

## Stringed Instruments and Buddhism along the Silk Roads

The network of ancient Silk Roads spanning the Eurasian continent did not only facilitate the movement of tradable commodities, but also played a major role in spreading technological advancements, religion, and cultural practices. Specifically, the rise of Buddhism during the 1st millennium CE cleared the way for ancient stringed instruments; namely the harp, lute, and lyre; to spread in both directions across the continent towards China and Western Europe. Early Buddhism initially aligned against music due to the Buddha, Siddhartha Gautama's experience with musicians in the worldly regal setting of his father's palace. However, as Mahayana Buddhism took shape, Buddhism forged strong ties with music (Lawergren 2002: 52). Consequently, as Buddhist travelers moved along the Silk Roads, they began to carry with them light instruments for conducting their rituals (Lawergren 2010: 117). The introduction of these instruments conveyed new song forms that necessitated their use (Huang Chang 1993: 9), cementing their place in Central and East Asian art and society.

Although the harp, lute, and lyre didn't reach the Eastern and Western points of Eurasia until the 1st millennium CE, their origins can be traced to Mesopotamia in the 3rd millennium BCE. Stringed instruments had been prominent in Mesopotamia since the earliest documented times and contrary to their counterparts in China, ancient Mesopotamian players are depicted with instruments of many different shapes and sizes. Additionally, Mesopotamian players were occasionally depicted in standing positions unlike the stationary depictions of Chinese string players of the period (Lawergren 2010: 117). Although exact dates are disputed, the harp is agreed upon as the oldest of the stringed instruments with likely origins in the late 4th or early 3rd millennium BCE. It is this early form of the harp that incited within a short span of time the

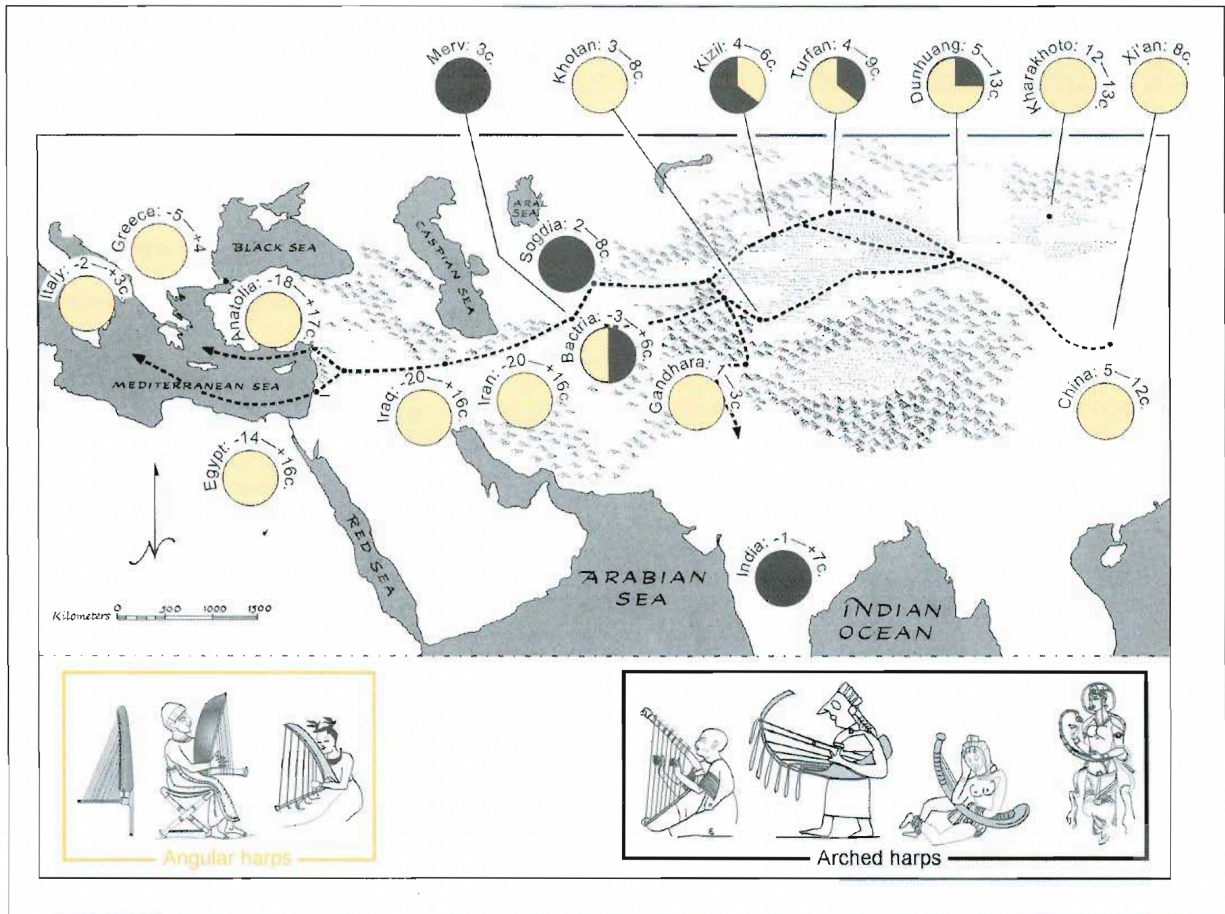
creation of the lute and lyre (Dumbrill 1998). In the following section, I will discuss the evolution of these early stringed instruments along with their most common typologies.

### **Buddhist Stringed Instruments**

The harp, being the oldest of the stringed instruments, most likely has its origins in the archer's bow. Ancient Sumerians may have realized that touching a bow to a resonant object resulted in amplification and transformed this weapon into the arched harp. These early instruments, maintaining their bow-like shape, would have sported 3-5 strings made from gut, which were known in Akkadian as *pitnu*. For functionality purposes, the strings of these early instruments were probably tuned to predominantly tonic, subdominant, and dominant notes in their respective keys. However, the introduction of a new type of harp conducive to the diatonic scale, gave musicians the ability to play more complex melodies. This instrument, dubbed the angular harp, introduced strings of varied lengths with constant mass equal tension, facilitating the implementation of the diatonic scale that was also later adopted by arched harps. As the 3rd millennium progressed, both types of harps grew in size and string number. Musicians of this period are always depicted sitting down and wearing similar types of robes and headdresses. By the 7th century BCE, some Assyrian arched harps of the era boasted a three octave range and a fixed leather soundboard (Dumbrill 1998: 218).

By the start of the Silk Roads period, arched harps existed only in India, while the angular harp dominated the regions further West. As a result, the presence of particular harp types at Silk Roads sites provides ample information about what regions may have had influence over that particular site. In the 1st millennium BCE and 1st millennium CE, the presence of the angular harp expanded from India into Gandhara, Bactria, and Sogdiana (figure 1). During this

same period, the angular Persian variety of harp became quite popular in China and other regions further east (Lawergren 2010: 118).



(Figure 1) This map demonstrates this distribution of both Indian arched harps and Persian angular harps across Eurasia.

Lawergren, Bo. Harp Map. Photograph. 2002. In Bo Lawergren, *Harp, Lute, and Music along the Silk Road*, 53. University of California, Berkeley, 2002.

Because lyres developed from the primeval arched harp, they are similar to harps in many ways. However, they are distinguishable by a few key characteristics. The strings are shifted 90 degrees to that of the harp and are mounted on the yoke, a vertical rod parallel to the arch of the lyre that also houses the tuning devices. Another important element of the lyre is the bridge of

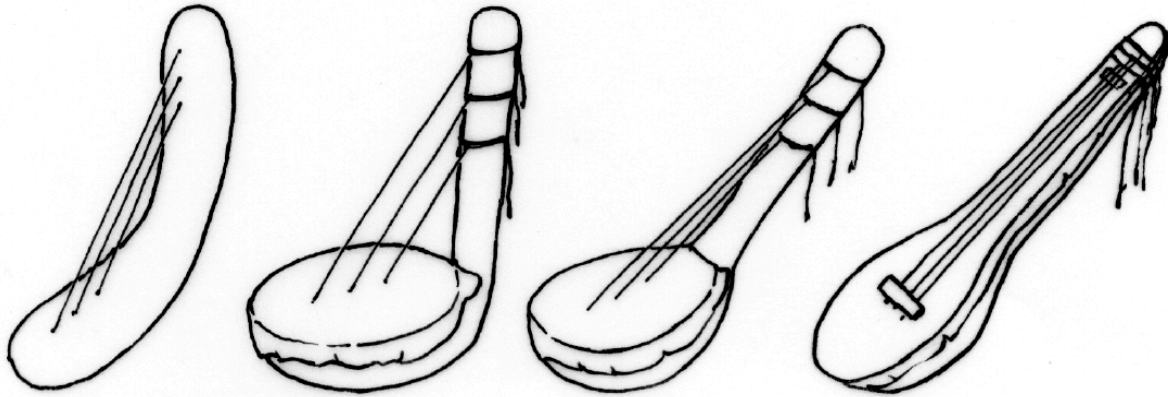
the instrument. This piece mounted on the arched soundboard exerts force and the vibration of the strings into the soundboard which in turn functions as a sort of amplifying device.

Consequently, the soundboards of ancient lyres evolved into thicker pieces constructed from sturdier materials like wood rather than the skins that were previously used. Lyres of ancient Mesopotamia often depict a bovine shaped soundboard, and by the early third millennium BCE they included as many as 15 strings. Unlike the harp, in order to produce a myriad of notes on the instrument's different strings, these strings would have had a variety of thicknesses and strung at different tensions in order to produce a scale (Dumbrill 1998: 235).

The sheer quantity of lyre representations in antiquity suggests that it was the most popular of the stringed instruments in Sumerian civilization. Although lyres were originally very heterogeneous in shape, their design became much more unified over the next three millennium by the start of the Seleucid period and Silk Roads transfer (Dumbrill 1998: 236). Unlike harps and lutes, lyres are scarcely recorded at Silk Roads sites and seldom in the East. Instead, they are more prevalently found further west in Europe (Lawergren 2002: 52). However, recent analysis of a 4th c. CE lyre uncovered in Kazakhstan suggests that the lyre was transferred along routes from Central Asia to Western Europe in the 1st millennium CE (Kolltveit 2022: 208).

Finally, the lute, like the lyre, was a development of the arched harp. However, rather than adjusting the orientation of the strings, the lute is like a straightened arched harp with a bridge added (figure 2). Unlike the other two stringed instruments, the lute is a fretted instrument allowing single strings to produce more than just one note. Fretting the lute by touching one of its strings to the neck of the instrument temporarily shortens the string, increases tension, and raises the pitch produced by that string. Deciding the placement of these frets helped the Sumerian people to understand the concept of ratios (Dumbrill 1998: 310). Frets closer to the

bridge must be smaller in order to raise the pitch of the string by the same value as the larger frets further away from the bridge. By the 5th century BCE tuning pegs relative to those of modern day stringed instruments were being incorporated into the design of ancient lutes (Dumbrill 1998: 344).



(Figure 2) (Dumbrill 1998: 308)

Higano, Yumiko. Drawing. 1998. In Richard J. Dumbrill, *The Archaeomusicology of the Ancient Near East*, 308. London: Tadmora Press, 1998.

Lute morphology is broken down into two types: the long-necked and short-necked varieties. The long-necked lute first appeared in Mesopotamia around 2300 BC, nearly a millennium after harps and lyres. Although it was initially popular within Mesopotamian fringe-groups, it became widely popular by the latter half of the 2nd millennium BCE (Krispijn 2011: 117). With the aid of the Silk Roads, lutes quickly became popular in East Asia in the 1st millennium CE. This was due to their light weight and often only having a single string, their cost effectiveness. Short-necked lutes were not prevalent until much later, around 100 BCE in Bactria and Sogdiana, and they did not become common in the Indian subcontinent until the beginning of the 2nd century CE. Long-necked lutes reached China by the 2nd century CE,

whereas the short-necked variety did not arrive until about 420 CE. Chinese accounts report Central Asian travelers playing their lutes while on horseback, emphasizing their portability (Lawergren 2002: 54).

### **Music in Buddhist Art along the Silk Roads**

The origin of the term Silk Roads dates back to the 1870s and is popularly attributed to Ferdinand von Richtofen. Often overlooked, the trade that occurred along these routes encompasses not just the transfer of goods but also cultural and spiritual exchanges as well (Waugh 2002). One of the most significant transfers that occurred was the spread of Buddhist religion from India into Central Asia and China throughout the 1st millennium CE. This transfer occurred predominantly along the routes through Margiana and the Oxus River valley in Bactria and Sogdiana before traveling along the Tarim Basin further east. Routes diverged on the Tarim Basin but ultimately rejoined at Dunhuang, one of the most significant sites located on the western edge of the Chinese Empire (Neelis 2004: 775). In the 2nd and 3rd centuries CE, Parthian, Sogdian, and Indian translators began to reach Central China along with Buddhist monks, furthering the transmission of Buddhism and associated culture. Conversely, Chinese pilgrims like Faxian (337-418 CE) and Xuanzang (600-664 CE) also traveled to India and their accounts chronicle additional teachings. The monasteries and temples being built in Western and Central China exhibited stylistic similarities with the Buddhist art present in Central Asia (Neelis 2004: 776). Included in these similarities were paintings, reliefs, and statues of musical scenes often found on temple walls (UNESCO).

The Mogao Caves, commonly referred to as the Thousand Buddha Grottoes are located in Dunhuang, the aforementioned cultural crossroads of the silk roads on the eastern side of the Taklamakan Desert. This site contains many examples of musical depictions in the Buddhist

context and helps allude to the types of instruments present in the region during the 1st millennium CE (Neelis 2004: 776). Although angular harps are dominant throughout silk roads, 10 % of the Mogao Caves' depictions of harps are arched. Along with the Kizil Grottoes, this is one of the highest concentrations of arched harps at any Silk Roads site (Lawergren 2010: 119). A 13th century particular example of an arched harp at the Mogao Caves is one of the latest Chinese depictions of harps, as harps majorly declined in popularity in the following centuries (Figure 3). This particular example exhibits Tibetan motifs, showcasing the influence of the culmination of cultures in eastern Buddhist art (Lawergren 2010: 119). Other examples at Dunhuang showcase the context that music played in an ensemble setting. One particular wall painting portraying a musical ensemble depicts harps, lutes, and a variety of percussion instruments centered around a subject in elaborate clothing performing a dance (Figure 5). Interestingly, the musicians in this example are all female, indicating that women may have played a major part in the religious role of instrumentalist.



(Figure 3)

Lawergren, Bo. Depiction of an arched harp from the Mogao Grottoes (cave 327). Photograph. 2002. In Bo Lawergren, *Harp on the Ancient Silk Road*, 119. Los Angeles: The Getty Conservation Institute, 2002.



(Figure 4)

Lawergren, Bo. Depiction of an angular harp from the Mogao Grottoes (cave 156). Photograph. 2002. In Bo Lawergren, *Harp on the Ancient Silk Road*, 119. Los Angeles: The Getty Conservation Institute, 2002.



(Figure 5) Cave 98

Huashi, Peng. Photograph. 1981. In *The Art Treasures of Dunhuang*, 100. Translated by Diana Yu. English Edition. New York: Lee Publishers Group, 1981.

Further east along the Silk Roads in Central China, there are more examples of this type of ensemble performance. A Buddhist stele dating to the Northern Zhou period (557-581 CE) and discovered at the tomb of Tang Emperor Taizong (627-649 CE) vividly depicts both the



influence of Central Asia on the region and the contrast between Central and East Asian cultures (Figure 6). However, the scene is unified through the medium of music and religion. In the center of the stele lies a large incense burner shrouded in lotus flowers. To the left of this burner, the artist has depicted Central Asian characters, whereas to the right of the burner, only Chinese characters are depicted. The Central Asians can be distinguished by their pointy noses, hairstyles and belted robes. On either side of the burner there are sitting ensembles of musicians, and although they are of different cultural origins, the Central Asian and Chinese ensembles play both the lute and angular harp. On the far side of both ensembles there is a Central Asian and a Chinese monk that are again differentiable by their dress and body characteristics. Towards the incense burner there are two dancers. A Central Asian dancer performs a traditional Sogdian dance called the 'Sogdian Whirl' whilst a female Chinese dancer performs the traditional Han-originated 'long-sleeve dance' in traditional long-sleeved garb (Juliano & Lerner: 76). The information that can be gathered from this stele is striking because it illustrates the manner in which Central Asian Buddhist traditions were adopted and then fused with Chinese traditions and culture. It is unique to see the interaction between the two cultures pictured harmoniously, and it speaks to the role music plays as an international emotive and spiritual language.



(Figure 6)

Juliano, Annette, and Judith Lerner. Tang Emperor Tomb. Photograph. In “Cultural Crossroads: Central Asian and Chinese Entertainers on the Miho Funerary Couch ,” n.d., 72–78.

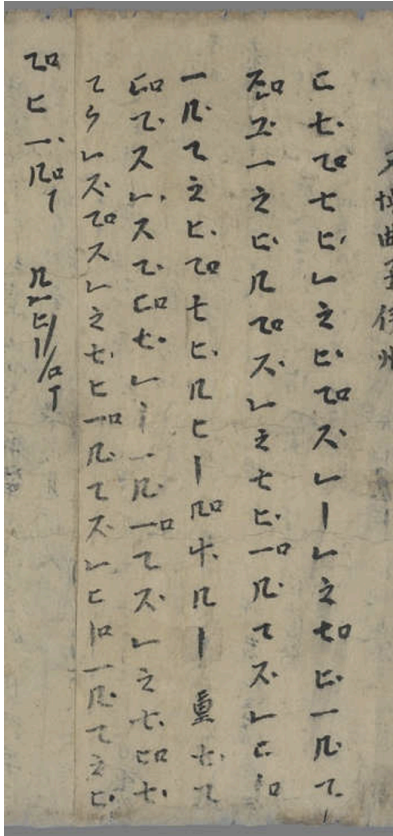
A different element of the relationship between musical practice and Asian religion can be seen on a panel from a Chinese funerary Couch housed at the Miho Museum in Japan (Figure 7). This relief illustrates the connection between gods and goddesses, celestial musicians, and earthly entertainers. At the top of the relief the four-armed goddess Nana is pictured high above the celestial and earthly entertainers, establishing the goddesses dominance and creating a hierarchy in the image. Below Nana there are two celestial musicians standing on lotus flowers above their earthly counterparts (Juliano & Lerner: 72). The celestial musician on the left plays a particular kind of double-chested lute that is reminiscent of the Rabab, the present-day national instrument of Afghanistan (Juliano & Lerner: 76). The earthly entertainers appear to be composed of both Central Asian men and Chinese women. The musicians play both the angular harp and short-necked lute while the Chinese female dancer in the center performs the same ‘long-sleeve dance’ performed by the Chinese dancer in the previously discussed Buddhist stele (Juliano & Lerner: 73).

Although this relief is not of Buddhist origin, it contains stylistic elements characteristic of Buddhist art. For this reason, it can be assumed that these images were likely transferred by Sogdians. Sogdian merchants traveled not just east to China, but also south to Northwest India, and they fused their Zoroastrian beliefs with the Buddhist imagery that they frequently encountered. Some Zoroastrian Sogdians converted to Buddhism, although not all. This relief proves the impact that Buddhist musical practices had and how they transcended Buddhist origins to become prominent in various contexts. Western instruments carried by predominantly Buddhist merchants began to be transferred and utilized in new non-Buddhist contexts.

## **Types of Music along the Silk Roads**

Musical notation from the Silk Roads period in the 1st millennium BCE and 1st millennium CE has not been recovered by archaeologists. However, there are historical documents that describe what types of music may have been played. Lyrical notation and in some cases song form from Central Asian have survived due to manuscripts and song transfer from Central Asian lutenists like *Sujīva* and *Bārbad* (Lawergren 2002: 54). The most common song form that existed along the Silk Roads was the *chu-zi*, a number of folk songs that combined into one suite. They could be performed with or without dancing and instrumentation (Huang Chang 1993: 9). Within *chu-zi* there were the often simpler mountain songs which derived from folk dances; and *Airs* which were more literary, composed of four lines of 5-7 characters each, and often written by famous poets (Huang Chang 1993: 10). *Pien-wen*, a type of recitative, was also popular, originally sung by Buddhist monks to appeal to audiences. They were later adopted by all sorts of entertainers outside of the Buddhist realm as well (Huang Chang 1993: 11).

Although notation of Silk Roads music has not survived, there are plenty of examples of lute tablature from Tang Dynasty China that have survived in East Asia. It is likely that a portion of this Chinese lute music from the period was influenced by Central Asian exposure. For example, Tang dynasty manuscripts like *Pelliot Chinois 3808* were discovered in Dunhuang, and because art in Dunhuang was heavily influenced by Buddhism, it is likely that this tablature was as well (Figure 7). Scholars have deciphered the majority of the symbols found within this tablature, but there are still a number of unknown characters that exist (West & Chan 2017: 1)



(Figure 7)

West, Andrew, and Eiso Chan. Tune 16 of Dunhuang manuscript Pelliot chinois 3808.

Photograph. In “Proposal to Encode Old Chinese Lute Notation,” 2017.

<https://www.unicode.org/L2/L2017/17311-n4848-lute.pdf>.

While it may be difficult to speculate exactly what Silk Roads music may have sounded like, *The Silk Road: A Musical Caravan* attempted to recreate the sound of 13th century Silk Roads music in a series of recordings featuring renowned musician Yo-Yo Ma among others (Smithsonian Folkways Recordings 2002). This may be the most accurate recreation of music along the Silk Road that exists, and it will remain this way until additional Silk Roads musical notation, manuscripts, and instruments are uncovered and researched by archaeologists.

## Conclusion

Travel along the Silk Roads was predominantly conducted for economic motives. However, these intercultural exchanges resulted in cultural and spiritual transmissions in addition to transmission of physical goods. In particular, the spread of Buddhism enabled the transfer of Buddhist musical practices. One of the most prominent of these was the use of lightweight stringed instruments like the Harp and Lute. The Harp, Lyre, and Lute were each developed three millennia earlier in Mesopotamia during the early 3rd millennium BCE. By the Silk Roads period in the late 1st millennium BCE and 1st millennium CE, the people of Central and East Asia began to adopt these instruments from India and Persia to replace their heavier alternatives. These new instruments were more portable and conducive to Buddhist song and dance.

Examples of Buddhist musical tradition can be seen in art along the Silk Roads at the Mogao Caves, on Emperor Taizong's tomb, and on the Miho Funerary Couch. These depictions help convey how music and religious practice were associated and what types of roles were played by those who partook. Although notation has not survived from the Silk Roads, there is plenty of scholarship on song form and Chinese Tang dynasty lute tablature. Based on this knowledge, it is possible to infer and even recreate the type of music that may have been played along the Silk Roads. Music in art, song notation, and instruments preserved along the Silk Roads work in tandem to showcase how the spread of Buddhism enabled the simultaneous spread of Buddhist music.

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