A Pratibha Spandan's Journal

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

THE SAROD: TRACING THE EVOLUTION AND DEVELOPMENT

Vivek Naware[1], Prof. Dr. Archana Ambhore[2]

1 Assistant Professor (Sarod), Indira Kala Sangeet Vishwavidyalaya, Khairagarh, C.G
2 HOD, Department of Music, Smt. Radhadevi Goenka College for Women, Akola

ABSTRACT
String instruments have their place in the development of Indian classical music. These instruments have been prevalent since ages and have been referred in our ancient texts like Vedas, Puranas and Upanishads. Sarod is the classical Instrument, having mesmerising and hypnotic impact on people due to its deep resonating sound. Musicologists, historians and musicians have different views regarding the evolution and development of sarod. Some consider it from medieval origins, whereas others ascribe it to ancient Indian origins. The paper carefully investigates the ancient Indian origins of sarod from ancient veenas and its development in the modern era.
Keywords: Sarod, Veena, Chitra Veena, Swarodaya.

Introduction

Structure of Sarod

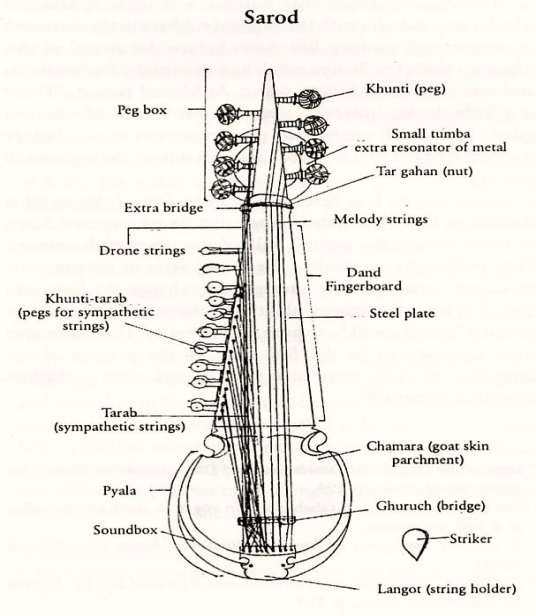

Figure 1- Sketch of Sarod

The modern *sarod* is manufactured from either single piece or double piece toonwood or teakwood. However, use of toonwood is more prominent than teakwood. The block of wood is chiselled to make it hollow to make the instrument. Sarod can be divided into three parts.

- Peg Box
- Fingerboard
- Drum

Peg Box (*Khunti*)- It is a tapering portion of the instrument which consists of either eight or six pegs for Main strings and drone strings. Eight peg *sarod* generally consists of brass *tumba* for extra resonance and support of peg box.

Targahan: It is the junction point between pegbox and fingerboard. Main strings of the *sarod* pass through the finely cut *targahan* to the bridge and finally tied to the *langoat*. Drone strings pass through extra jawari bridge. Extra jawari bridge is found in Peg box having eight pegs.

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

Fingerboard (*Dand*)- It is the middle portion of the instrument having a tapering galvanised steel plate. The galvanised plate ensures the smooth slide of the fingers. This portion also consists of *chikari* pegs and sympathetic string pegs. The plate has miniature openings on the top for the entry of sympathetic strings to the pegs.

Drum (Piyala)- This is a resonator having circular shape and diameter of around 10.45 to 12 inches. It is hollow from inside and covered with tightly stretched goat skin. Sound post is beneath this stretched goat skin.

Bridge (*Ghudach*): This is an important component of the instrument. It measures around 2.75 Inches in length and has a height of around 0.75 inches. It is placed around 2.5 to 3 inches from the string holder (*langoat*). Both *targahan* and the bridge is made from deer horns or other related material. In earlier times it was made from ivory. All strings i.e. 4 main strings, 4 drone strings ,2 rhythm strings (*chikari*) and 15 sympathetic strings pass through the bridge. 4 main strings, 1 drone string and 2 rhythm strings pass through the upper portion of the bridge, whereas 3 drone strings and 15 sympathetic strings pass through the miniature openings in second and bottom layer of the bridge.

String Holder (*Langoat*): *Langoat* is fixed on the drum with screws. It is made from brass or steel. There are 8-9 knobs on *langoat* on which knots of the strings are tightened.

Type of Sarods and method of tuning

Two types of *sarods* are prevalent in present era.

- *Sarod* with Eight long pegs
- *Sarod* with Six long pegs

***Sarod* with Eight long pegs-** This type of Sarod is played by the musicians of Maihar Senia Gharana i.e. disciples of Baba Alauddin Khan and Ustad Ali Akbar khan. This type of Sarod was altered by Ayat Khan under the guidance of Baba Alauddin Khan. It typically has 4 main ,4 drone ,2 rhythm and 15 sympathetic strings.

***Sarod* with six long pegs**- This type of Sarod is played mainly by the disciples of Bangash gharana of Ustad Hafiz Ali Khan. It typically has 4 main ,2 drone ,2 rhythm and 11 sympathetic strings.

Both the types of *sarods* are manufactured in single piece or double piece wood depending upon the choice of the individual.

Objective

- To explore the historical origins of the *sarod* in the context of ancient Indian string instruments and its development.

Hypothesis

- The contemporary *sarod* has developed from ancient *veenas* through a gradual adaptation influenced by evolving musical styles, regional craftsmanship, and cross-cultural interactions, culminating in a unique instrument characterized by a fretless metal fingerboard and a deep, resonant tone appropriate for Hindustani classical music.

Research Method

Various appellations of the Sarod -S.M Tagore in "Yantra Kosh" mentions *sarod* as '*Sharadiya veena'*. Prof. G.H. Taralekar in "Bharatiya Vadyanncha Itihas" referred *sarod* as *sarabat* or *sharadiya veena*. Shri Abasaheb Mujumdar proposed that the original designation of the *sarod* may have been *swarodaya*

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

i.e. rising of swaras or *swaravart*. (Taralekar) Ustad Ali Akbar Khan regards the Sarod as a *Veena* and recounts that it was referred to as *swarodhyayak veena* during the era of Bharat Muni. (Bandopadhyay 85). According to Swami Prajananda, correct name of *sarod* is *sharadiya veena*. Pt. Brij Narayan states that 'Sa', the initial letter of the Sarod, is the first swara of music. In Persian, it is known as *shahrud* (Swar+ood) or Shah+ Rud, and in Sanskrit, it is known as *swarodaya* (Swara+ Uday). According to some scholar- name of Sarod is taken from the word *shahrud*, in which it is connected to *rudra veena* of Shah, hence the name *shahrud*. *Sarod* is known as *swarod* in Bengal, which has originated from *Swarodaya*.

Views of Musicians, Musicologists and Archaeologists-According to G.H Taralekar, a lute type of *veena* was prevalent during the *natyashastra* period is the past form of *sarod*. This guitar type of *veena* had no frets and had four, five or six strings. One end of the string was tied to the bridge placed on the drum (*Piyala/pokhara*) and other to the peg. The upper portion of this *veena* near the fingerboard showed a descending shape. According to him this type of *veena* is probably *kachhapi veena* as the lower part of the *veena* resembles to the back of tortoise. On this *veena,* swaras were produced by plucking the string and pressing the string by other hand. The *veena* was played in sitting and also in standing posture. (Taralekar 20 -21)

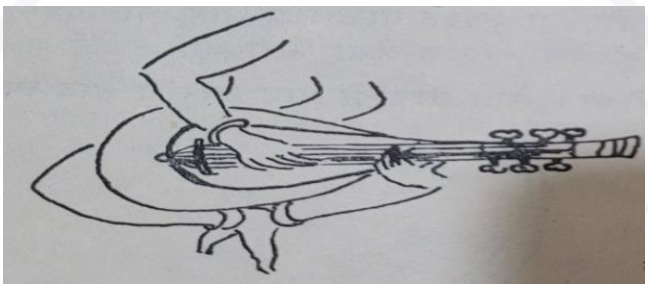

Figure 2- *Kachhapi veena*, Courtesy: G. H Taralekar

As learned from numerous sources and from literature, *sarod* is propagated as post-descendant of Afghan *rabab*, however, Baba Allauddin Khan had informed Ustad Ali Akbar Khan that Sarod was also widely used during the time of *Bharat Muni*. At the time, it was known as *swarodhyayak veena*. He goes on to mention Nagod village, where sculptures of *sarod* can be seen in the Nachna and Bhamra temples. Ustad Ali Akbar Khan asserts that *sarod* is a *veena* in the same sense as other *veenas*. (Bandopadhyay 85.)

K. Krishna Murthy in "Archaeology of Indian Instruments" has extensively dealt in all categories of instruments and studied sculptures in the ancient sites of Sanchi, Barhut, Amravati, Gandhara, Nagarjunkonda, Mathura and Ajanta. He has referred this type of *veena* as guitar or lute type of *veena* in his work. His findings under the chordophones (*tat vadya*) category reveal that the lute/guitar type of instrument having close resemblance to *sarod* is represented in the sculptures of Sanchi in the scene 'the return of perfectly accomplished Buddha to his native town'. In this representation two musicians with *sarod* type of *veena* with pear shaped resonators and straight neck is seen. However, number of strings cannot be identified. This *veena* has small pegs to regulate the tuning. The instrument is plucked by right hand and placed on fingerboard for playing notes by left hand. The instrument is accompanying the royal procession. This type of *veena* is represented only once, in the reliefs of Sanchi. (Murthy 27)

At Amravati, this type of *veena* gets representation in the sculptures of later period. In the following figure, the instrument is seen played by a male musician. Three pegs for tuning the instrument can be seen clearly. It has a pear shape resonator and tapering fingerboard like *sarod*. Instrument is plucked with the right hand and left hand is placed on the fingerboard for playing the notes. It is been played in the standing position in accompaniment with other musicians and dancers. (Murthy 27) The following picture is also represented in Dr. Lalmani Mishra's "Bhartiya Sangeet Vadya" and referred as *chitra*

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

veena. Swami Prajananda referring the following sculpture has narrated- "One of the *natas* is playing on a lyre or harp that resembles the Indian *rababa* or *saroda*. The correct name of *saroda* is *sharadiya Veena*." (Prajananda 104)

Figure 3-, Amravati ,2 nd century, *Courtesy: Suvadeep Sanyal*

In another sculpture at Amravati, this type of *veena* is represented from posterior in which a female musician in sitting position playing the instrument can be seen. (Figure 3). Number of pegs cannot be made out from the figure. Oval resonator and narrow finger board can be seen clearly. The instrument is plucked with right hand while the left hand is on the fingerboard. It is represented with other female musicians.

Figure -4-Amaravati- Female *chitra veena* player
Courtesy: Cover page-Art and Buddhism in ancient India -Jas Elsner

This type of *veena* is represented twice in the reliefs of Nagarjunkonda and has five small pegs and is plucked by right hand and played on the fingerboard with left hand. The *veena* appears here with group of Dancers. The *veena* has pear shape resonator and a straight fingerboard like *sarod*. According to K. Krishna Murthy, this type of *veena* was also used as a solo instrument. 'An example of this comes from the panel illustrating the 'night before renunciation' carved on an inscribed frieze slab. A female attendant is shown holding a guitar or lute on her lap and is playing upon it with a plectrum'. (Murthy 27)

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

In Gandhara sculptures this type of *veena* is found less than harp type. According to K. Krishna Murthy, 'In the reliefs, the lute appears invariably either as an accompaniment to the other instrument in a musical entertainment or as a solo instrument. Generally, lady musicians, nymphs and celestials occur in the sculptures as guitar players. Guitar found in the reliefs, is commonly a two stringed *veena*.' (Murthy 28)

The researcher visited the archaeological site of Ajanta, one of the World Heritage sites declared by the UNESCO, maintained by Archaeological survey of India. The period of Buddhist cave monuments at Ajanta ranges between 2nd and 1st centuries B.C to the Gupta period (5th and 6th centuries A.D.). Ajanta caves have very good illustration of *sarod* like *veena* in cave no 4 (Figure 5). The cave number four is the largest vihara cave having representation of this type of *veena* in the main pillar in front of the sculpture of Buddha. Dr. Lalmani Mishra has referred this *veena* as *chitra veena*. The *veena* is played by a *yaksha* in a sitting posture. The fingerboard seems to have frets. The method of playing the instrument is very similar to that of Sarod. Along with this *chitra veena*, sculptures of other instruments like flute, and a bowed instrument with frets similar to *dilruba* is also represented on the main pillars. This suggests the popularity and prominence of these instruments during this era.

Figure 5: *Chitra veena*: Ajanta Cave no- 4 (front and side angle view)

Similarly in the cave no 16, the similar sculpture of *chitra veena* as mentioned by Dr. Lalmani Mishra is carved on top of the ornamental pillar near the entrance of the cave. *Veena* is played by a *yaksha*. Six pegs of the *veena* can be seen clearly. *Veena* has a bridge(*ghudach)* placed on the oval resonator. The *veena* is plucked by right hand fingers while left hand fingers are on the fingerboard.

Figure 6: *Chitra veena*: Ajanta Cave no- 16

Sarod like instrument is also found in Champa caves in Madhya Pradesh, according to Swami Prajananda in "Historical development of Music".

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

Pt. Brij Narayan in his 14-episode programme of 'Sarod ka Sursansar' narrates in episode- 1 that *sarod* like instrument is found in Champa caves and many temples and caves of ancient India. He explains about the similarity of the instrument in instrument holding style and even the sitting posture in the sculptures to modern day *sarod*. He gives his opinion regarding the evolution of *sarod* from *Kacchapi veena*. Goat skin was used in *kacchapi veena*. (Narayan, "Sangeet Sarita-Sarod Ka Sur Sansar")

This suggests that *sarod* is very ancient instrument. He further mentions about one of the shlokas of Kalidasa's *Meghadootam* (450 A.D) to prove that *kacchapi veena* had goat skin (*charma*) on the resonator-

"Aradhainam shravanabhavam devamullanghitadhva
Siddhahvandair -jalakanabhaya-dwinibhir muktamargah"
Meghadoot 1.45

He narrates that after worshipping Lord Skanda -Son of lord Shiva, *siddha* couples running with their *veenas* (*kacchapi veena*) as they are afraid of rain drops falling on the *veena*. (Narayan, *Interview with Pandit Brij Narayan*)

The period under study, which runs from the second century B.C. to the sixth or seventh centuries A.D., was a formative time in Indian history, according to K. Krishna Murthy in "Archaeology of Indian Instruments". There was a great deal of political peace and stability during that time. People's extreme economic wealth and religious fervour surely produced a friendly environment that led to a variety of creative endeavours. The vibrant society was always prepared to both adopt new trends and change existing ones. As a result, we observe that throughout the reviewed period, new innovations have emerged and older traditions have been revived. (Murthy 78)

In "Bharatiya Sangeet Vadya", Pandit Lalmani Mishra provides a detailed description of *chitra veena*. According to Bharat Muni- "*Saptatantri bhavecchitra*" was defined for *chitra veena*. Bharat Muni made the earliest mention of the instrument known as the *chitra veena*. It was played with fingers and had seven strings, according to Bharat. According to Nanyadev in *Bharatbhashyam* the *shloka- Matango vadakastasyachaitriko naama naparaha* implies that Matang was a player of the *chitra veena*. Texts such as *Sangeet Makarand, Sangeet Sudha*, etc. also mention *chitra veena*. This *veena*, according to Acharya Sharangdev, has seven strings and can be played with both fingers and a plectrum. (Mishra 96)

Pandit Lalmani Mishra claims that four to five different *veena* kinds were primarily highlighted in the sculptures found in caves, temples, and stupas during the pre- and post-Bharat periods. It makes sense that a sculptor would base their work on the popular tools and artwork. So, it is not hard to find out *veenas* as described by Bharat. In addition to having a realistic background of the imagination in realistic form, ancient Indian artwork also possesses a flying imagination in the vein of modern art. Therefore, issues must be taken into account on a macroscopic, if not microscopic, level. *Vipanchi* and *chitra veenas* are regarded by maharshi Bharat as the two primary *veena* kinds. As a result, *vipanchi* and *chitra veena* are frequently depicted in Bharat period sculptures. *Vipanchi veena* had nine strings which were tuned in different *swaras*; but the tuning of *chitra veena* is not clear. So, the *veena* in which the system of playing individual strings separately is known as *vipanchi veena* and *veena* with 5-6 pegs and the instrument with ability to produce more than one swara from one string can be considered as *chitra veena*. *Veenas* with five or six strings are not mentioned in *Natyashastra*; however, if any *veena* sculpture showing five or six strings/pegs it can be easily predicted that remaining one or two pegs cannot be seen or the artist/craftsman has not paid attention to the exact no of pegs of the *veena*. (Mishra 97-98)

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

Pandit Lalmani Mishra based on the above facts and circumstances came to conclusion that the *veenas* as shown in Figure 1 to 6 are a form of *chitra veena*. He also presented the fact that the popularity and propagation of *chitra veena* diminished between seventh century to thirteenth century due to *kinnari veena* and *ektantri veena*, but approximately regained its popularity and place in music with the name of *rabab* and due to the fact that the ancestors of Seni had embraced to this instrument, the instrument had made a very important place. (Mishra 98)

Pandit Lalmani Mishra further states that the ancestors of *Tansen* adopted the form of Rabab was advanced form of *chitra veena* resulting in inclusion of Indian classical music in totality. (Mishra 114) *Rabab* form of *chitra veena* had undergone changes and *surshringar* and *sarod* instruments were developed subsequently. (Mishra 98)

Musicologist Raja Sir Sourindra Mohun Tagore in "Yantra kosh" has mentioned *sarod* as *sharadiya veena* or *sharad*. *Sharadiya veena* is made of single piece wood. The resonator of *sharadiya veena* is covered with goat skin (*charma*). This instrument does not have frets like *rudra veena*. This instrument has six strings with six pegs. While altering the strings as per their requirement, musicians sometimes choose steel strings. This *yantra* has 7 to 11 *tarab* strings which are called *parshwatantrika* in sankrit, but the main strings of *sharadiya veena* are six only. (Tagore 28)

Ustad Ali Akbar Khan in his autobiography "Apnader Sebay" throws light on the fact that Tansen had made one *rabab* which was called as *tanseni rabab* or *dhrupadi rabab* as per Baba Allauddin Khan. He describes the non-proper sound of the instrument during rainy season was due to the non-availability of stretching mechanism to stretch the *charma* during that period. He describes that Jafar Khan, one of the ancestors of Tansen made *Surshringar* instrument replacing goat skin (*Charma*) with wood (*Tabli*), wooden plate with Steel plate (fingerboard) and gut strings with steel and bronze strings, thus was able to play the instrument in rainy season also. He pointed out that that at one point of time *sarod* artists used to carry three different musical instruments. *Surshringar* for *vilambit alap, rabab* for *jod* and *sarod* for *gat /toda*. He explained that the size of *sarod* was smaller in earlier time but the belly was oversized therefore the hands couldn't reach the drum. Due to this fact *ladi* of been *anga, lad-lapet, tarparan angas* were difficult to play and resulted often in breaking of strings while playing. With these problems taken into consideration Baba Allauddin Khan directed his brother Ayat Ali Khan to make such an instrument in which all *angas* of *veena* could be played easily. (Bandopadhyay 85,86)

Alterations in contemporary *sarod*: The length, width, number of strings, and introduction of Jawari Bridge were among the structural changes made to the current *sarod* over the past century.

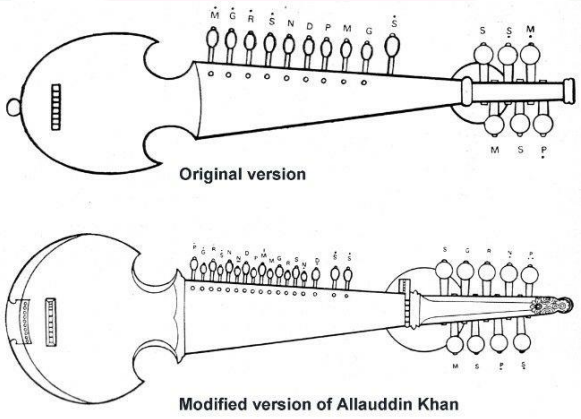

Figure-7 - Changes in sarod
(Modified Version of Allauddin Khan)-Courtesy-Dr. Sarita McKenzie Mcharg

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

As mentioned earlier, Baba Allauddin Khan of Maihar Senia Gharana along with his brother Ayat Ali Khan made attempts to change the tonal quality of *sarod* by alterations in design of *sarod* as per Ustad Ashish Khan, *sarod* maestro and the eldest son of Ustad Ali Akbar Khan.

As seen in figure 7, *piyala*, or drum, of the original *sarod* was oval in shape. It was converted into more circular shape with increase in the diameter from 9 inches to 11 – 11.5 inches. This enhancement in diameter and change in shape gave the instrument a profound sound with high amplification.

Width of the fingerboard was increased as compared to the earlier version is evident from fig.8. Thickness near the neck portion was reduced thus helping the artist to play *alap*, *gamak* and fast phrases with ease.

Earlier version had a spherical *langot* (string holder), as shown in Fig.8, in which all the strings collided in a single string holder knob. Changes were made with a persistent *langot (*String holder) having 7-8 knobs to tie the knot. This also facilitated the correct alignment of the strings and ease of holding the instrument with diminished chances of breaking of strings.

The number of sympathetic strings, or tarabs, was also raised from nine/eleven to fifteen. This helped the artist to tune the string according to the *raga* and also added resonance to the instrument.

Number of *chikari* (Rhythm strings) strings was increased to two instead of one.

An optional *ati mandra pancham* brass string was added in addition to the four main strings Ṣ Ṗ S M to enable playing in the lower octave. The players of the current generation of *sarod*, however, do not use this option.

In *targahan, jawari* bridge was added to accommodate four strings that are tuned in S, G, R, or Ṇ, or in accordance with the raga. This added extra character to the instrument.

The bridge was changed which had three layers for holding strings. The uppermost layer holds four main strings, one drone string and two rhythm (*chikari*) string. Three drone strings G, R, Ṇ pass through middle layer of the bridge and fifteen sympathetic strings pass through the bottom layer. Middle and bottom layer has miniature openings for the strings to pass through it.

Extra brass *tumba* was introduced on the posterior side near the neck of *sarod*. It is placed here by small opening drilled on the rear side of the neck. So, the sound passes through this bowl shape *tumba* resonating with the inner overtones.

Plectrum or *java* for playing the instrument was changed from metal *java* to coconut shell *Java*. Earlier, the metal java used in *surshringar* was used to play *sarod*. However, it produced more metallic sound. Acharya Baba Alauddin Khan used coconut java for playing *seniya rabab*. He began to use same coconut *java* for the *sarod*. This enhanced the melody of the instrument. It sounded smoother and facilitated the artist to play *tarparan, lag-lapet, ladi* and *jhala*. Coconut java has a good grip than metal java thus ensuring better control over the *bols*.

The thickness of goat skin and steel plate was standardised for balanced sound and desired sustain.

Ustad Ali Akbar Khan standardised the gauges of the strings with tonal quality in mind. *Pancham* string which was earlier of steel was replaced by bronze wire.

Ustad Ali Akbar Khan standardised the pitch of Sa, increasing it from 'B' to 'C. "Ustad Ali Akbar Khan's method of tuning and quality of tone and sound became the ideal for the generations of the *sarod* players that followed." (Khan)

SWAR SINDHU
(National Peer-Reviewed/Refereed Journal of Music)
A UGC CARE listed Journal
ISSN 2320–7175 (O) | Volume 13, Issue 01, January-June, 2025
http://swarsindhu.pratibha-spandan.org © The Author(s) 2025

Conclusion

Hence, it can be concluded that the contemporary *sarod*, *rabab*, *surshringar* are the instruments of same category and have minor difference, but all three have originated from *chitra veena*. As *chitra veena* is found in the ancient sculptures of north as well as south India, having a pan India presence, clearly shows the popularity and importance of this *veena* during the ancient era. The diverse appellations like *kacchapi veena*, *sharadiya veena*, *swarodhhyayak veena*, *swarodaya*, *swarod*, *swaravart*, *sarabat*, *shahrud*, suggests the instrument likely travelled across different regions of India, each of which gave it a name in their own language or dialect.

Bibliography

Bandopadhyay, Anindyo. Swarsamrat. Translated by Hemkant Navdikar, I st ed., Pune, Deepti Prakashan, 2022

Elsner, Jas. Amravati:Art and Buddhism in Ancient India. Reaktion Books, 2023.

Guimet, Musee. "Stupa Scene with Music." Wikipedia, Wikimedia Foundation, 13 May 2018, en.wikipedia.org/wiki/Hadda. Accessed 14 May 2023.

Khan, Ashish. "The Contribution of Maihar Gharana to the Evolution and Technique of Sarod." Sovenier Published by Deba Prasad Banerjee, 1993.

McKenzie Mcharg, Sarita. "Modified Version of Ustad Allauddin Khan." Www.facebook.com/Photo/?Fbid=1512946405404035&Set=A.1512946422070700&Locale=Sq_AL., 2017, https://www.facebook.com/UstadAcharyaAllauddinKhan. Accessed 2023.

Mishra, Lalmani. Bharatiya Sangeet Vadya. Bharatiya Gyanpeeth, 2005.

Murthy, k.Krishna. Archaeology of Indian Musical Instruments. Sundeep Prakashan, 1985.

Narayan, Brij. Interview with Pandit Brij Narayan. 10 June 2023.

"Sangeet Sarita-Sarod Ka Sur Sansar." You Tube, 2021, youtu.be/2foEtnAVEHk. Accessed 17 May 2023.

Prajananda, Swamy. A History of Indian Music. First ed., Ramakrishna Vedanta Math, 1963.

Sanyal, Suvadeep . "File:27.5. Life Scenes of Buddha-2nd Century CE-Limestone-Amravati-Andhra Pradesh-Sculpture Gallery-Indian Museum-Kolkata- A1-A25070.Jpg." Wikimedia Commons, 29 Apr. 2018, commons.wikimedia.org/wiki/File: 27.5._Life_scenes_of_Buddha-2nd_century_CE-Limestone-Amravati-Andhra_Pradesh-Sculpture_Gallery-Indian_Museum-Kolkata-_A1-A25070.jpg. Accessed 12 May 2023.

Tagore, Sourindra Mohun. Yantra Kosh. Madhyast Yantralay, 1875.

Taralekar, G.H. Bhartiya Vadyanncha Itihas. First ed., Pune, G.Y Rane Prakashan, 1973.