

The Trumpet, Cornet, and Related Instruments

Historical Sketch

- The trumpet's earliest ancestors (and those of all brass instruments) were simply animal horns, hollow sticks, or other items with which the player produced a sound by buzzing the lips within an aperture. Later people learned to fashion more sophisticated instruments by working wood and/or metal.
- By the 13th century a long, metal straight trumpet, called the *buisine* was in common use. For the next several centuries brass trumpets retained the basic playing properties of this early instrument, although they were made in several different shapes. Since keys and valves were not yet invented for brass instruments, these trumpets could only play in a single key, on a single overtone series. This led to the development of *clarino* playing, or playing in the extreme upper register of the instrument where the partials are closer together, allowing for more melodic playing.
- A somewhat related instrument used primarily during the 16th and 17th centuries was the cornett (which has no relation to the modern cornet). This instrument was fashioned of wood and changed pitch using a series of finger holes, like early woodwinds, but the tone was produced by buzzing, like brass instruments. This instrument is generally associated with the development of brass instruments and is thus mentioned here, but in reality its relationship to the modern trumpet is limited to similarities in mouthpiece nature and size, and playing range. Its tone quality was a great deal mellower than that of the trumpet.
- The tradition of *clarino* playing reached its peak during the early eighteenth century in works by composers such as J.S. Bach, Leopold Mozart, and Michael Haydn, but began a serious decline in the latter part of the eighteenth century. During this time writing for trumpet was mostly harmonic, usually reinforcing chord tones in instrumental music. However, toward the end of the century the keyed trumpet, which changed pitches using a system related to that found in woodwind instruments, was developed. Joseph Haydn's famous trumpet concerto was written for this instrument. This keyed trumpet is the immediate predecessor to the modern valved trumpet.
- The development of the valve began in the latter part of the eighteenth century, but the idea was perfected during the mid-1810s by Heinrich Stözel and Friedrich Bluhmel. Valves were added to the trumpet and also to related instruments including the bugle (creating the flugelhorn), and the posthorn (creating the cornet). The cornet, which has a bit mellower sound than the trumpet due to its more predominantly conical tubing, was the preferred solo instrument in the trumpet family for some time, especially in the concert band and brass band. It was occasionally found in nineteenth-century orchestras, but was never incorporated into the standard orchestral instrumentation.
- The modern three-valve arrangement for cornets, trumpets, etc. was perfected and standardized within a few decades after the valve's invention, and by the end of the century virtuoso cornetists and trumpeters were dazzling audiences in Europe and America.
- In the twentieth century the trumpet and cornet were both used effectively in classical and jazz idioms, but the cornet slowly declined in America throughout most of the century, and by the beginning of the twenty-first century most cornets in America were student instruments. The cornet still has a prominent place in the British brass band movement, however, as these ensembles use cornets rather than trumpets to supply the upper voices. Brass bands also normally include a flugelhorn, though this instrument is most readily associated with jazz, where it provides a mellow sound that is better suited to some jazz genres than that of the trumpet.

Instruments

Trumpets (and related instruments) are available in a wide variety of keys and utilize both piston and rotary valves. Piston valve instruments are typically used in America, England, and France, while rotary trumpets are preferred in Germanic countries. A listing and brief annotation of the most commonly-used trumpets is given below:

- Piccolo trumpet in Bb or A. Most piccolo trumpets can be tuned to either Bb or A, using an interchangeable leadpipe. Which key is used generally depends on the piece being performed. This instrument is most commonly used for playing *clarino*-type parts in early music, as well as in modern works for brass quintet or other chamber ensembles.
- Soprano trumpets in Eb and D. Occasionally one might find a single instrument that can be tuned to either of these keys, although it is more common to find these as separate instruments. These instruments are used occasionally in brass chamber music, although they are more commonly used for performances of orchestral music (especially earlier works). The Eb trumpet is often used when performing the Haydn and Hummel trumpet concerti.
- Bb and C trumpets. These are the most commonly found trumpets used today. The Bb trumpet is the standard instrument used in most wind band music, jazz, and much of the solo and chamber literature. The C trumpet, which developed at the beginning of the twentieth century, is now considered the standard orchestral trumpet.

- Alto trumpets in F and Eb. Parts originally intended for these instruments are now normally played on Bb or C trumpets. However, the F trumpet was especially common in the late nineteenth century, and was the most common orchestral trumpet called for in period works such as those by Gustav Mahler and Richard Strauss.
- Bass trumpets in Bb and C. Pitched one octave below the “standard” Bb and C trumpets in common use. The bass trumpet is rarely written for today, but is called for frequently in the operas of Richard Wagner, as well as in orchestral works by composers including Igor Stravinsky and Leoš Janáček.
- Flugelhorn in Bb. In America this instrument is most commonly used in jazz, where its warm color provides a nice contrast to the brighter Bb trumpets. The instrument is also part of the standard brass band compliment.
- Cornet in Bb. This instrument has declined somewhat in use in America, although a century ago it was one of the more popular solo instruments used in performances of the famous bands of John Philip Sousa, Arthur Pryor, and Edwin Franko Goldman. While called for alongside trumpets in many American band works, today all of the trumpet and cornet parts are commonly played by trumpets in American bands. In Britain and Europe, however, the use of the instrument in the brass band has helped it to maintain a firm hold both as a solo and ensemble instrument. The cornet is slowly making a comeback in America, due in part to the beginnings of a brass band movement here in the British tradition. Many band directors elect to start their beginning “trumpeters” on cornet, as the cornet is considered to be a bit easier to play than the trumpet, and the mellower sound is easier on band directors’ and parents’ ears!

Choosing Students for the Cornet/Trumpet

- Facial structure. An extremely large mouth and/or fleshy lips may make the student a better candidate for a lower brass instrument. 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. Physical size is usually not an issue with this instrument, since it is small enough to be easily handled by most students.
- 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, and then do it in the mouthpiece. If a student can get at least an octave or so within the normal playing range of the instrument, they may be a good candidate. If they favor low notes, try low brass. If they can’t buzz at all, strings, percussion, or woodwinds may be better.
- After letting them buzz the mouthpiece, you can let them play the instrument while you hold it and manipulate the valves.
- Again, if they get a reasonably good sound on the mouthpiece and/or instrument, and they LIKE the trumpet, they’ll probably be ok (with practice, of course).
- A student that shows promise for the cornet/trumpet might show similar or equal promise for the horn. Since bands often have an abundance of competent trumpeters and a lack of hornists, students that seem intelligent enough and interested in the horn, and that make a good initial sound on the horn, should be encouraged to start on that instrument instead.
- As students grow older a few might find themselves not as well-suited to the cornet/trumpet as at first—perhaps the lips “fill out” too much or they otherwise have trouble reaching the higher range, even with diligent practice. Do not be afraid to transfer these students to euphonium or tuba, but keep in mind that, if lack of practice is the issue causing problems, a second-rate trumpeter will simply become a second-rate low brass player.

Pedagogical Concepts

- Instrumentation. For beginners, cornets are basically preferable to trumpets, as they are easier for younger players to play, and young players generally learn to produce a good sound more quickly. (The sound is also mellower, and easier on the directors’ ears!!!) When students are ready to move to an upper-line instrument they can then switch to trumpet. You might encourage them, however, to keep their old cornets rather than exchanging them, so that you can have them play cornets during high school concert band pieces that have separate parts for cornet and trumpet.
- A daily warm-up routine of some sort is a must for trumpeters (and all brass players), as these not only prepare the player for the day’s playing, but also reinforce the fundamental aspects of trumpet playing and even help prevent injuries from overexertion. This may be more important for trumpeters than for lower brass players, since the high tessitura lends itself to faster fatiguing of the embouchure.
- 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 fingerings.
- The third valve slide (and the first valve slide as well if possible) MUST be extended when playing 1-3 or 1-2-3 valve combinations, as the notes sounding in these combinations are otherwise VERY sharp.
- Teach players to take a deep, low 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.

- Trumpet players are especially prone to trying to overexert themselves in the upper register, usually doing more harm than good. The high register should be developed gradually, adding notes only when they can be reached with minimal effort. Chromatic long tones into the upper register, as well as harmonic-series lip slurs into the upper partials can help to develop the lower register properly.
- Tonguing should be simple – just say “tah” (or “tee,” “taw,” or other manipulations). For multiple-tonguing use “tu-ku” for double tonguing and “tu-tu-ku” or “tu-ku-tu” for triple tonguing.
- 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.
- Trumpeters will use mutes more frequently than other brass players, and should be encouraged or required to own straight, cup, and Harmon mutes by the time they reach high school. Calls for bucket mutes might be found rarely. Parts calling for plungers are often encountered in jazz charts, but putting the hand over the bell is usually equally effective.
- Transposition. Trumpet players are sometimes called upon to transpose parts written for instruments pitched in keys other than B-flat. Whenever possible, players will simply use the appropriate instrument (for example, using a C trumpet for parts written for trumpet in C). However, this is not always possible, and professional players consider transposition to be a necessary skill for the trumpeter. Advanced students who want to develop this skill should do so with the guidance of a qualified private teacher—future music majors will get ahead by developing this skill! Most high school players, however, will never encounter music requiring transposition.

Assembly, Lubrication, Care

- Assembling the trumpet is simple – place the mouthpiece in the receiver and twist. Do NOT hit the mouthpiece.
- Lubrication. Any standard valve oil is acceptable for piston valve instruments. Pull the piston out slightly, place a few drops of oil, and replace. Tuning slides require just a small amount of tuning slide grease to keep them moving, though some students lubricate the first and valve slides with valve oil or trombone slide lubricant to keep them moving freely.

Suggested Method Books for Individual Practice

- Arban, J./Goldman, E.: *Complete Conservatory Method for Trumpet*
- Bordogni, M./Porret: *24 Vocalises*
- Bousquet: *36 Celebrated Studies*
- Brahms, J.: *12 Etudes*
- Brandt: *34 Studies*
- Charlier, T.: *Etudes transcendantes*
- Clarke, H.L.: *Technical Studies*
- Getchell, R.W.: *Practical Studies for Trumpet*, vols. 1 and 2
- Kopprasch, C.: *Sixty Selected Studies for Trumpet*, vols. 1 and 2
- Schlossberg: *Daily Drills and Technical Studies*

Suggested Reading

Bate, Phillip. *The Trumpet and Trombone: An Outline of Their History, Development, and Construction*, 2nd ed. New York: W.W. Norton and Company, 1978.

Dale, Delbert A. *Trumpet Technique*. London: Oxford University Press, 1965.

Farkas, Philip. *The Art of Brass Playing*. Rochester, New York: Wind Music, Inc., 1962.

Fasman, Mark J. *Brass Bibliography*. Bloomington, Indiana: Indiana University Press, 1990.

Johnson, Keith. *The Art of Trumpet Playing*. Denton, TX: Gore Publishing Co., 1994

Mathie, Gordon. *Trumpet Teacher's Guide: A Bibliography of Selected and Graded Etudes*. Cincinnati, Ohio: Queen City Brass, 1984.

Sherman, Roger. *The Trumpeter's Handbook: A Comprehensive Guide to Playing and Teaching the Trumpet*. Athens, Ohio: Accura Music, 1979.

Tarr, Edward H. *The Trumpet*. Translated from the German by S.E. Plank and Edward Tarr. Portland, Oregon: Amadeus Press, 1988.

Suggested Instruments

Only Bb instruments are listed here, since those are the ones that most students will need to purchase and use. Students that want to major in music will probably need C trumpets and other instruments, and should purchase those under the supervision and direction of a professional player/teacher.

- Beginner Bb Cornets
 - Yamaha YCR-2310II or YCR-2330II
 - Getzen 381
 - King 603W or 605W
 - Bach CR300 or CR310
- Professional Bb Trumpets
 - Yamaha YTR-6335
 - Conn Vintage One
 - Bach Stradivarius 180 Series
 - Benge 90B

Suggested Mouthpieces

- Cornet
 - Bach 6, 7
 - Yamaha 11E4
 - Wick 5B, 7

*All of these cornet mouthpieces are suitable for beginners.

- Trumpet
 - Bach 3C, 5, 5C, 6B, 7B, 7C
 - Schilke 11, 14, 15, 15B, 17, 18

Prominent Players (worth listening to)

- Classical
 - Maurice Andre
 - Adolph Herseth
 - Philip Smith
 - Allen Vizzuti
 - Timofei Dokshizer
 - Fred Mills
 - Ronald Romm
 - Jens Lindemann
- Jazz
 - Louis Armstrong
 - Wynton Marsalis
 - Arturo Sandoval
 - Dizzy Gillespie
 - Miles Davis
 - Maynard Ferguson

Online Resources

- International Trumpet Guild. <http://www.trumpetguild.org>
- Trumpet Herald. <http://www.trumpetherald.com>
- Trumpet Player Online. <http://www.trumpetplayeronline.com>