The Spectrum of Sound: the Obscure Timbres within Muted Brass

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MUSIC

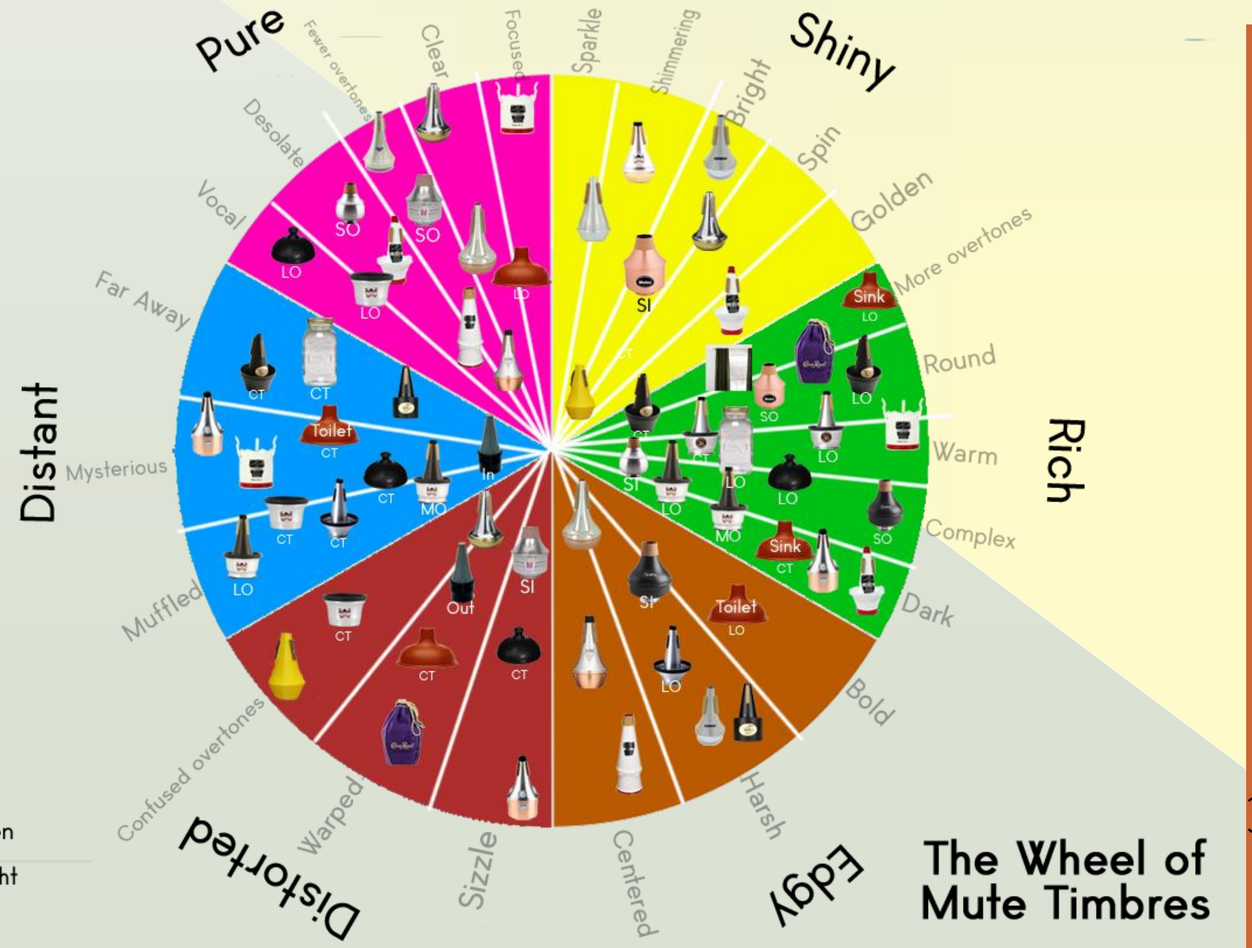
Composers and performers have long used mutes to achieve new and unique timbres for brass instruments. The scope of this field is evolving at a rapid rate however, and understanding mute technology and the depth of how it informs a composition is a much overlooked piece in today's music.

BRIEF HISTORY OF THE BRASS MUTE

The first mute-like object was called the "stopper" and was found on King Tut's tomb **in ca. 1300 BC**. It was said that the "stopper" might have been used to clean the bell of the trumpet after playing. The sound straight mutes made during the Carro Della Morta **in 1511** were often a symbol of facing the grim reality of death. Trombone mutes started to become used but they did not carry any religious significance unlike trumpet mutes. Brass mutes **before 1755** were wooden and transposed the trumpet pitch depending on the size of the bell. Composers like Monteverdi would often warn the performers of the mute transposition on the music score. **In 1755,** brass mutes became non-transposing. **By 19th century,** straight mutes for trumpets, trombones and tubas were featured in many operatic and symphonic works such as Mozart's *Idomineo* (1781), Berlioz's *La Mort d'Orphée* (1827) and Don Quixote, Op. 35 (1897) by Strauss. The development of mutes around **the start of the 20th century** shot up due to new genres such as classical contemporary music and jazz arising. The expansion of mute development consisted of straight mutes being created in different materials such as aluminum, copper, brass, and fiber. It also consisted of new mutes emerging such as the cup mute, harmon mute and practice mute. **To this day,** many composers and performers use mutes for many reasons in many genres now and the technology of mutes is still a growing phenomenon – and mute brands are continuing to upgrade mutes to make them more free-blowing and less resistant, with better intonation.

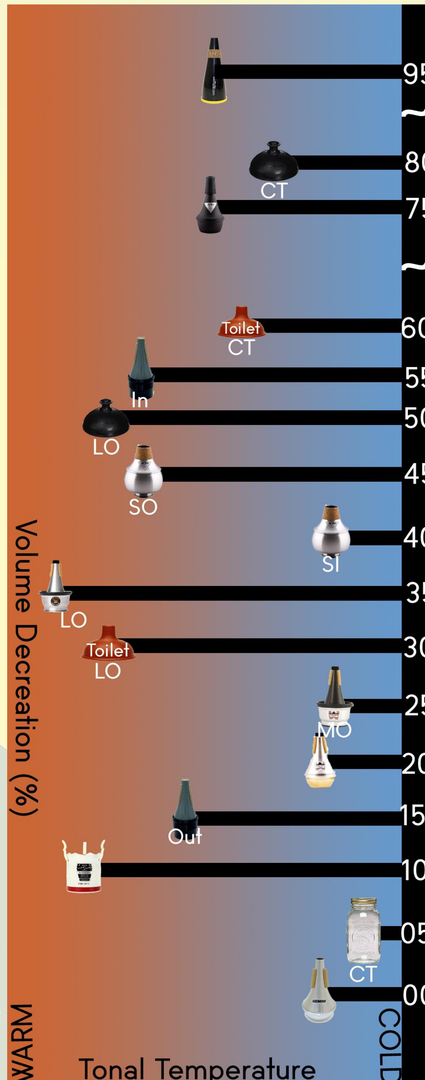
RESEARCH GOAL & METHODOLOGY

As mutes are commonly used in music of many genres, it may be challenging to select the correct type of mute, from an array of brands and materials. This research project will include an array of charts describing the spectrum of various muted brass sounds. These charts will help inform composers, songwriters and performers of the many sounds brass instruments can make so that they can be implemented in their music. My methodology is to simply play with a variety of mutes, break down each of their tonal content and volume, and graph them through various means.



THE BRASS MUTE – WHAT IS IT?

A modern brass instrument mute fits into or over the bell to change the tone color and/or volume. Mutes are often used extensively in new music, and can be compared to applying effect pedals to an electric guitar. Mutes can be bought from a mute seller such as Humes & Berg, Yamaha, Tom Crown and Jo Ral. Mutes can also be household objects like plungers, wine glasses, Styrofoam cups, and coconut shells.



Adhering to how extensive the spectrum of brass mute sounds could be outside the range of our knowing as musicians, these bite-sized charts would also showcase their potential of brass mute timbres in today's music. These charts also open the possibility of how vast the dimensions of music could really be, and it is only a matter of time for when these obscure timbres enter the field of play and are utilized in the creation of new sounds in music.