THE MUSIC ARCHIVE OF MONASH UNIVERSITY

presents

AN EXHIBITION OF CHINESE MUSICAL INSTRUMENTS AND ARTEFACTS: MUSICAL CONTINUITY FROM ANTIQUITY TO THE PRESENT

in the Foyer of the Music Auditorium, Sir Zelman Cowen School of Music

launched by

Ms ZOU BIN, Cultural Consul of the Consulate-General of the P.R China in Melbourne

12:30pm, Thursday 20 September 2018
Court scholars of the Zhou dynasty (1046-256 BCE) may be credited with inventing the world's earliest system of musical instrument classification. The *Zhou Li* text identifies eight distinct resonating materials used in instrument construction: metal, stone, clay, skin, silk, wood, gourd and bamboo hence the classification is named *ba yin*, meaning 'eight tone'.


Instruments made from each of these eight materials controlled one of the dances performed at rituals, which in turn could induce one of the eight winds emanating from each of the eight compass points shown in the diagram.

The eight-part concept of music and instruments were thus part of the calendrical system, the weather, the seasons, and even cosmological thought.

“First, autumn is the season when the Yang forces of nature are in retreat, and bells or metal slabs were the instruments sounded when a commander ordered his troops to retire.

In winter there occurred one of the most solemn ceremonies of the year, when the sun was assisted over the crisis of the solstice by the help of sympathetic magic. The primeval instrument, the drum, was essential to this ceremony, and there could be none more fitting to announce the sun’s renewed advance than the drum which also sounded the advance in human conflict and battle.

In spring when men desire trees to bud and crops to grow, the most potent instrument would naturally be one made of bamboo, a plant of such vitality that it remains green even in winter. The various types of bamboo, then, through which men’s chhi causes a similar chhi in Nature to respond, were the instruments of spring, and even in the orthodox eightfold classification the other vegetable substances, wood and gourd, were associated with this season.

Finally, in summer when the silkworms are fattening on mulberry leaves, or spinning their cocoons, it was appropriate to play an instrument whose strings were of silk. Moreover, summer was the time when drought was to be feared, and the zithers which accompanied rain-making songs were believed to be excellent implements of magic.

The association of the instruments with the points of the compass was no less straightforward. If autumn is the season of decline, the west is its direction, whereas spring and the east are contrary. Similarly, the north and winter must be associated with cold, and the south and summer with heat.”
STONE

The qing (sounding stone) instruments include fish-shaped percussion rattles. Our specimen (donated by Dr David Mitchell and Dr Tuti Gunawan and made of metal) is from Yunnan Province and contains rice grains that make a soft sound when shaken. It occurs in several sizes, with the largest suitable for storing grain. A large version of the instrument was shaken rhythmically to accompany the Ceramic Ring Fish Dance (tao xiang yu) in the Han dynasty (221 BCE-206CE). Several ancient specimens of this instrument have been found in the tombs of kings of ancient China, when they were buried with their possessions to show their status, as in the case of the famous archaeological tomb of the Marquis Yi of Zeng, Zeng Hou Yi Mu. When the instrument is shaken it produces a soft sound. It was possibly used by lovers communicating softly in order not to be heard by their parents.

The qing instruments also include stone chimes (not in display) that are flat and L-shaped and struck with a mallet. Sets of tuned stones are known as bian qing (arranged qing) and were an important instrument in China's ritual and court music going back to ancient times. Some of these chime bells have been dated at between 2,000 to 3,600 years old, but modern sets are also played in some large Chinese orchestras today.

METAL

Bian zhong (tuned set of bells): a miniature replica of an ancient Chinese musical instrument that is still performed in modern Chinese orchestras. The zhong (clapperless bronze bell) was used to punctuate ritual melodies in large court orchestras, and when arranged in tuned sets, the term became bian zhong (arranged zhong). The bells are suspended from a wooden frame and struck with a mallet to produce melodies and rhythms.

Bronze casting, one of the greatest achievements of the Shang (1600-1046 BCE) and Zhou (1046-256 BCE) dynasties, was used mainly for construction of ritual implements such as bells and vessels. There is etymological and structural evidence to suggest that the Chinese clapperless bells may have evolved from grain scoops. Some bells were used as signalling instruments on the battlefield.
In modern orchestras, the *bian zhong* can comprise at least 60 bells

The *bo zhong* (single, clapperless, bronze bell) is struck on its outer surface with a mallet and is generally larger than the largest bell in a *bian zhong*. Unlike Western bells, the outer surface of this miniature replica *bo zhong* is typically decorated with auspicious raised rectangular ribs and claw-like or horn-like or other zoomorphic designs.

**CLAY** (not on display today)

The *xun*, an egg-shaped globular baked clay flute similar to the ocarina, is still played today. It has a blowhole at the top, three fingerholes in the front and two thumbholes at the back.

**SILK**

For millennia, silk was the traditional material used for the strings on Chinese plucked and bowed stringed instruments such as zithers and lutes. The *Liji* (record of Rituals from around the first century BCE) suggests that silk strings represent ‘purity’ (*li an*) and ‘determination’ (*zhi*), an indication of the high value assigned by Confucian scholars to stringed instruments. (Alan R. Thrasher. 2000. *Chinese Musical Instruments*. New York: OUP, p18.)

Silk was gradually replaced by other materials such as metal and nylon. In fact, it was only in the mid-1950s that the *pi pa*’s (plucked lute) strings changed from silk to steel.

The *pi pa* is a four-stringed plucked lute, with 24–30 frets and a pear-shaped body, which is held upright when played. An instrumentalist uses five small plectra attached to each finger of the right hand to pluck the strings, although over the centuries, a finger-picking technique has also developed. The *pi pa*’s history can be dated back at least 2000 years during which the scale used has evolved from pentatonic to the 12-tone equal temperament scale. This instrument also has a very wide dynamic range and remarkable expressive power.
Often referred to as the ‘Chinese Guitar’, the *ru an* is a plucked stringed instrument with a long neck, four strings, a fretted fingerboard and a resonator box shaped like a full moon. Nowadays there are three sizes of the instrument, the *zhong ru an* (medium *ru an*) being the most popular.

The *yang qin* (Chinese hammer dulcimer, seen in image below) is the pièce-de-résistance in today’s concert. An adaptation of the Persian *santur* introduced into China during the late Ming Dynasty (1368-1644 CE), the *yang qin* traditionally comprises two rows of seven to ten bridges across which run double or triple courses of metal strings. The strings, struck with two slender bamboo beaters, usually cover a two-octave range and are attached to the top of a trapezoidal-shaped wooden sound box that enhances resonance. Since the 1950s, the *yang qin* has increased in size (with many more bridges and strings) and tonal range with more chromatic pitches added to the traditional 6- or 7-tone scale.

Xin Zhang and *Yang qin*

(Chinese Hammer Dulcimer)
The *gu zheng* (21-stringed Chinese zither) is another instrument featured in today’s concert. This long plucked zither has a pitch-defining moveable bridge under each of its many strings. The bridges are arranged diagonally across the top of the instrument. Around the late eighth century, a *zheng* had 12 or 13 silk strings which increased over time to 18 or 21 by the mid-twentieth century. The strings are now made of copper or steel wire and may span up to four octaves.

The *er hu* is a bowed Chinese two-stringed fiddle with a body and neck made of wood, and a bow usually of bamboo and horsehair. Two tuning pegs are attached to the top of the neck. At the lower end of the *er hu* is a short hexagonal-shaped tube resonator, the front of which is covered with snake skin, on which in turn is attached a small wooden bridge to bear the two strings.

The *er hu* has some unusual features. Its characteristic sound is produced through the vibration of the python skin by bowing. The horse hair bow is never separated from the strings (which were formerly of twisted silk but which today are usually made of metal); it passes between them as opposed to over them. There is no fingerboard; the player stops the strings by pressing fingertips onto the strings without the strings touching the neck. Although there are two strings, they are very close to each other and the player’s left hand in effect plays as if on one string.

The *jing hu* is the smallest (approximately 50cm in length) and therefore highest pitched of the Chinese two-stringed fiddle family. The instrument on display has a round instead of hexagonal body. The *jing hu*’s other attributes, however, are similar to those of the *er hu*. 
In the 1940s and 40s, the influence of Western music and styles of performance on Chinese music resulted in the emergence of large folk instrumental ensembles with a broader sound range similar to a Western symphony orchestra. To achieve this wider gamut of sound, varying sizes of instruments were introduced, one of these being the zong hu (bowed Chinese two-stringed fiddle). The zong hu is larger than the er hu, its pitch being roughly equivalent to that of the viola with a rich, mellow texture, thick timbre and deep tone, and a slight nasality. This larger Chinese fiddle is designed to play middle to lower range notes within the bowed string section; some technical skill is required in order to play higher-pitched notes as it is less flexible than the er hu due to string tension.

**SKIN**

Gu (drum) is the generic term for membranophone and is usually accompanied by a prefix to specify the type of drum being played. Widely varied in size and usage, most indigenous Chinese drums have a barrel-shaped body with the skin being tacked on (rather than laced to) the upper, or upper and under side of the body. The drum played in the concert is the zhong guo da gu (‘Middle Kingdom’ large Chinese drum).

The drum on display is the double-sided smaller and more modern xiao tang gu beaten with two mallets.
GOURD

The **sheng** is a traditional mouth organ originally used in ritual ceremonies as well as for entertainment. According to Chinese historical literature, ancient instruments similar to the **sheng** are considered to date from the **Shang** (1600-1046 BCE) and **Zhou** (1046-256 BCE) dynasties. The body of the instrument was made of gourd with holes for inserting the bamboo pipes generating the sound in a similar manner to the modern **sheng**. The base, which today may be made of gourd, wood or metal, acts as a resonator. One of the **sheng** on display has a lacquered wooden bowl and bamboo pipes, the other has a metal-plated bowl with bronze-topped bamboo pipes.

**Modern Mouth Organ or Harmonica, donated by Dr. R. Yu**

This modern version of the mouth organ has emerged in China in relatively recent years and can be used as a solo instrument or to accompany singing and dancing. The instrument has one or more air chambers fitted with a free reed. Though it spans many traditions, its method of sound production is universal: a player places the lips over a chamber of holes on one side of the instrument and blows or sucks air to create the sound. Many of the chambers can be sounded together, or separately.

WOOD  (not on display today)

Traditionally, woodblocks or clappers constitute the category of wooden instruments. Many have onomatopoeic names and strong symbolic meaning.

BAMBOO

The naturally hollow interior of bamboo symbolises humility and modesty and the hardness of the material represents human endurance and longevity. Since antiquity, these qualities were imbued into Chinese flutes, some of which are still highly venerated. The two main types of flute used in China are the **di zi** (transverse flute) and **xiao** (vertical flute).
The *di zi* is a side-blown flute originating during the Han dynasty (206 BCE–220 CE). The instrument has six finger holes, with another hole between the mouthpiece and first finger hole. The extra hole is covered by a thin membrane which vibrates when a player blows into the mouthpiece, creating a bright buzzing nasal timbre which is a distinguishing feature of the instrument. The *di zi*’s range is about two and a half octaves. Modern *di zi* are factory produced and usually finished with a coat of paint or lacquer and come in varied lengths for specific tone qualities and effects. Although there have been recent attempts to improve the *di zi* by adding extra finger holes and keys, most players prefer the traditional six-hole keyless model. The *di zi* on display was donated by Dr. R. Yu and is made of lacquered wood.

Although shaped like a flute, the *ba wu* is a free reed instrument, with a single metal reed and played in a transverse manner. Some modern ones can be played vertically. The *ba wu*’s cylindrical bore is made of a tube of bamboo closed off at one end by a natural node. Near the closed end, a small square hole is cut and a thin reed of bronze or copper is fastened with a plastic or bone mouthpiece around it. The mouth must cover the entire mouthpiece to produce a sound, which has been described as clarinet-like. Our *ba wu* has seven fingerholes on the front and one thumbhole on the back.

Before the Tang dynasty (618–907 CE) the *xiaoo* referred to Chinese panpipes; subsequently it came to denote a vertical, end-blown flute. In our display, the *xiaoo* is a vertical notched bamboo flute with four (others may have five) finger holes in the front and one hole at the back and has a pitch range of about two octaves. Its tone quality is pure, but its breadth of dynamic levels is relatively narrow.
ARTEFACTS to Complement Our Instrument Collection

Our pottery replica of a male figure playing a drum may have been inspired by or copied from carvings on an ancient Chinese tomb.

Two modern, machine-embroidered cushion covers from Yunnan Province.

Hand-held fan

Our small porcelain hand-painted panel produced the early 1900's depicts a young woman playing a Sheng to a receptive listener. The poem, by an unknown author, in the upper right-hand corner is not linked to the music being played but refers to the young lady's thoughts of looking forward to being known and loved. A private seal (omitted) at the end of the poem would have identified the author and date.