



Dr. professor Erdenechimeg Luvsannorov

Mongolian State Conservatory

MongolianAAA@outlook.com

The music and nature connections within Mongolian tradition

The miracle of the world is human

The miracle of the human is the mind

A. Hamilton (1755 -1804)

Background \The music and nature connection

Mongols believe that music has evolved from nature and humans have acquired it thanks to their creativity, thus humans and music are intrinsically linked with one another. Therefore, the power of human emotions lies within natural sounds or music. In this sense, sounds are the expressions of the coexistence of nature and living creatures (L.E).

Sound is studied by linguists, as a power of movement in physics, as a numerical value in mathematics, and as an artistic and aesthetic value in musicology. Ancient Greek scholars and scientists, Pythagoras, Plato,¹ and his follower Filolai, in III century B.C. put forward a theory that the intervals between 7 musical scales are equal to the distances between the seven brightest stars in the space known as the Pleiades.

Therefore, western music theory is based on the Gregorian calendar (100 years correlate with 100 tones and 7 stars correlate with 7 diatonic music scales \c, d, e, f, g, a, h\), while Asian music theory is based on the Lunar calendar (60 years correlate with 60 tones as a result of 5 elements² correlate with 5 pentatonic scales \gung, Shang, tsue, chi, yui\ by 12 years sequence.

This Asian pentatonic scale with 60 tones was published by Janjaa Khutagt Rolbiidorj³, who first introduced and named his literary work in Mongolian as “Merged Garakhyn Oron”. These two theories are different but they are unified in some musical instruments, namely, piano, in which seven white keys and five black keys make up one octave - 12 chromatic tones - to make a full sound.

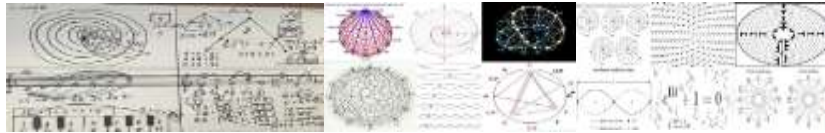
¹The Greek scholars Pythagoras and Plato also believed that the ancient musical scale was connected to the science of astrology \Ut Re Mi Fa So La Ti\

² Five elements are nature and biological- wood, water, fire, earth and metal.

³ Janjaa Khutagt Rolbiidorj is a researcher and monk of Mongolian Buddhist temple in 1800.

All previous studies conducted on artistic diversities are separate from our living nature, but these ideas represent a classic example of connections between music and our nature.

Images 1- 4



New methods and holistic approaches are being developed in contemporary studies and research works, such as studies on the music of different cultures (ethnomusicology) and studies on music with human development (anthropology-musicology).

Connection to Mongolian tradition

Since ancient times, the Mongols have observed their nature and universe and categorized them into two domains - tangible (visible) and intangible (invisible). They believed that all subjects of nature have their own deities, and reflected them in their music.

For this reason, one can say that the efforts and desires of ancient humans to distinguish and understand those intangible forces resulted in true connections and interrelations between humans and their nature.

This symbolizes that esoteric thinking of the subconscious mind was expressed through ancient cultures and music.

Different ethnic groups of Mongolia have their own oral traditions and performing arts such as myths, legends, tales, odes, benedictions, traditional songs, and music, expressed for example in the form of sacrifices and prayers during rituals of worshipping sacred mountains and waters, incantations, mantras or gestures.

It is still of high interest to modern-time researchers and scholars that the melodies of performing art expressions originated and developed in and around Mongolian Altai Mountains.

In particular, these include tuuli (epic), tsuur (traditional windpipe instrument with 3 holes), and khoomei (throat singing or laryngeal crooning) depicting the sounds of blowing wind, streams of water, and other natural sounds, performed by chanting, incantations, mantras and gestures of mouth, nose, lips, teeth, palate, larynx and chest cavity.

Example: video -1 - Melody of wooden bagpipe

In the XVIII-XIX centuries, the spells and incantations expressed in songs, music, myths, legends, tales, and epos are believed to be reflections of ancient people's thinking and mood.

Since the start of the XX century, through research, scholars have started to realize that the beliefs of ancient human subconscious minds help to uncover hidden intellectuality and secrets of ancient wisdom.



Image 5: Animal pitch brand with images of the sun and the moon

The earth gas⁵ in the mountainous area spreads longer while the earth gas in low steppe areas spreads short and fast. It is believed that 4 different types of earth gases spread when the earth breathes, while 17 different earth gases were released specifically on December 22nd, affecting the human body.

For example, the folk song of Dariganga⁶ uniquely differs from the others because of the lake called “Dagshin Duut Nuur” located on the slopes of sacred Altan Ovoo Mountain. Indeed,

geographically lake is located at a height of 1270 m above sea level, at a northern latitude of 450,919 and a longitude of 1,120,511.



Image 6. *Altan Ovoo Mountain of Dariganga and Dagshin Duut Nuur Lake.*

In addition, there are 13 big mountains located in the territory of Dariganga and the height of the lowest one is 1255 m above sea level and the height of “Shilyn Bogd”, the highest mountain, is located 1778m above sea level. This area had a total of 222 volcanic mountains, which erupted nearly 10-15 million years ago.

It is due to these facts that strong, majestic, and enthusiastic folk songs are born among people who live in and around this highly energetic land area. For example, folk songs of the Dariganga locality are quite bright, forceful, and with chord major form, whereas folk songs among other⁷ ethnic groups are long and melodious.

The peculiarities of the Dariganga locality have influenced Mongolian folk songs, expressing the nature it originated from. The long song called “Under the sun of the placid world⁸” is one example.



Example: video 3 – “Under the sun of the placid world”. Mongolian long-song singer N. Norovbanzad

⁷ Uzemchin, Barga or Buriad

⁸ “Uyakhan zambuu tiviin naran”- in Mongolian

The understanding and appreciation of the energy from mountains and waters, stone mounds, hills, and steppe still exist. Since ancient times, it's believed that energy is derived from two different sources, such as nature and biology. For example, natural energy is derived from the abovementioned natural structures, while bioenergy is derived from the physiological bodies of humans and animals.

Accordingly, bioenergy is divided into three categories including the energy of the body, language, and mind. Ancient Mongolian legends and myths demonstrated that nomads tried to understand that the human body's energy was directly connected to the energy of the earth, the universe, the sun, and the moon.



Image 7: Rooftop / upper flume of Mongolian dwelling known as yurt;



Image 8: Directions within the ger as 12 animals;

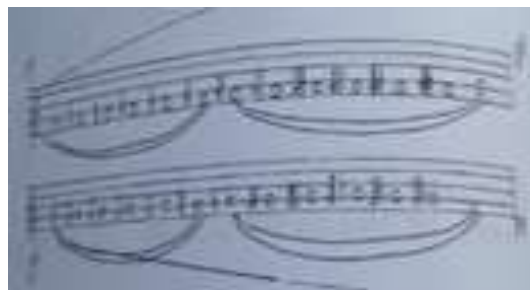


Image 9: Ratio of 12 tones; Belief in worshipping the sun and moon

Today you can still find in folk songs and music the traces of belief that the sun and the moon are the primary sources of life on earth. It is viewed that every phenomenon has two sides such as Arga⁹ and Bilig.

It describes how seemingly opposite forces may actually be complementary, interconnected, and interdependent in the natural world.

For example, the sun is viewed as Arga and the moon as Bilig, same as characteristics of everything including father and mother, soft and hard and etc. “As early as in the III century B.C, the leader of Xiongnu, the ancestors of Mongols had been worshipping the sun in the morning and the moon in the evening¹⁰”.

Famous scholars such as Pyelliot, Shivani, and Zakharova have once studied the traditional 12-year solar calendar that nomads use. According to historic references, there is evidence that nomadic Mongols worshipped the sun and the moon, categorized the interior of their ger as 4 directions, 8 azimuths, 12 hours per 12 zodiac animals at specific locations, and have reflected these within their knowledge and use of musical tones.

“Since ancient times, Mongolians have connected with stars, the sun, and the moon, and their knowledge has created the 12-year solar calendar, solar system, and the 12 zodiac names of solar light” (L.E. 183). For example, the directions within Mongolian ger are categorized into 12 directions, locations, zodiac animals, colors, images, and even musical tones.

The directions such as west, northwest, north, northeast, east, southeast, south, and southwest resemble the hours according to the shadows that move within the ger. Those 12 hours are named after different animals and each is related to a different musical tone. For example, the names of musical tones identified as:

- 1) Dundad hug (the middle tone) - location of Rat at north;
- 2) Ikh Bilge hug (grand blessing tone) - location of Ox at southeast;
- 3) Ike Chugulalt hug (grand meeting tone) - location of Tiger at southwest;
- 4) Khavirakh hug (grinding tone) - location of Rabbit at east;
- 5) Arigun ukigal hug (pure and abundance tone) - location of Dragon at southeast where fresh water is located;

⁹ Similar concept of Ying Yan theory. Arga bilig is expressed in Chinese as yin-yang in Tibetan as tav-shiirav; in Sanskrit as upaya-prajdnya; and in Indian as raga-tala.

¹⁰ Sukhbaatar.G “Mongolian ancestors”, 1980, 74, pages 123-124.

6) Dund bilge hug (middle blessing tone) - location of Snake at the center where the fire is located;

7) Khulugdegulen Zochilogch hug (guest on a horse tone) - location of Horse at the south where the entrance is located;

8) Tsuglagsan hug (gathered tone) - location of Goat at the southwest where abundant dairy products are located;

9) Gamshg -un egusel hug (disaster generation tone) - location of Monkey at northwest;

10) Tugusgul-in hug (the tone of the ending) - location of Rooster at the west;

11) Tasarsan -u Zalgamji hug (tone of the unification of broken) - location of Dog at northeast; and

12) Tokhioldagulakh hug (the occurring tone) - location of Pig at northwest (L.E, 2015, 165).

Consequently, since ancient times, Mongols have sensed and identified the soft and hard, hostile and favorable qualities of musical tones, relating them to 12 years of the solar calendar.

They believed that time is arranged according to the energy from solar reflection movements, and the vocal sounds and musical tones are connected to it. We also have studied melodies of Morin Khuur's (horse-head fiddle) music instrument and identified that 12 rising and 12 falling tones exist between the Fa and So tones.

(Please refer to image #10).



“Similarity and differences of string instruments, (Made by 360 horse tails), Horse fiddle is a musical instrument belonging to the classification of the stringed bowl instruments of the Mongols. In ancient times the makers of the khuur used $9 \times 9 = 81$ white horse hairs for the yin [dissonant] string and 81 black horse hairs for the yang [consonant] string. In the modern horse fiddles bade from horsehair, white string (args) consists of 120 strands, black string (bilge) bundled sound consists of 150 strands, and bow 90 strands total of 360 strands (horse tail hairs).

That 360 horse hairs sound quality is different from other metal strings.

These new aspects of the sound theory are very likely to expand the understanding of micro-chromatic scales in non-Asian music as well. Between each of the five notes of the scale on the horse, the fiddle is 12 tones. Six of the tones are consonant or Yin and are related to the animals of even months of the year. Six tones are dissonant or Yang and related to the animals of the odd months of the year¹¹”.

That is how worshipping the earth, the sun, and the moon is manifested in music and how it shapes the lyrics of Mongolian folk songs, e.g., Naran Abu (sun like father); saran eji (moon like mother), and so on.

For example:

Sun-like high mountains

Their cotton-like soft slopes

Like a warm chest of

My old gray father (lyrics about the father’s love and affection towards his child);

Pure and clear waters of

Rich and abundant rivers are

Like the tasty milk of my mother

Who gave birth to and raised me

Moonlike my beautiful mother

Has milk-like spirit

I shall not forget her

Milk-like spirit (lyrics about father and mother compared to sun and moon).

Such customs of the sun and the moon worship is one of the traditional expressions to gain energy from the sun and the moon. It is believed that Chinggis Khagan, when worshipping the sacred “Burkhan Khaldun” Mountain, gained power and energy by praying to the sun and to the moon, with his belt around his neck.

References to the sun and the moon worship by ancient people can be found in the compositions of ancient legends and tales. For example, the references can be found in the Mongolian tale of “Seven suns” which says: “Once upon a time on earth, there were seven suns

¹¹ Erdenechimeg.L “12 arga bilig musical tones of Morin Khuur instrument”, Ulaanbaatar., 2005,

existed from west to east. Six of them were shot down with arrows. When the seventh sun was attempted to be shot down the swallow bird got in the way.

The arrow hit the tail of the swallow bird, and since the tail of a swallow, the bird became two-branched. The swallow bird got afraid of the shooter and flew off over the mountain at west¹²”. (D. Ts, 1989, 60)

Image 10: Image of the sun shining through the rooftop of a ger



“Also, in the ‘Secret History of the Mongols’ it is stated that “Every day, one yellow person comes through an open space of the ger, rubs down my belly and its light gets absorbed to my belly”. It is quite interesting that the statement expresses the meaning that woman gets pregnant and bears a child from the sun¹³” (S.D, 1989, 89)



Image 11: Praying with anklebone marrow in a grip of hands

The worship of the sun is visibly expressed in the wedding traditions of Mongolians. For example, during the wedding ceremony “when the new bride comes the white felt is unfolded and spread at the east side of the ger, the sun and the moon depicted on the felt with rice and wheat, then the groom sits on the sun while bride sits on the moon, the thick side of a sheep anklebone is given to a groom and the narrow side is given to a bride. Afterward, the below *benediction is chanted:*

Let us pray to a yellow sun

Let us grip the anklebone

¹² Tserensodnom.D. “Mongolian folk tales”, Ulaanbaatar., 1989, 60,

¹³ Dulam.S. “Characters in Mongolian Legends”, Ulaanbaatar, 1989,89,

Let us pray to our parents' mascot; and the couple prays three times each to the sun, the moon, and the sky. This ritual is called the "Custom of gripping the anklebone".

In Jangar Epic, it is stated that "When a young man with the strength of a lion comes to ask Zambal Khaan for his Zandangerel Guush Khatan (queen):

Prayed to the yellow sun

Gripped at the edges of anklebones

Prayed with Tengeriin Togoo belt..."

According to this statement, it is clear that this ritual of wedding tradition to pray to the sun, the moon, and the sky is transmitted among Mongolians from generation to generation. Such a custom and ritual during wedding ceremonies including fire worship are also present among today's Mongolians.

This fire-worshipping tradition is inherited from many past generations since ancient times. There is a tale about how people first obtained fire.

The founder of the new musical genre in XX-century western music Anton Webern also mentioned that "Music is a natural system that is understood through a sense of noise" (Min Tiye Rui, 1996, 134).

Also, it is said that "Even though, music is created by humans, but is implicitly governed by natural law, and closely linked with nature¹⁴" (L. Erdenechimeg, 2000, 162). English psychologist Daniel Goleman viewed that "whoever possesses the culture of skills and ability to sense human emotions can control emotions of him or herself and can control emotions of other people around him or her".

Video 15: "A hundred and eight choral" Inner Mongolian composer's composition.

Enhanced and produced innovative ideas through these various music elements as written in "A hundred and eight choral" rhapsody. For example, a compilation of themes and content, language intonation, tone, vowel harmony, harmony instrumentation and harmony of rhythm, chord harmony, libretto, order-tonality, form, and structures refused from previous classical ideas.

¹⁴ Erdenechimeg.L. "Gur Dagun -u gun egshiglengiin uvidas", Ulaanbaatar.,2000, 162,

A new approach to play emerged by creating a new path, through different playing methods, techniques, and an innovative new approach to introduction. This illustrates the message and warning to the people of the universe to love and cherish the Earth.

Conclusion

This presentation attempted to highlight the essence of the relationship between music, humans, and surrounding nature as a whole. As you see, Mongolian music and song are intrinsically connected with nature and hence, are gradually being affected by changing environment and society.

As civilizations expand and urbanization progresses, they affect music trends, style, composition, lyrics, sound, tempo and temperament, methods, and techniques.

Traditional music is changing along with contemporary style, and modern orchestra and is performed by various ethnic bands in Mongolia. This unstoppable movement makes the folk music genre less popular, endangering its existence and one day might lead to its disappearance in the modern world.

Therefore, concerted efforts from various segments of society are needed to preserve traditional music by encouraging education, further research, and inter-generational exchange. In order to do this, we, the musicologists need to expand and develop music studies on traditional music and its development.

This means that conducting music research needs to address music development and issues affecting it through a holistic approach, taking into account changing societal trends, including urbanization.

May good deeds blossom!

Endnote

1. The Greek scholars Pythagoras and Plato also believed that the ancient musical scale was connected to the science of astrology \Ut Re Mi Fa So La Ti\
2. Five elements are nature and biological- wood, water, fire, earth, and metal.
3. Janjaa Khutagt Rolbiidorj is a researcher and monk of a Mongolian Buddhist temple in 1800.
4. Khairkhan Soum (administrative unit subordinate to a province) of Arkhangai Province and the place called Takhilgyn Khotgor in Mankhan Soum of Khovd Province
5. Flowing energy from dead volcanoes and natural structures,
6. Municipal unit of Mongolia known as famous in art
7. Uzemchin, Barga, and Buriat minorities

8. Uyakhán zambuu tíviiin naran”- in Mongolian,
9. Similar concept of Ying Yan theory. Arga bilig is expressed in Chinese as yin-yang in Tibetan as tav-shiirav; in Sanskrit as upaya-prajñya; and in Indian as raga-tala.
10. Sukhbaatar. G “Mongolian ancestors”, 1980, pages 123-124.
11. Erdenechimeg.L “12 arga bilig musical tones of Morin Khuur instrument”, Ulaanbaatar., 2005,
12. Tserensodnom.D. “Mongolian folk tales”, Ulaanbaatar., 1989, 260p,
13. Dulam.S. “Characters in Mongolian Legends”, Ulaanbaatar, 1989,89,
14. Erdenechimeg.L. Gur Dagun -u gun egshiglengiin uvidas”, Ulaanbaatar.,2000, 324p,