristic as it is singular. The African people in several districts of western Africa affix to

³⁵ Page: 13: Musical Instruments by: Geoffrey Hindly, Hamlyn all color paperbacks, United Kingdom

³⁶ Page:1: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

their drums human skulls. Human jawbones surround a war trumpet of the king of Ashanti, which was brought to England. The Maoris in New Zealand carve around the mouth hole of their trumpets a figure intended, it is said to represent female lips. The materials for ornamentation chiefly employed by primitive tribes are bright colours, beads, shells, grasses, the bark of tree, feather, stones, gildings, pieces of looking glass inlaid like mosaic, etc. Primitive communities are sure to consider anything which is bright and glittering ornamental, especially if it is also scarce. Captain Tuckey saw in Congo a Negro instrument which was ornamented with part of the broken frame of looking glass, to which were affixed in semicircle a number of brass buttons with the head of Louis XVI. On them, perhaps a relic of some French sailor drowned near the coast years ago.

Again, musical instruments are not infrequently formed in the shape of certain animal. Thus, a kind of harmonium of the Chinese represents the figure of a crouching tiger. The Burmese possess a stringed instrument in the shape of an alligator. Even more grotesque are the imitations of various beasts adopted by the Javanese. The natives of New Guinea have a singularly shaped drum, terminating in the head of a reptile. A wooden rattle like a bird is a favorite instrument³⁷ of the American Indians of Nootka Sound. In short, not only the inner construction of the instruments and their peculiar quality of sound exhibit in most nations certain distinctive characteristics, but it is also in great measure true as to their outward appearance.

An arrangement of the various kind of musical instruments in a regular order, beginning with that kind which is the most universally known and progressing gradually to the least usual, give the following results. Instruments of percussion of indefinite sonority or in other words pulsatile instruments, which have not a sound of a fixed pitch as the drum, rattle and castanets, etc. are universal. Wind instruments of the flute kind – including pipes, whistle, flutes, Pandean pipes etc. are also to be found almost everywhere, much the same in the case with wind instruments of the trumpet kind. These are often made of the horns, bones and tusks of animals frequently of vegetable substance and of metal. Instruments of percussion of definite sonority are chiefly met with in China, Japan, Burma, Siam and Java. They not infrequently contain a series of tones produced by slabs of

³⁷ Page:2: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

wood or metal, which are beating with a short hammer, the harmonicon is playing.

Stringed instruments without a figure board, or any similar contrivance which enables the performer to produce a number of different tones on one string, are generally found among nations whose musical accomplishments have emerged from the earliest state of infancy. The strings are twanged with the fingers or with a piece of wood, horn, metal or any other suitable substance serving as a plectrum, or made to vibrate by being beaten with hammer as the dulcimer. Stringed instruments provided with a finger board on which different tones are producible on one string by the performer shortening it more or less as on the guitar and³⁸ violin, are met with almost exclusively among nations in a somewhat advanced stage of musical progress. Such as are played with a bow are the least common; they are however, known to the Chinese, Japanese, Indians, Persians, Arabs and few other nations, besides those of Europe and their descendants in other countries.

Wind instruments of the organ kind i.e. such as are constructed of a number of tubes which can be sounded together by means of a common mouth piece or some similar contrivance, and upon which therefore chords and combinations of chords or harmony can be produced are comparatively of rare occurrence. Some interesting specimens of them exist in China, Japan, Laos and Siam.

Besides these various kinds of sound producing means employed in musical performances, a few other less widely diffused could be pointed out, which are of a construction not represented in any of the well-known European specimens. For instance, some nations have peculiar instruments of friction, which can hardly be classed with European instruments of percussion. Again there are contrivances in which a number of strings are caused to vibrate by a cutting of air, much as is the case with the Aeolian harp, which might with equal propriety be considered either as a stringed instrument or as a wind instrument. In short, the usual classification of all the various species into their distinct divisions viz. stringed instruments, wind instruments and instruments of percussion, is not tenable if researches are extended over the whole globe.

³⁸ Page:4: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

Various museums have collected musical instruments for display and research. The collection at South Kensington, in U.K. contains several foreign instruments, which cannot fail to prove interesting to the musician. Recent investigations have more and more elicits the fact that the music of every nation exhibits some distinctive³⁹ characteristic that may afford valuable hunts to a composer or performer. A familiarity with the popular songs of different countries is advisable because of the remarkable originality of the airs: these mostly spring from the heart. Hence, the natural and true expression, the delightful health and vigor by which they are generally distinguished. Western European artificial compositions are, on the other hand, not frequently deficient in these charms, because they often emanate from the fingers or the pen rather than from the heart. Howbeit the predominance of expressive melody and effective rhythm over harmonious combinations, so usual in the popular compositions of various nations, would alone suffice to recommend them to the careful attention of the modern musicians. The same may be said with regard to the surprising variety in construction and in manner of expression prevailing in the popular songs and dance-tunes of different countries. Indeed, every nation's musical effusions exhibit a character peculiarly their own, with which the musician would find it advantageous to familiarize himself.

Now, it will easily be understood that an acquaintance with the musical instruments of a nation conveys a more correct idea than could be otherwise obtained of the characteristic features of the nation's musical compositions. Furthermore, in many instances the construction of the instruments reveals to us the nature of the musical intervals, scales, modulations and suchlike noteworthy facts. True, inquiries like these have hitherto not received from musicians the attention, which they deserve. The adepts in most other arts are in this respect in advance. They are convinced that useful information may be gathered by investigating in productions even of uncivilized nations, and by thus tracing the gradual progress of an art from this primitive infancy to its highest degree of development.⁴⁰

Again, from an examination of the musical instruments of various nations may derive valuable hints for the improvement of the present; or even for the inventions of new. Several principles of construction have thus been

³⁹ Page:6: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

⁴⁰ Page:8: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

adopting by western nations from the eastern nations. For instance, the free reed used in harmonium is an importation from china. The organ builder Kratzenstein, who lived in St. Petersburg during the reign of Catharine II., happened to see the Chinese instrument change, which is of this construction, and it suggested to him, about the end of the last century, to apply the free reed to certain organ stops. At the present day instruments of the Harmonium class have become such universal favorites all over the world as almost to compete with the pianoforte.

Several other will authenticate instances could be cited in which one instrument has suggested the construction of another of a superior kind. The prototype of the pianoforte was evidently the dulcimer known at any early time to the Arabs and Persians who call it 'Santir'. One of the old names given to the disclaimer by European nations is cymbal, the Poles at the present day all it cymbal, and Magyars in Hungary 'Cimbalom'. The 'Clavicembaio' the predecessor of the pianoforte, was in fact nothing but a cembalo with a key board attached to it; and some the old Clavicembali, still preserved exhibit the trapezium shape, the round hole in the middle of the sound board and other peculiarities of the first disclaimer. Again, the gradual development of the disclaimer from the rude contrivance, consisting merely of a wooden board across which a few strings are stretches is traceable by a reference to the musical instruments of nations in different stages of civilization. The same is the case with the highly perfected harp, of which curious specimen, are sill to be founds among several barbarous tribes. It might perhaps be infers from its shape that it originally consisted to nothing more than an elastic stick bent by a⁴¹ string. The Damararas, a native tribe of southwestern Africa, actually use their bow occasionally as a musical instrument, when they are not engages in war or in the chase. They tighten the string nearly in the middle by means of a leathern thong, whereby they obtain two distinct sound, which for want of a sound board are of course very weak and scarcely audible to anyone but the performer. Some neighboring tribes, however, possess a musical instrument very similar in appearance to the bow, to which they attach a gourd, hollowed and open at the top, which serves as a soundboard. Again, other African tribes have similar instrument, superior in construction only in as much as it contains more than one string, and is providing with a soundboard consisting of a suitable piece of sonorous

⁴¹ Page:10: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

wood. In short, the more improved contrivances are closer to European harp. In addition, it could be shown if this were requisite for the present purpose that much the some gradual progress towards perfection, which we observe in the African harp, it traceable in the harps of several nations in different parts of the world.

Moreover, a collection of musical instrument deserves the attention of the ethnologist as much as of the musician. Indeed, this may be asserting of national music in general; for it gives us an insight into heart of man, reveals to us the feelings and predilections of different races on the globe, and affords us a clue to the natural affinity, which exists between different families of men. Again, a collection must prove interesting in a historical point of view. Scholar will find among old instruments specimen which were in common use in England at the time of queen Elizabeth, and which are not frequently mentioned in the literature of that period. In many instances, the passages in which allusion is made to them could hardly be understood if we are unacquainted with the shape and construction of the instruments. Furthermore, manners and customs of our old times assist us in⁴² understanding them correctly.

It will be showing that the modification, which is orchestra, has undergone, in the course of scarcely more than a century, is great indeed. Most of instruments which were highly popular about two hundred years ago have either fallen into disuse or are now so much altered that they may almost be considered as new inventions. Among Asiatic nations, on the other hand, we meet with several instruments which have retained unchanged through many centuries their old construction and outward appearance. One can see various musical instruments in museums including south Kensington instruments still in use in Egypt and western Asia, precisely like specimens represented on monuments dating from a period of three thousand years ago. By a reference to eastern instruments of the present time, we obtain therefore a key for investigating the earlier Egyptian and Assyrian representations of musical performances; and likewise for appreciating more exactly the biblical record respecting the music of the Hebrews. Perhaps these evidences will convey to some a less high opinion than they have hitherto entertained, regarding the musical accomplishments of the Hebrews in

⁴² Page:11: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

solemn processions of king David or in Solomon's temple; but the opinion will be all the nearer to the earth.

There is another point of interest about such collections, and especially that at south Kensington, which must not be left unnoticed. Several instruments are remarkable because of their elegant shape and tasteful ornamentations. This is particularly the case with some specimens from Asiatic countries. The beautiful designs with which they are embellished may offer valuable patterns for study and for adoption in works of art.⁴³

5:2: Importance of Musical instruments:

Instruments have only the note and laya for the performance of whole aspect of music and aim of music. Instruments are fulfilling soak in miraculous of music. Probabilities of extreme fulfillment in music, instruments have getting more honored than vocal and dance music, although use of poetry in vocal music makes the vocal music universal. Some times the poetry is demoralized the quality of vocal music also. If we can view the terms of classical vocal music and light vocal music, we can easily understand that, when the importance of verbs is decreases then it is known as classical vocal. In addition, when the importance of verb is higher then we know it is light vocal music e.g. Khayal, Dhrupad, Dhamar are classical vocal form and Thumri, Bhajan, Gazal and Geet are light vocal music. Above all the vocal forms have the verbs or poetry but its measurement is different per their forms. In addition, musicians can easily draw the line between classical vocal or light vocal music. Above every form of vocal music have been performed by vocalists with the help of verbs but its integrity would be the high or low as per selection of, form by vocalists. Listeners have enjoying the notes only in Dhrupad, Dhamar and Khayal form (words have less importance), listener have enjoying the words only in Gazal, Geet, Thumri, Bhajan e.g. (notes have less importance). Rules are not important in light vocal as it is applying in classical vocal music. Light vocal singers have the only motive to convey the emotions of poetry to the listeners. Still music is there but its motive and aim is changed classical vocal music is class orient music and light vocal music is, very oriented music. As vocal music is not base only on notes, and without words or poetry, it would not able to

⁴³ Page:12: Musical Instruments of the World by : Carl Engel, ABC Publishers, Jaipur-2004

satisfying the listeners. Vocal music has the limitations to convey its emotions without poetry. Vocal music is the combination of notes and poetry.

These types of limitation have not been finding in instrumental music. Although instrumental, have also the forms as classical and light but sill in both forms it is depending only on notes and pure notes, nothing else. Thus, the instrument music proved itself to getting the higher rank than vocal music. Instrumental music is pure and purely conveys the emotions through the notes only.⁴⁴

Experimental imagination gives the greatness to the instrumental music then the other arts. For the total reveling instrumental music is not depending on other factors, which other arts have to need. As example dance, dancer has needs the instruments, vocal and other percussion instruments for the performance. Vocal singer also has needed the help of Tanpura and Tabala and Sarangi or Violin or Harmonium for the coordination.

For the Drama, Drama has also supporting by the instruments as background music. We could easily imagine the scenes without music and with music, so all other musical arts need the support of other factors and without the help of the other instruments (musical). They are not the satisfied their aim of convey their emotions of music to the listeners of viewers.

Bharat Bhumi has also mentioned in the Natyasastra that uses of the musical instruments by the folk in various ceremony and celebrations, he considered as an auspicious.

उत्सवे चैव याने च नृपाणां मंगलेषु च ।

शुभकल्याण योगे च विवाहकरणे तथा ॥ 18 ॥

उत्पाते संभ्रमे चैव संग्रामे पुत्रजन्मनि ।

इंद्रशेषु हि कार्येषु सर्वातोद्यानि वादयेत् ॥ 19 ॥

स्वभावगृह वार्तायामल्यमाण्डं प्रयोजयेत् ।

उत्थानकार्य(व्य) बन्धेषु सर्वातोद्यानि वादयेत् ॥ 20 ॥

अंगानां तु समत्वाच्च छिद्रप्रच्छादने तथा ।

विश्रामहेतोः शोभार्य भाण्डवाद्यं विनिर्मितम् ॥ 21 ॥

⁴⁴ Page: 11: - भारतीय संगीत वाद्य, डॉ. लालमणि मिश्र, भारतीय ज्ञानपीठ प्रकाशन, दिल्ली-1973.

During the description of vocal and instruments he also mentioned that the importance of both more than the both, Jap and prayer for the realization of god.

श्रुतं मया देवदेवात तत्त्वतः शंकराद्वितम् ।

स्नान जप्यसहस्रेभ्यः पवित्रं गीत वादितम् ॥ 26 ॥

Therefore, it is enough enlighten on the importance of musical instruments. Nevertheless, sometimes-musical instruments are to be symbolizing for certain events and ceremony e.g. Temple's Bell (small and big), conch, 'Nagada' when they played together and we could imaging that somewhere performing the Arati in the temple. 'Sahenai' and 'Dhol' (drum) for marriage, for the wartime 'Dudumbhi', 'Ghounsha', 'Tabal', conch etc.

The all instruments were symbolizs, it sound was clarifying the image of the events, and that is its peculiarities.

Primitive peoples have been also used the drums and other musical instruments for covering their emotion, message, their fear and for warning about enemies. Drum bearing where also their principle and importance media for their communication.

Lastly, the most noted contribution of instruments in the history of music is that today's octave is established on the musical instrument Veena, if there would be no instrument the world would be empty with the tradition of music. Origin of notes, establishments of note, distance between two notes, tone, semi tone, it would not be possible without the musical instruments since early to today, weather it is Indian or western country the place of instruments is the phenomenon though the ages.⁴⁵ Frequency and analysis is not possible with musical instruments.

Bharat Muni had defined the Shrutis on two similar Veena (lute) Scientists are depending on the tuning fork and monochord instruments. The essential demand for the analysis the notes are the evolution of the music and for the critical evaluation of music.

⁴⁵ Page: 12 – भारतीय संगीत वाच डॉ. लालमणि मिश्र, भारतीय ज्ञानपीठ प्रकाशन, दिल्ली-1973.

On the view of instruments origination and independent identification for the helping hand of the performing arts, it has the symbolic characteristic in social environment and its contribution for the evolution in the establishment of notes, so musical instruments is pervasion (extended) more than the other performing arts.⁴⁶

5:2:1: Folk Musical Instruments:

In an Indian folk music, solo performance of instruments is found absent or insignificant. They have several dances in which they used only rhythm but there are the group performance of instruments and not solo performances as considered in Indian classical music. Instruments have been so integrated part of tribal life style, rare songs are found without instruments, they could not imagine songs without instruments. Because there songs are the intensively powerful for express their, emotions, and instruments have the effective role into, but we should know that songs have the main role and instruments are on second lead role.

The categories of Avanaddha [Membranophone] and Ghana [idiophone] are been used parallel in the folk music and folk dances, because rhythmic instruments are only have the animate power to make the songs alive. When the Dholak accompaniments with the Ahalsa and Holi, Nakkara in Nautanki, Nal in Tamasha and Hudak played in the son of Kahar tribes, listeners are the rocking while listening the performance. These states are the extreme of rhythmic instruments there are no frenzied enthusiasm in folk songs and folk dances such as Dhol in Punjabi Bhangada, 'Duff' in Rajasthani 'Fag' dance, 'Dhol' in Gujarati 'Garaba' and 'Dandiya-Ras', 'Madal' and 'Khol' in the dance of Santhals are Bhil tribes of Bengal and Bihar.

We have found the concealed natural rules of development when we think over the whole materials of the Indian classical music and folk music. We found 'Nada Dhinam Jagat' (world under the rules of sound) but it is better to say that. "Kala Dhinam Jagat" (world under the rules time), because it is scientifically proved that sound is also under the command of time. Time is also alternative of tremor and oscillating, it shows the difference between the Motion and 'Laya'. Motion is the symbol of animation and notes are the result of it. Therefore, the luster of the motion is more detailed anticipated

⁴⁶ Page: 13:- भारतीय संगीत वाद्य डॉ. लालमणि मिश्र, भारतीय ज्ञानपीठ प्रकाशन, दिल्ली-1973.

then note. We must have the subtle influence of orientation or education for understanding the notes, but every people could understand easily the motion whether they are elite or non-elite and there are no need for any education. Today we have been using the pop rhythms, which are borrowing from the west, we must education for understanding the western notes, but there is no boundary for the rhythmic instruments, we need not any education for the rhythms. Popularity of pop 'Bhangada' and its successful application shows the folk society's attraction to wards the motion or rhythm. Some of the popular Indian musical forms are also known as 'Indipop'.

God creates the motion in the human body, and his sensation is connects with the motion from right to his birth, imagines the unpunctuality of the heartbeats. While walking the movements of both hands is uneven, notice the twinkling of an eyelash. In short, it is holding forth that the motion is undivided factor of human body. Mankind's interest will increased in note after they became cultured. May be, the very first musician has created his first note from the. Derivation of the weeping of child

So the origin of the rhythmic instruments probably first in the history of origin of instruments, and with the development of culture gradually the musical instruments would be create still humans are more interested in rhythm than music. Gradually he being cultural with musical notes but his affection with rhythm is as it is. A- Person, society or countries are founds more cultural, elite and intellectual, who are well-develops in musical notes, and then who are under influence of the rhythm. There is no rhythm or insignificant rhythm in western Classical Music, time count ['laya'] may be there. The eminent music composer like Beethoven and Mozart are also been insignificant used of rhythm in their symphony, and we easily know the class of their music listeners. An Indian classical music has also the based of musical notes anticipated then the rhythm, then secondly 'Laya' [time count], 'Dhrupad', 'Dhamar', and 'Khayal' forms of Indian classical music are totally based on musical notes and it is only for the certain class of peoples, and it needs special practice and education for understand and enjoy above forms.

All instruments are classifying in four categories as per their characteristic, and 'Ghana' [idiophone] is one of them, they also known as non-membranous percussive instruments. The 'Kanshijoda', 'Manjira', 'Kartal', 'Ghanta Nad', etc. are in that idiophone categories, they are used in and with 'Avanaddha' [Membranophone] for the rhythm and time keeping

e.g. 'Manjira' and stick in 'Bharat Natyam'. To day this categories are vanished from the Indian classical music and south Indian classical music system, although it is founds in classical dance, folk dance styles and in folk music of India. To day we applied more and more new instruments in music field but we are totally forsaken the instruments of 'Ghan' [idiophone] categories. Anyway, we must accept that classical music is base on musical notes and folk music is base on rhythms.⁴⁷

5:3: Concept of New Classification

5:3:1: Classification of musical instruments:

The categorization of musical instruments made by the 'Natyasastra' (Chapter-28) is base on four groups of instruments.

3:1:1: Chordophones [Tala]

3:1:2: Membranophone [Avanaddha]

3:1:3: Idiophones [Ghana] [Non membranous percussive]

3:1:4: Aerophone [Sushir]

These categories were not devised because of musicological criteria; they rather served for the classification of the musical ensembles whose function was to contribute the instrumental accompaniment of song in the theatrical performance. The performance practice of Indian theater and dance originates presumably prior to the 'Natyasastra' by the time of which it was already established and it has been mentioning in its basic outline to the present day. According to the 'Natyasastra' [28+4/5], the musical ensemble to accompany Indian drama consists of a singer who sits together with two string instruments [Veena], one as a harp with 21 strings, and with a flute; there are further more percussion instruments (including the Mridang -drum) for rhythmic support. This combination of supporting melody instruments, drum and instruments to indicate the meter is still finding in contemporary performance of traditional Indian theatre.⁴⁸

There are many musical instruments in India. Some instruments are used primarily in north Indian music [Hindustani Music], some are used in

⁴⁷ Page: 1:- भारतीय संगीत वाद्य, डॉ. लालमणि मिश्र, भारतीय ज्ञानपीठ प्रकाशन, दिल्ली-1973.

⁴⁸ Page: 86 The Music Of South Asia. By: Selina Thielmann

the south Indian music [Carnatic music], while others are found in folk music. Instrumental music is usually similar to vocal music but sometimes there is distinctive instrumental style.

There is a traditional system for the classification of instruments. This system is based upon; non-membranous percussion (Ghan), membranous percussion (Avanaddha), wind blown (Sushir), plucked stringed (Tat), and bowed string (Vitat). Here are the classes and representative instruments.⁴⁹ 'Aahat' and 'Anahat' are the two parts of sound (NAD). Ahata knows as musical sound and 'Anahat' sound is nonmusical sound and it is clarifying its character in sound. As musical sounds are produced by Nakhaj (plucked), Vayuja (by air), Charmaja (Membranophone), Lohay (metallic sound), Shariraja (sound of human body). Thus, there are the five musical sounds, which can operate made or produced by man.

Sound of Mridang-Dhol (drum), Tabala etc. are the Charmaja sound (membranous sound). Manjira, bell etc. have the metallic sound, and Shariraya sound is to be produce by human vocal chords Veena (lute) sitar played by plucking so they classified in plucked or 'Nakhaj' sound. Vayuja (by air) is to be producing by the help of the air like Vanshi, Shahenai etc. so they know as 'Vayuja' sound.

Several scriptures have been classified musical instruments in four groups and other has been classifying in three groups only. According to 'Kohal', he had been described five groups, Mahershi Bharat and Dattila had been classified the musical instruments in four categories, as tala, Avanaddha, ghan and Sushir. Narada had been also classified the musical instruments in three categories as 'Kohal' like, Avanaddha, tala and Ghana.

After long criticism of difference of opinion, we clarified that which ancient scholars have been accepted 'Shariraja' (Human body) as the musical instrument. They have accepted five categories for the classification. Those scholar who were believed that human body as musical instrument as fourth categories and whom are not been believed that human body as musical instrument they have accepted only three categories of musical instrument. They had not been believes in forth categories. They believe that, this theory was not been clear and justifying.

⁴⁹: Field research work By: Researcher

To glancing the progress of instruments in the ancient period, the classification of Mahershi Bharat is more appropriate acceptable and proper. He have written in 'Bharat Natyasastra'

ततं चैवावन्ध्या च धनं सुषिरमेवच ।
चर्तुर्विधंतु वज्ञेयमातोयं लक्षणान्वितम् ॥⁵⁰

According to 'Turiya Panchangik' in 'Vimanvatiny' there are five groups of musical instrument as; 'Aatata', 'Vitata', 'Aatata-Vitata', 'Ghan' and 'Sushir'. However, the entire ancient scholars and present day's scholars have been follows the classification of 'Mahershi Bharat.' During the 2000 years old history have been founds only two differences of classifications. First is the 'Vitato' converted in to 'Avanaddha' and second was the 'Tatanaddha,' and second one was the new concept might be created or founded by eminent singer 'Tansen', he had been mentioned the 'Vitat' on behalf of 'Avanaddha'; 'Vitat' verb had been found in the 'Sangit Chintamani' before the Tansen. 'Vimanvathu Turiya' has been mentioning the name 'Atata' for 'Tata' and 'Vitat' for 'Avanaddha' musical instruments. 'Vitat' verb have been derives from the 'Pali' language.

Nevertheless 'Vitat' verb were creating confusion for the common artist. They have constrain to think over for the fifth classification of 'Vitata', because the have only four classification like 'Tata', 'Avanaddha', 'Ghan' and 'Sushir.' In addition, they divided 'Tata' instrument in two groups: Plucked as 'Tata' and bowed instruments in 'Vitat' and rest of three groups are as it is as their ancient classification.

The journey of music instruments has faced the many changes from ancient period to present day. Therefore, other new instruments are also been invents which were not fit in above classification e.g. 'Upang', 'Gopijantri', 'Anandlaheri' etc.⁵¹

⁵⁰ Page: 13,- Bharatiya Sangitvadyo ka Vargikaran By: Dr. Lalmani Mishra, Bharatiya Gyanpth Prakashan, Delhi-1973

⁵¹ Page:14, - Bharatiya Sangitvadyo ka Vargikaran By: Dr. Lalmani Mishra, Bharatiya Gyanpth Prakashan, Delhi-1973

5:3:1: Concept of New Classification:

If we try to compare the musical instruments with the some of the musical instruments of the world then we found the little difficulty to classify as Indian concept, not only with the western musical instruments but also with some of the ancient musical instruments.

We have the Upang musical instrument mentioned in musical history of ancient India. 'Upang' is a stringed instrument and it is covers with leather, it was using as rhythmic instrument by plucking the string. It creates the confusion for its class, whether it is Tata or Avanaddha, 'Upang' is not string instrument because it is not able to produced musical note, 'Upang' have producing only rhythm, but not by leather, therefore how we classified Upang in certain mentioned groups?

We have also the some bowed instruments, covered with leather e.g. 'Sarangi', 'Ravanhasta', 'Esraj' etc. These are stringed instruments but hey have leather also but hey are not produced rhythm. They have string but not played by plucked, but some scholar were classified them in the 'Vitat' group.

Upang musical instrument were been mentioned as 'Tanti Pathika' by, Mahakavi Ban, Upang also covered with leather and sound were produced by the string and still it is not classified in group of string instruments, by naturally it is rhythmic instrument. Therefore, it is confusion for musician how to classify, such instruments for their classification.

Nevertheless, we find new classification in Vimanvathu and Sangit Patha as 'Tataavanaddha', 'Vitata'.

Confusion also carries on with classification of 'Jal Tarang', 'Kancha Tarang'. Both are originally classifying in 'Ghan' (Idiophone) categories but they fulfill the whole aspect of musical fulfillment based on Raga imagination.

Other group is 'Mridanga Tarang' a 'Tabala Tarang' both is included in Avanaddha (Membranophone) but as Tarang, their characteristic is different, then the Avanaddha (Membranophone) they are not to be using as

the rhythmic instrument; the produced musical note and other stringed or bowed instruments as our ancient classification of musical instruments.⁵²

There is wide variety of way in which instruments may be grouping. They may be grouping by their primary materials (for example, metal, wood, earthenware, skin). By their functions (devotional, military, domestic), or their musical role (rhythmic, melodic, drone), In 1914 a comprehensive, if unwieldy system was devised, known as the Hornbostel - Sachs system, which defined instrument families in terms of what actually vibrates to produced the sound, the families were termed idiophone (Solid, intrinsically sonorous objects). As Indian classification 'Ghan', Membranophone (stretched membranes) as Indian classification, Avanaddha, Aerophone, (enclosed or free masses of air) as Indian classifications Sushir and chordophones (stretched strings) as Indian classification Tata. A fifth family, electrophones (oscillating electronic circuits), was added more recently. The Hornbostel - Sachs system is today widely used as an objective classification system for instruments from many different cultures. However the classification of instruments by their primary materials still persist in for instance, east Asian music and up to a point, the western orchestra, whose instrumental division consist of the string, woodwind, brass and percussion families with an additional grouping for keyboard instruments.⁵³

5:3:2: Classification of musical instruments:

The first category of musical instruments, discussed in chapter 29 of the 'Natyasastra' of Bharatmuni, is chordophone (tala). The term for the string instruments is Tata (from the verbal root tan, to extend or to stretch, hence Tata, stretch) which refers to something being stretches and extending towards one direction, i.e. to the string that is stretches between two fixed points. Membranophone (mentioned in chapter 1 and 29, and discussed in chapter 33 of Natyasastra) are calls Avanaddha. Literary 'tied' or 'covered with' i.e. a corpus, covered with a skin, according to chapter 33, verse 18; all instruments (Atodya) are suitable to be using as Avanaddha, provides that they are able to express the proper Rasa (sentiment) and Bhav (state of emotion). Ghana (compact, solid; derived from the root Han, to strike, to kill) are instruments with a solid body which is truck hence idiophones. These are

⁵² Page:15, – Bharatiya Sangitvadyo ka Vargikaran By: Dr. Lalmani Mishra, Bharatiya Gyanpith Prakashan, Delhi-1973

⁵³ Page:15: – Microsoft Encarta Encyclopedia – 1993-2001

considering in detail in chapter 31 of the Natyasastra. No specification is making as to the solid ⁵⁴ body being forming to the metal; the material may have been wood or clay as well, beaten with sticks. Finally, chapter 30 to the Natyasastra provides the description of wind instruments that are Sushir, hollow or having a good tube or channel through which the sound is producing. Vamsa (bamboo, bamboo tube) which refers to a wind instrument played without tools. Reed instruments were not yet using in Indian theatre at the time of the Natyasastra.

Beginning with Idiophone the four categories of musical instruments shall now be discussing based on the modern classification system devised by Sachs and Hornbostel; Deva (1977) follows the same order.

2:1: Ghana (Idiophones)

Idiophones are defined as either struck or clashed. Of struck idiophones, the sounding part is fixed and unmoved, and only the sound producing (but not sounding) part is moved. This category comprises struck rods (e.g. the Xylophone), plates (e.g. gongs) and vessels (e.g. bells). Of clashed idiophones, the sound is producing by moving two parts together, both of which are sounding (e.g. cymbals). Further types include shaken, rubbed and plucked idiophones.

1:1: Struck idiophone:

Struck rods have taken a long development in the history of musical instruments, which resulted in the construction of the Xylophone. The Indian Xylophone is known as Kasta-Tarang (literally –‘wood wave’), a term that points at the material wood of which the instrument is made. Because of the fixed pitches of the tuned slabs, the xylophone cannot produce the subtle glides from one note to another required by the performance practice of Indian music, hence the instrument has remained a random phenomenon in south Asian music. Another type of struck rods, called ‘Sangit Stambha’ (musical pillars) consists of stone pillars beaten with sticks; these instruments are tuned to specific ragas and because of their function to provide the rhythm accompaniment of song; they are referred to as ‘laya-Stambha’ (tempo pillars). Further xylophone are the Kinnari, an instrument which belongs

rather to the musical traditions of Burma and Thailand⁵⁵ (the name 'Kinnari' result from a terminological error and has nothing to do with the Indian string instrument 'Kinnari') and the 'Kancha Trang' (glass wave), a xylophone made of glass.

Bells belong to the category of struck vessels. They too are plays to announce the ritual worship in temple; at the same time, they serve to prevent evil effects. The term of bell is 'Ghanta', derived from the verbal root Ghan, to speak. Indian temple bells never reach the size of a European church bell. The mode of playing depends largely upon the constructional situation of the temple. Thus, in north Indian 'Haveli' type temple, the bell is often affixed to the temple roof and for reasons of convenience, a rope is let down to the interior, which is then pulled to make the bell resound the ceremonies. Temple bells may be plays in sets of small bells, too again by pulling strings that are tying to the bell.

1:2: Jal Tarang:

Two further types of struck vessel may be mentioned here : the 'Jal-Tarang', literally 'Water wave' is a set of porcelain bowls of different size filled with water, whose edges are beaten with small sticks in the manner of xylophone. Since gliding embellishments cannot be produces, the instrument is suitable only for the musical pieces in fast tempo. In south India, the Jal-Tarang has acquires the status of a concert instrument and appears, though rarely on the concert stage, accompanied by an Mrudang drum and a violin. In north India, the instrument is occasionally found in [88] temples as part of the ensemble that accompanies congregational singing.

The drumming pot (ghat) in south Indian pronounced 'Ghatam' and earthen water jar beaten with hands like a drum, is very popular in south India, where it is often used along with the Mrudang, to provide the rhythmic accompaniment of performances by the vocalist or melody instrument. In north India, the instrument does not occur in the concert stage.

1:3: Clashed idiophones:

The category of clashed idiophone includes sticks and clashed plates; clashed sticks serve primarily as props in dance all over India. They are refers to by various terms, besides the Sanskrit 'Danda' or 'Dandi', local

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expressions are used, such as 'Karra' or 'Katta' in Telugu and 'Kolu' in Tamil and Kannada. Kolattam (stick dance) is a south Indian dance play with sticks; Pinnal-Kolattam refers to a folk dance from south India with ribbons and sticks. Dance forms with sticks exist in north India as well; thus, the performance of the circular dance known as 'Rasa' in the 'Rasa Lila' dramas of 'Vraja' includes sometimes the presentation of stick-dance. Either clashed idiophones are made of wood (clappers) or of metal (cymbals), they are played mainly in religious context, by pilgrims, at rituals and in devotional music. Thus, in north India, the distinctive criterion for performances of the same musical genre in devotional respectively classical context is the use of cymbals in the former and their absence in the latter. The purpose of clashed plates is to indicate that the musical meter.

1:4: Shaken Rubbed and Plucked idiophones:

As for shaken idiophone, rattles are found in manifold forms as folk instruments and toy for children. The other principal type of instrument belonging to this category is 'ankle-bells' (Ghungharu). These are worn by dancers, who hold them in high respect and regard them as the sacred symbol of their profession. Rubbed idiophone includes scrapers and rasp. Finally, jaw's harps are plucked idiophones. The type of Jaw's harp found in south Asia, like European type; consist of a circular iron frame with a thin lamella jutting out between the jaws. This instrument is called 'Mukhachang' (Murchang-Mursinga) literally mouth (mukha) drum (Changa). The jaw's harp, of historically, recent origin, is played to support the drum rhythm; it is never used as a melody instrument. Besides the Mukhachang, the South East Asian type of jaw's harp made of bamboo exists in few regions of northern and eastern India, such as Assam and other Himalayan areas, and in Rajasthan and north Gujarat.⁵⁶ Musical instrument in non-membranous percussive (Ghana)

This is one of the oldest classes of instrument in India. This class is based upon percussive instrument, which do not have membranous, specifically those that have solid resonators. These may be either melodic instruments or instruments to keep the rhythm.

- Kasta Tarang
- Jal Tarang

⁵⁶ Page: 89:90: The Music Of South Asia By: Selina Thielmann

- Manjira / Zanz / Kanshijoda
- Ghatam / Ghanta (Bell-big/small)
- Murchang
- Ghungharu
- Kartal
- Chhimpta

2:2: Avanaddha (Membranophone)

2:1; Barrel drums

The two principal accompanying drums of south classical music belong to the category of barrel drums: the Mrudang of Carnatic music and the Pakhavaja or Mrudang of north Indian classical music. The term Mrudang is composed of 'Mru' (earth, clay) and 'Anga' (limb) and indicated that the instrument may have been made of clay in earlier times. Nowadays the drums are made of wood. Both the south Indian Mrudang and north Indian Pakhavaja are double conical, double headed drums, hence divergences occur not so much in construction but rather with regard to the sound characteristics.

Mrudang (south) the right head of the drum is covered with three different animal skin and that from inner, middle and outer layers. A black paste (Syahi) spread on the middle layer causes the characteristic dark coloring of this drumhead, which is there by to a fixed and invariable pitch. The left drumhead is covers with a buffalo skin and sheepskin; here dough is applying every time the instrument is playing and removes after use. Leather braces are stretches between the two skins around the instrument.

Pakhavaja or Mrudang (north) the Pakhavaja presumably derived from 'Paksa' wing, and the root 'Vaj' to be hard or strong or rather from Sanskrit 'Pksatodya'. Instrument with wings 'Prakruta', 'Pakkhaujja', Hindi 'Pakhavaj' is used along with Mrudang to denote the barrel drum, whose construction characteristic are the same as those of the south Indian Mrudang with the exception that the north Indian drum has tuning blocks. Besides the smaller type, a slightly longer version of the instrument is finds, the two types, however do not differ from each other in sound. The somber, majestic sound of the two north Indian types is clearly distinct from the sharper, higher pitched south Indian Mrudang. As for north India, there is no evidence for a

specification in the usage of the terms 'Pakhavaja' and 'Mrudang' to denote either the one or the other type of instrument, or nor is it possible to⁵⁷ identify which term is older. Both terms occur likewise in mediaeval Hindi devotional poetry, and the preference of the one or other term is often determined by poetic rather than organological criteria.

Besides Mrudang and Pakhavaja that are primarily associated with classical and devotional music, and that are popular throughout India, a great variety of double-headed barrel – drums can be found in the specific regions. Among these, the double-headed brass barrel-drum 'Khola', the typical percussion instrument of Bengal, has become widespread at least in northern and eastern India along with the 'Vaisnava', 'Sankritana', movement propagated by the 16th century Bengali saint 'Chaitanya'. Sankritana or congregational singing of the names of God, is accompanied by Khola drums and Kartal cymbals – the 'Dhol' and its smaller counterpart called 'Dhdaka' are cylindrical barrel drums characteristic of folk music traditions all over India. Further types of barrel drum are listed in the survey of musical instruments provided in this thesis.

2:2; Hourglass drum (Damaru):

Owing to its religious association with Lord Shiva, the pellet drum 'Damaru' (Tamil also 'Damarukam') is the most well-known type of hourglass drum. Depiction of Shiva as the divine dancer (Shiva-Nataraja) shows him with flame as the cymbal of destruction in his left hand and the Damaru as the symbol of creation in his right hand. The Damaru is a pellet drum, or rattle drum, characterized by two cotton strings tied by one end to the constricted part of the body, while small pellets are affixed to the other end. The instrument is played to accompany religious or ritual folk music as well as the chanting of magic formulae. In Tibet, the body of the drum is said to be made of two human skulls covered with human skin. In South India, a number of similar instruments called Dugduga, Dadbuduke, Kudukuaupai, and Naidukku are found. The Dadbuduke is famous nowadays not more as an hourglass drum, but takes a tin for its body. In Gujarat region similar instrument known as Dugdugi, which is used in the ritual functions of Gujarati Vaghari communities of south Gujarat for the worshiping of mother goddess 'Meldi', but they are playing it with stick.

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This instrument is very popular with comedians and itinerant musicians. Primitive types of hourglass drum are selling in the market as toys for children. There are furthermore types with pitch. The pitch is modifying by changing the pressure on the tuning braces at the point. Where the braces are constricted by a cotton thread, this is done while holding the drum in hand and playing.⁵⁸

2:3: Vessel-drum:

Vessel drum are constructs of a vessel whose bottom or sometimes-upper opening is covers with membrane. This type of drum is far more common in the Middle East; in south Asia, it is founds in some folk music traditions. According to Sachs (1923), the south Asian vessel-drum is refers to as 'Ghutru' Udupe and Ghumara. The Tumbaknari (from Persian, Tombak, and Dombak) is a vessel drum from Kashmir, an area whose music show strong middle-eastern influences and serves to accompany folk music. Further vessel drums are the Gummati consisting of an earthen can with a skin stretched over its bottom, and Kutamala a water pot with a skin over its opening.

2:4: Frame-drum:

In India, frame drum enjoy an extraordinarily high religious significance; they are plays in temple and as a part of religious ceremonies, and in many cases, they regarded as sacred instruments. Frame drums are moreover part of the folk music tradition. The most important type is the 'Duf' (Hindi spelling also, 'Dapa', 'Dhapa', 'Dhapha'); a frame drum is about four feet in diameter. In north India the Dhapha is a sacred temple instrument, which is playing only at the time of spring festival 'Holi', hence it is frequently refers to in verses of mediaeval devotional poetry for the 'Holi' season. During 'Holi', the Dhapha is indispensable in the ensembles to accompany performances of congregational temple singing, religious folk music, as well as religious theatre. It is very famous in Rajasthani 'Holi Songs' or 'Fag' songs based on Holi festival.

2:5: Kettle drums:

Beside the large number of folk music instruments, the category of kettledrum includes the Tabala, the principal accompanying percussion

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instrument of more recent style of north Indian art music. The term Tabala is a Middle Eastern origin; however, where as the Middle Eastern word table refers to a barrel-drum, the Indian Tabala is a pairs of kettledrums. The instrument was introduced into India relatively late; kettledrum occurred for the first time around 1550 at the court of Delhi. The right hand drum of Tabala with variable pitch, is called⁵⁹ Tabala or 'Danya' (right), the left hand drum, with fixed pitch is 'Banya' (left). The Tabala accompanies all style of classical, semi-classical and light classical music in north Gujarat. With the exception of Dhrupad and instrument renditions in Dhrupad style that are accompanied by the older and more traditional barrel-drum 'Pakhavaja.' Further types of kettledrum include the Nagara or 'Naqara' (a term of Arabic origin), which is often refers to in poetry of 'Dudumbhi' a term to denote kettledrum in generally occurs already in puranas. The Nagara is not limited in size, it may measure up to 1.5 meters in diameter. In earlier times, the Dudumbhi served to announce proclamations and messages and war drum (the army whose drum had been sized was defeated). Today, the instrument is played in procession (sometimes tied to the back of an elephant) and in temple.

2:6: Plucked drum:

Plucked drum are characteristic instrument of a folk music traditions, especially in Bengal. The Baul singers of Bengal accompany their songs on a plucked drum, either on the Ektara with fixed pitch, but more often on the Gopi-yantra on the Anand Laheri, both with variable pitch. In the regional music traditions of Maharashtra and Karnataka, plucked drum (called Tuntuni) are popular accompanying instruments played by epic singers.

This is a class of instruments, which have struck membranes. This typically comprises the drums.

- Pakhavaja
- Mrudang (Mridanga)
- Tabala
- Tabala Tarang
- Dholak
- Dholaki

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- Duf (Duf, Dhapa, Dafali)
- Nal
- Dhol
- Nagada
- Khol (Mridanga)
- Kanjira
- Tavail
- Pung
- Thanthi Panai
- Damaru (Dugdugi, Dakali, Dak)
- Chenda
- Shudda Madlam
- Ldakka and Udaku (Udakai)⁶⁰

2:3: Tata (Chordophones)

The 'Sangitratnakara' or 'Sarangdeva' (6.7) equates the general term 'Tata' for string instruments with Veena (lute) a word of doubtful origin that is possibly derived from the same verbal root 'Vad' (causing to sound) as the term 'Vadya' used for musical instruments. 'Sarangdeva' mentions an instrument referred to a Shruti Veena that could produce all 22 Shrutis. Verse 6.9 terms all remaining string instruments Svara-Veena (note-Veena); these include the Ektantri with one string, the Nakul (two strings), the 'Tritantri' (three strings), the Chitra Veena (seven strings), the Vipanchi Veena (nine strings) and of the instrument; it may be presumed that the Ektantri, Nakul and Tritantri were stick-zithers, and the Chitra-Veena, Vipanchi and Mattakokila harps. Written sources confirm that chronologically, the harp is older⁶¹ type of string instrument, followed by the lutes and the stick-zithers. Verse 6.10 of the Sangitratnakara mentions further instruments with one string 'Alapini' 'Kinnari' 'Pinaki' (bow) and Nishanka-Veena. We remember that this description dates from the 13th century, i.e. the turning point between the ancient and mediaeval period. Veena instruments with one equipped with frets hence could produce all notes. The expression Veena as such as much older, it occurs already in Yajurveda and is used in the

⁶⁰ Page: 1&2: www.chandrakantha.com

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Natyasastra as well, where it is stated (28.118-120) that, song is accompanying by two Vipanchi-Veena (which instrument has nine strings). Elsewhere (33.32), the 'Natyasastra' described the human body as a Veena with seven notes (known as Gatra-Veena) and adds that these enter into the musical instruments when they come out of the body; The passage points at the fact that, according to ancient perception. The Veena resembles closest the human voice, hence given the first place in the hierarchy of musical instruments.

3:1: Musical bows:

Simple chordophones are characterizing by the fact that the resonator can be separates from the sound producing element without making the instrument unusable. The most primitive type is the musical bow (Pinaka or Pinaki Veena), referred to in Sangitratnakara (6.10) whose strings is plucked either with the fingers or with a plectrum, producing a weak sound. Some times small bells are affixes to bow that produce a jingling sound. There two instruments in north India, Ravanhasta or Ravanhatta and Sarangi, Ravanhasta is a folk musical instrument invented by Ravan the demon king of Silence. Sarangi played with classical music as well as Gazal and Mujara style song sung by 'Tavayaf' (professional dancer). Today, the musical bow is plays primarily in south India by professional ensembles called Villupattu (Tamil Villy, bow and Pattu song). These groups render song narratives based on texts from the Mahabharata and Ramayana epics in (Malayalam); the musical bow serves to fill and support the musical progression in the intervals between the sung passages.

3:2: Musical sticks:

As distinct from the musical bow, musical sticks can be tunes. Here, the bow is replacing by a solid stick. First evidence for stick-zither is found in the 7th century A.D. Depiction of pairs of musicians on the famous relief 'Arjuna's Penance' in Mahabalipuram also called the [94] desert of Ganga, show the man playing a stick-zither with a half-gourd for a resonator (kuckertz 1996:92). The instrument is calling Kinnari. Between the 7th and 14th centuries A.D., this instrument developed in four successive stages into the type of instrument which is now referred to as 'Veena' or 'Rudra-Veena' in North India.

Type-1: (7th Century A.D.) Stick-zither presumably made of bamboo and with only one string, with a half-gourd placed on the breast of the player; plucked with the right hand while the strings pressed with the left hand.

Type-2: (8th to 10th Century A.D.) The same constructional feature as type-1, but gourd is placed on the armpit.

Type-3: (10th to 11th Century A.D.) Played by women, hence a second gourd was added (presumably because of insufficient physical strength of the female players).

Type-4: (14th Century A.D.) The two gourds are almost fully globular in shape; the upper gourd is placed above the shoulder.

The north Indian Veena (also Rudra-Veena, Vina) is a stick-zither with 24 fixed metal frets each of which serves to produce one-half tones within the range of two octaves. In earlier times, the instrument had only between 19 and 22 frets, but these were movable. The Veena has seven strings, for melody strings running over the frets, two drone strings affixed left of the fingerboard and plucked from time to time with the little finger of the left hand, and one drone string right of the fingerboard and plucked with left hand. The drone strings are referred to as Chikari. Veena playing was very popular in Mughal times; more recently, however, the instruments have increasingly been relegated into the background and were replaced on the concert stage by other instruments such as the long-necked lute sitar. The main reasons are the difficult playing technique of the modern (24 fret) Veena and the sensitivity of its tuning. Nevertheless, the art of Veena playing has been preserved to the present day, and the instrument is still heard, especially in connection with ancient 'Dhrupad style.'

3:3: Board Zithers:

Zithers are more common in the middle east than in south Asia hence it does not surprise that such instruments are found primarily in the north, which has come stronger under Persian and Arabic influences than the south. The Sanskrit term for 'Zither' is Sattantri Veena i.e. string instrument with a hundred strings. The Svaramandala (circle of notes) is trapezoid zither played with the fingers of the right hand, which is found as a drone-like south filler in the accompanying ensembles for performances of trapezoid board zither beaten with small hammers, has its roots in the Middle East; in India, it is played in Kashmir (India).

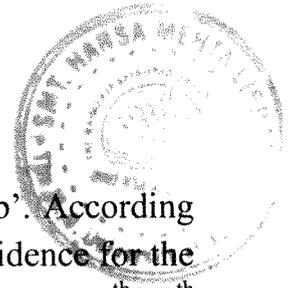
3:4: Spike Lutes:

Spike lutes (a type of lute made of a stick that runs through the body of the instrument) are characteristic for south East Asia, but they do occur in some south Asian folk music traditions, especially of Rajasthan. The most well known repetitive of this family is called 'Ravanhatta' (or Ravanhasta hand of Ravan) a bowed spike lute played in Rajasthan and Gujarat.

3:5: Long – Necked Lutes:

Long necked lutes are mostly plucking instruments, in distinction to the short lutes that are either plucked or bowed. The south Indian Veena is a long necked lute with 24 frets each of which produces one half-tone, and with four strings, two of which are made of steel and two of brass. The 17th century ruler 'Raghu nath Nayak' introduced the instrument into south India and his prime minister 'Govinda Dikshitar'; who first constructed the modern type with 24 fixed frets in place in earlier Veena with 20 movable frets. As for north India, the principal long necked lutes of present day concert music are Sitar and the Surbahar the 'sitar' (from Persian 'Setar'. Three strings, also called 'Tritantri-Veena', Veena with three strings) is said to have been introduced by 'Amir Khushro' (13 century); however, the instrument was not known at the court of the 16th century ruler 'Akbar'. It gained significance as a concert instrument only during the 20th century, when it began to replace the 'Rudra-Veena'. The 'Surbahar', a bass 'Sitar' is particularly suitable for performance in serious style of Hindustani music (especially 'dhrupad'); played together with the 'Pakhavaj', the 'Surbahar' may replace the older 'Rudra-Veena'.⁶² A further type of long necked lute is the 'Tanpura' or the 'Tambura'. The 'Tanpura' has neither frets, nor fingering technique; the four strings are continuously plucked with the fingers of the right hand, one string after the other produce a constant drone. The two middle strings are tuned to the outer thread are placed between the string placed between the strings and the and the cotton thread are placed between the strings and the bridge are placed between the string and the bridge, in order to produce a buzzing sound.

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3:6: Short-lute:

The prototype of the short lutes is the 'Rabab' or 'Ravab'. According to the definition of the term, string is pulled over strings. First evidence for the bowed string instrument is found in the Middle East around the 9th/10th centuries, when lutes were played for the first time with a bow. Two types of 'Rabab' evolved: the pike-lute that gained its principal importance in south-east Asia and the short-lute, whose area of influence extended subsequently to the west and via Kashmir to south Asia.

The principal bowed lute of north India is the 'Sarangi', which is played for the accompaniment of song and in recent times, as a solo instrument. According to modern perception, the 'Sarangi' bears exceptionally close resemblance of the human voice. Besides three-melody string, the instrument has about 35 to 40 sympathetic strings. The 'Sarangi' received its present shape apparently during the 17th century; it was not known at the Mughal courts. Nowadays the 'Sarangi' is also well established in north Indian temples, but here too, little evidence for the instrument is found before the 17th/18th centuries, and there are only few references to the 'Sarangi' in devotional poetry of the medieval period. In south India, the 'Sarangi' does not occur at all. The function of the secondary melody instrument is taken over by the European violin, which was introduced into south India around the middle of the 19th century by a grandnephew of 'Muttuswami Dikshitar'. In the Indian context, the playing position of the violin was changed; the player sits with crossed legs and supports the instrument on his left knee.⁶³

As for plucked short lutes, the most important representative is again found in North India. The 'Saroda' (a term presumed Persian origin, which is also related to Sanskrit 'Saradiya-Veena', 'Autumnal-Veena' or to the verbal root 'Sru', 'to hear', listen) is popular concert instrument for solo performance in any north India style.

3:7: Harps:

The north Indian expression for harp is the Sanskrit 'Veena', in south India; the Tamil word 'Yal' is used. Harps were of relevance in south Asia approximately until the end of the Gupta period (5th century A.D.) Thus, it is

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knows of king 'Samudragupta' that he played himself a harp called 'Parivadini'. The earliest type of harp, i.e. the arched harp is frequently depicting in the work of the Maurya Empire (C.A. 320 – 183 B.C.). However, the instrument itself is older and found already in Sumerian sources from approximately 2500 B.C. being the most popular instruments in Buddhism, arched harps are nowadays found only in Burma, but no more in India where Buddhism is almost extinct⁶⁴ Plucked and bowed stringed instrument of India:

- Chordophone (Tata)
- Sitar
- Rabab (Kabuli Rabab)
- Sarod
- Sarsvati Veena (South Indian Veena)
- Surbahar
- Gotuvadyam
- Rudra Veena
- Vichitra Veena
- Ektar
- Tanpura
- Bowed instruments
- Sarangi
- Sarinada
- Violin
- Esraj
- Dilruba
- Chikara
- Mayuri Veena
- Pena⁶⁵

2:4: Sushir (Aerophone):

4:1: Trumpets:

In south Asia, trumpets serve as signal instruments. Two principal categories are found: conch trumpets and Tubular trumpets. As for conch

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trumpets, two types are distinguished: the plain conch and the conch with a mouthpiece is adding. Conch trumpets (shankha-conch) are using in temples to announce the ritual worship; furthermore, in processions (funerals, marriage etc.) and in south India, they may occur in 'Nagswaram' ensembles to support the meter. Tubular trumpet may be conical or cylindrical in shape, and the type of tube may be either straight or crooked (S-shaped or C-shaped). Some instruments are made of animal horn, other of brass, and they are often plays with a mouthpiece. Tubular trumpets are plays as signal instruments in temple and religions processions, as well as in military bands.⁶⁶

4:2: Flute:

The Sanskrit term for bamboo is 'Venu' (bamboo, reed, cane). Further terms are 'vanshi' or 'Bansuri' (bamboo), pointing at the material of which the instrument are made, and 'Murali' (a general and poetic term for flutes). Three types are distinguishes: vertical, horizontal and beaked, of which only the horizontal type has gained significance in south Asia, whereas vertical and beaked flutes remain confined to local and folk traditions. Beaked flutes are particularly widespread in Punjab. Keyless horizontal bamboo flute of various sizes ('Bansuri' in north India, 'Pillankulal' in south) are played on the concert state (in north India also in temple) as accompanying melody instruments or holistically.

4:3: Clarinets and bagpipers:

In south Asia, clarinets are plays primarily in folk music and by snake charmers. The snake charmer's pipe is refined to by various names (e.g. Pungi, Tumbi, in Gujarat been, morli). However, the constructional features are more or less the same for all instruments of these types, consisting of a gourd that serves as an air reservoir to which three tubes are attached (a single tube on upper and a double tube on the lower end). The instrument is beating reed is affixed to each of the two lower tubes, one of which serves as a drone while the other produces the melody. The bagpipe, an instrument that is very popular in Middle East, occurs in the folk music of south Asia and refers to by a variety of vernacular terms.

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4:4: Double-reed instruments: (Oboes)

Three types of double-reed instrument are distinguished in south Asia : the 'Sahenai' (North India), a short conical oboes with metal opening, the 'Nagswaras' (south India), a long and slender wooden instrument and the 'Mohori' (East India), which combines features of both 'Sahenai' and 'Nagswaram', but bears more resemblance of the 'Sahenai'. Oboes are generally plays in procession and on celebrations such as marriages; because of their penetrating sound, they are mostly hears in the open space. At the outer gates of large Hindu temples, oboes and drums function as signal instrument to announce the ritual worship during the hours of service. In north India, oboes are founds as supporting melody instruments in musical performance in side the temples, too. Moreover, both the 'Sahenai' and the 'Nagswaram' players enjoy a high status and are regards as the preservers of the purity of the 'raga' tradition. The north India 'Sahenai', on the other hand, beyond to the 'Naubat' ensembles that used to play at place gates during the Mughal period.

4:5: Reed Organs:

The principal reed organ of south India is the harmonium, which was introducing from the west. Since the harmonium cannot reproduce the essential gliding movements of Indian music because of the fixed pitches of its keys, it has been banes from the concert stage in south India. In the north, the instrument was maintains largely for social reasons. Concert music apart, the harmonium is widespread as a supporting melody instrument in folk music and devotional music of north India.⁶⁷

- Bansuri (flute)
- Shahenai
- Pungi
- Harmonium
- Shankha (conch)
- Nagswaram
- Gottu
- Surpeti

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- Mukha Veena⁶⁸

4:6: Note on ensembles:

The basis of Indian music is always song. Musical instruments are evaluating according to the degree to which they resemble the human voice. For this reason, string instruments and especially the 'Veena', occupy the place on top of the hierarchy, followed by wind instruments. Brahmans, when appearing as musicians on the concert stage, act as singers or players of string instruments in (religious music they may play any instrument belonging to the musical practice of the respective temple). Musical ensembles consist of melody instruments (i.e. string or wind instruments), drone instruments (mostly the long-necked lute 'Tanpura') as well percussion instruments to provide rhythmic support (i.e. drums for rhythmic accompaniment and idiophone (Ghan) for metric beat). Ensemble types shall be discusses separately in the session on setting and performance practice of Indian music.⁶⁹

5:4: Folk musical instrument of Gujarat:

Folk music and singing had its following streams in the folk-life since ages past. It is the music of the heart and where there is folk-life coupled with gaiety, singing alone or accompanying by an instrument of any one or several types is sure to be three simple emotions and feeling given utterance rhythmically and expressed its artistry. A musical note, condense or an utterance would express feelings of sorrow and agony over loose and failure, about heroic exploits of the brave and pursuits of the wise and unworldly.

Folk music and singing although not at tuned to classical training and governed by any rules and regulations, this art has its own rhythm, cadence, musical notations peculiar and conducive to its mode of utterance and expression. It could be said that there is no school of music and fine arts for folk music and folk instruments, so of folk dances. Folk music, use of folk instruments and playing of folk dances have traditionally come down from one generation to the other, in the folk-life of the people residing in the respective regions having typical artistry of their own and at subsequent stages had taken to other region where such artists traveled.

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5:4:1: Traditional folk instrument of Gujarat:

Gujarat is quite rich and bountiful as⁷⁰ compared to other regions of the countries with regard to folk culture. Together with fine arts, dominance of folk arts in Gujarat exists in the mind of its people since centuries. Instrumentals in folk music and folk songs used since several centuries in Gujarat are quite unique so far as shape, system and devices are concerned and could be classified as (1) 'Ghan' Idiophones (2) Avanaddha – Membranophone (3) Tata – Chordophone (4) Sushir – Aerophone, all ready we have been discussed all the categories in details.

(1) Ghan (idiophone)

1. Zanza-Kanshijoda
2. Murchang
3. Chimpta
4. Manjira
5. Kartal
6. Maan
7. Dandiya
8. Thali
9. Tali/clap⁷¹

1: Zanza-Kanshijoda (kalbaliya, khadtala):

A pair of cymbals about 10 cm in diameter played primarily in all Gujarat, probably in Duha-Chhand, Bhajan and folksong in Vaishanava temples.

2: Mukhachang (Murchang – Mursinga)

Mouth drum: jaw's harp is consisting of a circular iron frame with a thin lamella jutting out between the jaws.⁷²

This instrument is quite common in central India, particularly Rajasthan, Gujarat and Madyapradesh. It is an iron frame of about 15cm length that has a tongue which produces sound when the air is blown in the frame after keeping between the lips of the player. Fingers are uses to move

⁷⁰ Page: 38: Folk Art and Culture Of Gujarat: By: Joraversingh Jadav

⁷¹ Page: 4: www.chandrakantha.com

⁷² Page: 105: The Music Of South Asia: By: Selina Thielmann

the tongue of the iron frame. Only skilled players can produce variety of musical notes in a rhythmic manner. It can be played during dance, song or in solo.⁷³

3: Chhimpta:

Chhimpta is always carried by an ascetic, they are used in their devotional song as a rhythm.

Small cymbals attached to an iron bar with two arms, played to mark the meter, term of uncertain origin.

4: Manjira

A pair of small cymbals about 6cm in diameter, played to accompany in religious and devotional songs. In Gujarat 'Manjira', players are playing 'Manjira' as an artistic way in public performances as 'Dayro' and 'Santvani'. Manjira playing accompanying the rhythm and playing two pairs and this unique art of Manjira playing is not the same in other states of India as in Gujarat.

Manjira are also used in south India classical dance like Bharat Natyam, Mohiniattam, and Odissi. Manjira is not played as an individual instrument but is the part of rhythm. It is used for the coordination of rhythm.

In Saurashtra, the ascetic caste of 'Kamalia' are the experts of Manjira playing, probably they are women, they are tie Manjira on the different parts of their body and put a small pot on their head with lamp, and sword in their mouth, and playing Manjira in a faster rhythm that scene is unforgettable.

This type of dance in Rajasthan is known as 'Teratal'

5: Kartal:

'Kar' (hand) and 'tala' (beat): that which is beating with the hand. A type of cymbals or buckled plates about 20 cm in diameter, played primarily by the Vaishanava Bhagat Narsingh Mehta had been used Kartal in his kirtan of Bhajan.⁷⁴

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6: Maan:

Maan is an ancient instrument of Gujarat, maan is a big pot made by copper, it has small neck, 'maan' played by traditionally by 'Bhatt' family of Gujarat, and it was very famous during the period of 'Prernanand'. 'Maan' is a one of the rhythmic instrument player is wear rings on different fingers and play while 'Akhyana' (Telling epic, stories like Ramayana, Mahabharata, Nalakhyan and other stories with songs.)

Nowadays one 'maan' player in Gujarat and that is Dharmiklal Pandya of Baroda. He is well knows artist of 'maan' player of Gujarat.

7: Dandiya:

Dandiya is a semi rhythmic instrument. It is coordination the rhythm, music, and the song. Dandiya had been uses from the period of Krishna with his Raas, or 'Dandak Raas'. Still this tradition is founds in Gujarat folk dance or Raas and Garaba. In Raas and Garaba, the size of Dandia is small, and probably making of wood or brass; people decorated it with woolen less and tied small bells on end. People of Rajasthan region, are also have used the Dandiya but it is in long size, their dance is known as 'Gher' or 'Ghumar'.

8: Thali:

Thali playing is also important part of folk life and folk music, after the birth of male child, the father of child or a member of the family playing the thali. Thali is made by copper, but thali is have not been used in Gujarati-folk music but it is well-known instrument of Gujarati tribes. Vanzara communities are also playing Thali with 'Chana' playing.

9: Ghughara-Ghughari or Ghungharu

Also known as Ghungharu (Ankle bells) most of dancers have used the Ghungharu while dancing. 'Ghungharu' is described in Jain scriptures as Ghughhariya. It is provides extra musical rhythm and it is make a rhythm such a powerful and effective.

'Ravanhattha' player is tided a Ghughari on end of his bow, and erects a rhythms with jerk of his bow. Some Qwali rhythm players are also tide a Ghungharu on their wrist and the sound of Ghungharu is well coordinate with the main rhythm.

10: Tali (clapping)

Tali is an international instrument, Tali is using for the pay homage for the good presentation for the thanks and enthusiasm.

In music Tali are using for the alternative of rhythm, clap is the first step of rhythm, in Gujarati 'Garba' mainly based of Tali, and Chapti (sound created when undoing a pinch). 'Tali' is also using in devotional songs, like kirtan and Bhajan and Dhun. People are relizeing self-meditation while clapping in Bhajan and Dhun.⁷⁵

(2) Avanaddha (Membranophone)

1. Dhol (Drum)
2. Choghadiya
3. Nagaru
4. Nishan-Danka
5. Tabla [Naraghan]
6. Transha – Khanjari and Duf
7. Damaru – Dakalu – Dugdugi
8. Dholak
9. Naal – dholaki

1: Dhol (Drum):

'Dhol' is the most famous rhythmic instrument amongst the folk Avanaddha instrument, in Gujarat and India. Nevertheless, it is famous all over the world, as the folk musical rhythmic instrument. Not only is to be shows in olden times 'Dhol' was using in the battlefield. Tribes were using dhol for the communication and conveyed their messages one place to another places by beating of 'Dhol'. Now it is using in occasion of marriage and other ritual functions. Thus 'Dhol' is now become famous more Mangal Vadya (an auspicious instrument) then Ranvadya (battlefield instrument). The ancient names for dhol were Aanak, Kawal, and Kshunak; recognize by their playing style as Patah, Kastapatah and Dindim.

Udhamdas was believes to be the first Dholi (drum player) of the Indradev in Satyuga, in Dwaparyuga Vamdas was the Dholi of eminent king Mandhanta and in Tertayuga Vidipaldas was the famous Dholi of the king

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Field Research Work: By Researcher

Mahendra, while in Kaliyuga Bhagvandas was the famous Dholi of king Vikram.

We have also found the stone sculptures of rhythmic and musical instruments in India about Dhol player and other musical instrument players in India about Dhol player and other musical instrument players. In the architectural figure of 'Khajuraho' cave people are shown using Dhol, Damaru, Mrudang and other folk instruments. These sculptures proved the antiquity of Dhol as rhythmic instrument, it is not been invented better instrument than Dhol in group songs and group dances, all over the world. That sculptures proved that the Dhol is primitive folk rhythmic instrument and still there is no answer for the Dhol.

In common folk life Dhol is using on the vents of birth, Janu, marriage, Simant or Vastupuja etc., there is no fix measure for making dhol, and however most of the Dhol is of 5 ft to 4 ft. of length and same measure of width. Dhol is making up from wooden; nowadays body is making by iron sheets.

In the Saurashtra region Bhangi cast is playing 'Dhol' and in North Gujarat 'Raval' communities are playing Dhol and 'Vaghari' communities are playing Dhol. In the Rajasthan region, the Valand (barber) communities are playing the Dhol. Mer and Kathi of Kathiawad and Koli and Ayar communities of Kutch, mad after the dhol. On the auspicious occasion, they are paying the good reward to the Dholi. On their occasion, they are arranging more than five Dholis, and just imaging the sound of that five Dhol beating together.

If some one wants to detail study about Dhol, then he must refer the book 'Dhol Sagar'.

In common folk life, Dhol is performs in various rhythms. In the event of breaking the event of village pond due to heavy rain, fire braking our in the village,⁷⁶ attacking over the village by enemies and raiders, or any other calamities in order to awaken the people of village 'Bungio Dhol' is performed.

When the dance is going on special type of rhythm is performs as according to dance styles, as Hinch, Chalti, Mataki, and Tentudo.

⁷⁶ Page: 10: Gujarat Na Lok Vadyo: [Guj] By: Joravarsingh Jadav

In the Gujarat, every occasion has their special style of rhythm playing and player should know that style and occasion.

- The rhythm of Chowghadia: playing on the various events of marriage, when accompaniment with 'Shahenai'
- Rhythm of Ganesha: It is performs on the establishment of Ganesha on the marriage ceremony.
- Rhythm of Fuleku (marriage procession): 'Ghughari' rhythm is playing on the marriage procession and on the returns; dholi plays Chalti rhythm on dhol. In addition, Janiya is playing with their sward and sticks.
- The rhythm of Hinch: on the marriage ceremony and during Navratri festival women playing and singing Garba, Dhol is accompanying with Hinch rhythm and on the extreme, he is playing Chalti on dhol.
- Rhythm of Mataki: While women are playing Garaba with the pot, dholi is accompanying with rhythm of 'Mataki'.
- Rhythm of Tintodo: During the Tintodo dance dhol is plying Tintodo rhythm.⁷⁷
- The rhythm of Jangi: after the marriage ceremony, on the event of see of the bride, then dholi is playing the Vidya rhythm and on the shikha event, he is playing Jangi rhythm.

Anadabhai Punabhai is the famous Dhol artist of north Gujarat's Radhanpur area and he knows the 22 rhythm of different 22 events of folk ceremony.⁷⁸

So it is one of the most common membranophonic instrument used by all classes of people at various occasions like weddings, temple worship, processions, community dancing, wrestling etc. it is wooden drum which is cylindrical in shape. Both side of the body of the drum are parches by skin and tighten by leather straps or cotton chords.

It is hang around the neck by a cotton string for playing and is beating by a wooden stick on one side and by fingers, palm and full hand on the other side. It is usually accompanying for community dancing and singing.⁷⁹

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Dhol also knows as 'Ramdhol', one of the most popular instruments especially in folk music at feast and ceremony. Dhol is a Sanskrit term adopted by regional languages.⁸⁰

2: Choghadia

In Gujarat especially Choghadia are connects with auspicious time and also known as Naubat and Takorkhanu. In Choghadia, one big and one small Nagada are used. They do not have Gajaro in their Padis like Dhol have. In old Jain temple, Ramaji temple, in the Havelies of Vaishanava, Swaminarayan temples, and even 'Langha' cast of Muslim are also expert in Choghadia playing at the Makbaras as Bhojak cast in Jain temples. Even at the Makbaras of Muslim emperors, the pair of Choghadia is uses with Shahenai. They were playing 24 hours with different of Ragas (tune).

3: Nagaru: (150 cm in Diameter)

The sound of Nagaras is traditionally playing at the temples of 'Ramaji' in the village of Gujarat from the ancient period. In ancient time, Nagara was knows as Dudumbhi, big Nagaras are known as Lambār, or Alambar, its sound known as Divtak. During the Tajia procession, even Muslims are also playing the Nagara. Actually nagara is used on a holy and auspicious occasions.

Traditionally it is knows as folk instrument as Naubat. In ancient time, traditionally it used for the arousing the valor of soldier on the battlefield, in the procession of the king, at the main gate of the king's palace.

Nagara is not useful for the musical purpose, due to its limitations. Therefore, it is not any more usefulness in musical events. It is purely folk instrument; it might be accompanying with 'Shahenai' but not suitable accompanying with human voice.

In Gujarat's Kutcha region, lute Suleman Jumma was well-known player of the Naubat or Nagaru in folk music. He was also performs of his art at festival of India, which was held in the east France, accompanied with Shahenai. Lute Suleman Jumma had the mastery on the both shyly of musical rhythm of Indian classical and folk rhythm. He had also performed the

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difficult tala on Indian classical, so easily like Brahma tala, dhruwad, Dhamar, Jaital, Zumara, Dipchandi and he was also expert player of folk rhythm; as 'Maniyaro', 'Hinch', 'Singodo' and 'Chalti'. He had the absolute dedication about Naubat, nagara playing. He had getting extra ordinary command over 'Nagara' and 'Naubat'.

4: Nishan-Danka:

Nishan-Danka is pair of drums kept hanging on each side of a horse's back during a war. It is making from brass. In the princely states before independence, when the procession of king was on the path, at that time in the front row there are used to Nishan-Danka on the horse, camel or elephant. In addition, animal rider beaten the Nishan-Danka by two stick with two hands, they were known as 'Nagarchi.' It looks odd delight in procession by creating beautiful thrashing on the both sides with Danka in the hand and Dandi in the other hand. The wall painting of such a camel-nagara is still quite visible for the telling the story of magnanimous past of history, on the wall of Shinor's Darbarghara of Bhavnagar.

5: Tabala – Naragha and Dokkad:

Tabala have two part 'Danya' and 'Banya' right hand known as 'Banya' and left hand known as 'Banya'. Danya also known as male and Banya are knows as female. It is different of opinion about his origin of Tabala, but it is fact that it is not an ancient instruments. No evidence has been founds before 15th century. Nevertheless, Tabla is knows as Naragha in folk music of Gujarat. 'Banya' is as made from clay, previously and later it is prepared from brass or copper; folk Tabala player were plays the different style then the classical Indian Tabala player. Folk artist was putting the 'Banya' on his lap and his fingering style was different of 'Danya' as compassion of classical Tabala player.

Now a days Tabala's essential instrument in folk music also, like Bhajan (devotional song), Qwali, somewhat in Raas and Garaba, Gazal, Geet, It is always used in classical ,semi-classical and light classical forms of music; but still it is not used in the rite-de-passage and marriage ceremony. Although it is not folk instrument but people are accept the importance of Tabala in the folk-life, especially in 'Bhajan Mandali' (group of devotional song singers). Tabala is also known as 'Dokkad' in Gujarat and Saurashtra, on the late night festivals of Janamasthami and Jalzhilani Agiyarash the

festival in on its extreme mood with the Tabala playing; accompanying with 'Kanshijoda' and 'Manjira'. In the village procession of Bhajan mandali, Tabala player tied Tabalas on his waist.

Dabgar caste is the professional Tabala maker of Gujarat, their colony is establishes in Ahmedabad of Gujarat, known as Dabgarwad in Kalupur area, they spreads out all over the Gujarat.⁸¹

Pair of kettledrums called Tabala or 'Danya' (right with variable pitch, tuned with tuning-blocks) and 'Banya' (left with fixed pitch) the head of the right hand drum is smaller and covered with black paste (Syahi); the principal accompanying instrument for all types of northern Indian music except 'Dhrupad' and temple music (where Pakhavaja is used).

'Tabala' is only north Indian instruments, in Carnatic style classical music there are no place for the Tabala still they are not accept the Tabala as an instrument for the classical southern Indian music.

6: Tansha – Khanjari & Duf

'Tansha' is one kind of Nagaras one part of which is like a 'Tagaru' of copper on which is covered leather. The depth being very shallow, it creates very sharp tunes in high pitch. 'Tansha' is being performing with Dhol. 'Tansha' are complementary instruments with dhol. Dholi, the performer, performs on the Tansha with the help of the thin bamboo sticks.

7: Khanjari:

Khanjari is an instrument that came into Gujarat from north India its ancient name is Kanjira. On one side of it are covers with leather and other side keeps open; between the strips of the instrument small Zanz are fixes, which creates music.⁸²

In Tamil also known as 'Kancira' frame drum with jingle plates fixed to the rim, some times also strings with small bells; played in folk music and south Indian art music.⁸³

It is metallic rim of about 20-30 cm diameter having 2-3 cm raised upward edges, in which small metallic plates of circular nature of 3-4 cm

⁸¹ Field Research Work: By Researcher
⁸² Page: 15: Gujarat Na Lok Vadyo: [Guj] By: Joravarsingh Jadav
⁸³ Page: 109: The Music Of South Asia: By: Selina Thielmann

diameter are fixed by a nail in such a way that these can move or clatter while playing. By holding in one hand by the side, the rim is given forward and backward movement in a rhythm to produce melodious sound. Quality of sound produced will depend upon the material used for making the frame of the rim and the plates fitted in it. Generally 'Khanjari' used in devotional song or with Bhajan Mandali.⁸⁴

8: Duf (Duffy):

It is smaller than the change in diameter, almost half of that about 30-35 cm. It is identical in its construction and method of playing to the change.⁸⁵

Duf is supposed to have come from Rajasthan. It is known as 'Dayaro' to 'Ghero' its Sanskrit name is 'Zallari' in the fair and festival of holi the vanzara communities sing and dance with rhythm of Duf. Duf well known folk instrument of north India with various names like Dapa, Dhapa, and Dhapha. It is also similar with Arabic duff, Nepali Dumpy and Tamil Tappu or Clappu; frame drum about 120 cm in diameter, with either circular or octagonal frame; regarded as a sacred temple instrument and in north India played only at the time of the spring festival holi; in south India also for public announcement, festivals and ceremonies and processions.⁸⁶

9: Damaru – Dakali – Dugdugi:

Mendicants or jugglers mostly use this instrument and it is an hourglass shaped wooden frame parched on both sides by calf or cow skin which is tightened by means of cotton chord. Both the heads are wide, about 6-8 cm in diameter while the middle or central portion is only 3-4 cm wide and the total length of the instrument may be 10 cm or so. Two knotted strings of cotton of about 5 cm length are there to strike on both the parched ends. When the instrument is played, while holding in hand at the center and shaken or moved the knotted ends strike on the parched surface to produce tinkling sound. This could be tuned by only skilled person otherwise could have different notes during its playing.⁸⁷

⁸⁴ Page: 254: Folk India- Vol: 6, By: Manorama Sharma.

⁸⁵ Page: 255: Folk India- Vol: 6, By: Manorama Sharma.

⁸⁶ Page: 109: The Music Of South Asia: By: Selina Thielmann

⁸⁷ Page: 254: Folk India- Vol: 6, By: Manorama Sharma.

‘Damaru’ in Gujarat is known as ‘Dakalu’. It is very ancient instrument. According to mythology in Puranas – when Lord Shankar in order to kill the demon Gajasur did Tandav dance, to increase momentum in dance he used the Damaru as instrument. It is believed that Lord Shiva founded Damaru. A verb originates from the sound of Damaru as according to Amarkosha written by Amarsingh.

Raval – Jogi and vaghari communities play Dakali for the removal of the bad effect caused by ghost. They are playing ‘Aranu’ and ‘Saraju’ to content the different goddess and it always occurs during the midnight. In the atmosphere of night the sound of Dakalu is horridification and frightful. As soon as the performance starts of ‘Dakali’ ‘Bhuva’ starts to shake the head incessantly in excitement because of the magical sound of ‘Dakali’.⁸⁸

‘Dakali’ is also hour-glass shape, whose pitch can be modified while playing by changing pressure on the tuning braces and one side beaten with small wooden stick in various rhythm, so that melodies can be produced; to amplify the effect of the melodies, one skin is beaten with stick.

‘Dakalu’ is also known as with different names in south India ‘Virananti’, Utukkai, Itakka, Dakka, Tavantai, Timila, Timilai.⁸⁹

10: Dugdugi:

It is also hourglass shaped but smaller than Damaru and Dakali. Madari and jugglers perform their show with playing of Dugdugi. When the instrument is played while holding in hand at the center and shaken or moved the knotted ends strike on the parched surface to produce tinkling sound.⁹⁰

It is also available in festival fairs in Gujarat as a toy made from clay but not in shape of hourglass. Octagonal frame with both wide skin and long stick passed within clay about 6 cm long, there are also two strings of cotton with knotted at the end affixed with the outside of the instrument, when the child shakes the stick the strings of cotton beat the skin and produce the sound and that sound makes child happy. ‘Damaru’ and ‘Dugdugi’ both have same manner but Dugdugi is a toy and ‘Damaru’ is a folk instrument.⁹¹

⁸⁸ Page: 16: Gujarat Na Lok Vadyo: [Guj] By: Joravarsingh Jadav

⁸⁹ Page: 108: The Music Of South Asia: By: Selina Thielmann

⁹⁰ Page: 254: Folk India- Vol: 6, By: Manorama Sharma.

⁹¹ Field Research Work: By Researcher

11: Dholak:

Dholak-Dholaki is a cylindrical barred drum made of rose wood, similar in shape to the Mrudang but smaller, sound similar to north Indian Tabala, in Tamil Tolakku, it is very distinct in sound; played in folk music, at feasts and ceremonies in south India also as a concert instrument.⁹²

Dholak is a very popular fold drum of Gujarat and north India. It is barrel shaped with a simple membrane on the right hand side. The left hand is also a signal membrane with a special application on the inner surface. This application is a mixture of the, clay, and sand (Dholak Masala) with lower the pitch and provided a well defines tone. There are two way of tightening the Dholak. Sometimes they are pulls to tighten the instrument. Sometimes metal turnbuckles are employing. It is says that this instrument used to occupy a position of considerable prestige. Today it is merely relegates to film music and folk music.⁹³

12: Dholaki or Nal:

This instrument is common in areas adjoining to Maharashtra. It is long, cylindrical and two face drum while tapers from one end to the other. The length of one drum may be 50 to 60 cm while the other one is only 15 cm. Both sides are unevenly pitching due to difference in the method of their pasting the parchment. It is usually played by hand and is used in accompany singing and dancing.⁹⁴

‘Dholaki’ also called Nal, is a drum with a barrel shaped shell. The left side resembles the ‘banyan’ (large metal drum of the Tabala) except that is uses ‘Dholak Masala’ coil based – application) on the inner surface instead of a Syahi (permanent black spot). The right head is unique in its construction.

Goatskin is stitching onto an iron ring. In the centre of this skin is a ‘Syahi’, similar to ‘Tabala’ except much thinner. The traditional Nal were lace with rope and had sticks to function as turnbuckles. Today, metal turnbuckles have replaced the rope (cotton string) lacing in most models. The Nal is very popular in the Tamasha (street performance) of Maharashtra. It has been absorbed in to the ‘hind’ film industry and today Nal is very popular for filmy music.

⁹² Page: 107: The Music Of South Asia: By: Selina Thielmann

⁹³ Page: 3: www.chandrankantha.com

⁹⁴ Page: 257: Folk India- Vol: 6, By: Manorama Sharma.

Musical styles that use 'Dholaki' or Nal: ⁹⁵

- Bhajan (Hindu religious or devotional songs)
- Filmy sangit
- Folk music
- Geet – light music
- Kirtan-Dhun

Uses of Dholak:

- Bhajan
- Filmy sangit
- Folk music
- light music
- Qwali (Islamic devotional songs)
- Kirtan-Dhun – Hindu chanting
- Sabada – Sikh devotion songs⁹⁶

(3) Tat (Chordophone) string instruments

1. Ektaro – Tamburo, Ramsagar, Dotar
2. Sarangi
3. Ravanhattho
4. Sarinada
5. Jantar

1:Ektaro-Tamburo-Ramsagar-Dotar:

One (Eka) String (Tara, trantri) also Tuntuni, Tuntune, plucked drum with a string stretched the membrane and the frame with fixed pitch; the oldest musical instrument in Indian folk music is Ektaro. It is found not only in Gujarat but also all over India. Might be the myths and scriptures of music is derived from the origin of 'Ektaro'. There is only one string in 'Ektaro' later with two strings known as Dotar. In 'Dotar', one string is tuned in 'Shadaja' (C[#]) and second string is tuned in 'Pancham' (G[#]). Ektaro is also known as Ramsagar and Tamburo in Gujarat region. It is popular in Bhajan singer (devotional song singer). Ramsagar might be deriving from the ancient

⁹⁵ Page: 3, 2 – www.chandrakantha.com by: Dr. David Courtney

⁹⁶ Page:3, 2 – www.chandrakantha.com by: Dr. David Courtney

Ektantri Veena, which is known as 'Ghosak', 'Ghostra' or 'Ghasavati'. It is also mentioned in 'Abirajendra Kosha' as 'Sughosha'.

When the Tambura is Ektantri then generally it is known as Ghosak, when with two strings (Dotar) then it is known as Nakul and when it is with three strings it is known as Trisur or Tritantrika. All the tree type of Tambura is found in Gujarat. Trisur and Tritantrika Tambura only found in region of north Gujarat. Tamburo was getting the prestige, because the eminent saint singers of Gujarat and Rajasthan like Narsingh Mehta, Meerabai, Gangasati and others, used it. Still Tamburo is popular in Bhajan singer of folk communities, known as Bhagat; Tamburo is also used in kirtan and Dhun.

A thick stick of bamboo and a kind of gourd (Tumbi) makes it. Bamboo stitched on the Tumbdoo (gourd) and half of the gourd is covered with animal skin and at the center of the skin affixed a bridge for the string, string is tuned by the moving the Khunti (pegs) which is affixed at the opposite end of the bamboo.⁹⁷

2: Sarangi:

In the prestigious new Grove dictionary of music and musicians, the Sarangi is described as follows: 'A bowed chordophone occupying a member of forms in the Indian subcontinent. I have a wasted body, a wide neck without frets and usually carved from a single block of wood; in addition to it three or four strings it has or two sets of sympathetic strings. The 'Sarangi' originated as a folk instrument but has been used increasingly in classical music.'⁹⁸

It is indeed remarkable that no two Sarangi are alike. This is understandably true for folk Sarangi, each one of them having its own particular characteristics, which always carry the marking of their maker – often the musician himself and for classical Sarangi. Some instruments are large and bulky.

In spite of these variations, a trained observer can recognize where the instrument was built and by whom. Moreover, he can easily make distinction

⁹⁷ Page: 6: Gujarat Na Lok Vadyo [Guj] By: Joravarsingh Jadav

⁹⁸ Page: 9: Gujarat Na Lok Vadyo [Guj] By: Joravarsingh Jadav

between different Sarangi 'Species', such as 'Gujaratan' a 'Jogia' or a 'Sindhi Sarangi'.⁹⁹

The 'Gujaratan' 'Sarangi of Rajasthan' is much more sophisticated fiddle, and the prototype of the classical Sarangi. It is played by Langa musicians who inhabit the desert area, and must have survived virtually unchanged for hundred of years.¹⁰⁰

3: Ravanhattho:

Ravanhattho believes to be the ancient musical instrument of our nature. It is only the bowed instrument of Gujarat, also known as the 'Ravan-hasta-Veena'.

In making of Ravanhattho, a small cover of coconut shell is used. Shell should be cut in half size and covered with animal skin, one stick is passed through the coconut shell and two or three string are adjusted over the skin and stick with two/three pegs (Khunti) which can help to tuning the string moving the cycle wise pegs as musician or player wants. 'Guj' (bow) is made from the hairs of horse.

This folk instrument found in all over Gujarat, Rajasthan and Madhyapradesh. Raval, Jogi, Bharathari communities are have the good command over Ravanhattho. They are singing the ballads, folksongs and devotional songs.

Pramaji Daya Barot is the famous player of 'Ravanhattho' he lived in Lakhtar area of Gujarat. Dahyabhai Barot is also good player he lived in Shihor of Gujarat. As a Ravanhattho player, he visited many foreign countries as an artist of 'Ravanhattho'.¹⁰¹

3:1: Ravanhasta – a musicological puzzle:

The history of the southern musician bow presents far more problem than that of its northern counterpart. Like 'Nanyadeva' most musicologist mention it, but so far we have not succeeded in finding a complete

⁹⁹ Page: 11: The Voice Of Sarangi\ By: Joep Bor
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¹⁰¹ By: Joravarsingh Jadav

description of the 'Ravanhastaka' which according to 'Jaapkunst', was also known in 'Java' in the 10th century A.D.

The 'Ravan' myth to which 'Nanyadeva' referred was un-doubted much older than the 12th century. In south India the 7th century 'Shaivite Saint' – singers 'Appar Swannigal' (or Tirunavukkarasar') and 'Tirunganansabandar' praised 'Ravana's music genius and great devotion to lord Shiva in their Devaram hymns. According to them, when Ravan tried to lift up mount Kailas he was crushed under the mountain by Shiva. Ravan prostrated himself before the lord and in order to appease him, devised a seven stringed harp (Yel) string with sinews pulled from his hand, with which he accompanied his Vedic hymns. The Jain author 'Swayambudeva' tells a similar story in 'Paumachariya' (C. 880 A.D.) Here Ravan tried to please the Nag king 'Dharanendra' by creating an instrument, which in 'Aabramsha' (derived word) is called Ravanhattya. Unfortunately, it is not clear whether this instrument was plucking or bowing, or what the instrument looks like.

In its most common form the 'Ravanhasta' was presumably a folk instrument which, in the words of Vemabhupala, was only played by beggars, and thereafter, impure and unworthy of treatment by Sanskrit musicologist. However, there is some indication that this legendary instrument was also used in classical music, since the poetess 'Rambhadrambha' (early 17th century) relates that the 'Ravanhasta' was played by female court musician of Tanjor. That it was musical bow, as suggested by 'Nanyadeva', is confirmed by 'Bartholomaeus Ziegenbalg' (1711), who describes the instrument in his chapter about the music of Malabar.¹⁰² 'Ravanhatum', which look like a hunting bow, and has only a single length of gut as bowstring, which is struck with bow.

Shortly thereafter, this bowed musical bow must have become obsolete, although the term 'Ravanhasta' survived. It is still used today in Maharashtra, Gujarat and Rajasthan for a particular type of spike fiddle, which is to be found throughout India and is known by a variety of names. Very little is known about the age of this instrument.

It was this kind of 'Ravanhasta' which caused musicologist a great deal of confusion after 'Pierresonnerat' (1782) wrote that "The Pandarons (Pandaram). A troupe of monk, which there are many, to play or accompany

¹⁰²

them on a kind of violin called 'Ravanastron.' It was giving this name because the giant Ravanen, king to the island of Ceylon (Shrilanka), invented it nearly five thousand years ago. The 'Ravan' legend that sonorant heard was the same one which appear had sung about a thousand years earlier, but in course of time the 'Ravanhasta' had undergone a metamorphosis. The original bow that Ravan twanged in the epics first evolved into harp. Subsequently to be replaces by a simple fiddle with a straight neck,¹⁰³ but that as it may, the Belgian musician F. J. Fetis (1856) was highly impressed by the primitive 'Ravanhasta', which he recognized as the truly original bowed instrument. He was one of the first western scholars who had a passion for comparative musicology and wrote extensively about Indian instruments in his 'Historic General 'da- la- Musique'. Since Fetis has no accessing to original literature on Indian music and never been to the east, his work contains many mistakes. Nevertheless, he reached the interesting conclusion that "There is nothing in the west which not been come from the East."¹⁰⁴

We have seen that 'Nanyadeva' is the first known description of the playing bow. By no means does he create the impression of introducing a recent innovation. On the contrary, he gives the Pinaka and Ravanhasta, a traditional status by linking them with Shiva and Ravan.

Nanyadeva contemporary, kind Someshvara also mentions bowing in his encyclopediadic work 'Manasollasa' (1131), write briefly summarizing the action which are employed in playing different instruments.

"With one hand, with two hands, striking with a stick or a ball, rubbing with a bow (Dhanu- agharsa), blowing..." He remarks that he does not described all the stringed instruments, because they were not all designed for entertainment. This also perhaps explains why we do not find musical bows in sculpture. Possibly the sound of these instruments was too esoteric to be used in accompanying court singers and dancers.

Finally, it should be remarks that with the works of 'Nanyadeva', 'Someshvara' and 'Haripal' it is difficult to establish their authenticity because most of the treatises of their predecessors have been lost. To our knowledge, there exists not a single work on Indian music with a complete

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chapter on instrument between the 2nd and 12th centuries A.D. so it is difficult to speculate about the point of origin of the playing bow in India. In any case, it is apparent that the bow was already in general use in the west (Someshwavar's capital was Kalyan and Haripal ruled Gujarat), the northeast (Mithila) and the south of India, and must have been introduced prior to the 12th century.¹⁰⁵

4: Violin:

It is the rise of the violin more than any other single factor that dominates the history of instruments during the 17th century. Its origins in the medieval bowed instruments, such as the fiddle, have been mentioned and its early association with dance, music and jongleurs led to the violin being treated during the start of its career as a secondary instrument. However, in Italy, the leader of European musical taste, the violin was already being used for certain dramatic effects in the orchestras of Florence during the 1560s. Within a century its brilliant tone, great dynamic range and greater responsiveness to the demands of the performer, enabled it to triumph over the viol.

The early history of the instrument is obscure and it seems to have emerged in its essentially modern form in the middle of the 16th century. The first great makers were the Amati family from the north Italian town Cremona – the home of Antonio Stradivari (1644-1737), the greatest violinmaker of all time.¹⁰⁶

4:1: Violin in Gujarati folk music:

Although violin is a European instrument but it is introduced in India in early 18th-19th centuries: nowadays violin is the principal bowed instrument of south India and north Indian classical vocal music and as in classical solo performance. It has a great deal of melody.¹⁰⁷

Folk communities of Gujarat, some professional are also accepted the European instrument violin for their folk performances, previously they had used 'Ravanhattha' in 'Dayro' and other live programmes. However, violin has brilliant tone, great dynamic range and greater responsiveness to the

¹⁰⁵ Page: 47: The Voice Of Sarangi: By: Joep Bor. (Quarterly Journal) Sep-Dec. 86 March-87

¹⁰⁶ Page: 107: Musical Instruments: By: Geoffrey Hindley

¹⁰⁷ Page: 118: The Music Of South Asia: By: Selina Thielmann

demand of the performer, enabled it to triumph over the Ravanhattho and it look sophisticated. Violin's characteristic is so close to 'Ravanhattho' of Gujarat, and to play easy who were familiar of master of Ravanhattha. Violin has much depth to express the emotion, because of four strings of different ranges. In addition, Ravanhattha has only two strings. Violin is more scientific instrument than Ravanhattha. Ravanhattha in an ancient folk instrument and still it is in primitive form and structure. So nowadays professional Ravanhattha player adopted violin as their accompanying instrument, but still they preserves their original folk style of Ravanhattha on violin. The professionals have substituted Ravanhattha by violin.¹⁰⁸

5: Surinda – Surando:

Gicak in Baluchistan folk music instrument sometimes referred to as folk Sarangi, with wooden body whose upper part remains open, lower part is covers with parchment, not suitable as a concert instrument because of weak sound.¹⁰⁹

In the Surando species, the beautifully shaped upper resonance chamber function like highly arched horn amplifier. In more advanced type the Saroz or Ghichak of Baluchistan and the almost identical Surando of Sindha, Gujarat, Kutch and Rajasthan and Sarindu of Punjab – the fingerboard descend into this chamber, dividing it into two compartment. The tree main strings and a variable number of sympathetic strings (usually five or six, laterally inserted in to the peg box) passed over nut. The first playing string of metal is tuned to the upper tonic (S-G-C#- H-O), while the middle string of gut is tuned to the tonic (S-G-C#- M-O) and the lowest string of metal to the fifth (P-G- G#- L-O). Sometimes a few resonance strings are anchored to peg fastened into neck. The bridge is placed in an oblique position on the skin table.

N. A. Baloch observes that the Surando is played by professional Kutch Gujarati bards and Jat such as the Maganiyars, Charans and Langa.¹¹⁰

Only few players of Surinda in Gujarat's Kutch region and Siddiquibhai Jat are one of them. He is connected with 'Gujarat lokkala Kendra'. His Surando is well decorative. He is master of Surando. He plays

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Field Research Work: By Researcher

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“Rasado shah Abdul latif bhitajo” (Hind calendar – 1745), Surkalyan of Abdul Latif, Khambhat, Hussaini, Soratha, Ramkali, Shohani-Mehwal (Soni-Mahival), Dhola-maru, Kalryel, Mazuri, Koheyari, Deshi, Kamod, Kedar, Bilaval, Marai, Hir-ranza etc. He played varieties of Rag-Raginis and kutchhi folk songs on Surando.¹¹¹

These wandering mistrals used to go around playing Surando music and putting people’s magnanimity and munificence to test. Their demand was not that of an ordinary mendicant, but rather a sort of officious solicitude. They would use the appeal of melodious Surando music to attain their objectives. According to tradition, the music of Surando had a devastating effect when handled by master musicians. One an accomplished bard, Bijal the ancestor of famous poet ‘DulaBhaya Kag’, his superb Surando music, exercised an overwhelming influence on the Ra’diyas, the King of Junagharh (Gujarat) and asked for his head as a reward. To please him, ad to pay homage to the high art Ra’diyas sacrificed his life at the altar of Surando music.¹¹²

The existence of Surando is now in danger, previously there was the patron (such as king) for the Surando players, but nowadays in independence India; there are no patron for artists, it is not easy to live life on music without patronize by the state government. So this beautiful Surando instrument is rapidly eliminating from the folk society as like other instruments.¹¹³

6: Jantar:

In Gujarat’s Saurashtra and Kutcha region Jantar is known as a divine instrument. In ancient times, the place of Jantar was of great importance amongst the other folk instruments. ‘Jantar’ is a very old form of ‘Rudra Veena’. There are two gourds, this stick etc. used in making of Jantar. It is performed wearing in the neck – while performing on it. Thumb and fingers of the right hand, which are placed centrally in the lower part of the Jantar, are used in creating the sound from the instrument. Number of artists using Jantar is decreasing now.

¹¹¹ Page: 9: Gujarat Na Lok Vadyo: [Guj] By: Joravarsingh Jadav

¹¹² Page: 15: Gujarat Na Lok Vadyo [Guj] By: Joravarsingh Jadav
¹¹³ Field Research Work: By Researcher

‘Vijanand’ the hero of the Gujarati folk story Seni-Vijanand; he was the famous Jantar player. His Jantar had to big gourd with 32 frets, he was been played 36 Raginis on his Jantar.

Nowadays there is not a single player of Jantar in Gujarat.

The Gurjar communities of Rajasthan, known as ‘Bhopa’ are accepted or adopted this instrument, but hey are not performing anywhere else and they never accept the donation from the other caste. Therefore, Jantar is now in history of folk musical instruments or near by the verge of extinction from the folk’s society.¹¹⁴

Jantar is stick-zither categories, 104 cm in length with tow gourds, 14 bone-frets and tree strings one of which is attaches to the side; played to accompany ballads and song narratives.¹¹⁵

(4) Sushir Vadya: (Aerophone):

1. **Flute (Bansuri, vanshi, vanshi, Murali etc.)**
2. **Shahenai – Bhungal-**
3. **Pungi (Bin)**
4. **Shankha (conch Shell)**
5. **Harmonium**

1: Flute:

The Sanskrit term for bamboo is ‘Venu’ (bamboo, reed, cane). Further terms are ‘vanshi’ or ‘Bansuri’ (bamboo), pointing at the material of which the instrument are made, and ‘Murali’ (a general and poetic term for flutes). Three types are distinguishing: vertical, horizontal and beaked, of which only the horizontal type has gained significance in south Asia, whereas vertical and beaked flutes remain confined to local and folk traditions. Beaked flutes are particularly widespread in Punjab. Keyless horizontal bamboo flute of various sizes (‘Bansuri’ in north India, ‘Pillankulal’ in south) are played on the concert state (in north India also in temple) as accompanying melody instruments or as solo.¹¹⁶

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Bansuri and Venu are common Indian flutes. They are typically made of bamboo or reed. There are two varieties: transverse and fipple. The transverse variety is nothing more than a length of bamboo with holes cut into it. This is preferred flute for classical music because the embouchure gives added flexibility and control. The fipple variety is found in folk and filmy styles, but seldom used for serious music. This is usually considered just a toy because the absence of any embouchure limits the flexibility of the instrument. The flute may be called many things in India: Banshi, Bansuri, Murali, Venu, Vanasli, Pavo etc and many more.

There are two main types, Bansuri and Venu. The Bansuri is used in north Indian music system. It typically has six holes; however, there has been a tendency in recent years to use seven holes for added flexibility and correctness of pitch in the highest registers. It was previously associated only with folk music, but today it is found in Indian (north) classical, filmy and numerous other genres. Venu is the south Indian flute and is used in the Carnatic system. It typically has eight holes. The Venu is very popular in all south Indian styles.

The flute has special significance in India because of its association with Lord Krishna.

Numerous common names reflect these epithets, Venugopal, Bansivala, Murlivala, Murlidhar etc.

Parts of Bansuri (Flute)

Now we will take a closer look at the north Indian Bansuri. It is always difficult to talk about the names for the various parts of the instruments because India is a land of many languages and dialects. Therefore the following terms should be considered as representative but not universal.

Dandi:

The Dandi is the body of the Bansuri. Bansuri is may be fashioned from variety of materials but reeds, canes and bamboo are the most common. Ideally, they should be constructed so that they taper towards the embouchure (mouth hole or Mukha-Randhra). They are therefore larger at the open end. This arrangement gives an extended range.

Mukha Randhra:

This is the embouchure or the blowing to hole, professional quality Bansuri in India are in variety of the transverse variety. However, there are also a number of fipple flutes, which are also available. This are sometimes found among folk musicians and they are frequently give to children as toys. The transverse variety yields much better control by allowing blowing techniques to bend him notes to the desired pitches.

Swar Randhra:

These are the finger holes. They are the holes that are uses to play the melodies. For a 7-hole flute, the musical interval are half-step, whole step, whole step, half step, whole step, whole step, whole step (please note that these are approximation). The use of equal temperament is not to be construes from this discussion. The 7th hole (closest to the open end) is optional when it is absent, the 6-hole flute are tuned to whole step, whole step, half step, whole step, whole step, whole step.

This 7th hole deserves special mention. Traditional north Indian folk flutes generally do not have it. The obvious advantage is that the presence of this hole extends range of the instrument by one note. However, there is a more important and not quite so obvious advantage. Its presence gives the Bansuri a more accurate pitch when overblown to produce the higher octaves.

Garbha Randhra:

This is the opening of the Bansuri. It should remain unconcluded at all times.

Rassi:

The body of the Bansuri tends to crack. This is simply one of the undesirable qualities of bamboo and reed. This cracking may be reduce or eliminates by tightly binding the body with twine. This is knows as Rassi. One trick used by artisans to assure an even and reproducible tension is to tie a fixed weight to the end of the string and slowly turn to the body of the Bansuri to wrap the twine around it.¹¹⁷

¹¹⁷ Page:4: – www.chandrakantha.com by: Dr. David Courtney

¹¹⁷ Page: 18: Gujarat Na Lok Vadyo [Guj] By: Joravarsingh Jadav

Origin of Flute: (Bansuri)

In the ancient era, the warp makes a hole in the bamboo sticks, in bamboo forest. When the wind was passing through the bamboo holes, the beautiful sound was produced from that bamboo. The primitive peoples were very progressive and curious, they always learned from the nature and natural resources surrounding them and from that environment, they have been invented the wind instrument known as Bansuri.

Epic legendary lord Krishna was the great Bansuri player of all the time. All the Gopies of Vrindavan, Mathura and Dwarika were mad after him. The sound of his flute was so infatuated not only human but animal also.¹¹⁸

Still this instrument uses in Gujarat region by tribal cowherd communities.¹¹⁹

Kulchi Savlani Jat communities are the expert of the double flute during camel herd. They always playing flute. Musa bhai Jat of 'Nanaluna' village of Kutch region of Gujarat is well known artist of the double flute and Bhorinda instrument, Bhorinda is made from the clay, there are three holes in clay ball and playing as like Pavo or flute, this instrument also been found during the excavated of Harappan residue. Bhorinda is also been popular in Sindh and Pakistan.¹²⁰

2: Shahenai (Double reed instrument oboes)

Three types of double reed instrument are distinguished in south Asia: the Shahenai (north India), a short conical oboe with metal opening, the Nagswaram (south India), a long and slender wooden instrument and Mohari (east India), which combines features of both Shahenai and Nagswaram, but bears more resemblance of the Shahenai. (Kuckertz – 1988-45) Oboes are generally playing in procession and on festival occasions such as marriages; because of their penetrating sound, they are mostly hearing in open space. All the outer gates of large¹²¹ Hindu temples, oboes and drums function as signal instrument to announce the ritual worship during the hours of service. In north India, oboes are found as supporting melody instruments in musical

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Page: 260: Folk India- Vol: 6, By: Manorama Sharma.

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Page: 18: Gujarat Na Lok Vadyo [Guj] By: Joravarsingh Jadav

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performance inside the temple too; moreover, both the Shahenai and Nagswaram are played as concert instrument. In south India, Nagswaram players enjoy a high status and are regarded as the preservers of the purity of the raga tradition. The north Indian Shahenai, on the other hand belonged to the Naubat ensembles that used to play at palace gates during the Mughal period.¹²²

The Shahenai is a north Indian oboe, although it is referred to as a double reed instrument. It is actually a quadruple-reed instrument. This is because it has two upper reeds and two lower reeds. The instrument has a wooden body with a brass bell. The reed is attached to a brass tube, which are wrapped in string. The Shahenai has eight holes but it is common to fine some of the holes, partially or completely occluded with wax. The sound of the Shahenai is considered particularly auspicious. For this reason, it is found in temples and it is an indispensable component of any north Indian wedding. In the past Shahenai was part of Naubat or traditional ensembles of nine instruments found at royal court¹²³

Shahenai is a folk instrument in Gujarat region, mostly used in marriage ceremony accompanying with dhol. Some tribes of Gujarat use Shahenai in their folk dances. Shahenai is known in Gujarat as Sharanaī, it is known as an auspicious instrument (Mangal Vadya) in Gujarat.¹²⁴

Bhungal:

Bhungal's ancient name is Nali or Nalika. Bhungal is derived from the Ransinga. Bhungal is used during the Bhavai, folk drama of Gujarat, also used in Bhajan (devotional song) recite. Bhavaya (folk community) believed that this instrument is a gift from goddess and they worship that instrument. Previously this instrument has been used in king's procession, and victory procession. Old Jain scriptures also mentioned the Bhungal as Nali.

Bhungal is made from brass and copper, originally it was made from the horn of an animal.¹²⁵

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3: Pungi: (Bin – Morli – Mahuvar)

In south Asia, clarinets are played primarily in folk music and by snake charmers. The snake charmer's pipe is referred to by various names e.g. Pungi, Tumbi, morli, bin, Mahuvar. But the constructional features are more or less the same for all instruments of this type, consisting of a gourd that serves as an air reservoir to which three tubes are attached (a single tube on upper end and a double tube on the lower end). The instrument is blown through a blow-hole at the outer end of the upper tube; a beating reed is affixed to each of the two lower tubes, one of which serves as drone while the other produces the melody. The bagpipe, an instrument that is very popular in the Middle East, occurs in the folk music of south Asia and refers to by a variety of vernacular terms.¹²⁶

Snake charmers of Gujarat as known as Madari and their communities are known as Lalwadi-Phoolwadi and they are street magicians of Gujarat. Nathbava communities are also playing the Mahuvar. Snake charmer plays Mahuvar accompanying with Dugdugi. Due to electronic entertainment media, they struggle to survive and facing the hard time for their sustenance.¹²⁷

4: Shankha: (Conch Shell)

Conch is very ancient instrument. Conch played in processions and in front of sanctuaries, sometime in temple for rhythmic accompaniment; loud, sharp and penetrating sound (can be soft if blown accordingly); also used as war trumpet played on battlefield (along with drums).¹²⁸

In Bhagavat Gita the different kinds of conchs were described as;

- Panchajanya conch played by Krishna
- Anantvijay conch played by Yudhisthir
- Paundra conch played by Bhim
- Devadatta conch played by Arjun
- Sughosha conch played by Nakul
- Manipushpak conch played by Sahdeva

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'Shankha' is a conch shell. This instrument has strong association with the Hindu religion. It is says that when it is blown it announces the victory of good over evil. This instrument has limited musical application.¹³⁰

5: Harmonium:

The principal reed organ of south Asia is the harmonium, which was introduced from the west. Since the Harmonium could not reproduce the essential gliding movements of Indian music because of fixed pitches of its keys, it has been banned from the concert stage in south India. In the north, the instrument was maintained largely for social reasons. All India radio has also banned this instrument for several years. The Harmonium is widespread as a supporting melody instrument in folk music and devotional music, nowadays it is an essential instrument of folk concert (Dayro Gujarati) and other light music genre.¹³¹

The Harmonium also known as Petivaju. This instrument is not a native Indian instrument. It is a European instrument, which was imported in 19th century. It is a reed organ with hand pump blows. Although it is a relatively recent introduction, it has spread throughout the subcontinent. Today it is used in virtually every musical genre except the south Indian classical.

Although this is a European invention, it has evolved into a truly bi-cultural instrument. The keyboard is European, but it has a number of drone reeds, which are particularly Indian. European models came in India in both hand pumped and foot pumped models. The foot pumped models disappeared in India many years ago, previously foot paddle models were used in Gujarati folk drama named Bhavai and 'Gujarati Natak Samaj', but they have to journey place to place so this model is inconvenient for journey, and something, which is usual for an Indian musician. In addition, the only advantage of the foot model was that it freed both hands so that both melody and chords could be played. Indian music has no chords, so there were no advantages for classical music. Although the hand pumped models required one hand to pump, they were more portable and comfortable when played on the floor, now it is also used in classical music.

¹²⁹ Page: 9: Srimad Bhagavat Geeta [Eng.] By: Swami Swaroopanand
¹³⁰ Page: 1: - www.chandrakantha.com by: Dr. David Courtney
¹³¹ Page: 100: The Music Of South Asia By: Selina Thielmann

In folk communities and beggars, also be played standing and walking. In this case, the Harmonium is slung by a strap around the neck. This however, seems to be limited to beggars that one may occasionally encounter.

Indian genre that used Harmonium (Gujarat)

- Bhajan (Hindu devotional songs)
- Film music (For composing songs and music)
- Folk music (Rural and regional folk music)
- Gazal (Urdu-Gujarati; poetic songs)
- Light music (Gujarati Sugam Songs)
- Qwali (Muslim devotional songs)
- Kathak Dance (North Indian Classical dance)
- Sabada (Sikh devotional Songs)
- Thumri (North Indian semi-classical form)
- Khayal (North Indian classical vocal)¹³²

5:6: Rhythm and folk rhythm of Gujarat:

Rhythm is movement generated and regulated by harmonious restrictions. This is the creative force in the hands of the artists. As long as words remain in uncondensed prose form, they do not give away as lasting feeling of reality. The moment they are taken and put into rhythm, they vibrate into radiance.¹³³

Rhythm is a proportion of time inherent in all aspects of nature. In music, it is rhythm, which not only beautifies the melody, but it is also the vital force in melodic imagination. Thus it is said, rhythm is the pulsation of melody-nay-universe.

It is time charged with energy with sweeps across endless space, transmitting all things – smallest to the biggest in to rhythm vibrations. Time, when measured and marked with certain number of beats is called a ‘time-measure’ denoted by ‘tala’ in India. It is known that the earliest form of expressing rhythm was. Possibly, primitive man discovered rhythm from the movement of his own body and melody from the varying pitch of his voice. At the same time, his familiarity with the rhythm and melody, inherent in all living beings, sharpened his musical sense.

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Page:1: – www.chandranatha.com by: Dr. David Courtney
Page: 18: Religion of an Art By: Rabindranath Tagore

5:6:1: Folk rhythm of Gujarat:

No doubt, it is difficult to survey the chronological development of system of keeping time in Indian music, but archeological discoveries have given us ample evidence of well developed percussion instruments as far back as the Indus valley civilization. It is not known what kind of time-measure or 'Theka' used to be played with 'Chandogan' or 'Nibadda Prabandha' at a later stage, nor is it known as to who actually composed the 'Theka' of various 'Tala' which have come down to us through the centuries.¹³⁴

It is a conjecture that perhaps in earlier days percussionists, being inspired, used to express various rhythm meters through spontaneous mnemonic composition on a drum. We may presume that simple time or 'Adi-Tala' was the origin of all other Tala, which has been without trouble to us through ages. It is said that 'Adi-Tala' from which 'Tri-Tala', as known today, was evolved, was the first formalized time measure. Nevertheless, some musicologist opines that the 'Dhamar' tala is the earliest formalized time-measure. However, following the track of vocal and instrumental music, one can surely say that along with the formation of 'Dhrupad' expounded by 'Baiju Bavra' during the 12th and 13th centuries, suitable memories were set within the form of a limited number of beats, appropriate for the song composition. They gradually many more Tala were expounded, 'Theka' were composed, laws, principles, feature grammar were set and distributed in five 'Jatis' (categories) as per scansion of Guru, Laghu etc. with a view to express various Chandas (metres). The Tala used to be played on different kinds of drums, mainly Mridangam.

In any case, it will not be wrong if we presume that systematization of 'Talaahyaya' of our classical music has developed and became systematized along with the developments and systematization of classical vocal and instrumental music and dance. For the simple reason that the tala aspects of our music is so closely interlinked with all other aspects of our sangeet (music) and none of them can be basically separated.

Various other folk drums, viz. dhol, Dholak, Dhaka, Madal, Dampha, Duff, and Kanjira etc. developed with alacrity in indigenous groups.

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A special mention may be making about the art of Dhaka and dhol playing. These two big drums are plays even now at the time of 'Navratri' of Gujarat and at the 'Durgapooja'. So far as compositions are concerned one may observe that unlike other drums, including the Pakhwaj and the Tabala, these two drums have certain composition suitable to time, seasons or occasions like those of 'ragas'. The compositions possess various sentiments and expression like Bodhan, morning celebrations, midday Aratika, evening Aratika and they produce a sad atmosphere at the time of immersion of the goddess. Through these instruments are considered folk drums, any sensible man will find immense material in the composition, which may easily be compared with the intellectual composition of the Pakhwaj and the Tabala.

The instrument mentioned above viz. Khol, Dhaka, dhol etc. were appreciated by the ordinary masses outside the wall of royal castles but on the other hand, the art and science of Tabala playing developed largely with the help and support of Muslim ruler.¹³⁵

There are numerous forms of music and dance with various suitable ways of keeping time and accompaniment, each one having its own laws, principles and features viz.

(a) Classical, light classical, light folk, Qwali, devotional etc. in vocal music:

(b) Similarly, varieties in instrumental music:

(c) Classical oriental, devotional light and folk dances:

Each of the above forms of music needs suitable percussion instruments and suitable way of keeping time or accompaniment. Again, these forms have large varieties depending on different schools of thoughts, trends, provinces etc. like languages in India. Any drummer will not be able to keep time in a simple way for any form of music unless he is acquainted with the same for a considerably long time.

Then after achieving the correct tala and Sam, tempo etc. either on his own or by hint, he was to establish the rhythm structure of the song composition very firmly in the minds of all thus he gradually creates confidence in his own mind. Then transmits the same to the mind of the

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audience with a feeling of relief and proceeds ahead with appropriate rhythmic embellishments.¹³⁶

It may be emphasized that tala is not rhythm. The equation of tala and rhythm is a common and very widespread mistake. The 'tala' is a metric frame within which the rhythm unfolds. Every tala or metric cycle is assigned one or more base rhythm patterns (theka). These basic rhythm patterns are played on the drum, and from them the drummer develops his rhythmic improvisation. In the course of the improvisation, it is the rhythm, which is modified whereas the tala remains constant. The tala may be best defined as the musical meter. A final observation regarding tempo. In south India, the tempo once chosen is strictly maintained throughout the performance progresses. In some styles of north Indian music, the tempo is moreover deliberately increasing at various stages of musical development.¹³⁷

The relationship of rhythm to music, we find that rhythm is even more vital for music than language. The two are usually considered as inseparable. Most of the cultures of the world, past and present, high and low, know of this intimate connection between music and rhythm. We will discuss here the place of rhythm in the cultivated and uncultivated music of India.

Since there is much similarity between the rhythm in music and the rhythm in literature, we may describe the former with help of the latter. The different parts used in the sentences of our ordinary conversation (i.e. the length of the different sense groups in it) do not usually have any balance or symmetry. Nevertheless, if we use these groups as altered with a stress or emphasis, our speech will undoubtedly be more forcefully sonorous. When these stresses or beats break up the lines or sentences into a regular pattern it gives rise to an orderly arrangement called rhythm. The rhythm is capable of producing an equiseta fading and has a peculiar magical effect.

The rhythm can be compared with the rise and fall of the wavy movements of a vast sheet of flowing water. When the appearance of these peaks is regularly timed and balanced it produces distinct rhythm to be found in the verses. If the recurrence of the peaks is not quite regular, but not also happens hazards even then an indistinct or veiled rhythm may be produced we come across this type of rhythm in prose-verse and literary

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prose. These different types of rhythm play an important part in the different forms of literature.

The musical rhythm is very much similar to the rhythm in literature. When the musical sound move in a wavy manner with, regular arise and falls, there are too arises a rhythm with its magical effect. Like the rhythm in literature, the rhythm in music can also be distinct and indistinct or symmetrical and asymmetrical, depending on the degree of regularity of the rhythm patterns.

However, in music and recurring beats are stronger than in poetry. It is interesting to note that word use in Indian music to indicate musical rhythm is tala, which is derives from the Sanskrit root 'Tad', which means to beat to strike.

In this connection, we should have to understand the two more technical terms, 'Laya' and 'Matra', using in the classical Indian music. The word laya seems to be of uncertain origin. It indicates the degree of rapidity of the movement of musical notes. It may be taking as equivalent to tempo of western music. The whole rang of this movement has been divided into three categories by the classical musicians of India. They are Vilambita (slow), Madhya (medium) and Druta (quick)

The unit adopted for measuring the duration of a musical line is calls Matra (Monra). No time measuring instrument like metronome is uses in Indian music. It is therefore difficult to express the laya (or the degree of rapidity) in terms of any comparable standard. According to some teacher of classical Indian music, the normal time taken to move one's index finger in the air around the cusp of knee is¹³⁸ nearly one Matra (Monra) in the slow tempo. The medium tempo is roughly double, and quick tempo is four times, the slow tempo.

In terms of the modern unit of time, we may say that in the slow tempo the beat will fall at the rate of about one beat per second (bps). The region of slow tempo begins from much less than 1 bps. It may be slow as 20 beats per minute (bpm). From these it extends up to 1½ bps. The region of medium tempo may be says to lie from above 1½ to 3 bps, and that of quick tempo

¹³⁸

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above 3 bps. In vocal music tempo seldom exceeds 5 bps. Nevertheless, in instrumental music it is often found even to exceed 10 bps.

Considering this vast range of laya, we may for the convenience of analysis of the different types of Indian music, adopt a more comprehensive subdivision of laya into –

- (1) Ati Vilambita (extra slow)
- (2) Vilambita (slow)
- (3) Vilambita-Madhya (slow medium)
- (4) Madhya (medium)
- (5) Madhya-Druta (medium-fast)
- (6) Druta (fast) and
- (7) Ati-Druta (extra fast)

The approximate rates of *bps* will be as follows

- | | | |
|----|-------------|----------------------|
| 1) | Extra slow | - less than 1 bps. |
| 2) | Slow | - 1 to 1½ bps. |
| 3) | Slow medium | - above 1½ to 2 bps. |
| 4) | Medium | - above 2 to 2½ bps |
| 5) | Medium-fast | - above 2½ to 3 bps |
| 6) | Fast | - above 3 to 5 bps |
| 7) | Extra fast | - above 5 bps |

It is doubtful if we can say that the slow tempo is a later innovation in Indian music. However, we should underline the fact that the slow tempos (particularly the extra slow variety) are rather uncommon in most types of Indian music. Only the medium and mild types of quick tempo are found to be used in the tribal music and the pure folk music of India. This is a large extent true also of the south Indian variety of classical music, and of Thumri and Tappa, and to some extent of dhrupad. It is only in Khayal that the slow tempos are considered very respectable. The Khayal – singer finds in them a greater scope for the combinational display of notes and Tana. Moreover, slow tempos are more suitable for the expression of sober ideas.

Some function of the slow tempos are performed by 'Alap' in Dhrupad and south Indian classical music, and by the asymmetrical rhythm in the traditional tribal music and the pure folk music of India. In the later types of music, the sober and the sacred sentiments are generally expressing with the help of the medium tempos. For example,¹³⁹ the songs (folk) of north Gujarat, "Chel Darwaje" is medium and "Fakira na Nathia" is medium slow. Probably 'Garba' songs starting with medium slow and pickup at end with fast rhythm.¹⁴⁰

A shaky or fluctuating tempo is discovered in every system of Indian music. For a musician of the classical style it is an unpardonable lapse. The folk music and the primitive music of India do not also favor a fluctuating tempo; although in such type of music the lapse is not taken, vary seriously. Sometimes the lapses are not even noticed in the uncultured music of India, the music there being produced by many at a time.

However, in all the systems of Indian music we find a deliberate rising of the tempo, particularly towards the end of a musical piece, as an expression of change in the feeling. This raising of tempo is usually intended to develop the idea or feeling and make it more stimulating and poignant. In the uncultivated music of India this raising of the laya i.e. increasing the rapidity of the movement, appears to be more purposeful and not merely conventional. In some types of this uncultured music, a deliberate lowering of the laya for a shift from mirthfulness to sobriety has also been found.

In the folk music of Gujarat called Bhajan, we find a deliberate use of a different tala structure in the midst of a musical piece. It is called Tal-firat. The idea is apparently to convey a change in the feeling following a change in the situation. Such mixture of rhythm-structure within the same musical piece has also been found in the dance and song of some south Indian tribes.

The movements of musical notes, rapid or slow, may be patterns. These different patterns produce different shades of rhythm (i.e. Tala) and make the music more varied, effective and attractive. When the patterns are regular, the rhythm becomes pronounced and symmetrical. It expressed a feeling of vigorousness. Nevertheless, patterns, as we have mentioned before, may also lack regularity or symmetry and yet may have a subtle balance

¹³⁹

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in their component parts producing a veiled or asymmetrical rhythm. This type of rhythm is more suitable for expressing a feeling of neutrality and tranquility.

Asymmetrical rhythm is very common in the primitive music of India. For some primitive tribes namely, 'Onge' and Andaman's of the island, the specimens of music in our collection show only asymmetrical rhythm. The music of the other primitive tribes contains rhythm of both the types, symmetrical and asymmetrical. The folk music of India also has both these varieties of rhythm.¹⁴¹

Rabindranath Tagore considered the rigidity of 'Tala' artificially, and detrimental to lyrical music. We may therefore conclude that the subtle or asymmetrical rhythm, as distinct from usual regular and singsong type of rhythm, occupies an important place, and has a long tradition, in Indian music. The term '*Tala*' of Indian music is actually applicable to the symmetrical rhythm i.e. rhythm arising out of the regular patterns. This type of rhythm is well developed in Indian music and offers good many varieties and subtleties. The two basic *Tala* divisions are found in most categories of Indian music are made of 3 and 4 *Matra*. The complete rhythm cycle is composed of more than two such divisions each having one *tala* – stress. The *tala* – stress is of kinds, *Sam* (major and initial stress), *Tali* (ordinary and non-initial stress) and *Khali* (minor and medial stress), the common Tri-Moric 'Tala' of the north Indian classical music are *Dadara* (3+3=6 matras) and *khemato* or quick *Dadara*. The common Tetramoric *Tala* of this music are *Kaherva* (4+4=8 matras) and *Trital* (4+4+4+4=16 matras). *Ektal* and *Chutala* are also regular in their rhythm structures.

These are some of the most regular *Tala* in the north Indian classical music. Each *tala* division in them consists of an equal number of matras, *Tala* of similar structure are using in the south Indian classical music, and in the tribal and folk music of India. *Trital*, *Ektal* and *Chutala* are not characteristic of the traditional tribal and folk music of India. The most common *Tala* found in them resembles the *Dadara*, *khemato* and *Kaherava* of north Indian classical music.

¹⁴¹

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Apart from these regular or uniform tritonic and Tetramoric Tala, dimoric rhythm structure are also to be found in the classical Indian music. There are several 'Tala' in which the unequal or dissimilar parts of Teora (Tevra) of north Indian classical music is making 3+2+2, and Zaptal of 3+2+3+2 matras. Such uneven rhythm structures are uncommon in the traditional tribal music and traditional folk music of India, judging from collection of the tape-recorded tribal music.¹⁴² we may say that whenever such types i.e. the Teora and Zaptal types of mixed patterns are found in the uncultivated music of India, those specimens also offer symptoms to show that they are been lately borrowed from the cultivated music.

There is a tala called Dhamar, which is commonly using in *Dhrupad*. Each half of this tala is composed of 3+2+2 beat division. However, here in the theka the last division is made only of one stroke the later part of the division being leaving stroke less. Rhythm-patterns made of such pauses or zero strokes are quite common in the uncultivated Indian music.

In the cultivated Indian music of India the stroke used on the drums are made with the help of syllables called 'Bols' which initiate the sound produced by the strokes on the drum.

It is doubtful if the primitive tribes of India used such mnemonic syllables while learning to play on the drums. Our initial attempts to discover such Bols from the tribe's drummers have failed. They say that they learn to play on the drum by beating it from their childhood.

However, the case is different in folk music. In many areas, the folk drummers have been founds to be familiar with this system of drum syllables.¹⁴³

We know that the folk music has a great tendency to spread than the tribal music. Folk motif, in general are very good travelers comparatively folk tore would therefore throw much light on the diffusion of culture. A careful study of the tala structure of folk music, and the name used for the tala in different regions, is very important from this point of view. Indian poetry of the pre-modern age was usually sings. A mention of the tala is to be founds in many of these compositions. Shree Krishna kirtan of Baru

¹⁴² Page: 117: Folk Lore, Magazine: Vol: IX - 4- No: April 1968. "Rhythm In Indian Music"
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¹⁴³ Page: 118: Folk Lore, Magazine: Vol: IX - 4- No: April 1968. "Rhythm In Indian Music"
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Chandidas, middle – Bengal poet, may be cited as an example. The names of Tala mentioned in the literature of different centuries and regions should be carefully collated and collating for this purpose.

Unfortunately, the classical musician of this country do not nowadays use all the Tala mentioned in the books of classical Indian music. They confine themselves mostly to a small number of Tala. Hence, more diverse and complicated rhythm structures are gradually becoming obsolete, the literary records and to some extends the folk music, save such Tala from being entirely lost.

It has been saying that the Tritonic and Tetramoric tala structure are very common in the traditional tribal music of this country. The tribal people are founds to diversify the rhythm structure in their music by zero-strokes, and occasional displacement of the initial beat or 'Sama'. Structural diversities are also to be founds in the primitive music of India, notably in the music of the tala.¹⁴⁴

We have briefly discussed the place of rhythm in the different types of cultivated and uncultivated music of India. We have also described the different types of rhythm, symmetrical and asymmetrical and the symmetrical rhythm made of division of equal and unequal number of matras with special reference in the different types of Indian music. These three may be calls asymmetrical rhythm, uniform rhythm and mixed rhythm. The uniform is believed to be associated with early primitive culture, so far as India is concerned, we have seen that asymmetrical rhythm and mixed rhythm were present here even in the Vedic music. It has been narrates in the 'Ramayana' that Valmiki, stricken with intense grief for the bird, uttered a curse in the form of couplet. Then he becomes surprised at this new verse forms the qualities of musical movement (laya) of this extraordinary verse and for its stability of being sings in accompaniment of stringed instrument. The use of the term laya in this context perhaps indicated that the regular musical rhythm was gradually replacing the Vedic asymmetrical rhythm at the time of Valmiki.¹⁴⁵

¹⁴⁴ Page: 119: Folk Lore, Magazine: Vol: IX – 4- No: April 1968. "Rhythm In Indian Music"
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¹⁴⁵ Page: 120: Folk Lore, Magazine: Vol: IX – 4- No: April 1968. "Rhythm In Indian Music"
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Rhythm have more stability and definiteness that intonation and perhaps for this reason the rhythm structure is the first aspect of music on which it formalizes itself and makes itself precise. It can simultaneously be expressing in a variety of ways – in shouts, steps, claps, bodily motions etc. It could be allowing words and all other types of vocal and physical activities to synchronies in one single rhythm. For this reason alone even when it is reach in a variety of modes of rhythmic figure can easily be observes. Obviously it is, therefore the same metric pattern a general dynamic form which may be sung, danced to and played on instruments – making it feasible for the elements to be repeated which enable them to be preserved traditionally.¹⁴⁶

Tala: rhythm or the singing or playing of every piece of music strictly to a chosen measure of time is the principal aspect of Indian music.

As is well know, Indian music, which is homophonic and has no harmony, can show its best charms in the region of melody. Only melody however, is a regular change of pitch with respect to time and so proceeds by determinate steps. Hence, it has to pay special attention to rhythm. Indian music has consequently develops every phase of it with minute precision and employs several time measures not known to the Europeans.

A time measure employs a fixed number for matras or time unites, a short syllable means one Matra and a long one means two. The timing of the Matra is regulated by assigning to them a fixed laya or duration for time. Subjectively, the laya or the rhythm sense means the ability to maintain precisely the uniformity of the time span of each Matra or time unit. The laya therefore is as it were the soul of every time measure. There are three varieties to the slow, medium and fast varieties of tempo in the western system. The Madhya or the medium is twice as fast as the Vilambita or the slow, and the Druta or the fast is twice as fast as the Madhya or the medium.

In the early stage, musical time followed the same sequence of long and short as that of his poetic meter used for the song. The time measure therefore used to possess the same number of bars or divisions as those of the metrical line of foot. A bar or a beat usually signifies the place of stress. However, as the rhythm of poetry mainly depends upon the actual movement of the words, and not on the tala, it is regulating more by the sense and the length of the words than by the regularity of stress. The measurement of time

by quantity or by the number of long and short syllables does not therefore necessarily contribute to the periodicity or regular recurrence of stress which rhythm in music means. The poetic metres therefore did not at all suit the requirements of musical rhythm, which framed its different time measures on the principle of regularity and symmetry of the places of stress and rest possible under the circumstances.

In poetry, it is meaning of words that matters, while little value is attached to the emotional power of pure tone music, however attaches more value to the emotional power of the tones than to their literary meaning and this served to mistake its rhythm still further independent of the poetic metres.

A tala – measure consists of several bars and places of rest.¹⁴⁷ A bar may consist of two or more matras but the chief constituents of a bar are either a group of two or three ‘matras’, joined together or a group of them repeated once, twice or more times as required to make up the total number of matras assigned to the bar. The bar is indicated by special stress or accent or by the beat of the hand or by a special conventional sound on the drum. Special stress is given on the principal bar and deliberate silence is observed on some other conventional sound is produced on the drum, to mark an agreed position to rest. The silence indicates a particular phase of each tala-cycle and thus helps to maintain the sequence of the bars or places of stress in the measure, accurately.

Ancient work on music mentions five Margi or generic Tala or time measures. A number of fresh tala-measures used to be obtained by assigning different time values and sequences to the Matra groups forming the Margi Tala, according to rule specifically laid down for the purpose. Thus, for generations past, there have been as much as, one hundred and eight Tala in vague and thirty-five of these are considered to be of special importance. Most of these however belong to the sphere of pedagogic interest and in practice; only a few are needed. Out of one and the same tala measure, a skillful drum player or a tala expert can create at will a number of time idioms, smooth or zigzag and signify a desired degree of ease or strain in following the tala measure. Temporary variations in the strict form of the tala measure are made by changing over from a time in ‘two-s’ to a time in ‘three-s’ and by effecting

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phase different between the places of stress and pause of the strict and the free forms of the time measure. Such handicaps evidently put the skill and culture of the performer and¹⁴⁸ the listener, as well to a rigid test. Indian music does this by laying it down that an artist must not take any liberty with a time measure or with the laya, in particular. Liberty with the tala measure may for once be tolerates but that with the laya, never!

In short, the first unity disclosed the method of selection a scale in an ideal manner, determines the degree of the consonant or dissonant character of a note, and fixes its place in the scheme of tonality. The second by giving prominence to particular notes and hence to particular consonances or dissonances make capital of those consonances or dissonances for an emotional appeal, and the third helps to maintain the flow of the emotional and governs it rise and fall. Thus, the three unities of Indian music [notes, prose and rhythm] are complementary steps of a common musical end in view and together make for a larger unity, viz. of giving character to music.¹⁴⁹

5:6:1:1: Hinchā,

6:1:2: Roopak

6:1:3: Kaherva

6:1:4: Uladio

6:1:5: Khemato

6:1:6: Chalati

6:1:1:1: Hinchā: 6 Beat s- 2. Bar:

| | | | | | |
|------|----|--------|-----|----|--------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Dhin | Na | Kitaka | Tin | Na | Kitaka |
| X | | | 0 | | |

6:1:2: Roopak: 7. Beats- 3. Bar

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

¹⁴⁸ Page: 116: Hindustani Music 'an out line of its physics & aesthetic' By: G.H. Ranade
II edition : 1957

¹⁴⁹ Page: 115: Hindustani Music 'an out line of its physics & aesthetic' By: G.H. Ranade
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| | | | | | | |
|-----|-----|----|------|----|------|----|
| Tin | Tin | Na | Dhin | Na | Dhi: | Na |
| O | | | 1 | | 2 | |

6:1:3: Kaherva: 8, Beats- 2, Bar

| | | | | | | | |
|-----|----|----|----|----|----|-----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Dha | Ge | Na | Ti | Na | Ka | Dhi | Na |
| X | | | | 0 | | | |

6:1:4: Uladio: 8, Beats- 2, Bar

| | | | | | | | |
|-----|----|----|----------|----|----|----|---------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Dhi | Na | Na | Dhin, Ta | Ti | Na | Na | Tin, Ta |
| X | | | | 0 | | | |

6:1:5: Khemato: 6: Beats- 2, Bar

| | | | | | |
|---------|-------|-----|------|------|-----|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Dha, ka | Dina, | Gin | Tak, | Tina | Kin |
| X | | | 0 | | |

6:1:6: Chalati: 8, Beats: Played in 2, Beats:

| | |
|-------------------|------------------|
| 1 | 2 |
| Dhi, din, tak, ta | Ti, din, tak, ta |
| X | 0 ¹⁵⁰ |

5:5: The Tribal musical instruments of Gujarat:

We have the numerous tribal areas in Gujarat. Hill are covered Danta, and Ambaji region to Poshina, Khedbramaha, curved to Vijaynagar, moved to south region of Panchmahal areas are and passed through Nonehal, to Surat's Mandavi region and Valsad, Dang and Dharpur areas. It is the main shelter of tribal; it is hilly and forest areas. They have their own culture, costume, traditions and it needs separately attention for research project, so researcher only notifies their instruments not their music.

Conclusion:

Rhythm is an essential part of music; music without rhythm is just like food without salt. Rhythm has a long era with horizontally traveled with human being from his primitive theory of evolution. We can notice that

¹⁵⁰ Field Research Work: By Researcher

humans every activities are directly connected with rhythm; he is walking in rhythm, his heart beats is in rhythm, while he speaks, sings, breathing and doing his daily rutting work; Timing is every where; such timing is nothing but it is rhythm.

This chapter has shows us the evolution of rhythm's progress from primitive period to modern period. In addition, how important Tala and musical instrument in the Indian music, researcher notice that classical music is not rhythm based music but Folk music or the primitive music has always-powerful rhythm. Our Indian classical music rhythm has second category, only 'Theka' is playing during 'Khayal', 'Bada Khayal' and 'Dhrupad' 'Dhamar' singing; but in folk form based or semi classical like Geet, Gazal, Thumri, Dadara, or in the recitation of instruments we feel the importance of rhythm, rhythm has the special prominent place in uncultivated music performance. Western classical music has no powerful rhythm but other western music like Jazz, Pop; Rock, etc. have the powerful bustling rhythm. It shows us the importance of rhythm in common people or folk people who do not cultivate in classical music. Indian rhythmic instruments have the verities of rhythm comparatively western rhythmic instruments; they do not have the rhythm of seven beats, fourteen beats, sixteen beats, twenty beats, eleven beats, twelve beats, and many more. So these verities of rhythm does not found in world's rhythmic instruments.

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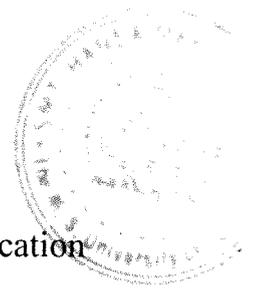
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ORIENTED MUSICAL INSTRUMENTS OF INDIA



Rudra veena



Sarasvati Veena



Sur Bahar



Vichitra Veena



Magadhi Veena



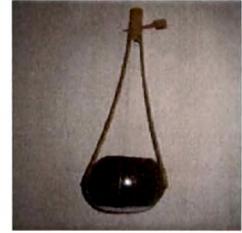
Nakul Veena



Sitar- Nikhil Banerji



Sarod



Tuntuni



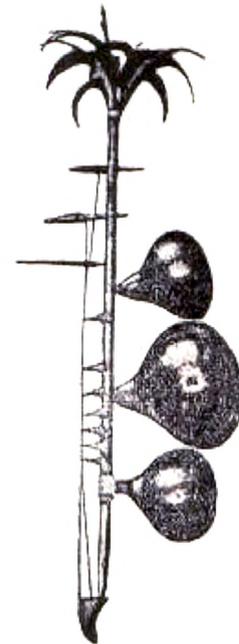
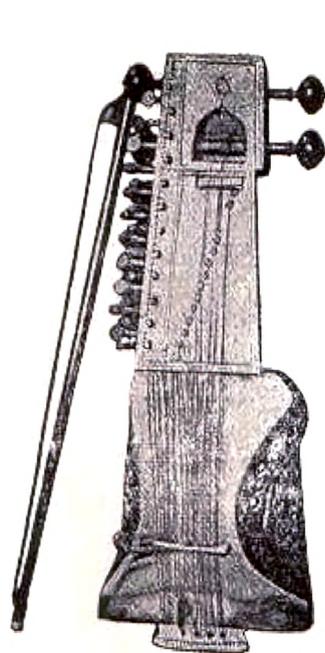
Violin



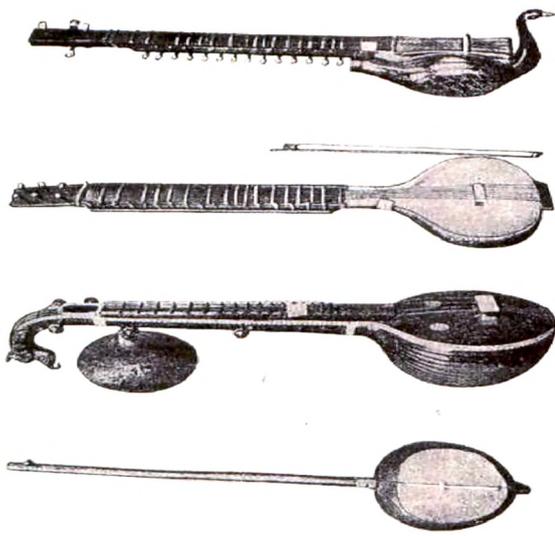
Flute- Pannalal Ghosh



Mohan Veena



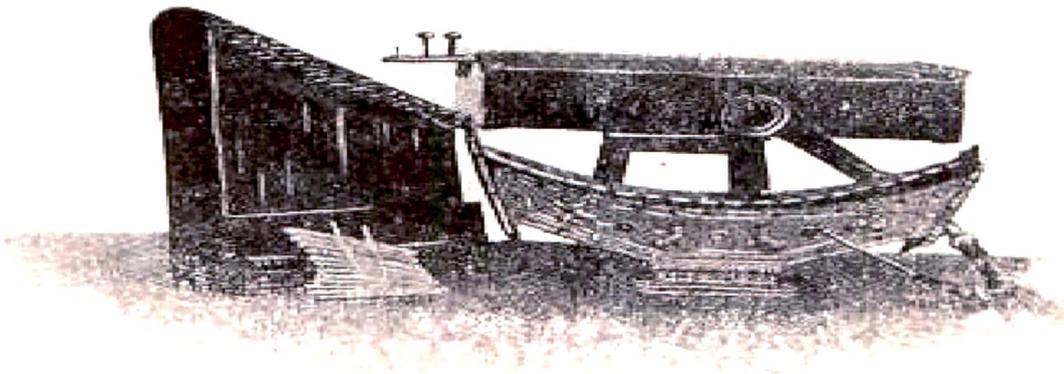
Old Instruments- Violin - Sarangi - Veena -



ISARAJ- 1/2/ VEENA AND EKATARO



SOUTH INDIAN INSTRUMENT



Enicient Santoor - Kasta Tarang - RanBheri - Bamboo Trang - Veena



Harmonium



Classical Raga Performance



Santoor



Sarangi



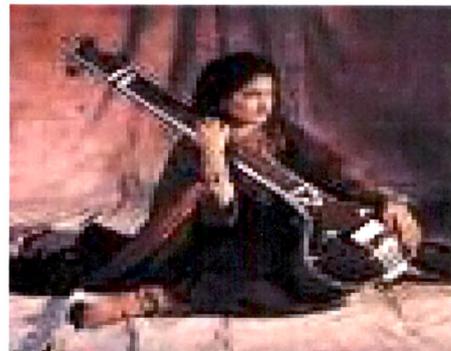
Sitar recitation



Tabala Recitation



Various Instruments in Painting



Classical Singer with Tanpura



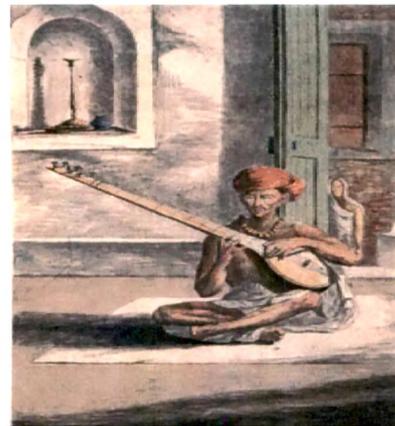
JAL TARANG



SAROD PLAYING



VEENA PLAYING



Right hand Setar playing



'KHOL' FROM BANGAL/ASAM



NARADAJI

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¹⁵¹ ALL PICTURES COURTACY FROM WEAKIPEDIA.COM & CHANRAKANTHA.COM

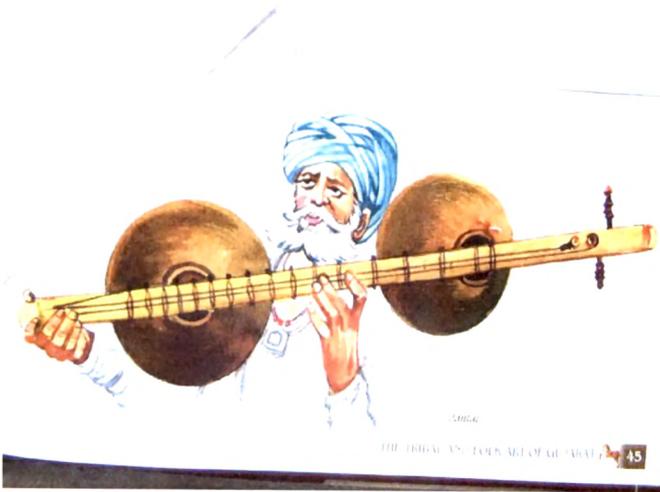
FOLK MUSICAL INSTRUMENTS OF GUJARAT



1- EKTARI 2 – JODIA PAVA 3 – THALI 4 – EKTAR 5 – SAHENAI

6 – BEEN OR PUNGI 7 – SARANGI 8 – RAVANHATHO 9 - PIHAVO¹⁵²

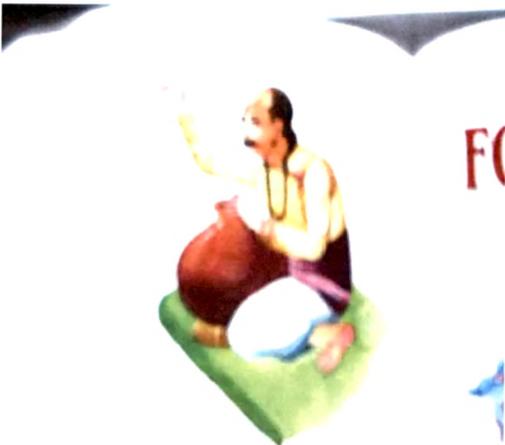
¹⁵² Photographs by Dhruva Trivedi- Gujarat Vidyapith, Ahmedabad



JANTAR



K ANSHIODA & MANJIRA



MAN BHATT



DUF PLAYER



DAMARU [DAKALI]



TRIBLE DHOL



NORTH GUJARATI SARANGI



TADAPU WITH ADIVASI DANCE



SARINDA PLAYER

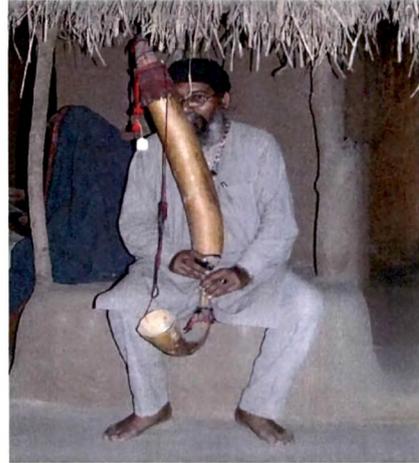


RAJASTHANI DESART INSTRUMENT

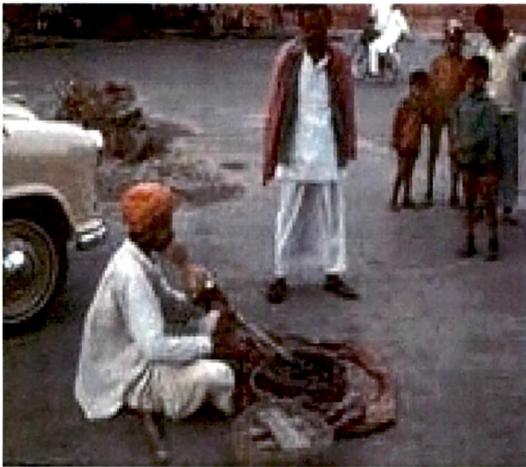


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BHAJANIK WITH TAMBURA



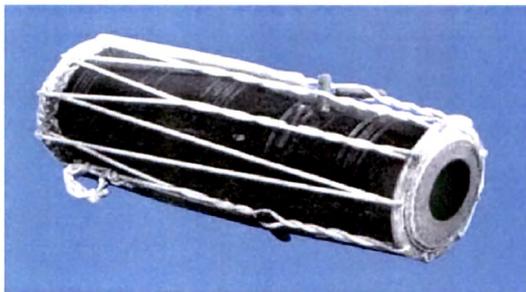
RESEARCHER WITH TADAPU



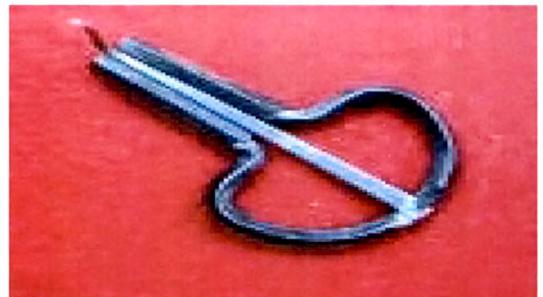
MHUVAR OR BEEN –MORALI



DUGDUGI

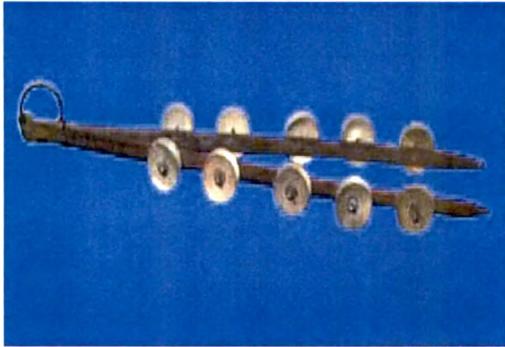


NAL



MOR CHANG OR MUKHA CHAN

¹⁵³ The tribal and folk art of Gujarat By: Minaxi Thakar



CHIPIYO



NAL & DHOLAK



DHOLAK



PLAYING STYLE OF RAVANHATHO



SHANKHA OR CONCH SHELL



GHUNGHARU



NAUBATA PLAYRE



NAGAD A



KAR TAL



FLUTE PLAYER



SHAHENAI



JODIA PAVA [FLUTE] ¹⁵⁴



PAVARI

¹⁵⁴ ALL PICTURES COURTACY FROM WEAKIPEDIA.COM & CHANRAKANTHA.COM