#### Erhu

The two-stringed fiddle is termed "二" "two" and "胡" "fiddle". Erhu is played with a bow which is trapped in between its two strings. The bow is made of bamboo and horsetail hair. The rosin-lathered horsetail hair's movement against the strings produces soul-stirring sounds, through left-right bowing actions. The absence of a fingerboard renders Erhu's pitch more difficult to control when bowing, but at the same time allows the instrument to have greater gradations in pitch and a richer palette of tone colors. With versatile playing techniques, Erhu is often associated with sorrow and is capable of producing sentimental sound and melody.

## **Tuning and range:**

The two strings of Erhu are usually tuned a fifth apart, with the inner string tuned to the lower pitch and the outer strung tuned to the higher one. Currently, the standard tuning is a1 for the outer string and d1 for the inner string. These pitches are used in almost all Erhu repertoires. However, possible range for the outer string is from d1 to b1, while possible range for the inner string is from g to e1.

Erhu commonly uses the range d1 to d3. Nonetheless, as the instrument hasn't fingerboard, it can reach screeching pitches of up to d4.

The most effective range of Erhu is universally considered to be from d1 to e3. Melodies composed within this range, it allows Erhu to produce sounds which are strong in character, clear and exquisite.

Within the range of a2 to d3, Erhu tends to become much softer. The volume of sound is much weaker. Erhu's amplitude decreases with increasing pitch, especially from d3 and above.



## Techniques and tonal color:

Bow techniques are the main techniques of right hand. Pressures are applies to the rosin-waxed bow, which is drawn with the use of the fingers and wrist. The thumb is placed on the bamboo stick of the bow, and the middle and ring fingers are positioned on the bow hairs. The fingers pull at the bow with the fluid motion of the wrist and forearm in order to play.

The bow hairs, trapped between the two strings, are bowed with smooth left and right bowing movements.

Like the western stringed instruments that have upward and downward bowing, Erhu has pull bowing and push bowing. Pull bowing is scored with a " $\Pi$ " above the note, and push bowing with a "V" above the note.

In every bowed stringed piece, the design of a bowing method will be scored exactly. A efficient and methodic design of a bowing method can not only facilitates the coordination between the left and right hands, but also represents the musical interpretation of the composer and also the player. Below are some most common bowing techniques of Erhu:

## 1. separate bowing

Separate bowing is the use of one bowing movement for a single note. Notes produced by separate

bowing technique are clear and precise, regardless of speed. Stronger notes are produced using the full extent of the bow in one clean sweep. Separated bowing is the most basic technique of Erhu and is often considered the most important as well. The left and right hands require good coordination and must complement each other.

#### 2. fast bowing

Fast bowing is the fast version of separate bowing. Fast bowing ensures a rapid playing of notes to produce detached sounds. It is often used for semi-quavers in scores.

#### 3. slurred/legato bowing

Slurred/legato bowing is the playing of two or more notes using a single pull of the bow. It is scored with a slur line "\cap" on top of the notes. Good slurred/legato bowing, as with the violin, requires consistent and fluid movements, especially during the movement of the bow.

The number of notes that can be played in one bowing depends on the piece's volume and speed. The lower the volume, the greater the number of notes can be played in one bowing.

## 4. spiccato

Spiccato is one technique of the bow bouncing on the strings, with one note per bounce. This technique applies generally to the outer string and is continuous in nature. The note produced are short and often used to express light-hearted emotion and happiness, this technique is scored with a "•" above the note.

## 5. stamp bowing

One short and detached note is produced by stamping the bow. Unlike the spiccato, stamp bowing hasn't bounce and is scored with a " $\nabla$ " sign above the note.

Numerous stamp bowing sounds within a single bowing action can be capable to produce by stamping the bow continuously with intermittent releases of tension while bowing.

## 6. tremolo

tremolos are played using the wrists and arms in trembling motions to play the same note at fast speeds using the tip of the bow. The position of the bow when this technique is played, must be beyond the bow's middle, towards its tail. Notes produced by this technique are usually weak.

### 7. pizzicato

Pizzicatos can be played by both of right hand and left hand. For right hand, fingers plucks at the strings. Compared to western bowed stringed instruments, Erhu's pizzicatos is short and dry-sounding, with free strings producing the clearest sounds. Like the western bowed stringed instruments, right hand's pizzicato is scored with "pizz" above the note and "arco" when bowing is required. For left hand, pizzicatos usually played on free strings and scored with a "+" above the note.

## 8. double stops

Double stops can also be done on Erhu in the form of perfect fifths. The instrument's strings can't be separated when the double stops are in progression. This technique requires the pushing of the bow hairs downwards, allowing the hairs to cover a greater area to play both strings simultaneously. As the space between Erhu's two strings is extremely narrow, the left fingers can only press at one point on both strings.

#### 9. bow-twisting

Metallic scratchy sounds can also be produced by twisting Erhu's bow and using its bamboo spine to bow at the strings. The sound is dissonant and mostly used in contemporary repertoire. Other contemporary sound include intentionally lifting the bow towards the middle of the strings and

bowing. The sound produced by such a technique is rough and tense.

# 10. left hand techniques

The left hand techniques of Erhu are similar to any western bowed stringed instruments, which are vibratos, portamentos, trills, and harmonics etc.