Introduction to composing music for the Concert Harp

Occasionally when I am out performing on my harp someone will ask me about how to compose music for the harp (I'm going to run with harp instead of concert harp from now on). My standard short answer is that it is similar to writing for the piano. Well, compared to other instruments written harp music is most similar to written piano music, and all musicians are familiar with how a piano works. More recently I have been asked to play some piano music on the harp to accompany a choir. This has started me thinking about the what is the same about writing for the harp and the piano, and what is different.

I hope that the following information inspires you to write for the harp. I would really appreciate any feedback that you may have. Send me an email at kristina@animatedcreations.net

Thank you,
Kristina Sara Johnson

Harpists use only four fingers to play

Well, we just do. We ignore the 5th finger. We can reach over a lot more notes than a pianist can, though. A stretch of a 10th is easy to do on the harp. Compositions for the harp frequently contain chords with the notes spread over a 10th or sometimes more.

Some starting notes about notation

The notation for both harp and piano is superficially similar. We both read treble and bass clef, spread across two staves where the right hand mostly plays the top line and the left hand mostly plays the bottom line. However, it would be fair to say that which hand plays where is treated as a much more elastic concept by harpists as much of the instrument is equally accessible by both hands. The left hand can play in any register of the harp, although harpists don't really like having the left hand up in the top two octaves if they can avoid it. The right hand is a bit more restricted by the harp resting on our right shoulder and our right arm reaching around the harp to the strings. Unless the harpist has really long arms, it will be troublesome for them to reach beyond the first few metal strings (G to E, 1.5 octaves below middle C).

It's worth pointing out here that harpists do not find guitar chord diagrams very useful. Yes, people have given this stuff to me, because I suppose both instruments have strings and in their minds that is similar enough. I can take the guitar music away and go and write something that works on the harp, but that will cost you extra.

The harp, like the piano, is a non-transposing instrument. What is written is how it sounds. The concert harp is tuned to concert pitch.

The range of a piano and a harp are very similar. The lowest string on a concert harp is C three octaves below middle C. The lowest note on the piano is the A below this C. The highest string on a concert harp is G four octaves above middle C. The highest note on the piano is the C above this G. Within this range, the notes available to the harp and the piano are the same. The difference is that the harp is in some ways more restricted than the piano in what combinations are allowable. The upside of this is that the pedals on a concert harp allow harpists some very interesting options not so easily available to pianists.

The Range of the Harp:
**The basics of pedals**

The harp has 47 strings and 7 pedals. Each pedal has 3 positions - flat, natural and sharp. The lowest C and D on the harp are not affected by the pedals, and are retuned as required. The natural scale of the harp, with all the pedals in the top position, is C flat major. With all the pedals in the middle position you have C major, and logically, with all the pedals in the low position you have C sharp major. When a pedal is depressed on the harp, this activates discs at the top of the string that increase the string tension. There is one disc engaged for naturals, and a second disc additionally engaged for sharps. These discs, and to a lesser extent the bits that connect the pedals to the discs are prone to getting out of alignment (for lots of different reasons). A harp needs to be regulated to keep these problems in check. What does this mean for a composer? Harpists prefer flats. If you ask a harpist what their favourite key is, it will be one with a lot of flats. We can guarantee that flats are always in tune. The sharper things get, the more likely it is that some discs will cause strings to sound slightly out of tune.

The layout of pedals on the harp influences what we are able to play. On the left side of the harp, from outside to inside, are the pedals D, C and B. On the right side of the harp, from outside to inside, are the pedals A, G, F and E. We can also reach the B pedal with the right foot, and the E pedal with the left foot, but this is awkward. So, this means we can change two pedals, one for each foot, at a time. So while the pianist thinks about the loud pedal and the damp pedal, the harpist has to keep track of 7 pedals and which are flat, natural or sharp. I tend think of this as the 3rd line on the music after treble and bass.

Harpists like to keep track of what pedals they should have at any point by scrawling pedal changes and little pedal diagrams on their music. What combinations of pedal changes and how the diagrams are written will vary from harpist to harpist, but you can be sure that they will all have equally strong opinions about how they go about this. Occasionally a composer will print a pedal diagram at the start of a piece of music.

Pedal diagram (usually just shown as lines without the labels):
Enharmonic equivalents

Harpists do a lot of thinking in enharmonic equivalents to optimise their pedal choices. They then write in all the pedals and draw circles around the enharmonically changed notes to remind themselves to play a different string. When this gets too extreme, the harpist will get upset and rewrite the music to their own satisfaction and stick the manuscript over the top of all the scribbling to save their sanity. The manuscript and sticky tape approach usually only applies when we are trying to play something written for the piano on the harp.


First, ignore that cello line running along the top. The lower part is written for the piano. I have heard a recording of this played on the harp by Xavier de Maistre and loved it so much I decided to get the music for myself. Hearing a recording is often where trouble starts.

There are several issues with this example that I am using enharmonic equivalents to resolve:
1. A harpist can’t change all those flats into sharps fast enough to read the music as written in the first two bars. Not that we would necessarily want to, because harpists prefer flats. Still, doing it this way remains a mind bender.
2. In the last two bars there is the use of the enharmonic equivalent of G sharp and A flat. This is partly to get around playing repeated notes, which resonate better on alternated strings at the same pitch. This is also because changing the G pedal more often would cause the string to buzz. Lastly, this is the only way we can get G natural in the bass and G sharp (A flat here) in the treble at the same time.

On the upside, at least the thing is not too fast to play, because with all these pedals going on it would never work otherwise. I haven’t even played through this yet to decide which fingers I want to use, or even which hands. Even without all that written in, this mess of pedal changes, pedal diagrams and enharmonic reminder circles is a bit scary looking. I may even decide later to go with different pedal combinations that better suit a fingering that I like. If that is even possible. It could be time to get the spare manuscript and the sticky tape....
As a result of the very enharmonic nature of the harp, music written for the harp tends to disregard some traditional rules of composition. It’s infrequent that there will ever be a written double-sharp or double-flat. In its place the actual note as it sounds will appear. When composing for the harp, be sure to explore all of the enharmonic options available to you. It is one of the things that makes music for the harp so wonderful and unique.

Glissandi and Slides
Lots of fun with all those pedals to play with. Shown below are:
1. A glissando from C to G
2. A slide between two notes

Harmonics
It is possible to play harmonics on most strings of the harp. Right up the top there isn’t really enough space to manage it. The most common harmonic is the one sounding an octave higher than the string played, but other harmonics are also possible. Harmonics are usually played on a single string. The harmonic technique for the right hand means that the right hand can only play one harmonic at a time. The left hand technique allows for one, two or three notes to sound harmonically at once, but these strings will need to be close together for it to work. Sometimes harmonics are written on the note that they sound, with the actual harmonic played an octave lower. Sometimes they are written where they should be played. It is important to note your preference somewhere on the music. I personally prefer the harmonic to be written where it sounds. Harmonics are very commonly used on compositions for the harp because of their lovely ringing bell sound. It is quite a different sound quality to a string played naturally.
Fingerings
Harpists like playing things that fit under their hands easily. Arpeggios and chords where we can grab four strings at a time make us happy.

Example: Le Moulin, from the soundtrack to the film Amélie, Yann Tiersen. This is one of my favourite film soundtracks of all time. As I've said before, the trouble usually starts when I hear a recording of something irresistible. This figure is straightforward on the piano. It doesn't fit easily under a harpist's four fingers at all. My personal work around is the fingering shown below the bass line. Less experienced harpists would probably not consider this option, and would probably not feel comfortable playing it. Thus, it is an example of writing that generally makes life more difficult for harpists. Four fingers = good. Five fingers = bad.

Printing suggestions for fingerings on the music
This is probably something a non-harpist composer shouldn't attempt to do. If you decide to consult with a harpist in this matter, different harpists will recommend different fingers based on their own technique.

What works – Harp vs. Piano
Chromatic scales
The piano is the master of chromatic scales. In comparison, the harp is very much a diatonic instrument. Fast chromatic scales, like those favoured by Chopin, will not work on the harp.

Example: Polonaise in A flat major, Op. 53, Chopin
Fast repeated chords on the same notes
The piano wins hands down in this category too. Once the keys are played on the piano, the sound rings on, even if you repeat those same notes right away. On a harp, if the string stops vibrating, then that note is lost. If you keep quickly repeating a chord on a harp, the sound is lost.

There is almost an exception to this rule. If enharmonic equivalents or different fingers (or both) can be used for repeated notes, it will help. Replacing the same fingers on the same strings is what harpists really want to avoid.

Example: Battle Hymn of the Republic, W. Steffe. Arranged for piano and choir by P. Wilhousky. This sort of writing really does not work on the harp. The tempo is that of a march.

Example: This Little Babe from A Ceremony of Carols, Op. 28, Britten. This example is faster than the one above, but it works well on the harp. It too has fast repeated notes. So, what is the difference here? The harpist can alternate the chords in the right (tails up) and left (tails down) hands. Very precise replacing of the fingers on the strings is needed for this to be effective.
Example: Cantique de Jean Racine, Op. 11, Fauré. This example is taken from the piano accompaniment. I was asked to play it on the harp. This passage has a lot of repeated notes. The notes in the middle line with the arc drawn over them are the ones I’m taking with the left hand. I chose the fingerings marked below to maximise the resonance of the passage and gain clean finger replacement. Avoiding using the same finger again can help with this strategy. At a slow Andante pace of crotchet M.M. 80, this makes the Cantique a very big homework task indeed.

Avoiding Buzzing
All those vibrating strings can be a hazard. You cannot half touch, brush past, or change a pedal disc on a piano key. All these things cause whatever it is lightly touching the string to create a buzzing noise. Some harpists consider this to be an unavoidable part of playing the harp and accept things as they are. Those of us who subscribe to the Salzedo technique like to avoid buzzes altogether.

Example: Battle Hymn of the Republic, W. Steffe. Arranged for piano and choir by P. Wilhousky. This sort of writing really does not work on the harp. The tempo is that of a march. The top notes in this will stop vibrating quite quickly. The bottom line on mostly metal strings will ring on for a long time. The metal strings will still be ringing when you go to play them again. It is very difficult for a harpist not to make a lot of buzzing noises on the strings when placing the fingers in a sequence like this one. Additionally, the fast replacing on strings just played kills the resonance and you lose the effect that this would have on the piano. A good work around for the harpist would be to just choose two lines of the four and play these as four finger scales. It would sound a lot thinner, though.
Example: The Young Person’s Guide to the Orchestra, Op. 34, Britten
The tempo of this harp solo is around crotchet M.M. 72. This makes this little figure one nasty pest on the harp. It is very easy to make buzzing noises by brushing past already vibrating strings when grabbing the next chord on the way down the sequence. Looks innocent, but requires a lot of practice to get it to work.

Harpists think this stuff is easy
I think that the harp trumps the piano in the following categories.

**Glissandi**
Mentioned a few pages ago. Actually, anyone can sit down at a harp and run their fingers along the strings to create a glissando, but it takes a proper harpist to make it sound really cool.

**Arpeggi**
So much harp music is centred around the arpeggio, and with good reason because they sound so beautiful on the harp. A grand example is the cadenza from Tchaikovsky’s Waltz of the Flowers from the Nutcracker Suite. This cadenza is based on inversions of a dominant 7th chord, and very little else. Chords and their inversions are drilled into harpists from their very first lessons.

Big Chords
Little chords are OK too, of course.


Tied notes and sustained sound
The length of time a note can be held for on the harp is dependent on which register it is played in. Once the harp string is played, there is a certain amount of time it will vibrate for. At the top of the harp, the thin nylon strings sound for only a very short time. At the bottom of the harp, the metal bass strings ring on and on. Everything else is somewhere in between these two extremes. Notes tied across bars are only really meaningful if used in the bass register. Bass strings often need to be damped or muffled to stop them from sounding much longer than required.

Rests and muffling
On the piano, a rest happens when the pianist isn’t playing any keys. On a harp, a rest happens when the harpist places their hands on the strings to stop them vibrating. This is referred to as damping or muffling the strings. If this is not done, whatever was last played will keep resonating until the sound fades away. It is important for the composer to be specific about how they want their rests to happen when writing for the harp.

In the diagram below, there are four examples of different types of string muffling on the harp. There are actually more than these, but these are the ones most commonly seen.
1. The muffle symbol
2. Muffle one, two, three or four distinct notes with separate fingers
3. Muffle a group of strings between the two notes marked, using the palm of the hand
4. Muffle all of the bass strings

Staccato and Legato
The natural sound of the harp is long sustained notes, with layers of sustained sound depending on the duration of the vibration of the previously played strings. The only way a harpist can achieve a true staccato, is to damp the strings played immediately after playing them by replacing all of the fingers. There are things the harpist can do to give a sense of a more staccato note as opposed to one played legato, and this intention in the sound can only be achieved by particular playing, placing and phrasing. Regardless of the specific technique the harpist uses, they should be able to go on about their own personal philosophies on this topic for several pages.
**Listening homework**
A rough guide to some of my favourite recordings. Between them, they show off the huge range of fantastic works that have been written or adapted for the harp.

Alice Giles - Harp Concertos: Ginastera/Gliére/Jolivet with the Adelaide Symphony
Alice Giles - Carlos Salzedo: Works for Solo Harp
Judy Loman - 20th Century Masterworks for Harp
Judy Loman - Harp Showpieces
Judy Loman - The Romantic Harp
Judy Loman - Musique De Chambre Française
Judy Loman - The Baroque Harp - Bach and Scarlatti
Seven Harp Ensemble - Bolmimerie
Xavier De Maistre - French Concertos for Harp
Xavier De Maistre - French Trios

**Reading homework**
Excellent reference on harp technique and effects. Yes, I am biased because I am Salzedo technique player myself. I can only recommend what I know.

Method for the Harp, Lawrence / Salzedo (Schirmer)
Modern Study of the Harp, Carlos Salzedo (Schirmer)