# IGIL

## Sound, Nature, and Tradition in Tuvan Music

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December 2018
(revised October 2025)

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# ABSTRACT

Tuva, an autonomous republic in the heart of Asia, is home to the Turkic Tuvan people, whose musical world has been shaped by the dynamics of nomadic life and an intimate relationship with nature. For Tuvans, nature is both muse and mentor — a living environment inhabited by spirits to whom music is offered in reverence. Their attentive listening to environmental sounds serves not only artistic but also practical and spiritual purposes.

This paper investigates how Tuvan music reflects and sustains this symbiotic worldview. It introduces the broader soundscape of Tuva through throat singing (*höömey*) and traditional instruments, then focuses on the *igil* — a two-stringed horsehair fiddle that sonically and symbolically embodies the horse, a central figure in Tuvan culture. Drawing on fieldwork, performance practice, and interviews with musicians, composers, instrument makers, musicologists, and shamans, the study explores how the *igil* bridges material, acoustic, and spiritual domains.

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# I. INTRODUCTION

My musical journey began with the violin and gradually expanded toward traditional music practices. Growing up within Turkey's rich musical heritage led me to the rebab, a traditional bowed instrument of deep historical and cultural significance.

The rebab's origins trace back to the ninth century and are often described as the earliest example of a bowed string instrument emerging from Central Asia, possibly developed by the Uyghurs. Over time, it spread across North Africa, the Middle East, Europe, and Asia, evolving into diverse regional forms and names.

Among the regions preserving instruments related to the Turkish rebab, Tuva captured my attention for its distinctive musical practices shaped by nature and for its traditional instruments—particularly the *igil*, a two-stringed horsehair fiddle that shares structural and conceptual affinities with the rebab.

Motivated by this connection, I traveled to Tuva to conduct field research and gain a deeper understanding of its musical culture. During my month-long stay in August 2018, I participated in performance sessions with local musicians, commissioned an *igil* from a local maker, and studied with master performers. I also interviewed musicians, composers, instrument makers, and musicologists, attended shamanic rituals, and explored with shamans the role of music as a healing practice within their tradition.[1]

[1] Most interviews were conducted in Tuvan and translated into Turkish by local interpreters.

# II. TUVA REPUBLIC

Tuva (officially the Tyva Republic) is an autonomous Turkic republic within the Russian Federation, located in southern Siberia. The Tuvan language—a Turkic language influenced by Mongolian, Tibetan, and Russian—is spoken by approximately 280,000 people worldwide.

Tuva is bordered by Krasnoyarsk to the north, Mongolia to the south, the Irkutsk and Buryat Republics to the east, and the Republic of Khakassia to the west. It is a land of rivers, forests, and mountains where nature plays a central role in both daily life and artistic expression. Even the national anthem reflects this deep connection:


*Figure 1 - Map of Tuva*

I, I am Tyva
I'm the son of the silver-snowed mountain,
I, I am Tyva
I'm the daughter of the silver-watered homeland.

*Men – Tıva men,*
*Möñge harlığ dağnıñ oğlu men.*
*Men – Tıva men,*
*Möñgün suğluğ çurttuñ tölü men*

Traditional Tuvan spirituality is rooted in animism and shamanism, centered on a deep respect for nature and the spirits inhabiting it. Mountains, rivers, trees, and animals are regarded as living entities possessing spiritual essence (*ee*), and maintaining harmony with them is seen as essential to well-being. Shamans (*kam*) serve as mediators between the human and spirit worlds, using music, chanting, and rhythmic drumming to communicate with unseen forces and restore balance. Over the centuries, Tibetan Buddhism also spread to the region, blending with indigenous practices rather than replacing them. Today, Shamanism and Buddhism coexist peacefully and are practiced in an integrated way. Within this blended belief system, music functions not only as art but also as a spiritual act reflecting the interconnectedness of humans, nature, and the cosmos.

Archaeological evidence indicates that the first human presence in the region dates back 20,000–25,000 years. From the 2nd century BCE onward, the area became home to various Turkic tribes, beginning with the Huns[2]. Between the 6th and 8th centuries, Tuva was part of the Göktürk Khaganate[3], followed by the Uyghur and Kyrgyz states. In 1207, the Mongol armies of Genghis Khan incorporated Tuvan lands into the Mongol Empire, resulting in centuries of cultural exchange with Mongolia.

Manchu rule was established in 1757, and in 1758 Tuva became a colonial region under Chinese Manchuria. Tuva declared independence in 1912, became a Russian protectorate in 1919. In 1921, the People's Republic of Tuva (Tannu Tuva) was established. In 1944, Tuva came under the sovereignty of the Soviet Union.

During the Soviet era, Tuvan people underwent a great deal of suppression. They were not allowed to pursue their traditions, practice their shamanic beliefs or play their traditional instruments. Tuvan music was labeled "primitive," and attempts were made to replace their traditional instruments with the western ones. After the dissolution of the Soviet Union, Tuva became a federal subject of Russia in 1990. Despite decades of repression, Tuvans preserved their culture and traditions to this day. Perhaps as a result of the difficult times they endured, they became particularly attached to their traditional values.

Today, Tuva's population exceeds 330,000, with most residents living in the capital, Kyzyl (meaning "crimson red" in Tuvan). The city is symbolically important, as it is considered the geographical center of Asia, commemorated by the *Center of Asia Monument,* built in 1968 and renovated in 2013.

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[2] The Huns were nomadic people who lived in Central Asia, the Caucasus, and Eastern Europe.

[3] The Göktürk Khaganate (or Turkic Khaganate) was a khaganate established by the Ashina clan of the Göktürks in medieval Inner Asia, between the years 552 and 659.

Although most Tuvans now live in urban areas, some continue to maintain a nomadic lifestyle. Tuvans have historically been cattle-herding nomads, tending to their herds of goats, sheep, reindeer, cattle and yaks for thousands of years. They have traditionally lived in *yurts* that they relocate seasonally as they move to newer pastures. This close relationship with the natural environment has shaped the Tuvan identity and musical expression.

*Figure 2 - Yurts - photo by author*

## III. TUVAN MUSIC

### a. Influence of Nature

Tuvans' nomadic lifestyle and close relationship with nature have profoundly shaped their musical traditions. According to Tuvans, nature is their conservatory, their school of music. This is where they learn their craft and find their inspiration.

Their acute sensitivity to environmental sounds is not just for musical purposes, but also for developing survival skills. In Siberia, life can be quite hard due to extreme weather conditions. Therefore, nomadic people learn to rely on the sounds of nature in order to determine things such as where to take their flock of animals, when to begin the first hunt of the season, when to migrate to newer pastures or to figure out when a cold front or a heat wave is approaching.

As a result of this deep listening of the natural sounds, Tuvans have developed a vast sonic vocabulary. Tuvan music features extensive imitation and representation of natural sounds, known as *boidus churumaly* ("sketch of nature"), which means drawing the sketch of nature with sounds. The traditional instruments they use represent different animals and the throat singing styles imitate various phenomena in nature.

Throat singing—known as *khoomei* in Tuvan—is the most distinctive feature of Tuvan music. In this overtone technique, the singer sustains a fundamental pitch while simultaneously isolating one or more overtones. Through this technique, singers imitate the wind, flowing rivers, or the calls of birds—sonic reflections of the nature around them.

As Tuvan music derives from nature, it is also made *for* nature. Tuvans believe that there are master spirits in nature, who are called '*cher eezy*'. The forest, the river, the water spring, the narrow passage high along the mountain slope all have their master spirits inhabiting and guarding those places according to their belief. Tuvans have a tradition of making offerings to these master spirits, such as food, coins, but most importantly music.

Making offerings to the spirits is an important part of hunting rituals as well. When Tuvans go hunting in the forest, they first serve food to the master spirits, then take out their instruments and play for them, sometimes until morning. They believe that pleasing these spirits brings luck and success in hunting.

Tuvan folklore includes numerous myths about music and the spirit world. One tells of a young hunter celebrated for his skill on the *shoor*, an end-blown flute:

Each season he and his companions returned from the taiga[4] with abundant game, attributed to the beauty of his playing. One day, when the first snow marked the beginning of hunting season, they all went hunting to the taiga. After the hunt everyone returned and gathered, however the young *shoor* player was missing. The rest of the hunters searched for him everywhere, only to finally find him seated under a big pine tree, lifeless yet still holding his flute. As the legend goes, the master spirit of that taiga was a woman. The cher eezy had fallen in love with the young hunter's *shoor* playing and claimed him for herself. [5]

[4] Taiga, also known as boreal forest or snow forest, is a biome characterized by coniferous forests consisting mostly of pines, spruces, and larches. The taiga is the world's largest biome apart from the oceans.

[5] Valentina Suzukey (2018, August) Personal interview.

## b. Structure of Sound

The harmonic series, also referred to as the overtone series is the sequence of tones that naturally occur when a string or air column vibrates. Each overtone vibrates at a whole-number multiple of the fundamental frequency. The overtones also contribute to how we perceive the timbre or tone color of a sound.

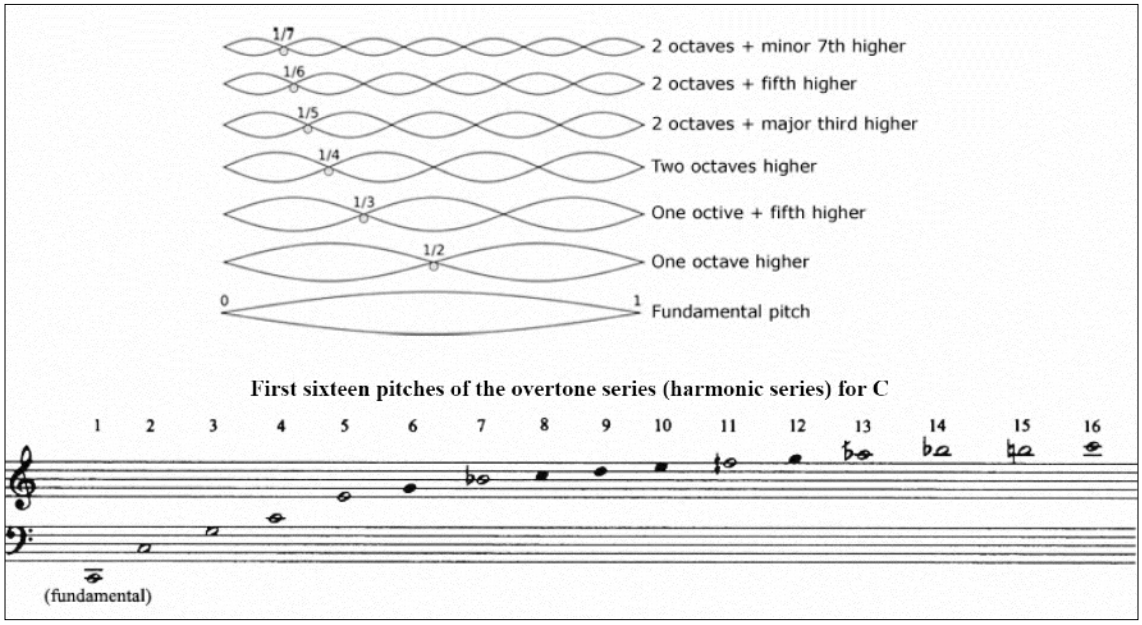


*Figure 3 - Harmonic Series (image source: Wikipedia)*

Tuvan music is organized around the harmonic series, built upon the relationship between a drone and its overtones. Yet these concepts differ fundamentally from their counterparts in Western musical theory. In Western contexts, a pedal tone serves as a stable foundation over which independent harmonies or melodies may unfold; if the pedal tone is removed, the harmonic material can still exist as independent musical entities. In Tuvan music, however, the drone is not an accompaniment but the very source of all sonic activity. If it is removed, the overtones it generates cease to exist.

Tuvan musicologist Valentina Suzukey describes this phenomenon through a metaphor: Tuvan sound, she says, is like a hologram. Fragments of the main tone—the drone—scatter around in smaller particles, forming its overtones. According to her, the subcomponents of the main sound source form what she calls a *sound cloud*, similar to the subatomic particles orbiting within an atom. In her analogy, Western sound resembles a dense snowball traveling directly toward a target, while Tuvan sound is like snowflakes dispersed into the

air, each flake drifting freely in its own direction. This analogy reflects a perception of sound not as a linear construct but as a spatial and multidimensional field. It demonstrates a broader Tuvan worldview in which sound is alive and inseparable from the natural environment.

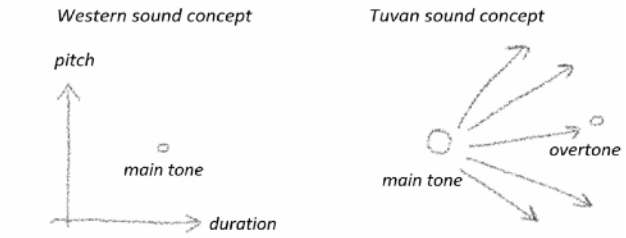


*Figure 4 - Suzukey's drawing for comparing Western and Tuvan sound concepts.*

## c. Throat Singing

Tuvan musical practice is largely centered on throat singing, with instruments serving primarily as accompaniment. In this vocal technique, performers shape and filter the sound using the oral cavity, nasal passages, and skull as resonating chambers. The aim is to create a layered sonority in which a fundamental drone supports one or more clearly audible overtones.

Throat singing is primarily a solo tradition, practiced both by women and men, with different particular styles. Different regions have different styles and characteristics in their throat singing. Moreover, Tuvans can distinguish where a singer is from by the subtle characteristics in their throat-singing.

Throat singing is often performed outdoors—while herding, traveling, or during communal gatherings—where the surrounding landscape acts as a natural amplifier. The acoustic feedback of valleys, caves, rivers, and mountain slopes interacts with the voice, reinforcing the sense that the environment itself participates in the act of music-making.

There are five basic styles of throat singing with various sub-styles. The basic styles are *Khöömei, Kargyraa, Sygyt, Borbangnadyr and Ezenggileer.*

**Khöömei**, the most general style among the others, is a style in which the singer sings around the middle range of his/her voice, producing two to three harmonics above the fundamental.

**Kargyraa** is a low-pitched style in which the singer produces both an undertone[6] and overtone along with the fundamental.

**Sygyt**, meaning 'whistle' in Tuvan, is a high-pitched style with a bright whistling sound above the fundamental which evokes the sound of the wind and the birds.

**Borbangnadyr**, which means 'to roll', imitates the sound of water rolling over the little stones in a stream. It is used as an embellishment to the other styles with a rolling effect by changing the overtones rapidly.

**Ezenggileer** is named after the Tuvan word for 'stirrup' and embellishes the other basic styles by adding a pulsating rhythm with the overtones, that evokes horseback riding.

*Figure 5 – Women throat singers' figurine in Tuva National Museum - photo by author*

## d. Traditional Instruments

The timbral variety is an important aspect of Tuvan music. The performer's approach to music is not merely melody based, but also timbre based, where the performer seeks to create different colors through the sounds s/he acquires on various instruments or with his/her voice. This emphasis on tone color rather than linear melody reflects an approach in which music is not a sequence of notes but an exploration of sound.

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[6] An **undertone** is a frequency that is a whole-number *division* of a fundamental frequency, the inverse of an overtone. While overtones are physically present in most natural sounds, undertones are intentionally produced in some vocal and instrumental techniques, such as certain styles of throat singing.

Traditional Tuvan instruments derive their distinct timbres from the natural materials used in their construction—wood, horsehair, skin, horn, and bone—which root them physically and symbolically in the natural world. Most of these instruments represent animals or natural phenomena, and some are used not only melodically, but also for imitating the sounds in nature and producing sound effects.

For example, *duyuglar*, a percussion instrument made of horse-hooves, imitates the galloping of a horse. The *amyrga*, a wind instrument fashioned from birch bark or reed, imitates the mating call of the male Siberian red deer. The bowed string instrument *byzaanchy* signifies a calf (from *byzaa*, meaning "calf" in Tuvan), while the *igil*, another bowed string instrument, symbolizes the horse.[7]

Among these instruments, the igil holds a unique place in Tuvan music. Closely associated with the horse, it reflects the deep connection between sound, nature, and spirituality in Tuvan culture.The following section explores this instrument in greater detail.

# IV. IGIL

## a. About the Instrument

The *igil* is a bowed string instrument with two strings made of horsehair. The term *igil* derives from *iyi khyl*, meaning "two strings" in Tuvan (*khyl* literally translates as "hair," referring to the horsehair used for its strings). The instrument typically has a teardrop-shaped wooden body covered with animal skin—most commonly male goat skin—and a long fretless neck. It is usually carved from a single block of wood.

The *igil* is also referred to as a "horse-head fiddle," as the pegbox is traditionally decorated with a carved horse's head. Its bow, also strung with horsehair, has a loose tension; the player tightens it during performance by pressing the hair with the right-hand fingers.

There is no standardized form for the *igil*, and regional and individual variations are common. During field observations in Tuva, instruments displayed differences in shape, size, and ornamentation, reflecting the artisanal and personal nature of Tuvan instrument making rather than industrial uniformity.

[7] See Appendix for more information on Tuvan traditional instruments.

The igil's sound is rich in overtones and natural harmonics are used in abundance while playing. The action (distance between the fingerboard and the string) of the instrument is quite high. Therefore, the horse-hair strings are not played by pressing down on them with the fingers, but by touching lightly with the fingertips.

According to Tuvan musicologist **Valentina Suzukey**, the igil's rich overtone spectrum originates from its horsehair strings. She explains that when a violin string is cut in half, it remains a single piece. Whereas when if the igil string is cut in half, the sting separates into many strands, as each individual string is made of a strand of horsehair .As each hair vibrates and resonates individually, the sound that comes out of the igil becomes significantly rich with overtones and timbral complexity.


*Figure 6 - Suzukey's drawing for violin and igil strings cut in half*

## b. The Legend

The igil, recognizable by the horse head carved on its pegbox, symbolically represents the horse. The horse is of great importance for Turkic societies, especially the Central Asian Turkic peoples. It has been a central figure in many legends and epics throughout history. According to various sources, Turkic peoples were among the first to domesticate the horse. Regardless of differing historical interpretations, the horse remains a core symbol of Turkic identity and culture.

In Tuvan folklore, which is rich with stories linking music, nature, and spirituality, the igil too has its legend, about how it came to be.

"Long ago in ancient times there lived a rich but unkind Khagan, an emperor, who owned many fast horses. Among his servants was a poor orphan boy tasked with tending the herds. One day, a wolf attacked the Khagan's horses and killed a mare that had recently given birth to a foal, thus leaving the foal vulnerable and weak without its mother. Thinking the foal would not survive for long, the Khagan ordered the orphan boy to take it to the

forest and leave there for the wild animals. Obeying the order, the boy took the foal to the forest, however feeling sorry for the foal, he could not bring himself to leave it there to die. Eventually, he decided to take the foal and care for it, assuming the Khagan would not find it out.

Years went by and the foal grew into a magnificent stallion, surpassing even the khagan's finest horses in all the races. Enraged with jealousy, the cruel khagan ordered his men to find the horse and kill it. Tracking the horse, the Khagan's men caught and pushed it down a cliff to its death. The orphan boy, not knowing what happened to his horse, searched and grieved for countless days and nights, until one night, when the horse appeared to him in his dream. The horse told him "Grieve no more. Go, look for me down that cliff. There you will find my body. From my head, carve an igil; from my tail, make its strings and bow. You will see, whenever you play that igil I will come and be there with you."[8]

Thus, the igil came to be.

*Figure 7 – An igil at the Tuva National Museum - photo by author*

## c. Tuning of the Instrument

The tuning pitch of the igil is not fixed, as in traditional context there is no fixed reference note to tune to. However, since it is also played in ensembles and orchestras in modern performance settings, musicians of today often tune to a specific pitch. The only fixed principle about igil is that the two strings must form a perfect fifth. Tuvans consider the fifth to be the optimal interval in the natural world, which makes sense given the fact that the fifth is the first interval after the octave in the harmonic series.

An anecdote shared by Suzukey illustrates the contrasting conceptions of tuning between Tuvan and Western traditions. Years ago, while conducting field research on Tuvan instruments, Suzukey recorded an elderly igil player in the countryside. After he performed several pieces, she asked him to play the open strings separately so that she could capture the tuning of the instrument. The man responded by playing both strings together. She

8 Nachyn Choodu (2018, August) Personal interview.

explained once more that she wanted to hear the tuning, so he should play the strings one after the other. The man played them together once again. After the same sequence happened for a third time the old man got angry and stood up, saying "What a strange girl you are! You asked to hear the tuning and I played it for you. I will go and smoke now and you can go get a tea!"

It was not until a few years later that Suzukey realized the reason of the misunderstanding: Since the igil's strings are tuned in perfect fifth, playing one string at a time would not produce any perfect fifth, and therefore would not demonstrate the tuning of the instrument. For Tuvan musicians, the true marker of tuning lies not in the absolute pitch of a single string, but in the resonance created between the two strings.This is why the old man insisted on playing the strings simultaneously, and not one by one.[9]

The incident illustrates how easily researchers can impose their own conceptual frameworks onto the music they study. Suzukey, despite being Tuvan herself and deeply knowledgeable about her culture's music, had been trained to think about tuning through Western analytical categories—as individual pitches to be documented separately. The old musician, never having encountered such a framework, simply demonstrated what he understood tuning to be: a living relationship between sounds, inseparable and only meaningful together.

Suzukey further observes that, in contrast to the European system where A=440 Hz serves as a standardized reference, Tuvan folk musicians prioritize the relational aspect of sound rather than fixed pitch values. The referential note can be any pitch, provided that the strings form a perfect fifth. She also argues that Western notation is inadequate for capturing Tuvan music, as its subtleties cannot be represented precisely in staff notation. In her opinion, folk musicians are not necessarily obligated to know how to read music, as Tuvan music relies primarily on oral tradition. Oral transmission remains central to the preservation and continuity of Tuvan musical practice, with each generation learning directly from listening, imitation, and personal interpretation rather than written scores.

## d. Making of the Instrument

During my stay in Tuva, I had the opportunity to observe the making of an *igil* from start to finish, as an instrument maker constructed one specifically for me. Based on my observations I found out that, as in the case of other Tuvan instruments, there is no strict

9 Valentina Suzukey (2018, August) Personal interview.

standard to follow when making an igil. Since it is a folk instrument, players traditionally would have made their own - by carving out a suitable tree from along their route and shaping it in a way that would suit their physical features. Similarly, before the instrument maker began to work on my igil, he discussed with his colleagues about building a *kyz kishi igili* for me, literally "an *igil* for a woman", emphasizing that the player's gender and stature could influence certain structural design choices.

Instrument maker Artysh Mongush explained that the quality of the wood is the most crucial factor in building an instrument. To prepare the wood, he first wets it until the sap is fully drawn out, then allows it to dry for as long as necessary. Once ready, the wood is carved and shaped roughly into form. Before applying the goat skin to the body, Mongush soaks the skin in water and leaves it in the sun for several hours to soften it. He noted that the most demanding part of the process is carving the horse's head at the top of the instrument —a symbolic feature that connects the *igil* to Tuvan mythology and its long-standing association with horses as spiritual and cultural symbols. Mongush typically requires about eight days to complete an *igil*, though he said that he can shorten the process to four days when needed.[10]

*Figure 8 - Instruments at Mongush's workplace - photo by author*

During conversations with ethnomusicologist Valentina Suzukey, she recounted several amusing anecdotes about foreign researchers visiting Tuva to interview local instrument makers. These researchers often approached the process through a Western luthier's

10 Artysh Mongush (August 2018) Personal Interview.

perspective, asking detailed technical questions about the species of wood, drying duration, and types of varnish used. In response, the local makers would humor them with imaginative answers such as: "I use the wood of the red pine tree; I dry it for ten years; I apply the same varnish mixture Stradivarius used." As Suzukey noted, there are no red pine trees in Tuva, and nomadic craftsmen historically lacked the means or need to store and dry the wood for years, since they moved with the seasons. Nor did they know the recipe of Stradivarius' varnish.

These exchanges underscore the cultural gap between Western expectations of standardized craftsmanship and the Tuvan worldview, in which instrument making is guided by immediacy, adaptation, and a context-dependent understanding of material and sound. The researchers, satisfied with answers that fit their own conceptual frameworks, often failed to recognize that the essence of Tuvan instrument making lies not in codified techniques but in a lived practice transmitted through experience and oral tradition.

## V. COMMENTS & CONCLUSION

Several musicians I interviewed observed that many people approach Tuvan music primarily through the spectacle of throat singing, without engaging with the philosophy underlying it. Yet once explored, this deep philosophical foundation expands one's understanding of both music and life. For researchers and travelers alike, sensitivity to local values and beliefs is essential—only through such respect can one gain trust, be accepted into the community, and observe its practices meaningfully.

During my fieldwork, I was welcomed not only as an observer but also as a participant. I was invited by the Tyva Ensemble to perform with them at the Tuva National Theater during the *Throat Singer's Day* celebrations on August 17. This experience deepened my insight into the living musical culture of Tuva and, I hope, will lead to future collaborations and continued research.

Tuvan practice reveals an entirely different paradigm in which instruments are living, adaptive entities shaped by immediate context and individual embodiment, where relational tuning supersedes absolute pitch, and where knowledge is transmitted through embodied practice rather than notation. This research opens paths for future work in comparative organology of Central Asian instruments and for compositional practice that

integrates Tuvan concepts of relational tuning and timbral listening into contemporary performance.

Traditional roots form the foundation of every art form. Across time and cultures, traditions have been the source from which creativity emerges and renews itself. Engaging with the traditional music of diverse communities not only enriches our understanding of sound and artistic expression but also fosters meaningful intercultural dialogue, connecting people through shared artistic experience.

## VI. APPENDIX

**XOMUS** – A jaw harp used in Tuvan music. The metal xomus, called demir-xomus, consists of a flexible metal tongue attached to a frame. It is played by plucking the tongue while holding the frame against the mouth, producing overtone-rich resonances.

**MURGU** – An overtone flute, end-blown with no finger holes, traditionally made from the stalk of the angelica plant. It produces harmonics by varying breath pressure and embouchure.

**SHOOR** – A long end-blown flute made from a hollowed willow or larch branch, with finger holes to vary pitch.

**LIMBI** – A side-blown, open-ended flute crafted from wood or bamboo, with holes for controlling pitch.

**AMYRGA** – A hunting horn designed to imitate the mating call of the male Siberian red deer. It not used melodically but to imitate the animal's sound.

**KENGIRGE** – A large frame drum introduced to Tuva by Tibetan Buddhists. Its goat-skin surface is struck with fingers or a mallet to produce rhythms.

**DUYUGLAR** – A percussion instrument made of a pair of horse hooves, clapped together to imitate the trotting of a horse.

**SHYNGYRASH** – A set of small bells like those used as ornaments on the heads or necks of horses. The bells are threaded together and placed on top of the kengirge or inside the duyuglar, producing jingling sounds.
**XAPCHYK** – A rattle made from the dried scrotum of a bull, containing sheep knuckle bones that create sound when shaken.

**CHADAGAN** – A plucked zither with a variable number of strings; the bridge is sometimes movable to adjust tension and tone.

**DOSHPULUUR** – A three-stringed plucked instrument, often compared to the banjo because it is plucked or strummed, although the doshpuluur's strings are unfretted. The sound box is made either entirely from wood or with goat skin stretched across a wooden frame. The first two strings are tuned a fifth apart and the third string forms the octave.

**CHANZY** – A three-stringed plucked instrument similar to the doshpuluur. It produces a louder tone than the doshpuluur and is commonly used throughout Central Asia to accompany throat singing.

**BYZAANCHY** – A bowed string instrument with four strings. Its name derives from the Tuvan word for "calf." The sound box is covered with goat skin at the front and open at the back. The first and third strings are tuned to the same note and the second and fourth strings are tuned a fifth higher. The bow is threaded between the strings so that it is drawn across both the upper and lower surfaces of the horsehair. The strings are fingered lightly from underneath rather than being pressed against the neck.

**DUNGUR** – A hand drum used in shamanic rituals. Each shaman makes their own dungur, considered a sacred object. The drum has a cross-shaped handle, a wooden frame, and an animal-skin head, played with an orba (striking stick). Motifs, often depicting animals, are traditionally painted on its surface.[11]

11 Appendix information is taken from Alash Ensemble's webpage https://www.alashensemble.com/