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The Embouchure and Tone Color

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Every professional player and advanced student has his own distinctive tone, but aside from such practical considerations as the reed and the mouthpiece, not many know how they are able to produce their own distinctive quality. To carry the point farther: it is not only possible to deliberately approximate certain qualities of tone, but it is possible, with work and diligent application, for the clarinetist to add a rich variety of tonal colors to his palette.

In orchestra as well as solo playing, one must be able to produce many different tone colors on the clarinet. For example, when performing Debussy's *Afternoon of a Faun*, the player must be able to approach the tone quality of the flute in order to effect a smooth transformation of the melody from the flute to the clarinet. To blend well with the oboe in the beginning of Schubert's *Unfinished Symphony*, he needs a different quality than is used to blend in the solo octave passages with the bassoon that Brahms so frequently uses in his symphonies. Pianists, string players, flutists, all have many different tone colors to draw upon. We have them, too, for the asking. In addition, we have a dynamic range unequalled by any other orchestral instrument; therefore tone coloring and dynamic should be important parts of our equipment.

During the course of a phrase, there are certain important notes which require more intensity than others. Often single notes require changes of color while they are sustained. An example of the latter is the high C of the solo in the *Venusberg* music in *Tannhauser*. All of these tone colors, ranging from extreme mellowness to stridency, and the dynamics of the tone, ranging from *pp* to *ff*, are controlled mainly by the muscles in the lower lip and the wind pressure.

The embouchure must be considered in two parts: the first is the amount of pressure and where it is applied against the reed; and the second is the quality of the pressure. The quality of the pressure is determined by the degree of muscular tension present in the lip, and this can be varied in the same manner as one can vary the tension (or state of contraction and relaxation) of the bicep muscles in his arm.

Many players "take in" too much lip. One needs to take in only enough to form a narrow cushion over the teeth. This also leaves a greater area of the reed free to vibrate, thereby producing a larger tone. Within this thin cushion, or pad, formed by the lower lip there are muscles which can be contracted or relaxed. It is the degree of contraction and relaxation of these muscles that produces the various tone colors needed by the player.

This variation in tension means, of course, that there is a different quality to the lip pad that is pressed against the reed. Generally speaking, a tightly contracted lip pad (muscle) produces a more intense and strident tone; and conversely, a relaxation of the lip muscle produces a mellowness. The lip muscle, however, should never be relaxed to the point where the tone is not supported properly.

Lip pressure against the reed is another matter. The primary object in exerting lip pressure is to force the reed closer to the mouthpiece. Pressure is needed to control the volume of tone more than the actual quality, but the point on the reed at which the pressure is exerted is quite important. A *ff* tone requires that the pressure be exerted lower on the reed. A *pp* tone requires that the lip pressure be exerted a trifle closer to the tip. This shifting of pressure is subtle -- almost an imperceptible "rolling" of the lip. Perhaps "rolling" is too strong a word to use since the shifting of pressure is done within the area of the lip pad while the lip is held in the same

position on the reed. The pressure is shifted from the top to the bottom area of the lip cushion, and vice versa. The shift is minute but very important.

The combination and interaction of the various degrees of lip pressure and lip tension enable one to achieve a rich variation in tone colors, and a great flexibility of embouchure, which permits one to favor each note of the scale. After mastering these two fundamental embouchure problems, the player will have a new field to explore, the limits of which are his own musicianship and imagination. Experience will teach subtleties of embouchure technique impossible to describe in print. Nevertheless, we shall attempt to give an example of this technique by using the high C of the Venusberg music to which we previously referred. After the high C has begun, let us say that we wish to bring more mellowness into the tone and then increase its intensity before moving on. We should gradually relax the tension of the lip pad--not the pressure against the reed--which brings a greater degree of mellowness to the tone. Then we should gradually increase the tension of the lip muscle while making a slight crescendo. This will give us a greater intensity of tone. Should you desire mellowness in a *ff*, the muscle tension should be slightly relaxed, and the intensity of sound controlled by the wind.

In the early stages of learning to play the clarinet, one usually simply stretches the lip tightly over the teeth. This is alright for a beginning, but we must recognize that it provides nothing but raw jaw pressure. At the appropriate time, a higher concept of embouchure control must be developed. We hope that this article will contribute toward achieving this goal.

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