

### Things to avoid:

- Abundant rapid chromaticism
- Five-fingered piano-derivative material.
- Lots of quickly changing notes and chordal harmonies.
- Rapidly repeated attack on the same notes.
- Un-enharmonically editable chords e.g a chord with a B, C, C# & D

## BASICS

### Range of the harp

- The double-action pedal harp has 47 strings and a range of six-and-a-half octaves. As we ascend the basic scale of a harp we encounter seven strings per octave, giving C D E F G A B and then repetitions of this sequence, exactly as on the white notes of the piano.
- 4th Octave C is our middle C, the highest note is above 1<sup>st</sup> octave G & lowest 7<sup>th</sup> octave C.
- The strings are color-coded as a reference point for the harpist, with all of the C strings red, the F strings black and the remaining strings white.
- The lowest twelve strings are always wire strings. The remaining 35 strings are usually gut.
- Range of each hand
- Harpists read the grand staff, with the left hand generally playing in the bass clef and the right hand playing in the treble clef.
- Harpists only use eight fingers (thumb, 2nd finger, 3rd finger and 4th finger) as the little finger is too short to be used properly.
- When playing, the harp rests on the harpist's right shoulder and the right arm wraps around the instrument, which limits the range of the right hand and shouldn't be asked to reach below the first metal string [the G one and one-half octaves below middle C].
- The left hand is uninhibited and can access the entire range of the harp, although the top octave is rather inconvenient.
- Harpists are accustomed to reaching a tenth.
- Harpists play mostly by placing their fingers in advance. Large, frequent and fast jumps are very difficult and risky.

### The basic sound

- The natural sound of the harp is a sostenuto, with the plucking action creating a tone that rings until it decays completely or the string is plucked again.
- Upper notes have very little sustain, so writing long, tied notes in the treble is useless.
- Bass notes have an extremely long sustain and often need muffling before proceeding to the next chord
- The player can stop the vibration of the strings by damping them, generally harpists damp the bass strings if only the left hand is free – unless the composer marks the music *laissez vibrer* (let vibrate) or *l.v.* for short.

- Legato the harpist produces is achieved by phrasing and careful placing

## **PEDALS**

- The harp has seven pedals around the base, which are controlled by the harpist's feet. Divided in this order:
  - Left side: D C B Right side: E F G A
- Each pedal has three positions: flat (the top position of the pedal), natural (the middle position) and sharp (the lowest position).
- The pedals alter the pitch of the strings, with each pedal corresponding to a single pitch class, e. g. a C pedal which simultaneously controls all of the C strings, a D pedal which simultaneously controls all of the D strings, and so forth.
- There can only be seven distinct pitches on the harp at a given time. Every time there is a change of key or an accidental, this change is made with the feet, both for the accidental and to return to the starting pitch.
- Two pedals can be moved simultaneously. On rare occasions, the feet can cross over and for example, move the E pedal while the right foot is occupied with F, G or A. this is not recommended often as it readjusts the natural posture.
- The lowest two strings of the harp, 7<sup>th</sup> octave C and D, are not controlled by the pedal mechanism. The harpist must tune each to the desired pitch and leave them at this pitch for the duration of the entire movement or piece (e. g. C# and D natural)
- Changes can be made silently and reasonably quickly.
- The composer must keep track of the pedals and being aware of impossibilities, such as a rapid chromatic scale. Playing, for example, a quick F followed by F# can be noisy as the pitch-changing mechanism strikes the buzzing string and tweaks the pitch up
- Harpists always mark each and every pedal change, including the return of the pedal to the original key .it is acceptable to leave pedal markings to the performer. Harpists prefer to make the pedal changes rhythmically (e. g. on the beat)
- Pedal markings can be done in either English (D# C Bb etc.) or French (Re# Do Sib etc.)

## **Best keys for the best sound:**

- Flat keys, as the harp is in “open string’ position

## **Harmonies:**

- the sustain makes thick chords in the lower strings sometimes sound “muddy” rather than “lush”. It is better to under-harmonize than over-harmonize in a harp composition.

## EFFECTS

### **Staccato**

- To achieve a staccato-like effect is to muffle the strings with the finger or hand immediately after playing, so do not write staccato notes on fast-moving passages, or with large leaps between the notes or chords.

### **Chords and arpeggios**

- Harpists only use 4 fingers on each hand. Therefore, a passage that is idiomatic to the piano does not necessarily translate well. Harpists can arpeggiate chords in an ascending or descending, on notation.

### **Glissandos**

- The pedal harp can be in any arrangement you want – diatonic, pentatonic, whole note, diminished, etc.
- In both cases, remember that every note of the scale must be accounted for.
- Enharmonics can be used to expand the options for glissandi beyond diatonic scales (e.g. a G7 gliss – D Cb B E# F G A).
- In addition to single glisses, multiple glisses, two or three fingers in each hand are possible in smaller intervals. For these, more than one finger on each hand is employed whether ascending or descending.
- To notate a glissando, carefully indicate the exact pitch of the starting and ending notes, also their rhythmic placings, then a straight line between them bearing the word *gliss(ando)*
- If specific starting and ending pitches are not desired, the general range of the glissando should be shown
- The setting for the pedals should be given, either with a pedal diagram or with the first seven pitches of the glissando notated or chord.

### **Tremelo / Repeated notes:**

- harpists cannot repeatedly play the same string in rapid succession as you can on a piano. The best way to accomplish this is by using an enharmonic equivalent, for example setting D# and Eb pedals or levers and alternately playing those strings like a trill, so that two fingers can create the effect of a repeated note. It is played fastest between two alternating hands

### **Trills**

- Two-handed trills work best, one-handed trills are awkward and cannot be played loudly.

### **Enharmonics**

- on the harp are physically played with two different strings, such as B# and C natural. This creates several useful possibilities:
- To fortify a single note, play the enharmonic simultaneously on the next string. This is especially effective when reinforcing the bass.

- The harp can play any note enharmonically except for D natural, G natural and A natural. Careful writing can sometimes distribute fast pedal changes more equally between the two feet such as changing D# and F# (left and right feet) rather than Eb and F# (right foot)

### **Pres de la table (p.d.l.t.)**

- Is a common color modification and is achieved by playing near the soundboard (closer to the base of the strings rather than in the middle of the strings as is standard) which produces a nasal and metallic sound.
- This is most effective in the middle register of the harp as there is very little discernible color change when used in the high or low registers of the harp.
- The position of the notation is important. Above the staff signifies right hand only, below the staff signifies left hand only, and between the staves signifies both hands. There are two possibilities for notation:

### **Harmonics**

- are produced by "stopping" the string at its midpoint and plucking the string just above that point, producing a note an octave higher than normal, with a clear, bell-like tone.
- Notate harmonics on the string where they are played, not where they sound. Harmonics sound best on open strings, that is, as a flat on the pedal harp, or with the lever disengaged on the lever harp.
- Harmonics are notated with a circle above the pitch, the number of circles should be equivalent to the number of harmonics desired.
- The left hand is capable of playing up to three harmonics simultaneously; spacing should not exceed a triad.
- The right hand can only play one harmonic

### **Pedal Buzzes**

- Are achieved by holding the pedal between the key notches i.e between c sharp & natural, this makes a loud buzzing noise

### **Tapping on the soundboard**

- The harpist can tap with either hand, using fingers or fingernails. It is also possible to knock with the knuckles or slap with an open hand. The composer should notate the rhythm and be clear about what part of the hand should be used to produce the sound.
- The harpist can also use the tuning key to strike the back of the soundboard

### **Thunder**

- is produced by using the open hand to strike the strings and immediately moving away to let the sound resonate.
- It is most effective in the lowest register on the wire strings and it is important to note that only the left hand is capable of playing in this register

#### **Plucking the string with nails:**

- Picking the strings with the nails creates a metallic sound

#### **Metal glissando's**

- The harpist can use the metal of the tuning key to glissando along the metal tuning pegs on the neck of the harp
- Pedal Slides
- are achieved by moving a pedal immediately after playing a string. When the string is still vibrating, the half-step change is audible. This effect does not work well in the high registers of the harp. The second pitch is limited in volume by the natural

#### **Paper through strings;**

- Paper can be threaded through the strings to create a banjo like sound, exact measurements, location and con / senza need to be marked, also the composer must give ample time for the player to thread the paper through the strings
- Felt can also be used providing a muffled muted sound

#### **Xylophone**

- One hand can hold the string at the base while the other plucks the string, creating a xylophone effect