## TUNING THE HARP WITH A TUNER and TUNING BY EAR

Courtesy of and by: <u>Elizabeth Volpé Bligh</u> *Principal Harp, Retired, Vancouver Symphony Harp Faculty, VSOI, VSO School of Music Adjunct Professor, UBC School of Music, President, West Coast Harp Society-AHS BC Chapter* 

I sometimes make the mistake of assuming that everyone knows how to use an electronic tuner, or to tune by ear. There is some misinformation on the Internet, so don't believe everything you see on this subject. I saw one video that said to tune with all the pedals in the natural position (don't do that)! I have articles on my web site about this subject and others. Harp Column magazine, May's 2020 has articles on tuning and recommendations of tuning apps. <u>https://harpcolumn.com/blog/top-apps-for-tuning/</u>

<u>Tune your harp every day</u>. The harp will stay in tune better, and your tuning skills will improve.

<u>Always tune with pedals in the flat position and the discs unengaged. On a lever harp, the levers should be unengaged.</u> This means that when you are tuning a C flat, the tuner will read its enharmonic note, "B". The F flat will read as "E". Some tuners read accidental notes only as sharps or flats, so be aware of the enharmonic names of the notes you are tuning, i.e. E flat = D#, A flat = G#.

Most North American harpists tune their A in the range from 440 to 442. Check the tuner's calibration every time you use it, in case you have accidentally pressed the calibration button and it has gone higher or lower.

Make sure that you look at the tuner when you are tuning. I put mine on the music stand, so that one hand is free to pluck the string, and the other one is on the tuning key. If you're in a noisy room use a pickup plugged into the tuner and clipped onto or inside the harp. The needle of the tuner should be in the middle when the note is in tune, the note should be the correct one that you are tuning, and the number of the octave should also be showing (i.e. C#3). Use your ear to determine if you are close. Check by playing a C flat major scale and arpeggio, then a D flat major scale, and so on.

If the harp has not been regulated in a long time, the semi-tones may not be in perfect tune, so you may have to do some adjustments. If, for example, one of your C naturals sounds flat when its C flat is in tune, you just slightly tune the C flat sharper, then check again with the disc in natural. Try to have your harp regulated at least every other year, if possible. (This is probably less necessary for lever harps.)

<u>When you tune by ear</u>, you can start by listening to a note played from your tuner, or use the piano or a tuning fork for your starting note. Then play the octave above it, get those in perfect tune by playing them at the same time and listening for "beats". Once the octave is in tune, tune the fifth above your bottom note of the octave. It should be a tiny bit flat. Then tune its octave and keep going like this.

This is a good article on tuning! https://www.franbarsbyharpist.co.uk/how-to-tune-a-harp.html

## For a more detailed explanation and tips on learning to tune by ear.....

## Tuning the Harp by Ear: by Elizabeth Volpé Bligh

Everyone should know how to tune by ear even though there are some very good tuning apps **and** electronic tuners. Even if you carry a set of fresh batteries and/or an extension cord, sometimes the tuner itself can have a malfunction that is unfixable. Also, sometimes tuners get "confused" and we have to be able to recognize when the tuner is leading us astray with wrong readings.

It is important to be able to recognize when the orchestra is playing at a sharper or flatter A than the one to which you have tuned. It is always good to check the pitch of the A with the oboist when you are playing with an unfamiliar orchestra, or with whomever is giving the tuning note.

Always have a tuning fork in your bag of strings and accessories that accompanies you to every gig. You should have one in whatever pitch your orchestra tunes in, i.e. *A* 441, and one for *A* 440 as well. Hit it on your knee, then place the bottom of the fork on your sound board so that the vibrating tines of the fork are loud enough to hear well.

We tune almost all the time in a tempered scale, in which each semitone matches in size. Rarely, there are pieces in weird tuning systems, and good electronic tuners have these options on the menu. Other instruments routinely alter some semitones to be sharper or flatter, depending on where they are in the chord or the scale. We cannot do that.

Start by matching the *A natural* above *middle C* to your *A* tuning fork. Note: tune the strings in flat position and then check them in natural. If you tune a string with the natural disc engaged, then the pitch will not stay accurate when you release it. Now release the disc to *A flat*. (Alternately, you can buy a C tuning fork and start there.) Tune the *E flat* above it by playing the *A flat* and the *E flat* at the same time, slightly flattening the fifth. This takes practice! Check it with your tuner, which is tempered, so your flattened fifth should match up exactly. Mind you, the tuner may say G sharp instead of A flat. It's the same note for us. Next, tune the octave *E flats*, playing them simultaneously, and also broken in upwards and downwards directions. In some cases, the pitch may be slightly different depending on whether you play the note with the thumb or another finger.

Follow the "cycle of fifths": A flat, E flat, E flat, B flat, B flat, F, F, C, C, G, G, D, D. This should bring you back to A natural. Make sure you complete the entire cycle of fifths, wherever you choose to start. This could also be done as: A, E, E, B. B, then go back to A, then D, D, G, G, C, C, F, F. This should all be done as flats, checking in natural position, since the regulation will affect the tuning.

Check the tuning by playing a scale, a series of cadences such as I, IV, V, then set your pedals into different chord patterns with enharmonic settings and play these glissando patterns as you would play scales, slowly, 4, 3, 2, 1.

The tuning may not have come out right. This could be because your fifths were "perfect" and not flattened enough. If they are perfect, then the result is the "Pythagorean comma". This simply means that the semitones did not come out exactly the same and you have not achieved a tempered scale. It's all right; if you practice tuning by ear and checking with your tuner, then this trains your ear to recognize what a tempered fifth sounds like.

This can be a more time-consuming process than using an app or electronic tuner, so always get to your gig early. An hour is usually enough; this gives you time to unload your harp, tune and warm up. With experience, you get to know your own time-line.