The Trombone

Historical Sketch

- The trombone’s earliest ancestors were, like those of all brass instruments, animal horns, hollow sticks, or other items with which the player produced a sound by buzzing the lips. People later learned to fashion more sophisticated instruments out of wood and/or metal.
- By the thirteenth century a long, metal straight trumpet called the *buisine* was common. In the fourteenth century a single-slide instrument, known in musicological circles as the “slide trumpet,” is believed to have been in use (though the earliest surviving examples of such an instrument are from several centuries later). This instrument changed pitches/harmonic series by moving the entire body of the instrument back and forth along a single tube into which the mouthpiece was inserted.
- By the mid-fifteenth century a double-slide instrument, called *trombone* in Italy, *posaune* in Germany, and *sackbut* in England and France, had appeared. These instruments were functionally almost identical to modern trombones, except that the bore, bell, and mouthpiece sizes were considerably smaller. The term “sackbut” is now commonly used to refer to these smaller predecessors of the modern trombone. The sound of these instruments was much softer and mellower than that of modern instruments, well-suited to doubling voices.
- By 1500, trombones were in use throughout Europe, being most commonly used for church and civic functions, and often doubling vocal parts. An entire family of trombones, soprano in Bb or A, alto in F, Eb, or D, tenor in Bb or A, bass in G, F, or Eb, and contrabass in BBb, was developed, but only the alto, tenor, and bass were commonly used, frequently doubling their corresponding vocal parts. The soprano appeared only sporadically and never really caught on; in trombone ensembles this role was most often filled by the cornett. The contrabass also was rare, and likely little more than a novelty.
- In the early 1600s trombone usage remained much the same as it was in the previous century, with voice doubling in church music being its most common role. Early dramatic music, including Claudio Monteverdi’s (1567-1643) famous opera *L’Orfeo*, used trombones rather prominently as well, often to symbolize death, the underworld, and/or religious themes. As the century progressed, however, trombone usage became increasingly rare, until the instrument nearly disappeared completely from England, France, Italy, and parts of northern Germany. Only in Austria did the instrument continue to thrive, and composers there used trombones very prominently in early eighteenth-century chamber music. In such works the alto trombone was the preferred “solo” trombone, though there is some debate among musicologists whether the “alto” trombone of that time was indeed a trombone in F, Eb, or D, or if it was really a Bb (tenor) trombone equipped with a smaller mouthpiece and used to play in the “alto” register.
- Beginning in the mid-eighteenth century Christoph Willibald von Gluck (1714-1787), Wolfgang Amadeus Mozart (1756-1791), and others began to exploit the trombone’s dramatic associations in operas and sacred works, and composers slowly began to use the instrument in serenades, divertimenti, and other instrumental works. Trombones became a standard part of the symphony orchestra after the early nineteenth century thanks largely to Ludwig van Beethoven’s (1770-1827) use of trombones in his fifth, sixth, and ninth symphonies.
- The eighteenth century also saw a significant change in trombone construction, with larger bell flares and bore sizes more similar to those of modern instruments being introduced. In the early nineteenth century the tenor replaced the alto as the most common solo instrument (though see the earlier note about the “alto” trombone), and the newly-invented valve was applied to some trombones, producing instruments similar to the F-attachment instruments widely used today. The valve trombone (no slide) was also invented during this century and for a time more common than the slide trombone in some locales, but never gained a long-term foothold in any country or genre. In the twentieth century an enlarged Bb tenor trombone with a bass
trombone mouthpiece and usually two rotor valves came to almost completely replace the large and unwieldy F, Eb, and G bass trombones.

- Trombone soloists became especially popular in the early nineteenth century in Leipzig, Germany, and surrounding areas. Prominent players such as Friedrich August Belcke (1795-1874) and Carl Traugott Queisser (1800-1846) were featured in concerts along with the finest string and piano soloists of the day. Later in the nineteenth and early twentieth centuries American soloists associated with the bands of John Philip Sousa (1854-1932), Arthur Pryor (1840-1942), and others demonstrated an unprecedented level of technical facility on the trombone. Pryor himself was the most famous of these soloists.

- In the twentieth century the trombone was more frequently used and used in more diverse roles than ever. Increasing amounts of solo and ensemble music were written for the instrument, and jazz opened up an entire new medium of performance. In the early twenty-first century fine trombonists were making a living as soloists, small and large ensemble performers, studio performers, and teachers in the classical, jazz, and popular realms.

Instruments

The most commonly used trombones today are the Eb alto, Bb tenor, and Bb bass. Other instruments will receive cursory mention here, but are relatively uncommon.

- Soprano trombone in Bb. This rather small instrument uses a similar mouthpiece and plays in the same register as the trumpet. A few makers do produce these now, but they are little more than novelties. Due to the extremely short slide, intonation is very difficult on these instruments and is likely a reason that they were never widely used.

- Alto trombone in Eb. This is believed by most to have been the preferred solo instrument in the trombone family during the eighteenth century; thus all solo literature for trombone written before 1800 would most likely be best played on this instrument. (A “minority report” of scholars believes that a small-bore Bb tenor trombone with a small mouthpiece was the “alto trombone” in use at the time, but modern players still tend to prefer the sound and response of the Eb instrument for period works.) In the orchestra the alto trombone should be used for the first trombone parts in most eighteenth century and many nineteenth century works.

- Tenor trombone in Bb. This is the most common trombone in use today. The small-bore straight tenor (no F-attachment) is preferred for beginning students, and professional versions of this instrument are preferred by most jazz/commercial players. Large-bore straight tenor trombones are sometimes used by principal players in bands and orchestras, although the large-bore tenor with F-attachment is usually preferred for all forms of classical music.

- Bass trombone in Bb. Really an extra-large-bore tenor trombone, this instrument most often uses two valves in order to provide a fully chromatic lower register, and the large bore and mouthpiece helps this instrument to effectively reproduce the sound of “true” bass trombones in F, Eb, or G. These instruments come in two varieties: “independent,” with the two valves in F and Gb or G (D or Eb combined) on the main body of the instrument, so that both valves can be used individually, or “dependent,” with the second valve in D or Eb mounted on the F-attachment tubing, making it where the second valve can be used only when the first valve is depressed.

- Bass trombones in F, Eb, or G. These instruments are still occasionally used today, but have mostly been replaced by the Bb bass trombone because the long slides require a handle to operate, making them rather clumsy. That said, an F bass trombone (usually somewhat inaccurately) referred to as an F “contrabass” trombone) is becoming increasingly common in certain contexts. The addition of two valves has rendered the outer positions (and thus the handle) unnecessary, so the instrument can be operated more efficiently than the older F bass trombones.

- Contrabass trombone in BBb. The modern version of this instrument has a quadruple-slide, making the slide the same length functionally as that of the Bb tenor or bass trombone. This instrument usually sometimes uses a mouthpiece similar to a small tuba mouthpiece, and has a very deep, dark sound. This instrument was never very common, and with F “contrabass” trombones increasing in quality and availability these have
fallen into almost complete disuse. The older (i.e. “sackbut” era) version of this instrument was
EXTREMELY long, requiring a huge handle to operate.

Choosing Students for the Trombone

- Facial structure. An extremely small mouth and/or thin lips may make the student a better candidate for a higher brass instrument, while very large-lipped individuals may be more successful on tuba. Extreme overbites or underbites can be a problem on brass instruments but can in some cases even be beneficial for woodwind players. A student with a lisp may have difficulty articulating properly on any wind instrument, but more so with the brasses.
- Physical stature. It’s hard to tell with young students, although if a student is REALLY small at age 10-12 they might never “grow into” the instrument. It’s a good idea to have a parent meeting before choosing instruments for many reasons, but one of these is to take a look at the stature of students’ parents to see if those students are likely to be able to eventually reach seventh position!
- When allowing students to try instruments, have them try to create a buzz first of all. No really special embouchure formations—just buzz the lips, then do it in the mouthpiece. If a student can get at least an octave or so, he or she may be a good candidate for the trombone. If higher or lower ranges are favored, try the trumpet, horn, or tuba, as needed. If the student can’t buzz at all, strings, percussion, or woodwinds may be better.
- After letting the student buzz the mouthpiece, you can let him or her play the instrument while you hold it and manipulate the slide.
- Again, a student that gets a reasonably good sound on the mouthpiece and/or instrument, and LIKES the trombone will probably be ok (with practice, of course).

Pedagogical Concepts

- Instrumentation. For beginners, small-bore, straight tenor trombones are preferable, as F-attachment instruments are often too heavy, and using an attachment too early often keeps the student from mastering the longer positions. For high school players moving to a large-bore F-attachment instrument is usually preferable.
- A daily warm-up routine of some sort is a must for trombonists (and all brass players), as these not only prepare the player for the day’s playing, but also reinforce the fundamental aspects of trombone playing and even help prevent injuries from overexertion. Make fundamental exercises a part of each band rehearsal, but also encourage students to play warm-up exercises in individual practice.
- Make sure players learn at least a short chromatic scale as early as possible. This will help to avoid a great many difficulties later on, as students will be familiar with a fuller spectrum of notes and slide positions.
- Make sure that students use the fingers, wrist, elbow, and shoulder together as a sort of “system of hinges” in order to operate the slide. Overdependence on the elbow leads to “herky-jerky” slide movements, and eventually to slide alignment problems.
- As players advance, the “grip” on the slide should become increasingly loose, so that eventually there is enough “play” between the thumb and fingers on the right hand that slide movement becomes almost a “throwing and catching” kind of operation. Be aware that this relaxed and efficient slide action can only be achieved if the instrument is clean, properly lubricated, and in good repair.
- Teach players to take a deep, full breath, and make sure they are blowing as efficiently as possible. Often students will try to do more work with the embouchure than with the air and tongue, producing a thin, strident sound. Have students use the air to manipulate the embouchure, rather than putting a great deal of direct pressure on the lips. This will help maintain a better tone quality and also gives students more playing stamina.
- Also, do NOT press the mouthpiece into the face. Use no more pressure than is necessary to create a proper seal between the lips and mouthpiece—to do otherwise is physically taxing and can cause long-term damage. As stated above, let the AIR do most of the work.
- The trombone slide is very delicate, with tolerances much tighter than those of the valves on other brass instruments. Because the slide is more exposed than the valve sections on valved brass instruments, it is especially prone to being damaged. Teach students to be very careful with the slide, and teach them how to properly clean and lubricate the slide. A thorough cleaning process should be completed at least once per semester.

- Tonguing should be simple – just say “toh” (or “taw,” “tee,” or other manipulations). For multiple-tonguing use “tu-ku” for double tonguing and “tu-tu-ku” or “tu-ku-tu” for triple tonguing, changing the vowel as needed for different registers just as when single-tonguing. The “t” can be replaced with a “d” if that produces a more desirable result.

- Lip slurs are great for developing the embouchure, but for beginning players trying to mix natural slurs with legato tongue in “slurred” passages can produce an inconsistent and sloppy legato sound. Teach them to use the tongue and AIR properly to produce a smooth, but CLEAN legato. Although most method books indicate that trombonists should tongue softly in order to play legato, even more importantly, students should be told to blow a steady stream of air, and to move the slide quickly from note to note. The hardness or softness of the tonguing will then usually resolve itself. *You may need to work with trombonists individually or at least separately as a section on this, as this is a problem unique to the trombone. When players become more advanced judicious use of natural slurs when available can be encouraged.

- Scales and arpeggios should be learned, memorized, and practiced EVERY day.

- As with all instruments, individual practice is a MUST, and obtaining a private teacher is HIGHLY desirable.

- Trombone players will encounter passages needing straight mutes fairly early on. High school players may need cup mutes, plungers, and perhaps Harmon or bucket mutes.

- Advanced players will want to begin learning to read in tenor and perhaps alto clefs. While music requiring these is rarely encountered in high school level band music (though tenor clef is beginning to appear more often), orchestral pieces employ them frequently. The method books by Reginald H. Fink and Brad Edwards on this topic are excellent for initial training in clef reading.

**Assembly, Lubrication, Care**

- When assembling the trombone, set the case on the floor, or a sturdy table—NOT on a chair. Remove the slide section first, hold it vertically, and place the bell section on it, TAKING CARE NOT TO CRASH THE BELL INTO THE SLIDE. Then place the mouthpiece in the receiver and twist slightly—do NOT hit or force the mouthpiece.

- Lubrication. The product I recommend is YAMAHA TROMBONE SLIDE LUBRICANT. This works as well as any slide cream, but is as easy to apply as petroleum-based slide oil, which I do NOT recommend. Make sure the slide is clean, place a thin line of product about halfway down each inner slide tube, reassemble the slide, work the outer slide up and down to spread the product, spray with a small amount of water, and go! Lubricate rotary valves by placing rotor oil on the spindle under the valve cap and under the stop screw, and on all moving parts. Remove the valve slides and squirt some regular valve oil down into the valves for even faster action (excess will have to be emptied). Don’t let this valve oil run into the handslide. Do NOT allow students to remove rotary valves. You can do this to clean them if you so desire— instructions for the process can be found on various Internet sites. If in doubt, leave this to repairmen. Tuning slides require just a small amount of tuning slide grease to keep them moving.

- If you have to restring a rotary valve (most trombones today have mechanical linkages, though), a quick internet search will yield instructions. Woven fishing line is an acceptable alternative to the more expensive “rotary valve string” sold in music stores.

**Tips for care.**

- When placing the trombone on the ground place it somewhere away from heavy foot traffic, with the mouthpiece receiver, bell, and tuning slides on the ground (the mouthpiece should be removed). This keeps the weight of the instrument off of the slide, which can bend quite easily.
DO NOT place the instrument on a chair with the bell in the seat and the slide bumper on the floor. This places unneeded weight on the slide and leaves the instrument prone to being knocked over by inattentive students.

The slide and mouthpiece should be cleaned regularly. The inner slide tubes should be wiped clean before applying additional lubricant to avoid buildup and dragging. Even better, clean the insides of the outer slide tubes using a cleaning rod and cloth as well before each application of lubricant.

Occasionally a more thorough cleaning is needed. To do this, fill the assembled slide with warm water and a bit of dishwashing detergent, and then work a trombone cleaning snake through both sets of tubes and into the slide crook. Pour out the water and then rinse with clean water until all of the soapy residue is gone. Repeat this process with the outer slide only, then wipe clean the inner slide tubes before applying lubricant. DO NOT run the cleaning snake through the inner slide tubes when the slide is disassembled, as this can bend the inner tubes.

Very little lubricant is needed to make the slide work well. Both the Yamaha product recommended here and the various available creams will cause dragging if allowed to build up excessively.

Emphasize to students that the instruments are VERY delicate, and must be cared for. Still, I hate to say it, but they WILL drop the slides.

The First Day

- On the first day “with instruments” tell students they should leave their instruments in their cases. Before removing instruments, begin the rehearsal with some breathing exercises such as those found in *The Breathing Gym*. If possible, every rehearsal should begin with some of these exercises.
- After breathing, have students get their mouthpieces only. Have them buzz “any note,” and then have the class match pitches in simple patterns (i.e. middle register whole notes).
- Have students place their cases on the floor, and “walk them through” removing and assembling the trombone as indicated above (under “Assembly, Lubrication, Care”). The trombone is delicate and students tend to be careless with it, so make them go through the process step by step with you.
- Show students how to lubricate the slide (see above under “Assembly, Lubrication, Care”), and have them do so. (Hint: You can have your music store include a tube of Yamaha Trombone Slide Oil, which I recommend, with the instrument, along with a spray bottle.)
- Demonstrate the correct holding position for the trombone. The left arm should support all of the weight, with the thumb around the first bell brace (or on the trigger paddle if the instrument has an F-attachment), the index finger going across the slide to the mouthpiece receiver, and the other three fingers wrapped around the lower cork barrel. The right hand should be free to move the slide. Place two fingers on either side of the lower leg of the slide, holding the slide brace between the thumb and the index and middle fingers. The slide should be held loosely, with the fingertips only. Move the slide using all of the joints of the fingers, wrist, elbow, and shoulder as a “system of hinges.”
- Teach students how to find each slide position as follows. Keep in mind, though, that these guides are a starting point only; slide positions are not fixed locations but must be adjusted according to intonation needs of the moment:
  - First position: Just barely past the stop. You shouldn’t be able to see the inner slide at all, but it is good to be out just a bit.
  - Second position: The slide brace will be about halfway between the bell and the stop.
  - Third position: The slide brace will be just inside the bell.
  - Fourth position: The back part of the outer slide will be just past the bell.
  - Sixth position: As far as the student can comfortably reach. (For beginners, this will probably still be a little short, but it is a good starting place.)
  - Seventh position: As far as the student can reach when the shoulder, elbow, wrist, and fingers are extended. (Most beginners will not be able to reach an in-tune seventh position. This is ok for the moment.)
• Fifth position: When in seventh position, allow the right elbow to “drop” and bring the hand back with it. This should be approximately fifth position.

• After students have a rudimentary idea of where the slide positions are, beginning on fourth-line F, teach students a Remington pattern whole-note exercise by rote. Repeat beginning on low Bb. If time allows, try doing the same starting on the Bb on top of the staff. This gets the students’ “playing range” well ahead of their “reading range.” While not all students will be able to play this whole range of notes from day one, the attempt is still good, and places you in a situation where each “new note” introduced in students’ reading is one that they have already played in a “rote” exercise, at least for the first few months.

• If time allows, distribute warm-up sheets and have the students repeat the “rote” Remington exercise while looking at it on the sheet. Hopefully some associations between reading and playing will begin to develop.

• Lastly, “walk students through” disassembly of the instrument, going through the assembly process in reverse.

Suggested Method Books for Individual Practice

Tenor Trombone:

- Arban, Jean-Baptiste/Alessi, Bowman: Complete Method
- Bordner, Gerald: Practical Studies for Trombone, vols. 1 and 2
- Bordogni, Giulio Marco/Mulcahy: Complete Solfeggi
- Edwards, Brad: Simply Singing for Trombone
- Fink, Reginald H.: Introducing the Alto Clef
- Fink, Reginald H.: Introducing the F-Attachment
- Fink, Reginald H.: Introducing Legato for Trombone
- Fink, Reginald H.: Introducing the Tenor Clef
- Gower, William and Voxman, Himie: Rubank Advanced Method for Trombone, vols. 1 and 2
- Lafosse, Andre: School of Sight Reading and Style, Book A
- Remington, Emory/Hunsberger: The Remington Warm-Up Studies
- Tyrell, H.W.: 40 Progressive Studies for Trombone

Bass Trombone:

- Aharoni, Eliezer: New Method for the Modern Bass Trombone
- Bordogni, Giulio Marco/Ostrander: Melodious Etudes for Bass Trombone
- Getchell, Robert W./Hovey: Practical Studies for Tuba, vols. 1 and 2
- Gillis, Lew: 20 Etudes
- Gillis, Lew: 70 Progressive Studies
- Grigoriev, Boris/Ostrander: 24 Studies
- Ostrander, Allen: Method for Bass Trombone
- Raph, Alan: The Double-Valve Bass Trombone
- Tyrell, H.W.: Advanced Studies for BB-Flat Bass

Suggested Reading


**Suggested Instruments**

- Beginner Tenors
  - Yamaha YSL-354
  - King 606
  - Conn 22H “Director”
  - Jupiter 332, 432
  - pBone (*These plastic/fiberglass instruments might be acceptable for beginners, but will need to be replaced with “real” trombones in the second year.*)
Professional Tenors
- Yamaha YSL-682, YSL-882 series
- Conn 88H series
- Bach Stradivarius 42 series
- Benge 165F, 190F
- Courtois AC420, AC440
- Getzen 1047F, 3047F
- Blessing B-88 series
- Rath (modular/custom instruments)
- Edwards (modular/custom instruments)
- Shires (modular/custom instruments)

Professional Basses
Yamaha YBL-822, YBL-813 Please note that certain Chinese manufacturers are now producing acceptable quality instruments that are either copies of above models or are at least comparable to them, at substantially lower cost. Importers of these instruments include Wessex Tubas, Big Mouth Brass, Mack Brass, JP-Sterling, Dillon Music, Tuba Exchange, and perhaps others. These instruments are worth considering, particularly in the presence of budget constraints.
- Bach Stradivarius 50 series
- Courtois AC550
- Getzen 1052FD, 1062FD, 3062FD
- Holton TR-181
- Benge 290
- Rath (modular/custom instruments)
- Edwards (modular/custom instruments)
- Shires (modular/custom instruments)

Please note that certain Chinese manufacturers are now producing acceptable quality instruments that are either copies of above models or are at least comparable to them, at substantially lower cost. Importers of these instruments include JP-Rath, Mack Brass, Wessex Tubas, Andreas Eastman, and perhaps others. These instruments are worth considering, particularly in the presence of budget constraints.

Suggested Mouthpieces

- Tenor
  - Bach 7, 7C, 6.5AL, 5GS, 5G, 4G
  - Schilke 47, 51, 51C4, 52
  - Wick 5BS, 5AL, 4AL, 4BL

*The Schilke 47 and Bach 6.5AL are great first mouthpieces for trombonists.

- Bass
  - Bach 1.5G, 1.25G, 1G
  - Schilke 58, 59
  - Yamaha Yeo

*The Schilke 58 and Bach 1.5G, or similar-sized mouthpieces from other makers, are probably the best first bass mouthpieces.

Additional Note on Mouthpieces
In addition to the above brands, Faxx makes fine copies of some Bach models for a lower price. Yamaha mouthpieces use a similar numbering system to Schilke, though the sizes vary just a bit.

**Prominent Players (worth listening to)**

- **Classical Tenor**
  - Christian Lindberg
  - Joseph Alessi
  - Mark Lawrence
  - Alain Trudel
  - Jorgen van Rijen
  - Brett Baker

- **Jazz Tenor**
  - Carl Fontana
  - Bill Watrous
  - Wycliffe Gordon
  - J.J. Johnson
  - Conrad Herwig
  - Kai Winding

- **Bass (all)**
  - Douglas Yeo
  - Randy Hawes
  - Blair Bollinger
  - David Taylor
  - Charles Vernon
  - Ben van Dijk

**Online Resources**

- International Trombone Association. [www.trombone.net](http://www.trombone.net)
- The Trombone Forum. [www.tromboneforum.org](http://www.tromboneforum.org)
- Douglas Yeo Trombone Web Site. [www.yeodoug.com](http://www.yeodoug.com)
- Dr. Everett’s Blog. [thereformingtrombonist.wordpress.com](http://thereformingtrombonist.wordpress.com)