OUTSIDE THE MODAL BOUNDARIES

There are many Irish tunes that don't fit neatly into the profile of any of these modes. Some use both major and minor thirds and/or sixths. Some employ notes that fall in between the half steps. This happens in particular in the area of C-natural to C-sharp and F-natural to F-sharp on the flute, whistle, and uilleann pipes.

C-natural is an especially variable note on the uilleann pipes which, according to Breandán Breathnach, possesses "... several colors... which are exploited to the full by the skillful performer. It lies approximately halfway between B and D...", in other words, approximately halfway between the equal tempered C-natural and C-sharp. In fact, at least half the time C-natural is played according to our modern intonation expectations, but often, especially in tunes with a tonal center of G or D, the sharper "piping C" is used by traditional flute and whistle players. The pitch of C-natural can change even during the course of a single note.

On the flute and whistle, you can finger C-natural by using a cross fingering^{vi} or by half-holing.^{vii} On a keyed flute you may also have the option of using a C-natural key. You can also play this "piping C" by using special fingerings that we will explore later. All of these fingering options produce Cs with differing tone and pitch colors, and these relate quite directly to the tradition of uilleann piping. All of this will become more clear as you work your way through the book.

One more observation about C-natural and C-sharp: When playing C as a quick passing note between B and D, Irish flute and whistle players will usually play the note as a C-sharp, even if C-sharp is not in the mode of the tune. This may be in large part because playing B—C-sharp—D makes for an easier fingering sequence. The C-sharp goes by quickly enough that its altered pitch does not seem all that apparent. But this use of C-sharp is an important element of style, not just a fingering convenience. If you play such notes as C-naturals, they often just sound "wrong" to someone with an ear that is finely tuned to traditional Irish music. On the Boehm-system flute, fingering C-natural in such situations is no harder than fingering C-sharp——in fact sometimes it is easier. Therefore, Boehm-system flute players may forget to alter C in this way, since it has no particular fingering benefit for them.

For examples of this use of C-sharp, see *The Battering Ram* on p. 335, *The Cliffs of Moher* on p. 337, and *Hardiman the Fiddler* on p. 346.

Note that if you use the *tight triplet* technique (described on pp. 256-257 in Chapter 18) in these B—C—D sequences, then you will be playing C-natural instead of C-sharp.

MOST WHISTLES SOUND ONE OCTAVE HIGHER THAN WRITTEN

The most common and useful tin whistle is the small one in D. This instrument plays one octave higher than the flute, fiddle, pipes, etc. When reading tune transcriptions, this whistle sounds one octave higher than the notated music.

The much larger low D whistle, which plays one octave lower than the small D whistle (i.e. at the same pitch as the flute) is becoming increasingly popular. When reading music notation, this whistle plays the notes as written.

Whistles come in a variety of other keys. For the purpose of music notation, these "non-D" whistles are considered to be *transposing* instruments, that is "instruments for which the music is written in another key or octave than that of their actual sound." (By this definition, the small D whistle is technically a transposing instrument.) All the whistles are treated as if they were D whistles even if they produce music that is either higher or lower in pitch level than that of the small D whistle.

For example, the C whistle is one whole step lower in pitch than the small D whistle. The lowest note of a C whistle is, naturally, a C, and is played with all six tone holes covered, the fingering that produces D on a D whistle. For the purpose of music notation, this lowest note of *any* whistle is considered to be a D. Therefore, when reading a tune you would use the exact same fingerings, no matter what key of whistle you choose to play it on. Let's say you are playing a tune that is in D Ionian. If you play it on a C whistle, you use the same fingerings that you would use to play it on a D whistle, but the music comes out in C Ionian.