Monologue on the Left Hand

BY PATRICK O’BRIEN

TRANSCRIBED AND EDITED FROM A DIGITIZED VIDEOTAPE
BY DOUGLAS ALTON SMITH

Editor’s Introduction

In about the year 1991, Patrick O’Brien had been teaching guitar and lute in New York City for more than fifteen years, following his remarkable recovery from tendinitis via his autodidactic study of anatomy and physiology in the early 1970s. A significant portion of his teaching was devoted to helping students who had suffered injury to their hands due to faulty technique, as he himself had.

In the videotape dating from approximately 1991 that is here transcribed, Patrick set out to produce a series of short video recordings (about thirty minutes in length) that would explain the essence of his pedagogical method, particularly for those students who had lost part of their ability to play. This tape was given to one of these students and probably also to others. He refers below to other similar films that he intended to make to educate more than one student, but thus far I have found only one other, on the left arm.¹

On the Left Hand

I’m sitting here alone in a room with a [camcorder] machine and I’m teaching a guitar lesson to the machine. I’d like to build up a library of concepts that I use to advise people who are having technical difficulties on guitar.

¹ The video film of this monologue will be made available on the website of the Lute Society of America. I am grateful to Brian Hays, and to his source Tom Singman, for providing the digitized videotape of this impromptu lecture and permitting its publication. If a reader has another tape by Patrick on a different aspect of guitar or lute technique and would like to contribute it for publication, please contact the current Journal editor.
I’ll start with some of the easier things that are very simple to teach and might be perceivable for a format like this.

The principal difficulties people get into in the left hand have to do with two or three categories of muscles that they might be misusing or not taking advantage of and a couple of mistaken perceptions about how the left hand works.

The first thing to define is kind of ironic. You would think I should define everything about how the shoulder and arm work, and I will get to that. But the first thing to remember is for [the] most accomplished players who are getting the usual kind of carpal tunnel problem that people describe in the left hand on the guitar and are being advised to get the retinaculum extensorum split and so on and so forth.²

The usual thing to say about that for me is to observe that they have never been told anything about the muscles which control the lateral motion of their fingers. And by taking control of and learning to balance those muscles, they could so improve their leverage and the balance of their whole left arm eventually that they could avoid the

² The retinaculum extensorum is a strip of fascia on the back of the hand. Patrick refers to advice that he has heard to split it, that is, to submit to a surgical procedure which would be irreversible and may not even solve the player’s problem.
necessity for that kind of operation or extensive therapies that people recommend for that sort of thing. Most of the therapies like that operation are designed to make you tolerate more of the motion that you don’t need in the first place.

**Abduction**

The basic irony of early guitar study is that you are told you must stretch your fingers apart, and you see that it’s necessary to stretch on the neck of the guitar. As you first perceive the command to stretch on the neck, you begin a grave mistake that is compounded in later technique. When I look at my hand, and intuitively when I say, “Stretch,” I’m going to move my hand like that. [He spreads all his fingers and thumb far apart: Figure 2.]

That involves a group of muscles that are basically on the dorsal (top) side of the hand, and they are called abductors [Figure 3]. Any motion away from the centerline of the middle finger is said to be abduction or moving away from center. If you try a little test, if you press against your index finger and press out, you’ll see or you can feel the muscle right here [pointing to the outer edge of the base of the index] distending. That is the muscle that pulls the index finger outward. Likewise you can see and feel the ones on the outside of the little finger pulling it outward.
The muscles that pull the other fingers outward aren’t perceivable from the surface. They are deep down between the bones of the hand. But there’s one in here, in this compartment between these two fingers [the ring and little fingers], that pulls the ring finger outward, and there are two that pull the middle finger back and forth. The method of definition, the nomenclature they use, is that either one of those is an abductor because either one of those muscles pulls the middle finger away from that imaginary center line. We overuse those on guitar. We say, “Stretch,” constantly.
Adduction

The muscles which pull the fingers back toward center are called adductive muscles. They’re basically in the palm of the hand, although they are deep in the palm, and again, you can’t see them easily on the surface [Figure 4].

There’s one here which pulls the index finger in toward the middle. There’s another here which pulls the ring finger in toward the middle, and still another down in there which pulls the little finger in toward the middle. [He points to the locations of the adductor muscles: Figure 5.]
Those are the ones which are habitually underdeveloped in guitarists and many string players. Basically the reason for that is that we don’t think of the command “Squeeze” as a necessary thing when we are trying to stretch on the guitar.

So here, then, is the irony. I wish I could get up close at this, but basically, if I say, “Stretch,” to my fingers when they are straight out like this, that does move their tips apart. If on the other hand I bend my fingers like that as you do on the guitar, and then I say, “Stretch,” that tends not to move the tips apart any more; it jams them together [Figure 6]. If I give the command, “Stretch,” to the second and third fingers, it pushes the tips closer together.

Ironically, if I say to the fingers, “Squeeze,” it pushes the tips a little bit apart. Many times on the neck of the instrument that is a necessary balance to learn, when to say, “Stretch,” and when to say, “Squeeze.” We say, “Stretch,” too often and, “Squeeze,” not often enough.

I’m going to demonstrate this to a couple of other people and try and send a few different tapes. Basically when I am looking down at the neck from above, I see a view that looks like this [Figure 7]. And if I am trying to place my fingers, say, my second and fourth fingers which are a typical problem for guitarists, if I try to place them a whole tone apart, and I believe that to be very difficult to do, I will say, “Stretch,” to those fingers and the tips will get jammed toward one another that way.

If on the other hand—you can see where my second finger is—if I say, “Squeeze,” to my second finger, the tip goes back quite a bit, and I’m
able to shift forward toward the fret like that. When I say, “Squeeze,” to my fourth finger, I can aim it out at the fret and much more easily get a whole tone. It’s a little hard to do it this way, but on the neck if you can do it from above, as you experiment with it, you can see that by using the adductive muscles you can actually get a very good grip on the neck and more distance between the fingertips.

Figure 6. Stretched proximal phalanxes but fingertips not spread. Screen capture by Douglas Alton Smith.

Figure 7. Adducted fingers seen from above. Screen capture by Douglas Alton Smith.
When you abduct two fingers on the neck like that, the second and third, there is a tremendous amount of stress on the back of the hand here. [He points to the dorsal side of the left hand below the base of the middle finger and to the other metacarpal bones.] And that usually is the sort of thing that leads to the diagnosis of carpal tunnel syndrome. In fact, it is simply not necessary, it is counterproductive to jam the fingers apart like that. If you are holding a simple chord like this and find yourself stretching fingers apart like that, it's actually not doing a very good job of pressing down on the strings. You're not coming straight into the tips of the fingers, but rather you're pushing along the surface of the string. And much of your energy is either going down this way or up that way along the string.

If you can squeeze your fingers toward one another, you can actually bear more weight from your arm, which is the basic way you play. I should spend more time on that in a few moments, about the weight of the arm doing most of the work.

Adduction is the principal exercise that one has to do to get away from the kinds of problems we have with the back of the left hand. I have a series of exercises that deal with that.

Quite simply, it is very unlikely that anyone could overdo the exercise of the adductive muscles. Why? Well, if you try to abduct [spread] the fingers a tremendous amount, you begin to tear tissue between the fingers, and you put a lot of twist or torque, a lot of turning force, on the fingers. You are tilting and twisting them. And there's an infinite amount you can twist them outward, [so] you can twist them outward and keep twisting them until you hurt yourself.

Whereas in adduction, there's a finite amount you can squeeze together. You squeeze until you run into the finger adjacent and then you can't squeeze any further. So it's hard to overdo adduction.

**Arm Position**

With that in mind, I can advise you to attempt a fairly extensive program of adduction, and you can learn how to do it in a fairly safe way, even if no one is there to watch you and monitor every little bit of work.

For instance, I can ask you to hang your hand and arm and shoulder very loosely, using the weight of your arm on the neck, leaving your arm and shoulder very loose, hanging down, right below wherever you are on the neck. And then put your second and fourth fingers, these two fingers, on the sixth string, one fret apart. That's only a half step. Usually I'll ask you to do that in the middle of the neck. I've observed that almost
everyone plays with a pretty good hand position with the left hand if they play the bass side of the neck in the middle of the neck somewhere.

Most of us start to twist wildly when we get to the first position, and we start to hook off that way when we get to the treble side of the instrument. Ironically, because of our training we have the most trouble playing the simplest part of the instrument. That again has to do sometimes with early training, being taught to play the notes E, F, and G with [left-hand fingers] 1 and 3 when we’re not ready to do it, as opposed to 1 and 4, which is the way it was always taught in previous centuries. And [the latter] would line up and balance our hand comparatively well.

**Static Adduction Exercise: The Squeeze**

    Now I asked you to put [left-hand fingers] 2 and 4 here, with a relaxed arm, and adduct them. You can see me doing that as I move these two knuckles toward each other. In fact, the fourth finger is going to get squeezed a little bit under the third finger here. I will move to a new string and then squeeze again for a few seconds and then move to a new string and then squeeze again.

    It’s very important that exercises always move to the new string for each attempt or for every few attempts after a few seconds. You should not attempt to do this same squeezing on the same fret on the same string many, many times in a row. Each time you move to the new string, your arm shifts down slightly, and you try and do this squeezing, or adduction.

    If I were viewing my hand from the ceiling, I would see that my fingers when I adduct, my fingertips, are lined up perpendicular to the plane of the fingerboard. If I held my hand like this, you can see that I’m sort of pressing down straight into the fingerboard now rather than pressing at an angle like this.

    Now, once I’ve completed the cycle of those squeezes, squeezing for a few seconds and relaxing for a few seconds on, say, the sixth fret where I am now, I can go down to a slightly bigger fret, slightly further away from the center of my body, and squeeze there.

    One way to think about this is that we have so long used our fingers in a slightly bowlegged fashion that now it is necessary for us to compensate or develop the ability to be knock-kneed a little bit, so that we will eventually be able to stand up straight with those two fingers rather than [be] bowlegged. We have to overcompensate by building up the adductive muscles.

    Now you can progress down the neck, fret by fret—squeeze, release, squeeze, release again—taking a few seconds. I’m foreshortening
the time here. A few seconds on each one. You can count, “One, two, three, four, relax, two, three, four”; next string, “One, two, three four, relax”; and so on.

When you can come down here at the first fret and play 2 and 4 there with good adduction and without excessive abduction, you will find that you can proceed, maybe after a few days or a week, coming up to the higher frets and playing at a whole tone with that adduction. Sometimes people go up very high on the instrument, depending on whether they have a cutaway or what kind of guitar they are playing, where it feels comfortable.

Here I am adducting at a whole tone. I can develop that ability gradually, move it down the neck slowly, fret by fret, day by day, trying to go maybe one more fret per day, giving myself a couple of weeks to get down here, whatever is necessary. And when I can do this whole tone with good balance and adduction, not this way but that way, I can proceed up the neck again and try to play a minor third. And still balance the same way, trying to avoid this and get a balance that squeezes toward center, and therefore centers the weight of my arm and the weight of my hand underneath the position I’m playing in.

I can proceed down the neck with that, and gradually increase my ability to balance my fingers properly, side to side, at greater and greater distances.

I also ask people to do these exercises with 1 and 3 and also with 1 and 4, although with 1 and 4 it’s hard to start at a half step. Many people prefer to start with a whole tone, gradually working their way up to a minor third and then proceeding down the neck and working to a major third and proceeding down the neck. It depends on how tight your hand is, how flexible it is, how you’ve exercised it, how fast you can develop in this direction. Basically that process of exercises for adduction teaches you a kind of balance that safeguards you against excessive abduction and keeps you from stretching the back of your hand unreasonably.

There are a great many other choices that you find yourself beginning to make when you try this. One of the things is that you will, of course, try centering your arm weight underneath the position you’re playing in, rather than holding it out to the side. It’s good to get it down and centered.

Another thing you’ll do is try either raising the instrument or lowering your shoulder, or a combination of those, in order to get the ability to stretch this way without bending the wrist like this. If the guitar is too low, you have too much bend in the wrist and you should just raise the instrument.
You don’t have to raise the instrument, of course, if you happen to be playing a style like a blues style in which you don’t do big stretches. This is only for a situation where you don’t have to control large stretches.

**Adduction Exercise Playing Tones**

After doing those basic warm-up squeezes each day, with those three combinations of non-adjacent fingers—I usually don’t ask people to do this exercise with adjacent fingers, there’s not much point to it, and it’s possible with weak third and fourth fingers they can really strain themselves—once they’ve done the basic squeezes, I sometimes ask them to actually play the notes: that is, to play descending half steps [on the] high strings and learn to turn the finger in each time they put it down. At first they might put the fingers down this way, leaning them outward each time. But they can learn to hold them up straight or hold them slightly in toward center, which is stronger and safer.

**The Vibrato**

Also, there’s another thing that intuitively happens when you are really well balanced. If you’re a classic guitarist, this will certainly happen. You tend to use a vibrato, which is in a kind of disrepute in modern times. We play with so much stress this way that we don’t get a very good sound to the vibrato. With the fingertips that fall over to the outside and then jam toward the inside, you don’t get an even, comfortable-sounding vibrato. You don’t really get a good-sounding vibrato unless the finger is well balanced side to side and it’s centered, when viewed from the top, so that it’s comfortable to lean back and forth from the elbow and play that kind of classical vibrato.

I think many people playing other instruments, for instance the cello, probably learn this balance of the finger because it is stressed that they should play with vibrato from their very earliest lessons. It’s agony to play with a big vibrato from the arm if the finger is stretched off to the side, and they just get in the habit of kind of centering the finger because they’re constantly being asked for vibrato in their early lessons. So they lock into this system of balance accidentally, just because of the accident of the request for the vibrato.

Conversely, a classic guitarist will free up his vibrato and get a comfortable sound out of it when he does this. And when he begins to do this exercise, he’ll naturally start doing this. I usually ask him not to at first, to try and emphasize his learning the balance of his hand better.
Many of us actually use a vibrato when the finger is extremely unbalanced and jam the hand down. You can tell someone’s using a vibrato on classic guitar because he’s kind of leaning, he’s going for a high note like this one for instance, and he’s ironically leaned away from that place, stretched his hand. He doesn’t feel confident. He kind of jams his arm weight to try and make more force on the note, and of course he’s straining his hand terribly to do it. There’s a kind of free vibrato that starts to happen spontaneously when you really feel comfortably centered on each finger.

**Slurs**

Another thing that happens when you’re comfortably centered on each finger is that it becomes very easy to make slurs of various kinds. And once I’ve asked people to do this kind of exercise—adducted half steps, just playing the notes normally across the neck and back and then down to the next fret and so on, until they are down at the bottom of the neck—once they’ve done that of course they can proceed to wider intervals the same way I described with just the plain squeezing. They can come up the neck and try and play, adducting the fingers a little bit, on whole tones. Because the bass side of the neck is the place where they usually develop the best leverage, I usually ask them not to shift to the new position until they get to the bass string.

Some of us attempt to leave our thumb stuck in the back of the neck the way I am now, and we lean further and further away as we go to the treble until we have very poor leverage indeed here on the treble. The fingers kind of flatten out, looking from underneath the neck.

If I let my thumb slide down the back of the neck and relax the weight of my arm, I can come back up to the tips of my fingers, which is a much more secure place to play from. That’s the reason why I’ll ask you always to shift to the new position in this exercise when you return to the bass. It’s the most secure and fail-safe way to do the exercise.

**Practicing Wider Intervals**

Now, once you’ve done this with half steps and whole tones, you might go on to a wider interval some weeks later. I don’t wait for one portion of the exercise to get perfect before I go on to the other one. When you get any one of these up to 65 or 70 percent efficiency, something like that, you try doing a little bit of the next biggest size [interval] up the neck, just to stretch yourself a little bit further.
You might say there’s a natural interval for each pair of fingers. For instance, for 2 and 4, obviously it would be a whole tone. So I start with an adducted or shrunken interval, a half step, and then I go to the natural interval. Eventually I go on to an even bigger, oversized interval. I don’t usually go more than one half step over the normal limit, in other words, a minor third with 2 and 4 is as far as I would go. There is a natural limit to the hand, I feel, and I don’t really want to go crazy stretching miles further than I have to.

But it depends on what you wish to do with your own style and how big your hand is and how flexible it is. Eventually, some months later, some people do proceed even further than that and develop a tremendous span of the hand. Notice I’m trying to avoid the word “stretch” for the association of abduction when I say the word “stretch.” I’d like you to have a wide reach, a wide span of your fingers with good balance, rather than merely saying the word “stretch.”

The possibilities for developing this exercise in other directions are very interesting. Because you are coming down very directly and straight down on the fingerboard, perpendicular to the plane of the fingerboard, you will find that it is very easy to slur from one finger to the other. You’ll get a very good, solid slur, where the note you slur is nearly as loud as the note you pluck. So, many people like to practice slurs upward or downward with these adductive exercises, again, gradually proceeding, being able to control the slurs with good adduction and [with] one element I should discuss later on—the transfer of weight from finger to finger.

When you slur from 2 to 4, the weight should come off 2 as 4 makes its impact. As I look here, I can see a certain whiteness of my second finger as I press down, right on the tip. The nail is pink, but it’s sort of white near the tip from the pressure. As I press down on 4, or slur down to 4, 4 takes up that whiteness, and this becomes pink over here on my second finger. I haven’t picked the finger up in the air, I’ve merely let the pressure off it, taking up the weight of my arm by my fourth finger. This is what I call transferring weight.

The weight of my arm is now all on my second finger; I could well play this note without my thumb entirely. And now I take that weight up on my fourth finger. The slur sounds much better, cleaner, and is much easier to do if you allow the weight to shift into the fourth finger as you do the slur. Mind that I’m not saying you should pick up the finger or that you should take the weight off 2 before you get 4 down. It’s as though 4 drives 2 off.

Likewise, when you make a shift in the other direction, when you make a slur in the other direction, the normal way to practice it at first
is to allow 4 to slur downward. It makes a kind of stroke where it rests against the next string. That’s the best way to begin the practice. Some people do an exercise where they slur up and then down, and then up and down, making all the notes very equal. You would end on the bottom finger, and [on] the next string, you could start on the top to reverse the order. Again, I proceed from bass to treble, and then return gradually to the bass and shift, and gradually work my way down with an adductive interval to the bass, then back up the neck and work with a wider interval, then come back up again and work with a still wider interval.

And you’ll notice that the wider the interval, the more I have to either raise the instrument or drop my body down. [He demonstrates lowering his shoulder and arm.] This is not a natural posture in which I’m playing, but I’m sitting on the stepstool here trying to make a graphic demonstration.

Summary

Now if you work some kind of series of exercises in adduction the way I describe, you will find that in many chords that you play, instead of placing that chord and stretching your fingers apart, it would be possible to squeeze them together and get much more leverage and also cut down the strain on the back of your hand.

So that, in short, is how I introduce the concept of adduction, or squeezing together in the hand, as a way of balancing the weight of the arm on the fingertips without a lot of stress in the back of the palm of the hand. Anyone who has studied with me could tell you that I could do probably another three hours on that one subject. There are a million interesting facets to how that affects your technique.

I am going to try and tape a short segment, which this is related to, with a jazz guitarist [Greg Chako] who came to me a couple of months ago diagnosed with carpal tunnel syndrome. I introduced this concept to him and he began to work on it. We did two lessons and he’s doing fine now. He has a complex chord vocabulary [and] a large old Gibson F-hole guitar, the kind of situation that would normally cause the potential for a lot of stress. He’s managed to control that stress and improve his leverage vastly in a fairly short time.

[In reference] to the tape Dr. Frank Wilson sent me a while ago, this would apply to a Mister A particularly, and the person after him on the tape, I can’t remember the name, Mister X—in any case, two jazz players who have had some trouble especially on the back of their left hand. I would try to optimize all of the elements of the action they
mentioned and probably check the size of the frets, which I refer to in another tape here.

Have the frets tall enough. Then raise the instrument up, lower the arm, and work on the adduction and get whatever capacity for adduction I could. Once you make that choice for adduction, you’ll find yourself staying in this position and, perhaps in scales, reaching up with your fourth finger flattened or reaching out with a barre, a hinge barre, or this kind of an angle, rather than drawing it back like that.

It involves almost a 180-degree change in the position of the palm of the hand under the neck. And it gradually does things I’ve mentioned elsewhere on these tapes in terms of loosening the shoulder muscles and allowing the weight of the arm to fall down under the position in which you play.

Okay, that’s enough for this session. I’ll try to get back to this tomorrow.