Brass Clinic

Alternate Trombone Slide Positions
by John Swallow

Trombonists use alternate positions with varying levels of enthusiasm. Most can only imagine the potential gains from practicing the alternate positions as much as the primaries. I first heard them described as false positions, a term that persists.

Many trombonists complain that pitches sound worse in alternate positions than in primary positions. Young players are taught the primary positions first and develop concepts of pitch and sonority from these early exercises. When they ultimately learn alternate positions, the unfamiliar timbres can be discouraging. If young trombonists insist that notes played in alternate positions feel the same, the tone could be distorted.

Note in B than B₃ in fourth position in C major. Trombonists should remember that pitches played in positions that create sympathetic overtones sound better when they are performed with accuracy and assurance. Because a consistent sound is important, the attitudes of a trombone section will determine some position choices.

By using only the primary positions, those closest to the top of the slide, some scales will have better resolutions than others, particularly with legato lines. The resolutions of the 3rd and 4th steps and the 7th and 8th steps in a major scale may cross into another harmonic. There is no cross over in the first octave in the key of B₃, but first position in the second octave crosses into another harmonic. In B major the resolution from the A₄ to B₄ does cross over, unless the A₃ is played in fifth position. In the key of C, D₄ crosses over to E₄ unless D is played in fourth position.

For consistent lines there are preferred positions for each major scale that depend on the resolution of the half step. Some patterns of resolution sound better in one key than another, but the position sets from one key can be borrowed for another. The Tuba Mirum solo from the Mozart Requiem uses one set of positions, but these would be quite different if played in B major; these alternate positions also help in playing the work as written. Tommy Dorsey’s famous theme song, “I’m Getting Sentimental Over You,” is ideal in the key of D but less so in B. On the lighter side it is impossible to play Lasso Trombone in C. Position sets sometimes repeat within a phrase, as in Schumann’s “Rhenish” Symphony; the positions for the chorale form a pattern of resolution and line.

Whether playing legato scales, melodies, or the implied tonalities of the atonalist, resolving half steps in this manner gives a consistent resolution and a strong sense of the key center. In teaching I refer to this approach as tonal positioning, choosing positions according to the key or tonality.

I first learned alternate positions in a rather authoritarian manner and used the same approach with my students. Ultimately I understood and appreciated the musical and technical reasons for using them. As part of a tribute to Pablo Casals in the Saturday Night Review, Leonard Rose inspired a different approach to trombone playing. He stated, “...For generations, cellists had accepted the principle that in order to play a certain interval one

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had to approach it by a slide or glissando. Casals rationalized the problem perfectly by innovating the principle of 'extension.' That is to say, by stretching further, sometimes with the second finger, sometimes with the fourth, to make the interval thus avoiding the slide. Then when a shift or slide was absolutely necessary, he did it on the half step rather than the whole step, again minimizing the in-between slide.

This quote helped me to imagine the harmonic series of the trombone's seven positions as a set of strings, each a tritone in length. When I viewed it this way, many string techniques became applicable to the trombone.

By visualizing the harmonic series as a set of strings, new possibilities for glissandi and natural slurs become apparent. Moving from F3 in sixth position to B♭3 in first creates a glissando, while F in first position to B♭ in first is a natural slur from one harmonic to another.

By thinking of the trombone positions as frets on a guitar fingerboard or finger positions on a violin, trombonists will know whether the next note will produce a glissando slur as the result of staying on the same harmonic or a natural slur. Higher in the harmonic series the pitches of the harmonics are closer together, and the alternatives multiply until the harmonics become step-wise.

This diagram illustrates the B♭ tenor trombone register from E2 to D5. Triggers will complicate the picture, but make the concept no less relevant. After shading out all but the primary positions in the chart, I call the three-sided figure the Bermuda Triangle because many players imagine dire consequences if they venture in there.

The diagram also shows the seven arpeggios on the trombone, each with a complete set of harmonics for the seven basic pitches descending from B♭ in first position to E in seventh position. The other five arpeggios descending from Eb in third position through B♭ in seventh position should be constructed from pitches borrowed from the seven natural harmonic sets. The B major arpeggio is constructed entirely of pitches borrowed from those basic seven. I refer to it here as a scale or key center made up exclusively of borrowed harmonics. By avoiding alternate positions, players miss many of the natural harmonics of the arpeggios further down the slide.

To illustrate the concept of tonal positioning, play all half steps in either direction on the slide using a tongue-assisted legato. Half-step resolutions sound best in the same harmonic, just as they do in the same string of a cello. The opening phrase of Guillmann's Morceau Symphonique illustrates this concept.

Any tonguing on a natural slur should be undiscernable unless the composer indicates otherwise. Avoid glissing twice in the same melodic direction. On the B♭ arpeggio in Mozart's Tuba Minuet the positions indicated preserve the natural slur model and gliss only once in the same direction to retain the B♭ sonority.

Slide technique becomes increasingly important whenever speed, intervals, and registration are the primary considerations. It helps to hold the slide bar loosely between the thumb and index finger so that the hand and wrist remain fully mobile as the
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weight and momentum of the slide are used to change positions. Changes in slide direction should be kept to a minimum in rapid passages by studying the pattern of motion in a passage. This is particularly important at points of resolution or on phrase endings, such as these two short calls from Rimsky-Korsakov’s Scheherazade.

Assuming that natural slurs produce a legato equal to the other winds and strings, players should strive for the same quality with all legato playing. Keeping a consistent pattern of resolution throughout legato lines and playing the larger intervals as natural slurs wherever possible helps to achieve more flowing lines.

Players who flutter tongue easily can think of the II# syllable as a shift from a reflex to a manual flutter. Conversely, learning this articulation can help others in the development of a flutter tongue.

Trombonists can also articulate with a Ha syllable, without any tongue. This use of the breath can improve playing on rapid legato passages such as those included in flexibility routines. Be careful not to exaggerate this articulation. The mind and body function at a much higher level than these simple words suggest.

The trombone is capable of a still wider variety of articulations that can further enhance melodic playing. Delineation, resolution, sonority, and slide technique should be the most important considerations in the choosing of slide position. Combining the fluent use of alternate positions with sophisticated articulative skills offers trombonists the opportunity to achieve technical and musical artistry.

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The Earl Williams Trombone Company, with all of its original tooling and machinery, has moved back to California where the company began in the 1930s. Information about the company and its trombones is available from Christopher Calicchio Weik, 6409 Willoughby Avenue, Hollywood, California; 213-462-2941.