DAKOTA DRUMLINE

FRONT ENSEMBLE TECHNIQUE

Technique Philosophy

Everything we do from a technique perspective will be in the interest of achieving the best sound and the most natural and anatomical movements of our body. It should flow; it should be relaxed; it should feel good! Our bodies have a natural way of moving, and we need to work *with* our bodies rather than *against* them. So, as opposed to reprogramming natural motions of our body, we should be cuing into them and figuring out how to use them to our advantage.

In line with our goals of creating the best possible sound, it is important to realize that technique is not *one-size-fits-all.* To play only one way *all the time* is extremely limiting. An artist would not paint a mural using only a single shade of paint. There are many elements that go into the sound we create, and as artists we need to manipulate those elements to craft musical phrases. For mallet players these include things such as velocity, weight, touch, bar placement, stroke type, mallet choice, visual flare (this can actually affect perception of sound), among other things.

How we choose to play will be determined by musical context. Things such as style, tempo, dynamic, desired visual effect, etc, will all be factors to consider. For example, if we hear that a part is slow and lyrical, should we be using piston strokes and trying to rebound the mallet at high velocity? Hopefully you got the correct answer to this one, which is “no.” In such a passage we would likely play with a very legato approach, lighter touch, and potentially use some wrist break.

Playing this way inherently adds some demand to what we do, because it is not oversimplified. However, playing this way will enable you to develop your musicianship to the highest level.

Note that there will be a general way in which we play that is still quite defined. We just won’t box ourselves in with it.

Approach To Dynamics

A lot of factors affect the amount of sound produced by your instrument. These include height, velocity, touch, mallet choice, register of the instrument, etc.

However, we choose to corresponding dynamics with heights as a general rule:

p = 1 inch
mp = 3 inches
mf = 6 inches
f = 9 inches
ff = 12 inches

Because height and dynamic are not the same thing, this height system does not replace listening for how your sound fits into the musical whole. These heights are a starting point, but ultimately when we craft a moment of our music, it is your job to match the musical phrasing defined by the staff or your center player. This is an *aural skill,* but it is important to use the visual cue of matching the height of the player next to you as well. This not only makes us more visually unified as an ensemble, but gets us *most* of the way there in terms of achieving balance and blend. Your *ear* will get you the rest of the way.

Approach to Stroke Type

For our general stroke, which we call the *legato stroke*, we will keep the mallet head moving in a continuous vertical motion for the duration of our playing. The mallet head should not stop at the top of the stroke, and it should not stop at the bottom of the stroke. The velocity of the downwards portion of the stroke should be high, and we should follow the stroke all the way through the bar–this results in a big, round sound. This stroke type will be utilized for most tempos and many musical contexts. Words we choose to characterize this stroke as are “relaxed and flowy.”

We will sometimes utilize the *piston stroke*, a stroke during which we rebound the mallet relatively quickly back to its starting position. The rebound should not be artificially fast and it should not result in additional tension in our approach. The primary context in which we will do this is single independent strokes at slow to moderate tempos.

Approach to Building Chops

When we play music, we must be relaxed... However, relaxation requires strength.
An extremely physically demanding passage of music can only be played in a relaxed state once you have the requisite strength. In order to build strength, we must *exercise!* This is usually referred to as “chopping out”.

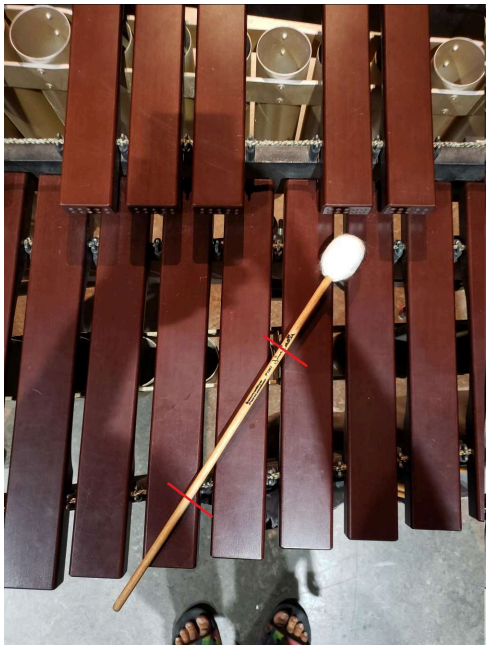
The way we will chop out is not the same way we approach playing music, since the intended end result of chopping out is to gain strength, and the intended end result while playing music is to produce the best sound. While good sound requires relaxation, building strength requires time under tension. When we chop out an exercise to build strength, we will breach tempos in which relaxation is not possible, and this is by design. We will still try to avoid excess tension to mitigate risk of injury, but pushing our limits is necessary to become strong. Building chops is an athletic endeavor, and like all athletes we need to be careful to mitigate the risk of injury. Muscles need time to recover, so chopping out everyday for hours will only lead to injury. Plan a chop out routine that involves short periods of high intensity coupled with periods of relaxation, and make sure to take rest days!

Approaching chop building like this will allow us to build strength so that in the long term, we can be more relaxed in our playing, even while playing very athletic passages of music.

Technical Approach

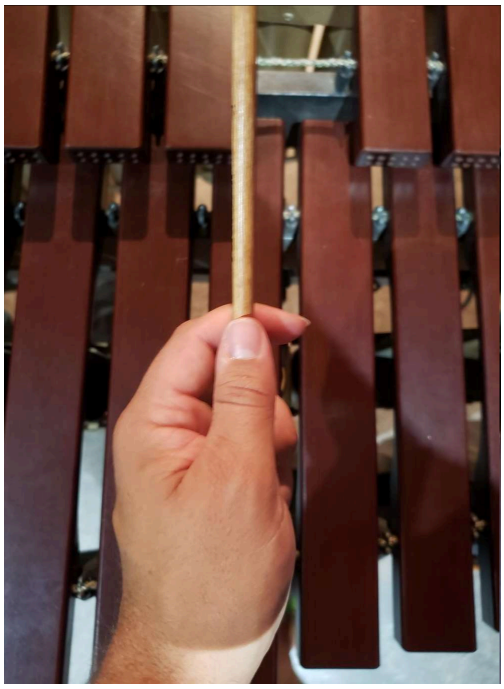
2 Mallets

Start by conceptually dividing a mallet into thirds:

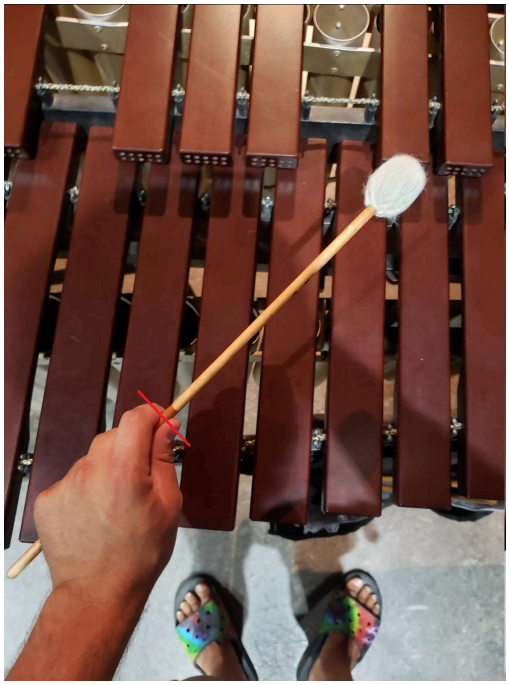


Place your thumb and index finger on the lower third, and wrap the back 3 fingers around the mallet to that there is a bit of space between your index and middle finger:

If done correctly, you should see what we call the “T-Grip”:



Turn the hand over so that the back of your hand is not quite parallel with the keyboard, but close. This position is what we call German grip, and it will be utilized for general 2 mallet playing:



At Dakota we will utilize a movable fulcrum for 2 mallet playing. The fulcrum is the point in the hand with the most pressure, and the point at which the mallet pivots from. The further back our fulcrum is, the bigger the sound we get. This comes at a cost though, as moving the fulcrum back also requires our hands to move more weight, and therefore takes more energy. At slow and moderate tempos this is fine, and we will utilize the back fulcrum approach in which our pinky and ring finger support the mallet the most, while the rest of the fingers remain more relaxed. When we get faster, we will switch to the middle fulcrum, in which our middle finger supports the mallet the most while the back 2 fingers remain more relaxed. Finally at extreme tempos, we will play with the front fulcrum approach, in which the thumb and index fingers provide the most support and the back fingers remain relaxed.

Glock and xylo players will approach 2 mallet technique slightly differently. We will not utilize the back fulcrum approach in most cases. The power provided by the back fulcrum approach is not something required on these instruments. These instruments require more delicate playing, so the front fulcrum should be our default approach.

4 Mallets

At Dakota, we play with Stevens grip. If you have not played with Stevens grip before, here is a brief walkthrough:

-Wrap your pinky and ring finger around a mallet. Allow a little less than an inch of the back of the mallet to stick out from your fingers. This mallet is called the “outside mallet”. (See first image)

-Next, place the bottom of a mallet’s shaft directly into the center of your palm. Make sure the very bottom of the mallet shaft is actually in contact with the center of your palm, as opposed to the side of the mallet shaft. This is called the “inside mallet.” (See 2nd image)

-Wrap your middle finger around the inside mallet, as pictured above. (See 2nd image)

-Place your index finger and thumb on the inside mallet to form the “T-Grip”, as pictured above. The index finger should remain underneath the thumbnail, not tucked in towards the base of the thumb.

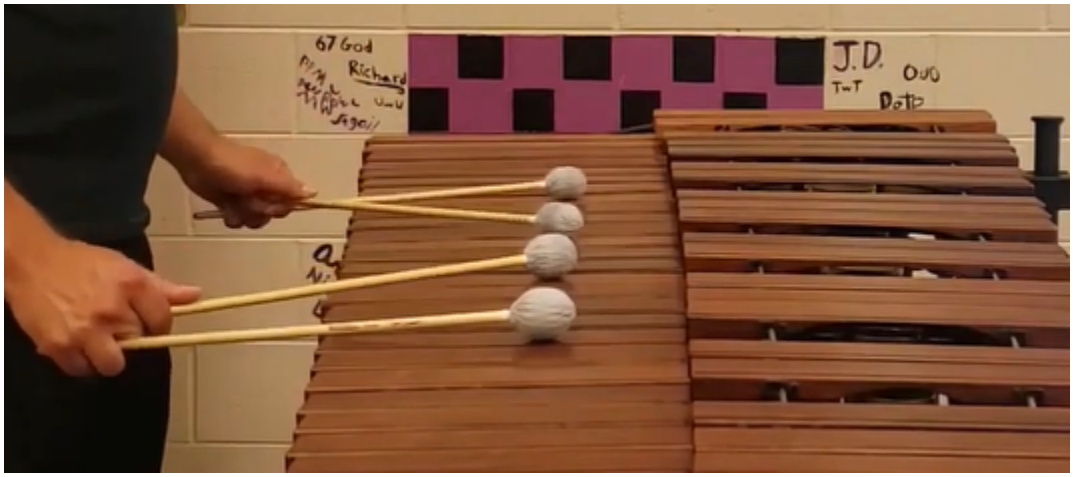
Double Vertical Strokes

The double vertical stroke is a stroke in which both the mallets in one hand contact 2 bars simultaneously.

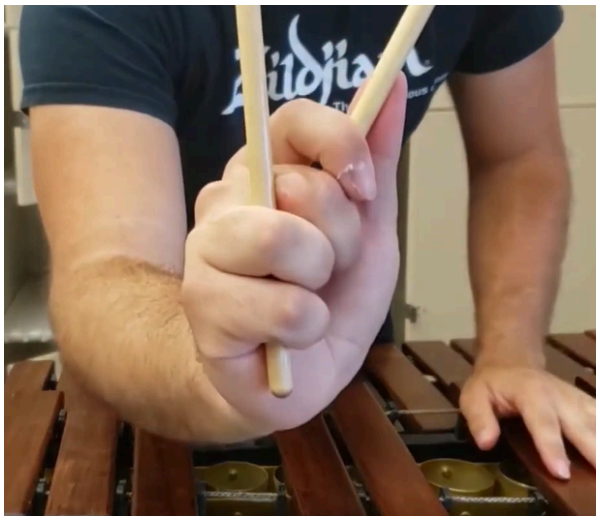
It is important when we set up to play a double vertical that our mallets are level and on a flat plane. I call this the “home base”, and we should always strive for as flat of a home base as possible. When our home base is flat as pictured above, our hand should be at a slightly turned over angle. Avoid having your hand at the following angle:

The issue with this angle is it forces your hand to rotate in a way that is not as anatomical; the range of wrist motion when your hand is at this vertical angle is very little. As a result, players who play at this angle tend to inflame their wrist tendon over time, or have to compensate for their lack of mobility by adding additional arm to their motion. When your hand is at the correct *slightly* turned over angle, there is a significant amount of added mobility and comfort added to the stroke.

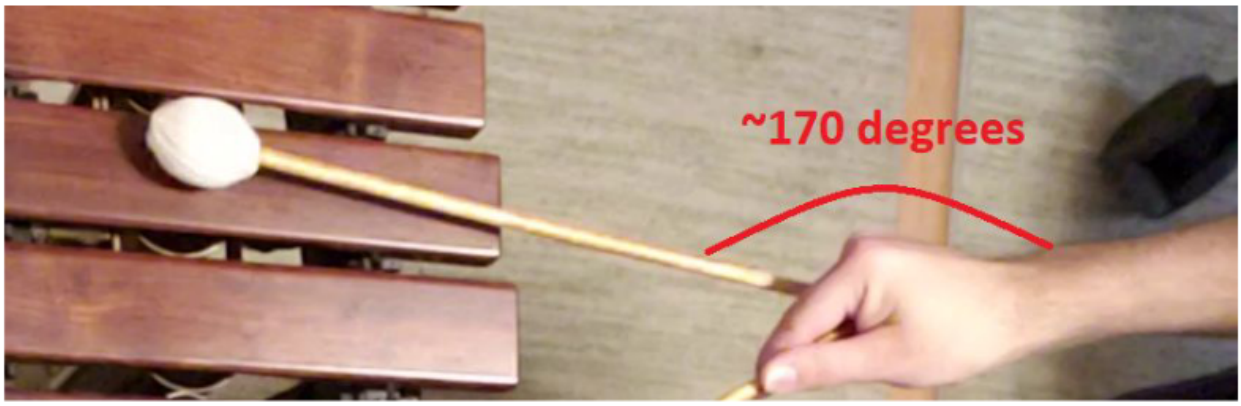
Once you have achieved the correct angle of your hand, set your mallet heads down on the bar to check your bar placement:



We call this the “shish-kabob”, because the mallet heads are in such a straight line that you could skewer them. This must be the case to achieve consistency of sound. If your shish-kabob is incorrect, you should check that you have the correct amount of your outside mallet sticking out the back of your hand, which should be a little less than an inch:



Additionally, check that your outside mallet is at the correct angle relative to your forearm:



This can be achieved by first bisecting the angle of your 2 mallets with your forearm, and then making a small adjustment to ensure that mallets are in a straight line over the bars.

If your bar placement and home base are correct, simply turn your wrist down to contact the bars simultaneously with both mallets.

Inside Mallet Technique

While holding 4 mallets, we will often play with only our inside 2 mallets in order to play passages that are in close proximity to permutations or block chords. Playing with just mallets 2 and 3 requires rotation of the hand, and for comfort and mobility we play with a home base that looks like this:


(Position A)

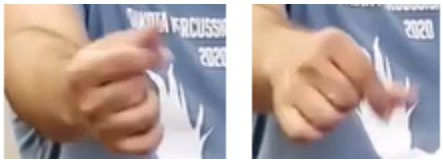
At this position, our outside mallet is about halfway between the playing height and the keyboard, and our hand is turned completely vertically. At this angle, the back of the hand should not be visible to the player. We call this “Position A”. From position A, we need to turn our hand over to achieve “Position B”:


(Position B)

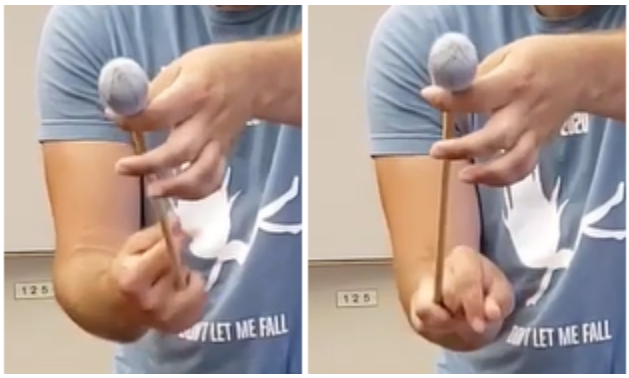
In this position, the inside mallet is contacting the bar and the entire back of the hand should be visible to the player. However, at Position A it is not. This means a good way to know whether or not we are achieving good rotation is to check our “strobe light”–the effect created when the back of our hand flashes in and out of our vision.

To get from A to B and back, we need to rotate our hand around an axis. There are 2 things you can conceptualize as the axis, and these are the outside mallet head and the center of your palm.

If we take the mallets out of the hand and rotate the hand with the correct motion, there is a point in the center of the palm that stays fixed while all the meat of your hand rotates around that one point.

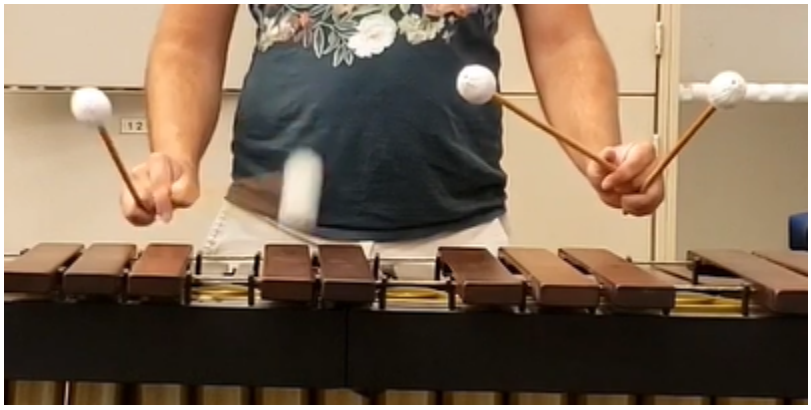


With mallets in hand, you can think about the outside mallet HEAD (not the shaft) as being the axis of your rotation. The bottom of the shaft itself will move back and forth, but the head will only stay still and rotate in place.



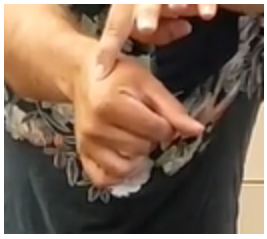
Starting at your inside mallet home base, rotate your hand from the A position to the B position to contact the bar. Make sure your outside mallet stays relatively still in space and that you can see the “strobe light” effect in which the back of your hand is only visible at the bottom of the stroke. Common mistakes include pushing the mallet down with the thumb and index finger, turning the motion into more of a double vertical motion, and excess tension/curling of the thumb. The thumb and index finger should remain relatively relaxed, which is only possible if your middle finger is doing its job of keeping the mallet stable in the palm.

Single Independent Strokes / Alternating Strokes

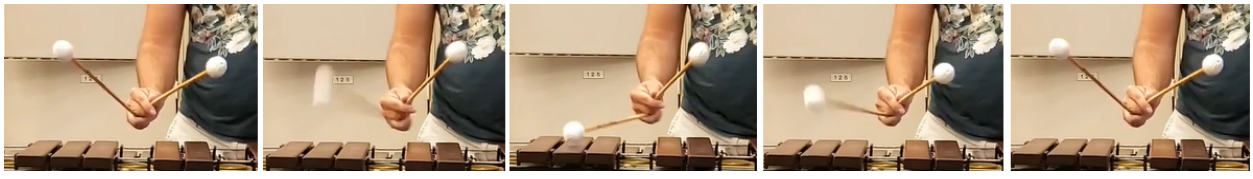


A single independent stroke is a stroke in which 1 mallet contacts a bar independently of all other mallets. This stroke should be made from our home base, and then rebound back again.

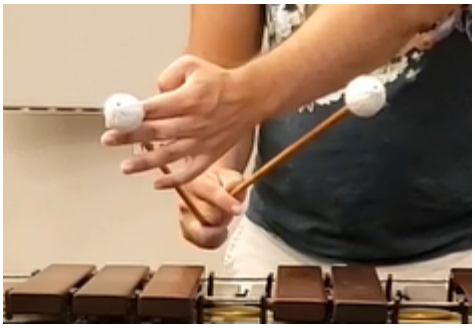
In order to do this, we must use rotation of our hand. For our mallets 2 and 3, the motion is the same as what is described above, but the range of motion is different. Rather than rotating our mallets 2 and 3 higher than our outside mallets, we must utilize a flat home base, like when we play double verticals. This is because single independent strokes are used for permutations, and we don't want our mallets 2 and 3 to stick out while we play permutations. They must start from the same heights as mallets 1 and 4.
For our outside mallet single independent stroke, the rotation is different. The direction that we must rotate the hand is in the direction of the metacarpal of our index finger:



Imagine an arrow drawn along that metacarpal. Rotating your hand in the direction of that arrow will allow you to strike the keyboard with your outside mallet while your inside mallet remains relatively still in space:



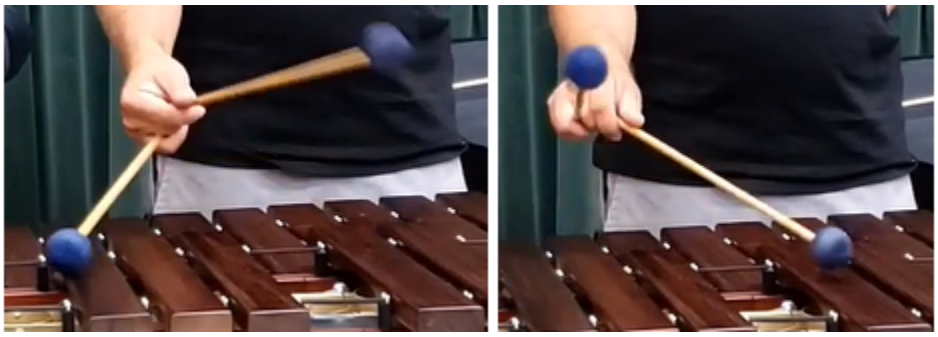
Using 1 hand at a time, single independents can be practiced by holding the stationary mallet in place with the other hand:

 or 

At a slow to moderate tempo, a single independent stroke should rebound back to home base before the next stroke occurs, putting the hand back into a neutral position between each stroke. However, as we get faster and faster, it becomes impossible to truly do this. When this occurs, we will allow the mallet to rebound halfway after the initial stroke, and finish the rebound when the next stroke occurs. These are called *alternating strokes.* While playing alternating strokes the motion of the strokes are connected, and the stroke should feel more fluid and bouncy. It is not a single independent, and it's not a lateral. It falls between the two in the middle of the spectrum.

Do not overthink alternating strokes. *Everyone does them without realizing it.* That's because they are inherently more efficient. They also result in improved sound quality–since we are no longer tasked with rebounding the mallet ungodly fast, we can achieve a good follow-through with our stroke and play through the bar, rather than on top of the bar.

Double Laterals / Triple Laterals / One Handed Rolls



The three topics of this section can really all be boiled down to the same thing. If we make no attempt whatsoever to rebound our mallets and simply teeter totter our mallets back and forth, we can alternate between our mallets extremely quickly. If we do this continually, it is called a one handed roll. If we do this for 2 consecutive notes, it is called a lateral. If we do this for 3 consecutive notes, it is called a triple lateral.

One handed rolls are often taught to be played to produce a continuous sound without any metric intent. This is a good skill to have, but in order to have our skill at the one handed roll transfer to double laterals and triple laterals, we must be able to play them with control. If we can play various check patterns utilizing the one handed roll, then when we are faced with double laterals or triple laterals that are meant to be played metrically, we are already good at tilting our hand back and forth with good control and good timing.