Learning Tremolo

by Tom Poore

Tremolo is relatively rare in the guitar repertoire. But it's the foundation of one of the most popular works for guitar: Recuerdos de la Alhambra. Since most of us who play guitar eventually want to learn this piece, tremolo becomes a "must have" technique. I intend this article for those who've tried and failed to develop a good right hand tremolo. If you're an intermediate to advanced player who doesn't yet have a good tremolo, you might find this to be an effective alternative to what you've tried in the past.

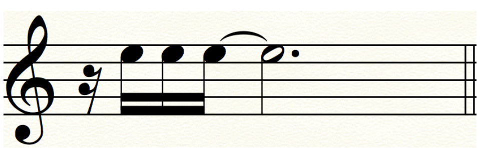
Before beginning, you should recognize that no amount of practice can fully overcome bad technique. If your right hand position or movement are basically flawed, then you'll have to work harder to achieve less. Good basic right hand positioning and movement are beyond the scope of this article, but remember they're the foundation of everything that follows.

Another caveat: You should be cautious about any intensive work on your right hand technique, particularly if you're an adult over forty. A sudden increase in the kind of practice outlined below can lead to soreness in your right shoulder. A reasonable amount of time to put into this procedure is fifteen to twenty minutes a day, and certainly no more than a half hour. Pay attention to your body, and pace yourself. Remember, you're trying to improve your playing, not put yourself in a hospital.

More than most techniques, tremolo relies on speed to be effective. Without control, however, speed is useless. And here lies the basic problem with learning tremolo: speed and control don't get along well with each other. Speed is easier when control is set aside, and vice-versa. Of course, no one denies that either can be ignored in a good tremolo. And in the vast majority of technical study, guitarists begin with control and then gradually add speed. Indeed, most of the time this is the only sensible way to go. But in learning tremolo, it's time to turn this process on its head—you'll now begin with speed and gradually add control.

To begin, you must first get an idea of how a finished tremolo should feel. So start by lightly drumming a, m, i on a table top. Do this (and all the following exercises) no slower than a quarter note at 138. Drum all three fingers in one quick and smooth movement, pause, then repeat: a, m, i—pause—a, m, i—pause—a, m, i—etc.

As you do this, emphasize a light and easy feel in your fingers. It should feel as though you're barely doing anything at all. REMEMBER THIS FEELING! Ideally, your finished tremolo will feel just this easy. This feeling is what you'll be trying to cultivate in the exercises that follow.

Now pick up your guitar and try this on the first string. For stability, lightly rest your thumb on the third string:

At first, concentrate only on a feeling of physical ease. Each nail of each finger should glide easily over the string. (If your nails repeatedly catch on the string, they're probably too long. File them down a bit and try again.) Try not to bounce your hand on each three note burst. Also, some people tend to roll their hand sideways, unconsciously compensating for the different length of each finger. Try to avoid this. Either bouncing or rolling your hand are defects to be avoided in tremolo, as they'll inevitably hurt your accuracy. Don't rigidy lock your hand in place—rather, think of it as floating in just the right place over the strings. If you find one or more fingers bumping into the second string, reposition your arm so that your fingers are a bit more curved toward the palm. Don't overdo this, you need only enough curvature so that your fingers can easily clear the second string.

Be sure that your a finger doesn't slide along the string—rather, it should contact and depart the string at the same spot. Any sliding along the string is wasted motion.

For now, don't worry about loudness or the quality of your tone. These are control issues you'll get to later. Also, don't be concerned with how far your fingers follow through. This will take care of itself in due time. But it's a good idea to let your fingers immediately release back to their ready position at the end of each cycle. Don't rush this release—just let your fingers fall easily into their ready position.

As you settle into an easy and smooth movement, now try to gradually control the rhythm, so that you produce three equally spaced notes. This will be challenging—your three note bursts will be raggedly timed at first. Stay with it, but don't over-control it. Try to maintain an easy feel as you try to increase the accuracy of your timing. Monitor yourself as you do this. Does your right shoulder tense up as you try to control the rhythm? Then ease off the control, consciously relax your shoulder, and try again. Does your breathing become irregular? This is a sign of over-control—again, ease off, relax, and try again.

Precisely what do I mean by over-control? Well, it's easier to hear than to describe. But think of it this way. If I read aloud the following sentence: "What do you want to do?" it will sound something like this:

"Whadaya wanna do?"

This is perfectly idiomatic and understandable to anyone fluent in English. But if I over-control my recitation, it might sound like this:

"WHAT...do...you...WANT...to...DO?"

To any native speaker this sounds affected, as though I'm speaking a language I don't quite understand. In effect, this explains what you're going for in this tremolo exercise. You want the three note burst to roll trippingly off the tongue, so to speak. You don't want it to sound as though you're over-articulating each note.

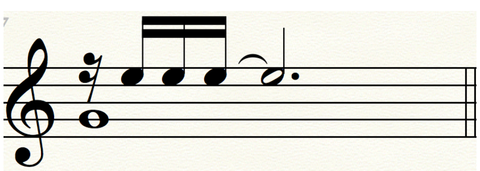
As you experiment with these bursts, you might encounter one of the following problems:

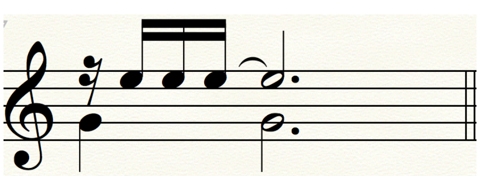
• M tends to miss the string, leaving a hole in your three note burst. If this happens repeatedly, it probably means that the different lengths and curvatures of each finger are affecting your accuracy. Try preparing all three fingers on the first string, then move each finger in quick succession. (Obviously the notes produced by a and m will be muted.) Be careful not to lift m off the string as a moves. When you can do this easily, try the burst by still preparing your fingers on the string, but now, right before doing the burst, lift your fingers very slightly off the string. When you can do this easily, try the burst with no preparation, but your fingers should start from the position you established in the previous step.

• A tends to bump into the second string. If this is happening, then a is starting from a too extended position. Reposition your arm so that a is curled inward at the middle joint a bit more, so that it easily clears the second string when it plays.

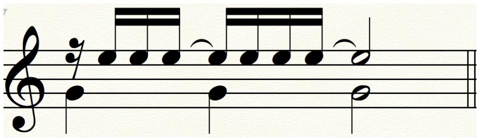
Be particularly alert to how both a and c (the little finger) feel. In any complex right hand movement they often tense up—ideally they should move together freely and easily, like a well-oiled hinge.

The keys here are to listen, then remember the feel. When it sounds good, try to repeat the feel—when it sounds bad, try to change the feel. Don't be surprised if this doesn't yield immediate results. The challenge here is that when you do each burst, you won't know if the feel is correct until after you've heard the resulting sound. In a sense, you're like a man walking in the woods at night, trying to shine a light on the skittish critters around you whenever you hear a sound. By the time you swing the light in the direction of the sound, the critter has run off, leaving you to guess what it might have looked like. So be patient, and keep experimenting until your notes are evenly spaced, and you can do this as easily as when you were drumming your fingers on a table top. Always remember, your goals are physical ease and accuracy. Again, don't worry about tone or volume.

When you have this down, move on to the next exercise:

Now you're adding the thumb into the mix. Again, concentrate on physical ease and rhythmic accuracy. Don't be concerned with tone or volume, and don't over-control the movement. Use just barely enough control to accurately time the four note bursts.

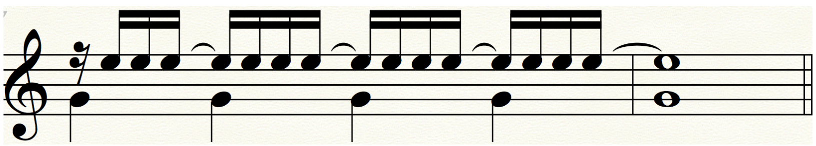
When this is going well, try this:

Listen closely as you do this. Are you accenting the last thumb stroke of this five note burst? If so, you're over-controlling the movement—the accented last note means you're increasing physical tension through the burst. Try to keep all the notes as dynamically even as possible. Again, don't worry about tone, and don't worry about playing loud. Your goals are physical ease, rhythmic accuracy, and dynamic evenness.

When this is going well, try this:



Again, focus on physical ease, rhythmic accuracy, and dynamic evenness. Remember the feeling of ease you had when merely drumming your fingers on a table top? That's the feeling you're going for here. Continue to monitor your right shoulder and your breathing.

When this is going well, try this:



Again, don't crescendo through this burst—keep all the notes as dynamically even as possible. Your mantra is still physical ease and rhythmic accuracy.

When the last exercise is going well, try looping it two or three times without pause. You're now starting to do a continuous tremolo. Remember your goals: physical ease, dynamic evenness, and rhythmic accuracy. Again, you want this to feel as easy as drumming your fingers on a table top.

At this point, you can begin to add more control to the mix. Notice all the above exercises are on the first string—this is the easiest string on which to do tremolo. Now you should move on to the other strings, where the room for error is smaller. Again, try to maintain the physical ease you've cultivated throughout this process. As your tremolo becomes more fluent and reliable, gradually increase the volume, and pay more and more attention to your tone quality. In time, you should be able to do tremolo at any volume, on any string, with a full palette of color—all the while maintaining the physical ease you felt when you began this process by lightly drumming your fingers on a table top.

Now to answer some questions that might have come up.

Should I use planting during these exercises?

If you wish, you can very lightly prepare a on the string at the beginning of each burst. But you may want to delay planting until the late stages of your development of tremolo. In these exercises, remember that you're beginning with speed, then gradually adding control. Since planting is a control technique, it can interfere with your feeling of physical ease. Bear in mind also that, with the fingers, planting is of limited use in tremolo.

Should I emphasize movement at any particular finger joint?

No. In this process, you should focus on how it feels, not how it looks. If you cultivate the greatest possible feeling of ease, then the finger movements will take care of themselves.

What should c (the little finger) be doing?

It should move easily with a.

During this process, should I vary the strings played by the thumb?

Not at first, but it's a good idea as you become more fluent. The farther the thumb moves away from the fingers, the more it can interfere with their easy movement. So it's a good idea to work with this until you can easily play the sixth string with the thumb while doing tremolo on the first string.

(For those who want to go a bit deeper into this subject, the following is a more general discussion on tremolo.)

Have you always taught tremolo in this way?

No. At one time, my approach to tremolo was to begin with control and then gradually increase the speed. This is a fairly conventional approach, and in most areas of guitar technique it's the best way to go. But over time, I've become convinced that the right hand needs a more nuanced approach.

I notice you say "the right hand" and not "both hands."

Unlike most other instruments, stringed instrument players do very different things with the right and left hands. For the guitarist, an approach that works well for one hand isn't always apt for the other. For the left hand, I would argue that "control first, then speed" is always a good idea. But for the right hand, beginning with control in some cases can inhibit the ability to develop speed.

What makes the right hand so different from the left?

The left hand moves and stretches a lot more than the right. It's easier to feel excess tension in large movements—in fact, large movements tend to dissipate tension. But the right hand tends to stay relatively still, and the finger movements in normal playing are far smaller. So it's easier for excess tension to go unnoticed. By the way, this helps explain why flamenco guitarists often have more raw speed than classical guitarists. They do a lot of rasgueado, which is a larger and more vigorous movement than most other right hand techniques.

Further, right movements are almost always more refined than left hand movements. Stopping a string is relatively easy compared to shaping tone and dynamics when sounding a string. The left hand approaches the right hand's refinement when doing slurs, portamento, or vibrato, but never fully equals it. In a sense, the left hand is a gymnast and the right hand is a dancer.

But why is beginning with control sometimes a bad thing for the right hand?

Because you can too easily control with excess tension. Beginning with control means playing slowly. At a slow speed you can play accurately in spite of excess tension. Since your accuracy is good, there's no particular reason for you to notice the excess tension with which you're controlling the movement. So practicing slowly, you ingrain this excess tension. When you gradually try to increase the tempo, this ingrained tension stays with you, and because it's ingrained you probably won't notice it. Instead, you assume you need more practice, and in doing so you further ingrain the excess tension. And so it goes, in a vicious cycle.

You tell students to pay particular attention to a. Why?

If any one finger is the key to a good tremolo, it's a. This finger isn't as naturally coordinated as i and m, and it far more easily falls victim to excess tension. Ironically, m is often blamed for problems that are really caused by a. For example, a common flaw when learning tremolo is that m misses, leaving a hole in the middle of the tremolo. But this miss is often set up by excess tension in a—the a finger curls in too much as it sounds the string, throwing m out of position.

I'm more and more convinced it's a good idea to cultivate a flexible tip joint in a, letting it give a bit as it sounds the string. This is a reversal from what I believed some years ago, and it's still controversial among some. But for a, at least, it's a good idea. Interestingly, Pepe Romero has advocated flexible tip joints for years, and he has one of the best right hands in the business.

Isn't it true that anyone who can play right hand arpeggios fluently will have little trouble playing tremolo?

For most people, yes. There's a lot of wisdom behind Segovia's oft-quoted maxim that tremolo is an arpeggio on one string.

So why use tremolo to cultivate the feeling of physical ease that's so important to right hand technique? Wouldn't it make more sense to do this with arpeggios, which are far more common in guitar playing than tremolo?

In a perfect world, guitarists would cultivate this physical ease long before they get to tremolo. And some do. In the real world, however, most guitarists don't. I suspect the main reason is that, other than cross-string trills, tremolo is one of the few right hand techniques with all three fingers that relies on speed to be effective. This may seem surprising at first—don't right hand arpeggios often rely on speed? But when you think about it, most arpeggio pieces in the student repertoire don't require the speed that tremolo does. Villa-Lobos Etude No. 1, for example, sounds fast at a tempo of 120. Tremolo, however, drags at this speed. So it's entirely possible that, for many students, tremolo is their first encounter with such high right hand finger speed.

In fact, tremolo is uniquely suited for cultivating a better feel for physical ease. We've already noted the need for speed, but there's an additional factor. In most arpeggios, the fingers naturally fall on consecutive strings. In tremolo, however, the fingers must all play on one string, and this is more awkward than playing consecutive strings. So the combination of speed and increased awkwardness makes tremolo a good diagnostic tool for right hand excess tension. Indeed, it can help you detect problems that might fly below the radar in other right hand techniques. And the physical ease you cultivate in pursuit of an accurate and reliable tremolo will pay dividends in almost every other area of right hand technique.

You say very little about the differences between hands from person to person. Is this an oversight?

I don't say much about this for two reasons. First, in a written article it's impossible to account for every individual hand. But the second reason is more subtle, and I'll use myself as an example. On my right hand, when my fingers are completely relaxed the m finger sticks out a bit from the other fingers. (Perhaps in a previous life I was a New York cab driver.) This, of course, is a disadvantage when learning tremolo, and I spent many hours trying to train it to stay in with the other fingers. But I'm convinced now that this was a mistake. By trying to make it to stay in, I was forcing it into a position that simply wasn't comfortable. Indeed, I was making a fundamental mistake: I was more concerned with how it looked than how it felt. It's the feel that's important—the easier it feels, the better it works. If it feels easiest in a slightly unorthodox position, then so be it. Pardon the pun, you've got to play the hand you're dealt.

Having said this, there's an old saying among airplane engineers: "If it looks good, it flies good." The same is true with guitar technique. When tremolo feels and sounds good, it also looks good. So no one should justify horrendous looking technique by saying it feels good—particularly those who aren't yet competent players. What I'm saying is that there are times in advanced study when finding the right feel is more productive than finding the right look.

Will this procedure lead some people to make changes in how they hold the guitar?

I wouldn't be surprised if it does. For example, those who become more sensitive to excess right arm tension often find they're holding the guitar head too low. Raising the guitar head a bit brings down the lower bout of the guitar, which puts the right shoulder into a more relaxed position.

Will this procedure alone ensure a good tremolo?

Possibly, but this will vary from person to person. Obviously the effectiveness of this procedure depends on the care and intelligence with which it's carried out. Further, many people will need to improve their finger independence between m and a. There are a number of ways to do this. For example, Greek concert guitarist Antigoni Goni had this approach:

> "At the time that I was practicing tremolo for the first time I was also playing the Segovia scales for three hours every day, insisting on m & a fingerings. I really think it helped a great deal."

While three hours a day of m and a scale work might be a tad much for most tastes, it does illustrate the importance of developing independence between these fingers. I like to use music for this. A favorite of mine is to play Sor's Op. 6 No. 1 with the p, m, a, m pattern—for me, this piece is just long enough for a good workout. I've also used the scales in thirds from Giuliani's Op. 1. Rasgueados are also excellent for developing finger independence.

As always, players should carefully monitor themselves as they do any rigorous exercises. Mindlessly pounding away at exercises can lead to injury.

Is there anything new in how you teach tremolo?

Probably not. People have been playing and teaching the guitar for a long time, so it's unlikely I or anyone else will discover something new. I'd like to think I've weighed alternatives and explained things somewhat better than most, which after all is the prime job of a teacher. But I'm not the best or final judge of that. Ultimately it's up to each student to decide if what I've written works. And that's as it should be.