

THE HAMMERED DULCIMER APPROACHED AS A PERCUSSION INSTRUMENT

INTRODUCTION

The hammered dulcimer by definition is a percussion instrument. Hammering on the strings is the most important distinction that sets the dulcimer apart from similar strummed or picked instruments, known as zithers. The majority of people that are attracted to the dulcimer do not come to it from a percussion background. The attraction usually is based on the magical sound that emanates from the dulcimer. One of the wonderful things about the dulcimer is its simplicity. Practically anybody can sit down at one, and make nice sounds come out of it. The trick is keeping it in tune;-)

While a percussion background is certainly not a prerequisite for becoming a great hammered dulcimer player, the understanding of some basic percussion mechanics will help a student of the dulcimer improve their playing skills. This workshop is designed to help dulcimer players of all skill levels, apply basic percussion concepts to the playing of the hammered dulcimer.

DROP AND BOUNCE – THE BUCK DROPS HERE

There are many ways to approach percussing a hammer onto a dulcimer string. Many players do not give it much thought. They find hammers that they believe feel right, and attempt to make sounds that they like. Sometimes this works out well, other times it does not work out as well. I know a number of players who are constantly looking for the "perfect" hammers that they never seem to find... (By all means, keep on looking;-)

When drum instructors teach new drum students how to *hit* a drum, the most commonly used method is known as "Drop and Bounce." This means, the drumstick is *dropped* from a distance 6 to 12 inches above the drumhead. The tip of the stick falls with gravity, strikes the drumhead, and bounces back up to the starting position. The wrist and perhaps some of the arm simply come along for the ride, guiding the stick in the most efficient manner possible. The drumstick should spend as little time in contact with the drumhead as possible, so that the head can ring out in a glory of overtones. If the stick is held down on the head, it will *choke* the sound.

One never truly learns the best possible way to percuss a drum. It is a life long task to seek an impossible perfection. You should always strive to do it better. This same concept holds true for ALL percussion instruments, including the hammered dulcimer.

Gravity can be one's greatest ally, in trying to achieve perfect percussion on the dulcimer. Learning to use gravity and letting the hammers "flow" onto the strings, is a key to speed and dynamics.

It is a great idea to spend at least 5 to 15 minutes a day of practice time simply hammering on one or a few strings. The goal of this time is to concentrate solely on the most efficient method of percussion. Both hands' hammers should sound even (More on this later). Good sounds start where the hammers meet the metal. If time and care is spent perfecting hammering technique, many other concepts and skills will fall into place.

THE HAMMERS – MASS IS GOOD

Many hammered dulcimer players use very light hammers. They often believe that lighter hammers give them a lighter feel, and that they can play their instrument with more sensitive and speed. It is counter intuitive, but in my way of thinking, hammers with greater mass lead to more dynamics, and increased sensitivity. That player needs to learn how to use this “mass” to the greatest ability.

Percussionist, Alan Able, before he retired, was the lead percussionist for the Philadelphia Orchestra. He often taught wonderful workshops through the Percussive Arts Society (Yes there is a percussionist police force out there;-). Many students were surprised by the size of the drumsticks that Alan used. They were large even by rock and roll standards. The key here is that these large drumsticks are beautifully balanced. The center of the stick is the exact balancing point. Both sticks are evenly matched tone wise. If one holds these sticks in the correct place, they do not *feel* heavy.

This same basic principle holds true for dulcimer hammers. In my opinion, a vast majority of hammers out there are *way* too light and are over balanced towards the handles. Finding hammers that are even close to balanced on the center point is a challenge.

It may not feel right at first, but heavier, well-balanced hammers are the key to sensitive dynamics and fast playing. (I actually prefer hammers just slightly balanced towards the handles, but almost even. This requires a visual explanation.)

There are practically as many types of hammers as there are dulcimer players. The styles of hammers vary in length and as mentioned above, width. Yang Qin (Chinese version of the dulcimer) hammers are long flexible thin pieces of bamboo. I have heard of other players using “hammers” that resemble mallets used on a marimba or Xylophone. There is an even four-mallet technique. The key here is that you need to decide what is the most comfortable. It is very important to try many types of hammers. Finding the exact right one, could be a life long quest. At dulcimer festivals and club gatherings, try playing with other player’s hammers and also try out some different dulcimers. Find out where they got their hammers (some players make there own).

RIGHT HAND - LEFT HAND – FREE HAND

In the percussion world, all hands are created equal. It is ideal for a percussionist to be ambidextrous. That means that neither the right hand nor the left hand is the dominant hand. In reality, most people are either *born* right hand dominant, the majority, or left hand dominant. An even smaller minority of individuals are born truly ambidextrous. Many percussion students spend countless hours working on strengthening their NON-dominant hand.

Since the dulcimer is a classic percussion instrument, dulcimer students face the same challenge. Often students complain, “I just can’t make my left hand do what I want it to do.” When they play tunes, they will often play two or three notes on their right hand for every one note they play with their left. This eventually catches up with them when they try to play a musical piece at a faster tempo.

It is important to do exercises that build up the non-dominant hand. Doing simple every day chores, such as brushing ones teeth with the left hand, does wonders for building up the non-dominant hand. Some tasks will feel very “strange” when attempted with the non-dominant hand. Try throwing a Frisbee™ disk with the non-dominant hand for a real humbling experience. USE your non-dominant hand as much as possible. The dominant hand rules only because you allow it to. On the dulcimer, do exercises where the non-dominant hand plays at least two times as much as the dominant hand. Try playing simple tunes with just one hand. Go slowly at first. WORK on it. It will help.

When playing tunes, one should not be able to tell the difference between the sound of the left hand and the sound of the right hand. The two hands should, in general, sound even and balanced. For many mortals, it is hard work to achieve this, but it is worth the effort.

To learn the sticking for a tune is to learn a tune. Sometimes it is easier to lead a sticking sequence with the right hand, other times it is easier to lead with the left. Figure out the best way and memorize the most logical starting hand for a sequence of notes. Divide and conquer. Break a tune in to parts. Practice the hard passages over and over... Remember to look for alternate ways to stick a difficult passage. The dulcimer has many repeated notes. Take full advantage of that.

In general, try to approach the instrument horizontally as opposed to vertically. Many players make the mistake of using more notes on the treble bridge, and ignoring easier to play notes on the bass bridge. Use both bridges, and both sides of the treble bridge. If you find yourself going up and down all of the time, rather than right and left, then you are probably not playing efficiently.

KEEP ALTERNATING, *EXCEPT WHEN IT IS BETTER NOT TOO*

In general, always alternate back-and-forth between left hand and right hand (or right hand left hand) when playing tunes. As with all rules, there are exceptions. But before you learn the exceptions follow the rules.

- Alternating is usually the fastest and most efficient way to play a tune or phrase.
- Go **SLOWLY** and get the mechanics right. Speed will come naturally with practice.
- Start phrases with the most logical hand. Use the duplicate notes on the dulcimer!
- Eliminate difficult crossover sequences and awkward sequences by finding the most logical sticking pattern.
- Practice difficult passages over and over. Start agonizingly slow. Slowly speed up the passage. Use a metronome!
- Use “doubling” when it is necessary to make the sticking pattern easier (see below).
- Go **SLOWLY** and get the mechanics right. Speed will come naturally with practice.
- Memorize and or write down the sticking patterns for tunes.
- To learn the sticking is to learn a tune (I heard that somewhere else.)
- Did I mention to **SLOW DOWN** and get the mechanics right?

DOUBLING

The term “doubling” refers to hitting two notes in succession with one hand. In other words, instead of alternating between left and right, the percussionist hits left then left or right then right. Doubling and even tripling are perfectly valid methods, as long as they are used in the right place for the right reason. If you *need* to double, do it. If you can alternate, then alternate. Never double simply because your non-dominant hand can’t keep up. In that case, slow down and work on your non-dominant hand until it can keep up.

RUDIMENTALLY, MY DEAR WATSON

Rudiments are standard timing phrases such as drum rolls that all drum parts in a piece of music are made up of. This includes rests. Most dulcimer students are not as interested in “drum” rudiments, as they are in learning tunes. Some basic percussion exercises are included in this workshop. A more advance workshop will include rudiments such as rolls, "flams" and "paradiddles".

KEEP THE RHYTHM TIGHT

Work hard on making sure your rhythm is tight. Spend **HOURS** using a metronome. If you don't own one, buy one. All musicians **REQUIRE** this valuable tool. It is especially important for percussionist. When you are in a band, other instrument players will tend to lock onto the dulcimers players rhythm. If you are not in time, the whole thing falls apart. Make learning the proper rhythm of the tunes part of learning a tune. Make notes of metronome settings for the tunes that you learn. Experiment with different time signatures. Change the time signatures of tunes that you already know. (This is a more advanced concept).

DYNAMICS

Dynamics, which means playing louder or softer, is one area that separates great musician from good musicians. Good dynamics simply comes from good technique and control. Practice dynamics when you practice scales, exercises and tunes. Expert use of dynamics can add a great deal of interest to tunes played on the dulcimer.

It is extremely important to **NOT** drown out other musicians when you play with them. Always listen to the other folks, and adjust your playing accordingly.

SCALE EXERCISES – USE THE DUPLICATE NOTES

The following table has the layout of a “common” hammered dulcimer. Simple major scale exercises are shown. By following the numbers that are followed by the recommended sticking, one can learn basic crossovers for the scales. These examples are shown in G, because they work on just about any hammered dulcimer out there. It is VERY easy to transpose these exercises to other major keys, such as D, C, A, F (F is harder for two octave). Go up and down the scales. A great exercise is a 4:4 up and back followed by a 5:3 up and back and so on. The G4 in this case would be repeated (but not doubled) to make the exercise symmetrical.

A6		D6		G#5
G6		C6		F#5
D6		B#5		D#5
E6		A5		D5
D6		G5		C5
C6		F5		B#4
B5		E5		A4
A5		D5		G4
8R G5		C5	4R	F4
7L F#5		B4	3L	E4
6R E5		A4	2R	D4
5L D5		G4	1L	C4
C#5		F#4		B3
B4		E4		A3
A4		D4		G3
G#4		C#4		F#3
F#4		B3		E3
E4		A3		D3
D#4		G#3		
treble left		treble right		bass

4:4 single octave G major scale. Start with Left hand. Note crossover on the "4" (in bold).

A6		D6		G#5
G6		C6		F#5
D6		B#5		D#5
E6		A5		D5
D6		G5		C5
C6		F5		B#4
B5		E5		A4
A5		D5	5R	G4
8L G5		C5	4L	F4
7R F#5		B4	3R	E4
6L E5		A4	2L	D4
D5		G4	1R	C4
C#5		F#4		B3
B4		E4		A3
A4		D4		G3
G#4		C#4		F#3
F#4		B3		E3
E4		A3		D3
D#4		G#3		
treble left		treble right		bass

5:3 single octave G major scale. Start with right hand. Note crossover on the "5" (in bold).

Single Octave Scales out of G. Follow the numbers, and watch out for the crossovers. Note the 4:4 pattern and the 5:3 pattern. There are other patterns too, but these are the most common. Go up and down.

A6		D6		G#5
G6		C6		F#5
D6		B#5		D#5
E6		A5		D5
D6		G5		C5
C6		F5		B#4
B5		E5		A4
A5		D5		G4
15R G5		C5 11R		F4
14L F#5		B4	10L	E4
13R E5		A4	9R	D4
12L D5		G4 8L		C4 4L
C#5		F#4	7R	B3
B4		E4	6L	A3
A4		D4		G3 1R
G#4		C#4		F#3
F#4		B3		E3
E4		A3		D3
D#4		G#3		
treble left		treble right		bass

5:3, 4:4 two octave G major scale. Start with Right hand. Note crossovers and scale starting notes are in bold

A6		D6		G#5
G6		C6		F#5
D6		B#5		D#5
E6		A5		D5
D6		G5		C5
C6		F5		B#4
B5		E5		A4
A5		D5	12R	G4
15L G5		C5 11L		F4
14R F#5		B4	10R	E4
13L E5		A4	9L	D4
D5		G4 8R		C4 4R
C#5		F#4	7L	B3
B4		E4	6R	A3
A4		D4 5L		G3 1L
G#4		C#4		F#3
F#4		B3		E3
E4		A3		D3
D#4		G#3		
treble left		treble right		bass

4:4, 5:3 single octave G major scale. Start with left hand. Note crossover on the "4" (in bold).

Two-octave G scale exercise. Start on the bass bridge at one. Notice that the two octaves end up having either a 4:4 followed by a 5:3 or visa versa. Again, these two exercises can be played back-to-back, repeating the bass note.

These same basic exercises can be used for chording exercise by just playing the 1 – 3 –5 and 8 of each scale. You are encouraged to make your own exercises on the dulcimer.

ALTERNATING BASE – INSPRIRED BY GUITAR

The sound of alternating base note on a guitar, played by a good finger picking blues player, is a wonderful sound. Often two base notes, an octave apart, will be played while something else is happening on the treble strings. If an octave is not alternated then a fifth or a forth is. This same technique can be used on the dulcimer.

Alternating bass technique requires you to have independence between your left and right hands. See the exercises included with this handout. This technique can be hard to learn at first. Most students get the hang of it in time.

HAMMERED DULCIMER PERCUSSION EXERCISES

These simple patterns encourage the student to play on a single string or few strings, to concentrate on percussion technique.

TWO HANDED EXERCISES

These patterns are designed to learn the basics of alternating base technique, and to start developing left hand, right hand independence.

MAGIC MOMENT

“Magic Moment” is a tune written to help learn alternating base technique.

LATE ONE NIGHT

“Late One Night” is a harp tune written by Rob Yoder, of DayBreak. It has an alternating base line. It can be played with some difficulty on the dulcimer. It is included in the handout.

FINE SPRING DAY

“Fine Spring Day” is a tune that was written that uses alternating base patterns. The tune is very syncopated. It is fun to play, once you master the technique. It is included in the handout.

CONCLUSION

Approaching the dulcimer as a percussion instrument can help students, improve their playing skills. Increased Sensitivity and speed all come from practicing good technique.

ABOUT THE AUTHOR:

Cliff Cole purchased his first hammered dulcimer in 1985, from Sam Rizzetta. At the time he was playing drums in a blues band. Prior to taking up the dulcimer, he studied drums and percussion for ten years. Cliff has played in numerous rock, blues, jazz, zydeco and folk ensembles since the age of fifteen. Folk instruments are where the heart is...

Cliff plays the hammered dulcimer in the folk group "DayBreak," which has been together since 1989. They have made several recordings, including "Lost Cave" which was recorded live inside of Lost River Caverns in Hellertown, "Little Steps", and "Autumn Calling," which features many of Cliff's original tunes. They also have produced two Christmas CD's one named "Unity; Unique Music for Christmas" and more a live Christmas CD of a Concert recorded in December of 2002

DayBreak's music is available on iTunes and many other digital download stores found on the web.

Cliff also plays gigs with his lovely seventeen old daughter, Emily Rose under the name of Glass Rose's. Emily has a strong, beautiful voice, which blends nicely with the dulcimer and guitar. They released a CD named Falling Wings. The CD feature's Emily's voice and features some of her original tunes.

Cliff's hammered dulcimer was made by James Jones. The full sized 2/16/18/7 instrument covers four octaves. (For more information about James Jones instruments go to his web site: <http://www.jamesjonesinstruments.com>)

Cliff works as a hardware test engineer for the networking start-up SilverStorm Technologies, which is located in King of Prussia, Pennsylvania.

Contact Cliff at:

Cliff Cole
2440 Schukraft Road
Quakertown, PA 18951
215-453-1722

<http://www.daybreakfolk.com/>

For "DayBreak" CD's tapes and bookings contact:

Cliff Cole – **215-453-1722**(cliffcole@enter.net)

Or Rob and Anna Lisa Yoder – 215-538-5280

This document can be downloaded from:

<http://www.daybreakfolk.com/>

Look for: Cliff's dulcimer workshops