You may have noticed that when different players try out the same whistle, one may make it sound more in tune to your ear than other players do. No whistle has inherently perfect intonation; or perhaps it is more accurate to say the meaning of "in tune" is subjective. It necessarily changes from situation to situation and it often involves compromise when playing with other people. Experienced players do their best to play what sounds sweet to their ear in any given situation. That personal judgment of good intonation usually does not conform to equal temperament. Instead, we tend to prefer the sound of "pure intervals." It may be more useful to think of playing in-tune intervals rather than in-tune notes, for it is the relationship between notes that we are really tuning.

For instance, sometimes the third degree of the Ionian mode (or major scale)—let's consider F-sharp in the D-Ionian mode—sounds better to our ears, in relation to D (the tonic note), if it is played slightly flat of an equal tempered F-sharp. In another mode, such as E Dorian, a sweet or correct sounding F-sharp may be sharper that than the sweet F-sharp of D Ionian. Why this is so is a long story, one written about much by others, having to do with pure intervals and the harmonic series. I won't delve far into this controversial area. Suffice it to say that equal temperament is a rather artificial, though very useful, system that is not based closely on the natural harmonic series. It was developed initially for keyboard instruments. When given a choice, our ears usually prefer the sweeter, pure intervals.

When we play unison melodies with fixed-intonation equal-tempered instruments, such as accordions, concertinas, and keyboard instruments, we need to adjust to them, or at least compromise. When we are accompanied by instruments such as guitars and bouzoukis, we may also need to make some adjustments. The open strings of fretted string instruments are not always tuned to equal temperament, but their frets do produce equal tempered intervals. This is a tricky area. As always, let your ear lead the way.

Add to these considerations the fact that whistle makers have had their own differing opinions and aesthetics about how to adjust the inherent intonation of their instruments. (With inexpensive, mass-produced whistles, similar choices have been made, but there are also quality-control problems inherent in the manufacturing process that often result in poorly tuned and inconsistent instruments.)

You may have noticed that with old simple-system flutes, F-sharp tends to be flat, A tends to be sharp, C-natural tends to be sharp, and C-sharp tends to be flat. At least that's how these notes sound compared to equal temperament. Those same pitch "distortions" are typically found in tin whistles and uilleann pipes. A very similar pattern is even observed in Irish fiddling. Since fiddlers determine their intonation by finger placement, and by comparison of fingered pitches to those of the open strings, these pitch "distortions" are clearly a matter of choice, though probably an unconscious or conditioned one. It seems that there is a kind of natural intonation "profile" or "dialect" that is inherent in the design of the simple-system instruments (flute, whistle, uilleann pipes, perhaps even the Neanderthal bone flute mentioned in Chapter 3) which is also inherent in the nature of traditional Irish music, and no doubt in other musical traditions as well.

We can certainly say that tin whistles do not naturally play in an equal-tempered scale. It is tempting to surmise that at least some of the intonation oddities of tin whistles were, and are, in fact intentional. Most of us prefer the subtle intonation "personality" that the simple-system instruments share. It takes time and experience to learn how to play the tin whistle and simple-system flute "in tune," but the kind of "in-tuneness" that most of us strive for, consciously or not, is not the same as the equal-tempered ideal that Boehm worked so hard to achieve in his new flute. Boehm-system flute players who succeed in sounding traditional do so, I feel, in part by emulating the simple-system intonation profile.

If you are a beginner, it will be hard for you to judge the intonation of a whistle, and hard to know how well it fits your own emerging aesthetic. You may want to start out on an inexpensive whistle. But once you gain experience and if you decide that whistle playing is important enough in your life, you would be well advised to invest in a good, handmade instrument. Try out different models and ask more experienced players to try whistles out for you and give you their feedback.

All of this boils down to the fact that you yourself must make a whistle play in tune, to your own standards, by controlling your embouchure. To make a note sharper you must increase the speed of the airstream, and to make a note flatter you must decrease that speed. These adjustments can be made by subtle and quick changes in your throat, mouth, and lips. If you are listening well and you care about intonation, you can probably learn to make these adjustments unconsciously, especially as you get to know your whistle and its intonation profile more intimately. As always, listening is the key to success.