

WRITING EFFECTIVELY FOR THE PEDAL HARP AS A PART OF THE CHURCH ORCHESTRA

by David Winkler

The harp has a “heavenly” sound which is a perfect complement to the church orchestra. This article will offer some pointers on how to write music for your harpist.

There are many orchestration textbooks which one may consult for a basic overview of the harp. Additional information may be found on the internet (see the end of this article for several links). My purpose here is to provide some quick tips which will be helpful to church music directors. Note that the harp I will refer to here is the concert harp or “pedal harp.” rather than smaller models such as the lever harp or “folk harp.”

The range of the harp matches from the lowest C on a piano to the highest G. The highest notes have a brittle sound which dies down quickly, while the lowest strings sound very “loose” and will vibrate for a long time. So the “sweet spot” where much of the playing is done is in the middle range of the instrument.

The pedals correspond to the notes of the musical alphabet: A, B, C, D, E, F and G. There are three positions of the pedals. With the pedal up all the way, the notes are flat. In the middle position, the notes are natural, and with the pedal all the way down, the notes are sharp. Note that moving a pedal changes all the notes of the same letter. For instance, with the C pedal in the middle position, all the C’s on the instrument will be natural. Thus, one cannot play C and C-sharp at the same time on a harp. This problem is solved by the frequent use of enharmonics (more on this later).

The three pedals on the left side of the harp, operated by the left foot, are (in this order) D, C, and B. On the right side (with the right foot), it’s E, F, G and A. So from left to right, we have:

D C B E F G A

A little phrase to help remember the order of the pedals from left to right is, “**Did Columbus Bring ... Enough Food Going to America?**”

GLISSANDOS

The harp is most famous for what one of my arranger friends calls “the big lick,” that is, the glissando. This is accomplished by rapidly moving the fingers up and/or down the strings of the harp. The pedals are set to the scale or harmony for the sound desired. Which leads us to note two things that can’t be done on a harp:

- 1. You cannot play a chromatic scale as a glissando.**
- 2. You cannot play a triad as a glissando.**

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The first statement should be obvious. Since the strings are tuned to a seven-letter scale, the 12-note chromatic scale isn't possible as a glissando. The second requires a little more explanation. To state it positively:

1. **You can play a 7-note scale as a glissando**, e.g., a major scale, a harmonic minor, etc.
2. Although you can't play a triad as a glissando, **you can reduce the 7-note scale to four or five notes** by the use of enharmonics. Let's see how that would work.

SETTING UP GLISSANDOS

For almost every note needed, an enharmonic is available on the harp. For instance, D-flat could substitute for C-sharp (or vice versa), D-sharp could substitute for E-flat, and B-sharp could substitute for C-natural, etc. However, for D, G and A-natural, there are no enharmonics possible, since the strings on the harp cannot be set to double-flats or double-sharps.

Now let's see a few examples. Let's say you would really like to play a **C major triad** as a glissando, but you know you can't do that. As a compromise, the pedals could be set to:

D C B# E Fb G A

From the above, we see that we have the 1-3-5 of the chord (C, E and G), plus the major 2nd (D) and the major 6th (A). Then we have B-sharp (enharmonic to C) and F-flat (same as E), thus doubling the root and 3rd of the chord. So overall, we have five different notes, producing a C6 chord with an added second (or 9th). The arranger would need to decide if this is the sound desired. An alternative would be to leave the B as a natural, so the strings would be tuned as:

D C B E Fb G A

This tuning will accentuate a little less of the "sixth" quality of the chord, since it's basically a C scale minus the fourth note.

Next, let's look at the pedal settings for a **B7 chord** (B dominant 7). Sometimes it's helpful to think in terms of which of the seven letters need to be eliminated to make the chord. The way they are "eliminated" is by the use of enharmonics. Since a B7 chord is spelled B, D-sharp, F-sharp, A, after setting the pedals to those notes, we have left a C, E, and G. C-flat is enharmonic to B; E-flat to D-sharp; and G-flat to F-sharp. So altogether, we would have:

D# Cb B Eb F# Gb A

In this case, it so happens that we have four different notes, considering that three of them (the root, 3rd, and 5th) are doubled by enharmonics.

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This works out differently sometimes, depending on the root of the chord. For instance, a C7 glissando would end up being a 5-note chord, since there is no enharmonic available for a D. So here, we would have an added 2nd (or 9th) in the chord.

D C B^b E F^b G A[#]

Note that, in this example, the B could have been set as a B-sharp, since we would still have the A-sharp (enharmonic to B-flat) as the 7th of the chord. Harpists typically will double the 7th, but as an arranger, you may decide for some reason that you want a little less of the 7th to be sounding, in which case you could specify a B-sharp.

Most harpists have charts to help them with pedal settings for various common chords, so don't feel that you have to figure all this out in complete detail. Still, it's good as an arranger to think through what you're writing to make sure it will be possible.

One other thing that can't be done is to change pedal settings at the end of a glissando. For instance, it wouldn't work to play an F7 glissando and then end on a B-flat, because the B-flat note isn't included in the setup for the F7.

WHY NOT TO WRITE TOO MANY GLISSANDOS FOR THE HARP

I've seen a lot of harp parts where all the arranger wrote for the harp is glissandos throughout. That's fine if that's really all that seems appropriate for the piece you've written. But here are some reasons why you shouldn't write too many glissandos:

1. **It can sound “schmaltzy”** if overdone (depending on the style of the music).
2. **It kills the harpist's fingers.** Pulling the strings with the fingers repeatedly, the motion required to execute a glissando, can wear down the harpist's fingertips and create a lot of tenderness, which takes some time to heal (I've even seen some poor harpists with band-aids on their fingers). Sometimes harpists use felt picks to help with this problem, but the use of picks creates a different sound. Picks can also be hard on the gut strings of the harp, which are very expensive to replace.
3. **It neglects other things** the harp can do which can be very nice and add a lot to the music.

Here are some “other things” the harp can play besides glissandos:

1. Chords (note that typically a harpist will roll the chords unless you indicate otherwise)
2. Arpeggios
3. Single notes or octaves
4. Doubling melody lines or counter melodies
5. Harmonics (these can only be used if the sound is very exposed)
6. Bisbigliando – a special tremolo-like effect (also only useful for softer passages in the music)

There are number of other special effects that can be done on a harp, but these are best left for solo arrangements for more advanced players. Also, I would caution against creating a harp part

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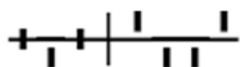
which is as busy as a piano part. The harp part should generally be simpler than something a piano would play, again, unless you are writing a piece for solo performance. Use the harp in the orchestra more as “icing on the cake” rather than “bread and butter.”

SOME OTHER THINGS TO KNOW ABOUT THE HARP

Here are a few other handy things to know about the harp:

1. The harpist only uses the thumb and first three fingers, not the “pinky.” So a fast 5-note pattern that might be easy on piano will not be easy on the harp, at least not with one hand. Likewise, a big chord of five notes in each hand isn’t possible.

2. Harpists usually like to mark their own music with pedal changes, etc. There are several different methods that harpists use to indicate pedal changes. The most common type looks like this:



The left side of the diagram represents the three left pedals: D, C, and B. The right side represents the four right pedals: E, F, G and A. The bars indicate the up, middle or down positions of the pedals. So for the diagram above, we have:

D C# B E^b F# G# A^b

If you use notation software, there is probably a way to create this type of pedal diagram within the program. But as I said before, harpists usually prefer making these markings as part of their personal preparation of the music.

One other thing to mention: in “classical” music, typically the composer will write out the first seven notes of the glissando, and then a squiggly line going up to the ending note. That’s not always done in commercial or church music, but it’s some information that’s good to know (please check an orchestration textbook for an example of what this looks like).

3. Don’t write slurs in your harp part. It’s not possible to connect notes on a harp the way that it’s done on a wind or string instrument, or even on piano. Harpists sometimes mark their music with slurs to indicate what they are playing with one hand or the other, but the arranger doesn’t need to include this information.

4. Rapidly repeated notes are difficult to do on a harp. This is because, to repeat the note, the finger has to be placed on the string again, which stops the vibration of the string until it can be replucked. For a workaround, again we can revert to harmonics. For instance, a rapidly repeated C could actually be done as a trill, alternating between B-sharp and C (although the two strings may not be perfectly in tune). But in general, keep in mind that rapidly repeated notes won’t sound very smooth.

WHAT IF YOU DON'T HAVE A HARPIST IN YOUR CHURCH?

Although the piano and the harp are quite different instruments, sometimes a pianist may be interested in learning. The advantage is that he or she is already used to using both hands and reading from a grand staff. At other times, a young person may be drawn to learning the instrument. Two things will be needed: (1) an instrument, and (2) a teacher.

Pedal harps can be quite expensive, similar to the cost of a good acoustic piano. Sometimes a harp can be rented or borrowed, or a decent used instrument can be found to purchase. The two main manufacturers of pedal harps (though there are others) are Venus and Lyon & Healy. If you decide to buy a new one, it might be worth a visit to the factory to choose your instrument.

For a harp teacher, check with your local symphony orchestra or university. The harp community is a small world, and players tend to know each other. Your local harpist may also have connections as to where to obtain a harp.

From time to time, harps need maintenance as well, e.g., adjustments of the pedal mechanism, replacing of strings, etc. Often there is an itinerant technician who makes the rounds from place to place annually to service harps in the area. Again, your local harpist will know someone who can help you.

CONCLUSION

A number of years ago, I was teaching piano at a church music school. Also teaching at the church was the harpist with our local symphony orchestra. One semester, I had a half-hour I wasn't able to fill, so I asked the harpist, who had the same half-hour free, if I could come study with her. She even had an extra harp she left at the church which I was able to use in practicing. Although I didn't really gain a lot of skill on the instrument, the time spent with the harp and with a good player taught me much that I have used in my own writing. It reminded me that the best way to learn about an instrument is to have "hands-on" experience, and to consult with someone who is a master of the instrument.

RESOURCES FOR FURTHER STUDY

Books:

The Pocket Guide to Composing for the Harp ... for Non-Harpists, by Darhon Rees-Rohrbacker

The ABC of Harp Playing: For Harpists, Orchestrators and Arrangers, by Lucile Lawrence

How to Write for Harp in the Commercial Orchestra, by Lisa Coffey

On the internet:

<http://composingforharp.com/> - Some excellent video demonstrations and other information

https://www.harpspectrum.org/harpworks/composing_for_harp/composing_for_harp.shtml
Helpful article by Joyce Rice.

<http://www.animatedcreations.net/harp/composeForHarp.pdf> - Introduction to Composing music for the Concert Harp - Kristina Sara Johnson

<http://www.elizabethvolpebligh.com/articles/Elizabeth-WritingforthePedalHarp.pdf> - Some helpful tips and suggestions

Standard Orchestral Works (to study harp parts)

Bartok - *Concerto for Orchestra*

Debussy - *Prelude to the Afternoon of a Fawn*

Ravel - *Daphne e Chloe*

Respighi - *Pines of Rome*

Rutter – *Requiem*

Stravinsky – *Firebird*

Note: harpists often come up with “workarounds” to deal with awkwardly written harp parts in standard orchestral works. An example is the famous harp solo in Tchaikovsky’s “Waltz of the Flowers.” Nevertheless, your harpist will appreciate knowing that you took the effort to try to create a part which is truly well-written for the instrument!