In The Doghouse

By Chris Fitzgerald

Physical Tone Production on the Double Bass, Part 2: Left Hand Shape, Fingertips, and Pads

In the last article in the series, I discussed "leverage and the left hand," and focused on the notion of what constitutes a good left hand stop of a fingered note and how to use the larger muscle groups of the body to get it. In this installment, I'd like to focus on several related issues: a description of a natural way to hold the left hand so that force may be applied to the string from the larger muscle groups; an examination of the validity of the traditional focus for beginning students to always play with the tips of the fingers on the strings (as opposed to playing with different parts of the pads); and tonal differences produced by playing with different parts of the fingertips or pads. There have been many discussions and arguments (some of them quite heated) about these subjects in dedicated bass circles, and while I don't feel that a definitive "answer" is possible for all bassists, the topics themselves represent aspects of bass technique that merit personal exploration by every bassist, at some point. As a disclaimer, any beliefs I express here are not meant to represent any empirical scientific facts that should be presented as "bass technique dogma," but rather simply represent my own take as a working jazz bassist and educator.

Tips versus Pads: Either/Or?

Most double bassists (jazz or otherwise) agree that the healthiest left hand shape for the instrument involves what is often described as a "C" shape – roughly the shape a normal-sized hand would assume while palming an orange. There are many reasons for this. Two of the more important reasons would be avoidance of squeezing the neck with the thumb on the back of the neck, and achieving the necessary finger spacing to play half steps in tune in the lower positions. The "orange-palming C shape" analogy is a popular descriptive approach used by bass teachers, because it covers both of the above aspects simply by asking the student to make a simple and natural hand motion. Try it right now: hold your left hand in front of your chest, palm up, and palm an imaginary orange (or better yet, a real one) with it. Next, turn the hand upside down, then sideways so that you are looking at the thumb/forefinger side of the hand. What do you see? You likely see a rounded shape to the entire hand, with thumb and fingers only slightly curved to conform to the circumference of the orange, with the fingers spread far enough apart so as not to drop it, but not unnaturally or uncomfortably far apart.

So far, so good, as this shape roughly corresponds to the shape most bass teachers would have the left hand assume when getting ready to play. But look again at your hand, and this time focus on what you *don't* see when your hand is in this position. When I look at my hand in this way, I *don't* see my thumb extending out in "hitchhiking position," with the last knuckle bending backward slightly away from where the back of the neck would be (which is a position advocated by most bass teachers I know). I also *don't* see the tips of the fingers –the portion of the fingertip directly under the nail, or put another way, the part you would poke somebody in the chest with – curving inward to apply direct and pointed pressure to the surface of the orange. Does this mean that the "C" shape is an invalid descriptive in regard to a proper and natural way to hold the left hand when playing?

I would argue not at all. To the contrary, I find the "orange C" shape to be an excellent way to introduce a natural and healthy hand shape to apply to the left hand. It not only puts the hand in the basic proper shape to play the bass, but it does so in a natural way that doesn't put stress on the small muscles of the forearm. It is only when the hand attempts to squeeze the orange that the forearm tightens up. The fact that the thumb and fingertips are not yet in "traditional" playing form is something that should be examined further as an extension/addendum to this basic shape, rather than something that invalidates it as a teaching tool. First, let's look at the thumb. While holding your orange (real or imagined) as described above, lock your thumb out as in "hitchhiking position." Notice that doing so doesn't alter much about your grip on the orange, the tension in your forearm, or the spatial relationship between your thumb and the opposing fingers it faces. Next, examine what happens when you curl your fingers in to apply fingertip (i.e. the "point" of the finger, as described above) pressure to the surface. Notice the tension that immediately builds up in the forearm muscles – there's no way around it. Given that these two commonly accepted aspects of left hand technique

seem to be in conflict with each other, how do we reconcile the difference? I would suggest that the best way to reconcile the difference is simply to redefine the term "fingertip." If we start by differentiating between the "point of the finger" and the "fingertip," then a lot of the confusion is immediately resolved. This is an important distinction, because excluding thumb position playing, I don't know a single bassist who regularly plays with the points of the fingers of the left hand; rather, every bassist I can think of plays with the pads (our new definition of "fingertip") of the fingers. The problem with talking about playing with the pads is simply that many people assume that this leads to the flattening or collapsing of the fingers (a practice that is most often discouraged by bass teachers). But this is not really the case. If we go back and revisit our "C" shape and apply it to the bass strings, we see that the front portion of the pad is applied to the string with a proper mechanism behind it which can apply as much force as needed – so most players who use this hand shape are really playing with their pads most of the time.

Once we understand and accept this, we can then begin to explore the tonal differences of playing with different parts of the pad. Playing with the front part of the pad closer to the tip produces a clean, bell-like tone, and playing with the fleshy part of the pad produces more of a buzzy "growl" sound. The reason for this is simply a matter of physics: the more pointed a surface, the more force is applied by pressing the "point" against another object (in this case, the string into the fingerboard). Think of holding a sharpened pencil in the middle of your fist with the eraser side pointing down towards your leg. It is perfectly safe to drop the weight of your arm and let the eraser hit your leg, because the surface of the eraser helps to dissipate the force. Would you do this with the sharpened end of the pencil? Certainly not. Applying force to a bass string to create a stop is much like this. As long as the physical mechanism – namely the curved fingers that transfer the weight of the arm to the string – remains intact, the rest of the equation is really just a matter of tonal preference.

Having a technique that allows room for producing different types of sounds as far as left hand stops is concerned can sometimes be looked upon as having inconsistent technique by those who feel that there is a single "right" or "wrong" way to stop the string. In answer to this type of response, I would argue that producing different sounds with the left hand necessarily requires using different techniques to get the sounds in the first place, and that the ability to do this is a good thing, rather than a bad thing. Bassists, like many other instrumentalists, often place so much importance on gear to produce various types of sounds that we can tend to overlook the most important tone controls one the planet – the ones on the ends of our arms, and the ones on the sides of our heads. In my younger days, if I was looking for a certain sound out of my bass, my mind would immediately turn to strings, or setup, or pickups and mics, or amplification, etc. As I get older and gain experience with the bass, my thoughts now immediately go to technique when I am chasing a new sound I'd like to get out of my instrument. Do I need a cleaner, more pure sound? This can be had by adjusting both hands to play with the less fleshy parts of the fingers. Do I want more growl and buzz? This can be had by getting more flesh on the string in the left hand and flattening the finger slightly while digging in to the string with the middle knuckle of the right hand at an angle I now simply think of as "the growl stroke." If I want a softer tone with less sustain, a slight adjustment of both hands can go in that direction as well. As long as the physical mechanism used to produce the sounds is a healthy one, then altering the details of the technique is a good thing, and one that will allow for a lifetime of tonal exploration. BGM