

The Euphonium and Baritone Horn

Historical Sketch

- Like the tuba, to which they are closely related, the euphonium and baritone horn trace their lineage to the serpent and ophicleide (see the tuba reading for additional information), and were made possible by the invention of the valve in the mid-1810s. Wilhelm Wieprecht, one of the individuals credited with the invention of the tuba, developed instruments roughly analogous to the modern baritone horn and euphonium as early as 1828, though an inventor from Weimar named Sommer is generally credited with developing the immediate ancestor of the modern instruments in the early 1840s. Adolphe Sax also played a pivotal role in the development of these instruments, as the modern baritone horn is essentially descended from Sax's baritone saxhorn, and the euphonium from his bass saxhorn. Following the invention of the compensating system by David Blaikley in the 1870s, a euphonium essentially the same as that preferred by modern professional players was introduced. (*The compensating system is a technology which corrects the inherent sharpness in certain valve combinations, and is used on practically all of the better modern euphoniums and on some tubas.)
- The above information is somewhat over-simplified, and omits the several variations of these instruments which emerged during the nineteenth century. Perhaps the most important of these variations was the double-belled euphonium, an instrument which enabled the player to alternate between a large "euphonium" bell and a smaller "baritone" bell to create different tone colors. This instrument was preferred by prominent American euphoniumists during the late nineteenth and early twentieth centuries, but was eventually supplanted by the British-style instruments in use by practically all modern professionals. Another of these variations was the "French C tuba," a six-valve instrument pitched one whole-step higher than the modern euphonium, yet used as the lowest brass voice in French orchestras well into the twentieth century.
- Baritone horns and euphoniums formed an integral part of the brass bands which emerged throughout Europe during the mid-nineteenth century. The euphonium especially became a frequently employed solo instrument in these ensembles, a situation which has continued into modern times. Although a few concert band composers have called for both the baritone horn and euphonium, usually only the latter instrument is employed in concert band scores (although with parts often erroneously marked "baritone"). As in the brass bands, concert bands have traditionally employed the euphonium as the preferred tenor soloist.
- A few composers, including Gustav Holst and Richard Strauss have employed the euphonium (under the name "tenor tuba") in orchestral works. A few players have used the euphonium instead of the tuba when playing ophicleide parts in early nineteenth-century works with success, but these parts are still normally played on the tuba. The German tenorhorn, an instrument analogous to the baritone horn, is employed in works by Gustav Mahler and Leoš Janáček. Nevertheless, neither the euphonium nor the baritone horn has been incorporated into the standard orchestral instrumentation.
- As a solo instrument the euphonium has always enjoyed a sizeable repertoire of showpieces for performance with concert band or brass band, and the majority of new solo works for the instrument still emerge from brass band composers. Euphonium players have always borrowed solo repertoire from trombonists, cornetists, trumpeters, cellists, and bassoonists, often with considerable success. The baritone horn has almost no solo literature of its own, though a small number of British players are currently working to make a place for that instrument in a solo role.
- Chamber ensembles of tuba and euphonium players are also now quite common, especially on college and university campuses. These ensembles increase the visibility of the tuba and euphonium through performing opportunities of all types. A few individuals have experimented with using the baritone horn in these ensembles for certain works.

Instruments

- Euphonium in Bb. The euphonium is essentially a "tenor tuba," having a bore profile and sound similar to those of the tuba, but pitched an octave higher than the BBb tuba. The large, predominantly conical tubing of this instruments contributes to its warm, sonorous tone. Modern euphoniums can have three or four valves, and the best instruments employ the compensating system with fingerings including the fourth valve. Practically all American-made instruments, whether they are called baritone horns or euphoniums, are euphoniums. That said, a few of these instruments (such as the old Conn and King three-valve, bell front, small-bore "baritones" are really "in between." In German-speaking countries the euphonium is sometimes referred to as the "baryton."
- Baritone horn in Bb. While sharing the same fundamental pitch, range, and fingerings as the euphonium, the baritone horn is much smaller in bore, bell, and mouthpiece size, and has primarily cylindrical tubing. Its sound is much brighter and more "trombone-like" than that of the euphonium. This instrument is today almost exclusively found in European brass bands. In German-speaking countries this instrument is referred to as the "tenorhorn." Although baritone horns were once almost universally three-valve instruments, four-valve models do exist today, including some compensating models.
- Eb alto/tenor horn. Called alto horn in the US and tenor horn in Britain, this instrument is basically a smaller version of the baritone horn, pitched a fourth higher. It is found only in brass band music today, though early concert bands sometimes used this instrument in lieu of the French horn.

Choosing Students for the Euphonium

- 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 in to the instrument. It's a good idea to have a parent meeting before choosing instruments for many reasons, but one of these is to see if certain students are likely to be able to eventually manage the large low brass instruments.
- 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, they may be a good candidate for the euphonium. If they favor higher or lower ranges, try those brasses. 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 euphonium, they'll probably be ok (with practice, of course).
- A student that shows promise for the euphonium will likely show similar or equal promise for the trombone. A number of factors can help to determine which of the two a student should play, including parents' arm lengths (if the parents are short/unable to reach seventh position, the child might not be able to either), financial situation (the child may *need* a school-owned instrument), and personal preference (if you've done your job in demonstrating and promoting all the instruments, some students will probably *choose* the euphonium). You will most likely have better luck getting good euphoniumists by starting students on the instrument, rather than transferring second-rate trumpeters later on. That said, a student that plays another instrument and becomes ill-suited to it as he or she develops—for example, a trumpeter whose lips “fill out” too much for the trumpet as he or she grows older—may become a good euphonium player with sufficient practice.
- Start more euphoniumists than you think you will need, and always encourage them to “stick with it” and excel. The low brasses have a high dropout rate, unfortunately, and you will need to anticipate this and try to counteract it, if possible.

Pedagogical Concepts

- Instrumentation. Instrument size is not an issue with euphonium like it is with the tuba—it is possible to purchase appropriate four-valve instruments for students to use from the very beginning. Compensating systems are preferred, but not always cost-effective (compensating instruments sometimes cost twice as much as four-valve non-compensating instruments). A good, affordable, standard “school euphonium” is the Yamaha YEP-321, an intermediate four-valve non-compensating instrument.
- If students do wish to purchase their own instruments, they need to personally try as many euphoniums as possible, showing preference for the four-valve compensating instruments. Inconsistencies in euphoniums abound, even from the same maker, and several of the same model might need to be tried before a suitable instrument is found (Yamahas are usually an exception to this). Woodwind and Brasswind in Indiana, Dillon Music in New Jersey, Baltimore Brass in Maryland, and Custom Music in Michigan all keep a reasonably large selection of euphoniums on hand, and you MIGHT be able to get them to ship them out to let you try them (although this will incur substantial cost).
- Clefs. Euphonium parts can be written in bass clef, or as a transposing instrument in treble clef, with the sounding pitch a major ninth lower than written (like the tenor sax). I recommend starting students with bass clef, though students that transfer from trumpet or another treble clef instrument can use treble clef. Ideally, students will eventually learn to read both; this is a must for those that want to major in music in college.
- Mouthpieces. While it is generally accepted that the euphonium and the trombone use the same mouthpiece, a good euphonium mouthpiece is generally deeper and more funnel-shaped than a good trombone mouthpiece. Students that use school-owned instruments should still own their own mouthpieces, as they will be more likely to care for their own belongings, and will be able to get the best individual mouthpiece for each student.
- A daily warm-up routine of some sort is a must for all brass players, as these not only prepare the player for the day's playing, but also reinforce the fundamental aspects of playing and even help prevent injuries from overexertion.
- 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.
- Intonation can be especially problematic on these larger instruments, and players should be aware that the 1-3 or 1-2-3 valve combinations are VERY sharp, and need to be compensated for, either by using the fourth valve instead of these combinations, or by “lipping” the pitch in order to correct intonation.
- 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.

- 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.
- 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. This may be most important for euphonium players, as they will need to be exposed to challenging material in order to offset the rather boring parts they most often receive in music for young bands. Retention of good players becomes a problem if students are bored into quitting band. As a teacher, do your best to choose at least some pieces that include challenging, enjoyable, and *individual* (not doubled with trombone and/or tuba) parts for euphoniumists.
- Discussions of nomenclature (i.e. baritone horn vs. euphonium) can be confusing for young students, though you should use the correct term (euphonium) in spite of the markings on students’ music. Save discussions of differences between the two instruments for when the students are older (or interested).
- Straight mutes are available for euphonium, but are very expensive and rarely used. The odds of needing one of these in high school literature are slim.

Assembly, Lubrication

- Assembling the euphonium 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.

Suggested Method Books for Individual Practice

- Arban, J.B./Alessi, Bowman: *Complete Method*
- Bordner, G.: *Practical Studies for Trombone*, vols. 1 and 2
- Bordogni, M./Rochut: *Melodious Etudes for Trombone*, Book 1
- Clarke, H.L./Gordon, C.: *Technical Studies*
- Fink, R.H.: *From Treble Clef to Bass Clef Baritone*
- Fink, R.H.: *Introducing the Tenor Clef*
- Gower, W. and Voxman, H.: *Rubank Advanced Method for Trombone*, vols. 1 and 2
- Lafosse, A.: *School of Sight Reading and Style*, Book A*
- Long, N.: *Rubank Elementary Method for Trombone*
- Mead, S. (ed.). *New Concert Studies*
- Remington, E./Hunsberger: *The Remington Warm-Up Studies*
- Tyrell, H.W.: *40 Progressive Studies for Trombone*

Suggested Reading

Bevan, Clifford. *The Tuba Family*. Second Edition. Winchester, UK: Piccolo Press, 2000.

Bowman, Brian L. *Practical Hints on Playing the Baritone (Euphonium)*. Miami, Florida: Warner-Brothers Publications, Inc., 1983. (*Formerly published by Belwin-Mills.)

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.

Frederiksen, Brian. *Arnold Jacobs: Song and Wind*. Gurnee, Illinois: WindSong Press Limited, 1996.

Griffiths, John R. *Low Brass Guide*. Roswell, Georgia: E. Williams Publishing Company, 1991.

Louder, Earle and David Corbin. *Euphonium Music Guide*. Evanston, Illinois: The Instrumentalist Company, 1978.

Miles, David. *An Annotated Bibliography of Selected Contemporary Euphonium Solo Literature by American Composers*. TUBA Press, 1992.

Morris, R. Winston, Lloyd Bone, and Eric Paull, eds. *Guide to the Euphonium Repertoire: The Euphonium Source Book*. Bloomington, Indiana: Indiana University Press, 2007.

Morris, R. Winston and Edward R. Goldstein, eds. *The Tuba Source Book*. Bloomington, Indiana: Indiana University Press, 1996.

Phillips, Harvey and William Winkle. *The Art of Tuba and Euphonium*. Seacaucus, New Jersey: Summy-Birchard, Inc., 1992.

Werden, David and Denis Winter. *Euphonium Music Guide*. New London, Connecticut: Whaling Music Publishers, 1990.

Suggested Instruments

- Beginner, Intermediate
 - Yamaha YEP-201 (3-valve)
 - Yamaha YEP-321 (4-valve, non-compensating) ****Great, affordable instrument for schools****
- Professional (4-valve, compensating)
 - Yamaha YEP-642, YEP-842
 - Meinl-Weston 451, 551
 - Besson Sovereign 967, Prestige 2052
 - Willson 2900, 2950
 - Hirsbrunner HBE
- Marching
 - Yamaha YBL-301M

Suggested Mouthpieces

- Schilke 46D*, 51, 51D, 52D, 52E2
- Wick/Steven Mead SM Series
- DEG/Brian Bowman BB1, BB2, BB3

*The Schilke 46D is a relatively unknown but good “beginner” euphonium mouthpiece. It has a small cup diameter like many beginner mouthpieces, but a deeper, funnel-shaped cup that is more conducive to a good euphonium sound. Students with larger facial structures *might* be able to start on the Schilke 51 or 51D.

Prominent Players (worth listening to)

- Steven Mead
- Brian Bowman
- Demondrae Thurman
- Adam Frey
- Riki McDonnell
- Robert Childs
- Earle Louder
- Leonard Falcone (deceased)

Online Resources

- International Tuba-Euphonium Association. <http://www.iteaonline.org>
- Sean Chisham’s TubeNet BBS. <http://www.chisham.com>
- TubaNews. <http://www.tubanews.com>
- Steven Mead. <http://www.euphonium.net>
- Adam Frey. <http://www.euphonium.com>