

Your tongue has a *resting position*, just as your playing fingers do. When you pull your tongue back from the roof of your mouth let it hang suspended and relaxed fairly close to it. Don't let your tongue rest against your lower teeth and don't pull it back into your throat. The principles of relaxation and economy of motion apply here as in every aspect of playing.

When you tongue in flute or whistle playing your embouchure must be prepared beforehand and it must remain stable. The areas of articulation (tongue) and air stream shaping and direction (lips and facial muscles) are separate and distinct. Your jaw should not move at all when you tongue.

THROATING

You can also start and stop the flow of air with your glottis, which is the opening between your vocal cords. I call this use of the glottis *throating*. I don't use this technique a great deal, but many players find that they are naturally inclined to it.

If you are unfamiliar with your glottis, you can feel it closing just before you cough or clear your throat. During speech and singing your glottis is opening and closing rapidly and repeatedly, like your lips do when you make them "flutter," as they do when you imitate a horse's "lip trill" sound. When you whisper, your glottis opens somewhat further than during speech but it is still not completely open.

S. C. Hamilton, in *The Irish Flute Players Handbook*,ⁱⁱ writes that throating is very widely used among traditional flute players. He doesn't use the term *throating*, nor does he identify the glottis specifically as the source of its articulation, but I am confident that we are talking about the same thing. His discussion of throating is brief, but it is the most complete I have seen thus far. He writes that it

. . . is brought about by a movement of the throat, which is probably best described as an underdeveloped cough! . . . Now cough into the flute while maintaining your embouchure—the result will be a shriek, as the airstream expelled by a cough is much too fast to produce a normal note. Repeat the experiment, but this time make the coughing movement much more gentle, almost as if it hurts to cough. This should produce the correct sound.

I hope that players who are expert at using throating will do more writing on the subject. Though I don't use throating very much, it is my opinion that a far greater degree of nuance and agility is possible with tonguing.

GRADATIONS OF TONGUING: SEPARATE VS. CONNECTED, HARD VS. SOFT

There are many subtle aspects of tonguing. Let's look first at how we use tonguing to interrupt and reinitiate the air stream.

When first learning to tongue, the natural inclination is to produce very separate, distinct notes. In doing so, you first whisper the letter "t" to give a clear attack to the start of the flow of air. In this action, you pull your tongue down away from the hard palate. Second, you replace your tongue to stop the air. After a brief pause you repeat the two-step process.

This way of playing, all with well-separated notes, is called **staccato** by classical musicians. *The Harvard Dictionary of Music* defines staccato more specifically as ". . . a manner of performance, indicated by a dot... placed over the note, calling for a reduction of its written duration . . . for half or more of its value."ⁱⁱⁱ In other words, a staccato eighth note, for example, would be sustained for at most the length of a normal sixteenth note, half or less of its nominal duration.

After some experience with tonguing one discovers that it is possible to reduce the separateness of tongued notes to almost zero, to make them very smoothly connected. To do this you use a different sort of tonguing action. Instead of using a two-step process, as described above, in which the air stream is alternately and distinctly started and stopped, you use a one-step process in which the air flow is barely interrupted at all.