All about Trombone



with Nick La Riviere

Introduction

In this clinic we'll talk about many aspects of music. We'll start with the basics of playing the trombone, including correctly setting the instrument up, the top mistakes made by beginners, and how to properly clean it.

Most importantly, we'll talk about the basics of getting a good foundation technically on your instrument. No matter what genre of music you'd like to play, whether it's pop, jazz, blues, classical, or anything else, before you can be good at playing it, you have to be good at making a solid sound out of your instrument.

After spending some time working on the basic foundations of being a good trombone player, we'll talk about the basics of improvisation and chord reading... But before we get in to any of that, what qualifies me to to tell you about music?

About Me

I've been playing trombone since I was in grade 5. A computer told me to - sort of. Back then at the elementary school I was at they had system for helping students pick instruments. Everyone

listened to badly synthesized tones played from a tape while we filled out a bubble sheet (an old fashioned kind of multiple choice test that can be read by a computer) and selected which tones we liked. None of the tones sounded like a real instrument, they all sounded like an



old synth keyboard, however the computer did have an answer for

everyone in the end. It said most of the boys should play tuba and the girls should play flute. Well done computer... My parents figured that tuba was a little big to carry around and suggested trombone instead, so trombone it was! I'm happy with the choice.

When in high school I played in all the bands available, including the concert band, jazz band, and the orchestra pit for musicals. I also played in a community big band with adults, similar to one that I now teach, and sat in with bands from other schools, especially Esquimalt which had a great jazz program lead by Dave Flello at the time.

After high school I went to the Victoria Conservatory of Music and took the Jazz Studies Program. It was the program's first year of existence, and it was lead by Hugh Fraser. There weren't many students in the beginning of the program, in fact at the beginning there was only 3 students and they were all trombone players. By the end of the year there was only me, so I decided that for my next year of college I should take the Jazz Studies program at Capilano College (now University) in Vancouver. There I studied with trombonist Dennis Esson. During my time there I did a lot of composing and lead my own jazz quintet.

After a year at Capilano College I was offered a gig on a cruise ship. I ended up playing on cruise ships for about 3 years. I worked for Carnival, Cunard, and Princess Cruises. I saw New Orleans, L.A., San Diego, many ports in Mexico, Puerto Rico, Aruba, St Thomas, Dominica, St Lucia, St Kitts, England, Germany, and New York. I also played on a cruise that left from New York and travelled down to the bottom of South America and back up to L.A.

Now I play with many bands in Victoria playing many different genres of music including jazz, pop, swing, R&B, celtic, folk, latin, Klezmer, rock, classical, and more. I play in bars, restaurants, orchestra pits, and big theatres. I also record on many artists' albums at various studios around Victoria, and perform on trombone, vocals, conch shells, and bass.

My own band, The Nick La Riviere Septet, features two violins, cello, piano, bass, and drums. I write all the arrangements and many compositions for the group. We play in jazz festivals, as well as at Hermann's Jazz Club and always are sold out.



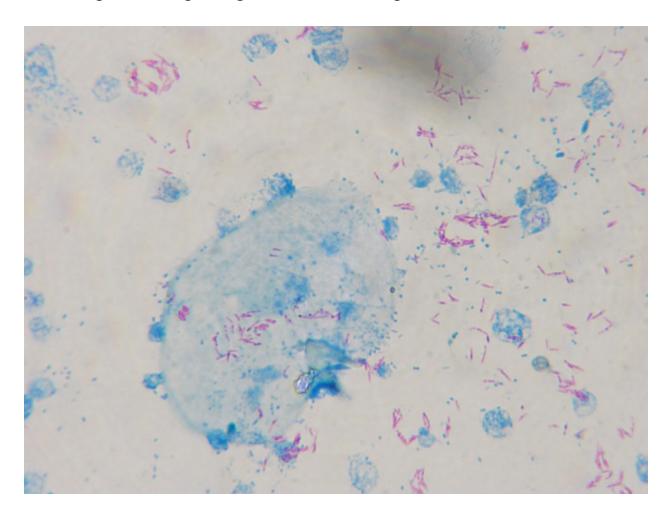
I also write arrangements for other groups, many of which are used in school R&B bands around BC. You might recognize my name from a chart you've played.

Trombone Basics

The Importance of Cleaning Your Trombone

One of the biggest mistakes trombone students almost always make is not keeping their instrument clean. Not only does it smell bad, it can also make you sick. In 2010 Scott Bean, a trombonist in Connecticut was suffering from a fever, a bad cough, a sore throat, and major weight loss problems. A doctor thought his trombone might be the problem so he took a sample from the inside of his horn. In it he found a mold called fusarium and a bacteria called mycobacterium, related to tuberculosis. According

to the article here (http://www.npr.org/templates/story/story.php?storyId=129725678), 'This stuff inside the trombone was causing an allergic reaction, which led to hypersensitivity pneumonitis, a severe inflammation of the lungs. Microscopic organisms were breaking off and getting into Bean's lungs each time he inhaled'.



'Dr. Mark Metersky took this picture of what's living in Scott Bean's trombone. The pink rods are Mycobacterium chelonaeabscessus species organisms. The round blue things are cells from the mucus membranes of Bean's mouth.' - NPR

So as you can see, not cleaning your trombone (or any instrument that comes in contact with your mouth - here's a similar case with a saxophone player http://chestjournal.chestpubs.org/content/ 138/3/724.abstract) is dangerous for your health. Not only that, I find that it's easier to play with a clean trombone. It's much easier to keep the slide moving freely, and I even find it easier to play with good tone.

So how often should you clean your trombone?

I clean mine at least once a week, sometimes twice a week or more depending on how much I'm playing. A good way to know it's time to clean it is either when it starts to smell, or when the slide becomes sticky. I never re-apply slide oil when the slide gets sticky - that will just put a new layer of goo on top of the old dried up slide oil, and that just equals a thicker layer of goo slowing down your slide. If you clean your trombone before reapplying slide oil on a clean slide, it will work a lot better and last longer before the slide gets sticky again.

How slippery should your slide be?

You should be able to hold the trombone vertically, holding the slide in your left hand as well as the rest of the trombone, and drop the slide using gravity only in to your right hand waiting below. Note that if your trombone isn't in good condition you might not be able to do this no matter how clean it is.



How to clean your trombone

I've made a video to help show students the right way to clean a trombone. You can watch it here: http://www.nicklariviere.com/ Main/Cleaning.html. (Or look for 'Cleaning your trombone' on youtube)

To clean your trombone you'll need a sink, shower, cleaning snake (available at Long & McQuade, Larsen Music, The Brass & Woodwind Shop, or Tom Lee - very cheap), towel, and a cup (optional).



1) Start by rinsing your mouthpiece in the sink. Run the cleaning snake through it to remove particles.



2) Start the shower and fill the slide with water. Not shown in the video is that you can use a cup to speed up the process. You can fill your slide a lot faster holding a cup under the shower

head and filling that with water, then pour water from the cup to the slide.



- 3) Run the cleaning snake through both sides of the slide. It is sometimes difficult to make it go around the bend at the bottom of the slide, but you should be able to make it go through that bend when going down at least one side of the slide.
- 4) Fill the slide with water again and don't use the cleaning snake, just empty it. This is necessary because often pieces of plastic and bristles will come off of the cleaning snake as you use it and get stuck in the slide. This step will hopefully remove those pieces, which otherwise might get between the outer and inner slides and cause friction.



5) Take the inner slide out of the outer slide and use a towel to wipe all the built up grease off the inner slide.



- 6) Put the inner slide away and fill just the outer slide with water again. Run the cleaning snake through it again just like you did when the inner slide was in it. This is necessary because when you used the cleaning snake before the inner slide was blocking the cleaning snake from touching the inside of the outer slide.
- 7) Like you did before, fill the slide with water and empty it without using the cleaning snake to rinse away fragments of the cleaning snake that may have come off during use.



8) Fill the bell of your trombone with water, run the cleaning snake through it, and dry it off. Don't neglect this part. There's a story about a trombone player who never cleaned this part of his horn, and one day took it to someone for repair. He cleaned it and found a clothes peg stuck inside. When he removed the clothes peg, this trombonist couldn't play anymore because he was so used to the resistance caused by having a clothes peg blocking part of the tube.



9) Reapply lubricant. That's your slide oil or cream etc. There are a lot of choices of lubricant, but I prefer Slide-o-Mix. To use Slide-o-Mix you need both the large and small bottle, even though they're sometimes sold separately. Put a drop from the small bottle at the bottom of the inner slide (on both sides), and a larger amount from the big bottle in the middle



of the inner slide, then slide in and out to make the liquids combine. For me Slide-o-Mix lasts the longest without getting gummy compared to other lubricants I've used. The worst lubricants I've seen are the 'no name' or store brand slide oils. They don't seem to last long, and at the best of times they don't make the slide that slippery. They're cheap, but you get what you pay for. Slide-o-Mix costs a little more but it works a lot better!

Correctly Setting Up Your Trombone

It seems pretty simple to put together, but there are three mistakes beginning trombone players often make.

The first is hitting the mouthpiece as they put it in to make it stay in place. By doing that it's possible to get the mouthpiece stuck in your trombone, and you'll have to get someone to use a device called a mouthpiece puller to get it back out. A better way to put

the mouthpiece in is to twist it clockwise while gently pressing it in to the trombone, as if you're screwing in a light bulb. This will lock it in place so well that you can lift the trombone off the ground just by holding on to the mouthpiece, but you can get it back out easily by twisting counter-clockwise.

The second mistake students will often make when setting up the horn is having a too-large angle between the bell and the slide. Students will often set up their trombone with a greater than 90° angle, which makes it less comfortable for



their left hand to hold the bell and slide. I prefer the angle to be a little bit less than 90°, but not too much less because the bell will get in the way of your hand when it passes by with the slide. This makes it more comfortable to hold the trombone for a long period of time.

Lastly, hand position is often overlooked with beginner players - and sometimes the habit of holding the trombone awkwardly sticks with the player through his or her career.

To hold the trombone properly, your left middle finger

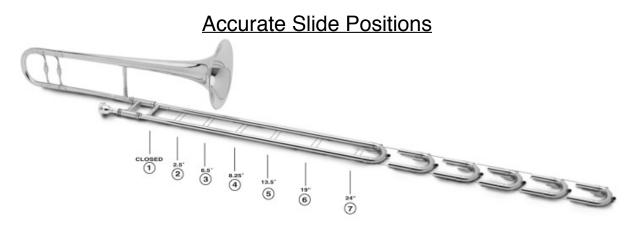


supports most of the weight and should be under the brace on the

inner slide just below the mouthpiece. Your fourth finger and pinkie below that are touching the non-mouthpiece side of the slide. Your thumb holds the bottom part of the brace the connects the bell half of the trombone, and your index



finger reaches over to the mouthpiece. Hopefully you'll find this position comfortable and it will let you play the trombone for a longer amount of time.



In order to play in tune, accurate slide positions are important. There are a couple of slide positions that often could use a little extra attention. Students will often look at a slide position chart like the one above and think that 3rd position is where the brace on the slide is lined up right with the bell, but it's actually about a finger's width before the bell. Often when a student has 3rd position in the wrong place, they'll also put 2nd position in the wrong place - it should be half way between 3rd and all the way in (1st).

The other slide position that is often played in the wrong place is 7. It's tough to reach, but it's ok to rest the slide on your fingertips to get there. 7th position should be about 3 fingers

width past the line you can see on the inner slide where it gets thicker. If you can't see that line you haven't gone far enough. Be careful though, if you move it much past 7 it will fall off.



A great way to check your slide positions is to use a

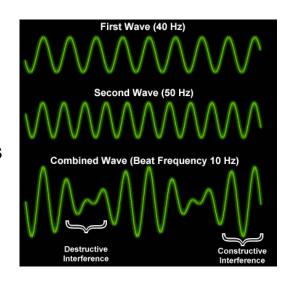
chromatic tuner. Start by playing a note in 1st position and adjusting the tuning slide. You should play either F in the middle of the bass clef or Bb at the top of the bass clef. It's best not to play the Bb at the bottom of the bass clef when checking your tuning because it's in the lower range of your playing and it might not represent the overall tuning of your trombone as well. Once you've adjusted your tuning slide play through the slide positions and adjust them when you're playing them when the tuner shows you're out of tune. When you're trying to find inaccurate positions it helps to play through them in a random order instead of in sequence; that is, play something like 1, 5, 3, 7, 2, 6, 4 instead of 1, 2, 3, 4, 5, 6, 7. Try different notes in the same position as well, sometimes the tuning is different depending on the note you're playing. This especially applies A and Ab at the top of the bass clef played in 6th and 7th position. The slide needs to be moved slightly in to keep those notes in tune.

The great thing about playing the trombone is it's easily possible to always play in tune if you listen carefully as you play. Like how when A and Ab are played in 6th and 7th position they can be flat if you don't make an adjustment, other instruments have notes that they naturally don't play in tune, and it's harder for the players to compensate for those notes. On the trombone, you're basically playing a giant tuning slide. You can always adjust your slide positions when you hear that the note your playing doesn't perfectly match the tuning of those around you.

Something to listen for to help you know when to adjust is the 'wave' that happens when the sound waves from your instrument aren't matching the sound waves from someone else's.

Try this:

Get someone to play a note and hold it; it doesn't matter if they're playing in tune or not. Make sure that this person doesn't adjust their tuning - just hold the note exactly as they started it. You play the same note, but start out very out of tune on purpose. Slowly adjust your slide so the note becomes more in tune. You should hear a 'wave' or



'beats' that resolve as the tuning settles. This graphic from thinkquest.com shows the physics of what you're hearing. The sound coming from your trombone is a wave (like every sound). When someone else is playing they're making another wave that's combining with the one you're playing. If they're playing slightly out of tune their wave is shorter or longer than yours, which means it won't line up with yours and in spots your wave may be positive while theirs is negative, as represented in the graphic. In those spots the volume of what you're hearing is lowered (see destructive interference in the graphic). This happens very quickly, so that's why you hear it as beats that keep repeating quickly until the tuning is corrected.

A professional musician is always listening for these beats as they play, and always correcting them as quickly as possible when heard. Even if you are absolutely sure that when you put your slide in a certain position it's in tune, you should change it right away if you hear that it's not in tune with the people around you. You can't assume that the people around you will adjust to you, and if no one adjusts the sound just stays out of tune.

One last thing to mention while we're on the subject of accurate slide positions is the Ab on top of 3 ledger lines above the bass clef. It's possible to play that note in 1st position but it's flat, and because the slide is already all the way in you've got no way to compensate for it. Instead always play that note in 3rd position. A professional never uses 1st for that Ab.

Alternate Slide Positions

Alternate slide positions shouldn't really be thought of as 'alternate' at all, but instead thought of as a second or third place that you can play the same note. You should think of them as just as useful as the 'regular' position. A trombonist who never uses alternate positions is like a guitar player who plays melodies all on the same string by moving his/her hand up and down the fretboard in big movements, rather then changing strings. Using alternates allows you to play faster and easier. Here's an example. This is a bit of a jazz tune called 'Joy Spring'. I've written it out here, along with the 'standard' positions. See how much slide movement is necessary to play it! And it's fast too!



Trying to play Joy Spring without using alternate slide positions is basically impossible - at least at the quick tempo it's usually played. But now, take a look at it with alternate positions.



It's now played mainly in the 6th position, which you may find awkward at first. You might also find it more awkward this way simply because you're not used to playing these notes in their alternate positions, *but* look at how much less slide movement there is! The less movement you have to do, the easier it is to play, and the more possible it is to play this piece fast. Of course, alternate slide positions aren't something that you only use when you play fast. You should get used to using them any time the alternate position is the closest, regardless of the speed. Once you get used to using them, the slow tunes will be able to be played more effortlessly, and the alternates will come more naturally to you when play something faster.

A few mistakes made by beginners

When a student gets started with an instrument, it's normal to spend a lot of time figuring it out on his or her own. This can lead to great progress, but it can also lead to some bad habits being learned. These bad habits typically are a result of a student figuring out a way to get a sound, separate notes, get higher notes, or hold the instrument that kind of work, but aren't the standard way to do it. Often the student will resist breaking away from these habits because they 'work well enough'.

For example, some students will try to get high notes by rolling their lips inward. For them, it does help get slightly higher notes, but it also comes with a drawback. The lips can only be rolled in so far before you run out of lip, and then you just can't play any higher. That point comes fairly soon. Tone also dissolves as the lips are rolled in. Correcting this can be a challenge because if the student tries to reach high notes without rolling the lips, he or she can't... at first. Just like getting rid of many other bad habits, it can be harder to play at first, but after a while it becomes much easier to play with proper technique.

Here are a few other common mistakes by self-taught beginners:

- •separating notes by squeezing the lips together instead of tonguing
- •tonguing at the end of notes instead of just the beginning (known as tongue stops, and only used in rare situations)
- •breathing in through the nose rather than the mouth
- •spending a lot of time between breathing in and playing (it should line up so that you begin blowing out and playing at the moment you're done breathing in)
- •not taking a breath in before playing (just working with whatever air is already in the lungs)
- •not using enough air (something musicians concentrate on their whole careers)

- •not getting the tongue out of the way once the note starts (leads to a bad tone and 'crumbly' sound)
- •changing the position of the mouthpiece on the lips for different ranges
- •attempting to get higher notes by smiling/wincing or other facial tension (look at a video of a great trombonist like Frank Rosolino there's basically no facial movement)
- •putting the mouthpiece too high or low on the face
- •letting air slip out between the mouthpiece and the face, or pushing too hard with the mouthpiece
- •inaccurate slide positions (not playing 7th far enough out, playing 3rd too far in and 2nd too far out so they become almost the same position)
- •leaning the right hand on the right leg, especially when the slide is in a farther position
- unusual hand positions
- •hitting the mouthpiece when putting it in to force it in to place (it can get stuck)
- •leaning the trombone on a chair when not playing (it can fall over very easily and be hard or impossible to repair)
- •never cleaning the instrument

That is only a short list of a few bad habits I've seen in self taught beginners. Possible bad habits are only limited by a player's imagination though, so just because it doesn't appear on that list doesn't mean it doesn't exist. Remember, if you think you have developed a bad playing habit, you'll have to work to correct it eventually, and the sooner you can do that the better. It may feel like changing the way you're playing is taking a step back, but if you're fixing a bad habit, your playing will get better than ever in the long run.