Cello

Another Article on Vibrato

by Solveg Peterson

Once, while I was at a social gathering of string teachers (from both the private lesson ilk and the school orchestra ilk), I was discussing student vibrato woes with a private-lesson-ilk friend of mine. An unknown, unintroduced woman asked me pointedly, "You aren't one of those private teachers who blames school teachers for bad vibrato, *are you*?" Busted! At the time, I attributed all bad vibrato to what seemed to me a mysterious drive in some school orchestra teachers to have their orchestras vibrating by the second year. Obviously, I was young and ignorant. Now, I realize that lots of teachers of both ilks possess that mysterious drive to have students vibrate almost right away.

Of course, my students come to me wanting to have vibrato like they want the newest fashion fad — as status and belonging. And I, remembering being that age, want to gratify them with a fabulous, one-lesson vibrato gimmick. And, since almost the very first student plea, I've been on a quest to find just that. I have been to clinics, read books, talked to teachers of all sorts, looking for both the answer to that "mystery drive" and *The Great One-Lesson Vibrato Way*. Then I came down with my very own case of "vibrato elbow" (tendonitis) — all along, I'd had crummy vibrato and didn't even know it!

After lots of soul-searching and researching and misery in relearning vibrato, I wish I could say that I had discovered a great gimmick for quick vibrato, or that I had discovered someone else who had discovered a such a gimmick. I also wish that I had solved the mystery. On the contrary, in that process, I became more convinced that not only does poorly-generated vibrato plant the seeds for painful injury, it also can ruin intonation and shifting — the left hand in general — in a perfectly good player or orchestra of players. So, while I will never give up my search for *The Great One-Lesson Vibrato Way*, I have at least stream-lined my former, nearly-never-ending method down to one that's just short of everlasting. The two main points, often developed simultaneously, are strength and flexibility.

Since many cello students have a hard time just sitting up straight for a whole lesson (doesn't anyone make kids sit up at the table any more?), and most of the rest of them take a long time to develop a solid hand position, strength-building is obviously critical. Vibrato without strength means that it is vibrato by force or tension. Where does this tension sit? Primarily in the elbow and thumb. But tension radiates, so if there is any in those two points, then there is also at least low tension in the hand, forearm, upper arm, shoulder, upper back and neck. Yuck! And, as many of you know, it seems easier to build strength than to eliminate tension. (And retraining poor vibrato is one of the all-time hardest and most demoralizing tasks for students.)

So, what I want to see in my students before I begin recognizable vibrato — (I start some "unrecognizable" exercises before they know it, so I can shorten the process at the "recognizable" stage — more on that, in a paragraph or two) — is a strong left hand in first position: arched, well-spaced/in tune fingers, that can stay that way for the duration of a short piece; the ability to play a scale with the fingers like that, and also the ability to play without the thumb touching the cello's neck. Next, students need to demonstrate a thorough understanding of extensions (a separate topic, altogether). Finally, they need a smooth and accurate shifting technique through 4th position — without thumb tension.

During all of this, I gleefully "force" students to do push-ups against walls and to do hands-over-the-head exercises (anything involving waving the arms around over the head for as long as possible, and then some). The unrecognizable vibrato exercise I start at this time is one of flexing the first knuckle of the fingers — the knuckle closest to the tip of the finger. (A friend of mine learned this one in grad school, but I think it's just as well to start it in the first year of playing.) It goes like this: I have students put their first finger on the G string. Then, I tell them to collapse it; then to arch it. Then, back and forth like that for a good long while. This *always* produces giggling, because it looks so easy. But when a student tries it, it seems that someone else's hand must be on the cello, because "it certainly isn't my hand making a fool of me on the G string!" Anyway, we continue through the fingers one at a time. The added benefit of this exercise is that it focuses the finger's placement on the string: the finger shouldn't "lose" the string during the exercise, so students learn to play on their fingertips more readily. This exercise strengthens and flexes the first knuckle so that the vibrato doesn't stop there, but instead flows right through it, adding color and warmth and easing vibrato in double stops. Naturally, I assign this exercise and, naturally, it gets neglected; but over the course of doing it in a lot of lessons, students get it down. It's really worth the work; you get a lot of bang for the buck from it!

Okay, so, once students have shifting down, *then* we go ahead with "recognizable" vibrato exercises — confident that their fingers have been primed with the exercise above. Of course, by this point in their playing, students probably have encountered someone who has pointed out to them that they don't use vibrato. So, they may have "joined up" with the "drive." But as long as they are able *not* to use vibrato in their lessons, then at least they don't have an uncontrollable, habitual twitch — a very hard thing for them to undo — so they're still okay.

We've already covered the fingers' tips, and in playing with a solid hand position, we've covered the rest of the finger joints. Now, each segment of the arm needs focus. The wrist gets the standard "string-polishing" exercise that we all know; and the "waving at the floor" exercise (this can also be modified to

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focus on the elbow: waving at the floor in a "door-knob-turning" motion that comes from the elbow, not the wrist). Since the elbow already gets a lot of work, it doesn't need a lot of finessing beyond pointing out to students that they don't want to lean on it too much, and that rest of the arm needs to give it a break.

The upper arm poses the biggest problem. But, as Kato Havas always points out, we want to generate the power in our playing from as close to the center of the body as possible. So, the upper arm needs a lot of work. I have an exercise I fondly call the "dying cow" exercise; you add and remove fingers in this progression: 1 alone; 1 and 2 together; 1, 2 and 3 together; all 4 fingers together; then 2, 3, and 4 only; 3 and 4 only; 4 only; then 3 and 4 together again; 2, 3, and 4 together; all 4 fingers; just 1, 2, 3; just 1, 2; just 1 by itself.

Each column shows which fingers are playing:

1	1	1	1						1	1	1	1
	2	2	2	2				2	2	2	2	
		3	3	3	3		3	3	3	3		
			4	4	4	4	4	4	4			

The student makes a huge and gross-sounding motion, generated in the upper arm, that pivots on the tip of the finger(s), counting 1&2&3&4& on each finger combination (the "number" is the finger in its vertical position, the "&" is the finger leaning back towards the scroll as far as possible — this is a *very* exaggerated exercise — and all the fingers are added or subtracted on the "number"). As fingers are added, the first knuckles' flexibility get to show off! This exercise would be impossible without it.

To help students visualize the ease of this motion that at first feels very unnatural to them (people generally avoid their weak places, and the upper arm is usually weaker than we need it to be to play the cello), I use the image of a marionette: the puppet, with all the same joints as we have, has its fingertips nailed to the fingerboard, and there is one string operating the whole thing, attached at the elbow: pulling up and dropping the arm from the upper-arm segment of the body. This exercise isolates and strengthens the upper arm, and I'm telling you, they will be fatigued in minutes, if not seconds. The whole arm needs to lift up and relax down, pulling the fingers up and letting them down, while they remain "nailed" to the fingerboard. Since all the previous exercises have worked on all the other segments of the arm and hand, they are flexible and strong enough to relax while the upper arm learns how to do its part. And in a short while, the exercises all start to come together; and the students usually begin to see the point of it all.

Once they have this exercise, then we can work on doubling the speed, and adding measured vibrato to scales and simple songs. Suddenly, like a ball on a roulette wheel, it "drops" into place, and the student has only to maintain and add finesse to the vibrato. ("Only!" I say. "Yeah, *right*!" the student says…)

This process saved my own arm; playing a mere twenty minutes could reduce my arm to numb uselessness. Scared of permanent damage, I forced myself to do nothing but these exercises and non-vibrato scales and etudes for a couple of months. Thankfully, the process cured my tendonitis and I learned a good way to bring some pretty nice-sounding vibrato to those of my students who actually do the exercises.

I'll continue to search for *The Great One-Lesson Vibrato Way*, but in the meantime, my own arm is resting easier, and my students' vibrato sounds pretty good, shown off with great pride and accomplishment by those who finally get it down!

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