

Sheng

Sheng, a multi-reed mouth organ, is one of the oldest Chinese reed wind instruments. It uses the vibration of bronze reeds attached to bamboo pipes to create sound.

Sheng has many different types in different areas, with different numbers of reed pipes,

Tuning:

Technique and tonal color:

Unlike the other instruments, Sheng's tonal color is very much dependent on the instrument itself. The quality of materials and craftsmanship of the instrument will determine how the instrument will sound. Sheng's pitches are usually split into three regions ---- high, notes a_2 and above, middle, notes between a_1 to a_2 , and low, notes a_1 and below. The high regions have been described as well defined, the middle regions are rich and strong, and the lower regions as soft and delicate.

Breathing

The breathing techniques used to play Sheng are unique due to the make-up of the reeds. As such, Sheng can be played through sucking or blowing. When blowing on Sheng with the aim of playing on just one bamboo pipe, it is inevitable that air will escape through the other pipes of the instrument. For this reason, a lot of air is required, and an amateur player might find it tiring to play the instrument.

Recent improvements in Sheng claim to allow air to escape only from the reed pipe that is being played, consequently reducing the loss of air and prolonging the span of time one can play a note. However such improvements haven't yet to be fully ascertained. It is known facts that the better the instrument, the fewer gaps that allow air to escape.

Sheng playing requires a certain amount of blowing force from the player to be able to vibrate its reeds. It is noted that the higher the note, the greater the amount of force required.

Due to its construction, Sheng's volume is imbalanced, with the volume of the middle to lower notes usually sounding louder than those of the higher notes.

In recent years, Sheng's higher registers have been fixed with amplification pipes, to moderate the instrument's volume.

Advancements in both the instrument-making and its playing techniques have allowed changes in volume (generally p-f), as well as crescendos or diminuendos to be played on chords.

Techniques employed by Sheng can be split in finger techniques and mouth techniques. Both of them are not mutually exclusive.

Finger techniques

Finger techniques encompass the pressing of levers, covering of holes and the use of different fingerings to produce different sound effects.

1. chords and polyphony

Chords have always been an important and integral part of Sheng playing as they are associated with Sheng's character. The arrangement of reed pipes in the traditional Sheng is perfectly suited to play traditional harmonies. Traditional chords mainly are thirds, fourths or fifths lower or higher from root notes.

Due to emphasis on chord training among Sheng players, some traditional players may feel that

it's easier to play chords than to single notes.

Previously, Sheng work possessed only a skeletal melody and players would often embellish in the form of chords, harmonizing the skeletal melody according to their personal habit. Recently, non-traditional chords have been introduced to Sheng and the practice of writing out all notes in a chord began.

Chords usually comprise three or four notes on Sheng. Recently, it's able to play chords of up to six notes. On the traditional Sheng, it's difficult to make a clear definition of what chords can be played due to the non-uniform nature of the reed pipe arrangement.

Among Chinese wind instruments, polyphony is native only to Sheng, and the instrument's nature renders it capable of being a powerful solo and accompanying instrument.

Composers often like to use ornamental trills like *acciaccatura* and *mordent* to be played alongside harmonies.

Counterpoint is becoming more common among Sheng's recent repertoires, and it has become common for main melodies to be played among the lower registers and for accompaniments to be played on the higher registers of the instrument.

2. **Single note**

It's rare for **single note** to be used in folk music as the traditional Sheng has always been a chord-centered instrument. Afterward, it was discovered and improved that different single notes can be joined together to form Sheng's first arpeggios.

3. **portamento**

For Sheng, gliding is the gradual closing up or opening of a playing hole while blowing the instrument. Coupled with the control of breathing and fingering techniques, a Sheng player can play an upward glide and a downward glide as well. Notes are usually glided a third higher or lower. The higher the note, the easier it is to glide. Notes above a_2 exhibit a clear portamento. However, although the lower registers are able to utilize gliding techniques, there is usually little or no sound emitted.

Mouth techniques

Mouth techniques have two aims—to create different sound textures using breath and to beautify a sound.

To achieve the former aim, Sheng creates different sound textures through different variations of breath. Sheng's most common breath techniques include plain playing, light breaths and heavy breaths. The different breath techniques are usually left to the discretion of the player according to the piece being played.

Tonguing is also utilized on Sheng, including single tonguing, double tonguing and triple tonguing. It's acknowledged that tonguing on Sheng requires a greater force than other wind instruments and it's easier to tongue repeatedly on Sheng than to tongue running notes. Tonguing on Sheng is used to mimic the sound of drums, footsteps, cymbals and even plucked stringed instruments.

1. **flutter tonguing (huashe, 花舌)**

Like flute, flutter tonguing (*huashe*, 花舌) on Sheng uses the vibration of the tip of the tongue and the throat to induce continuous columns of air to produce rapid spurts of breath.

2. **Hushe(呼舌)**

Hushe(呼舌), loosely translated means “to and fro air”, is a difficult and very unique technique on Sheng. As the nose breathes, the back of the tongue will move back and forth, creating a constant

air column between the reed and the mouth that will make the reed vibrate, hence producing a gentle tidal sound. The sound produced in this manner is usually not loud. This technique is scored with the words “hushe” above the note.

3. **houshe(喉舌)**

Houshe(喉舌) utilizes the columns of air that is forced out by the vibrations caused by the throat. This technique is scored with the word “houshe” above the note.

4. **vibrato**

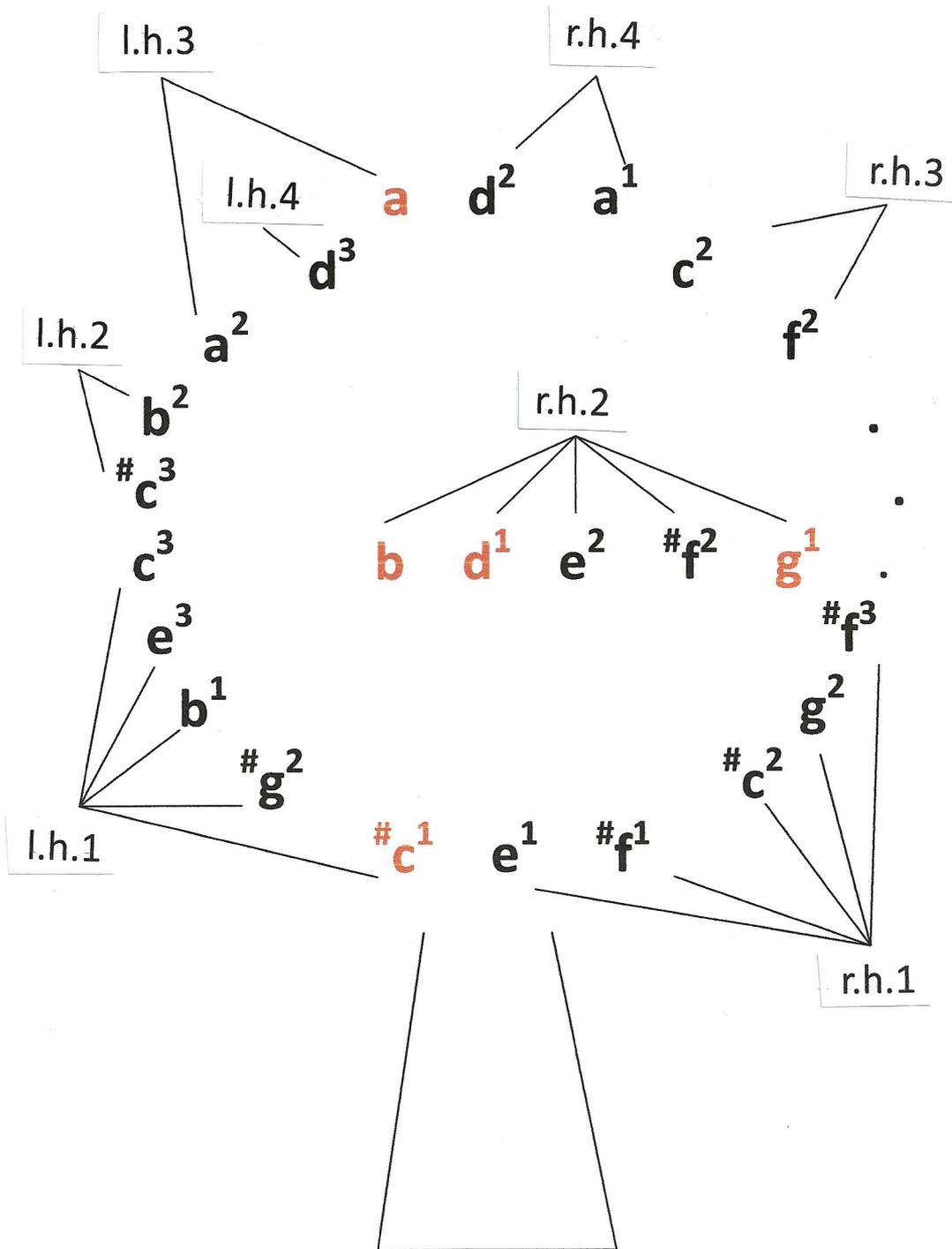
There are various sub-techniques to vibrato that use the diaphragm, throat and tongue to vibrate a played note to different extents.

Fingering Chart for 24 reeds Sheng in D

This fingering chart is all in concert pitch. Red notes are keyed, the rest are played by covering wholes.

l.h.---- Left Hand.

r.h.---- Right Hand.



Fingering Chart for 36 reeds Sheng

This fingering chart is all in concert pitch. All notes are keyed.

l.h.---- Left Hand.

r.h.---- Right Hand.

