

the major sixth nine, the minor seventh ten, the major seventh eleven, and the octave twelve. You can see and hear these intervals and their constituent semitones clearly by studying and experimenting with the fretboards of guitars or other fretted instruments which have twelve frets to the octave.

It's not necessary that you mentally count the number of semitones in each interval you hear. But just as it is a carpenter's business to be able to look at a board and know whether it is two inches wide, or four, or eight, it is your business as a musician to gradually gain the ability to hear an interval and know whether it is a minor second, a major third, or a perfect fifth, etc., in other words to mentally "measure" it, to and know or feel what the distance is between the two pitches. Knowing what intervals are, knowing their sizes and names, and knowing that there is a sensible and proportional system to their relationships will enhance your ability to learn by ear, an ability that everyone has.

Enter now the third dimension: pulse and rhythm.

Aside from some slow airs, all Irish tunes have a *pulse*, a steady recurrent beat. When we tap our feet we tap out the pulse. The pulse is subdivided into either two, three, or four units of duration which most transcribers of Irish music represent as eighth notes, sometimes as sixteenth notes.

As stated above, a note has both pitch and duration. A melody then, or a tune, is formed by a succession of notes (pitches and durations).

Rhythm is hard to define succinctly. In *The Harvard Dictionary of Music*, Willi Apel attempts this by stating that "rhythm is everything pertaining to the temporal quality (duration) of the musical sound."<sup>iii</sup>

This broad definition will work for our present purpose, which is to integrate the *rhythms* of the notes with the two-dimensional *interval* "map" of the melody. This sounds complex, but it needn't be experienced that way. What we are doing is stretching our powers of attention so that as we learn a tune, we create an on-going, three-dimensional melody in our mind's ear.

Music is a profoundly physical experience. It is made up of air compression waves that affect our bodies and make them vibrate. Over-dependence upon music notation dulls our perceptions of the physical sensations of music and causes us to externalize and conceptualize music, to remove ourselves from it in a very real sense. Learning to learn by ear again, for we all did so as children, brings us back into full contact with music.

So, as you are learning a tune, immediately bring your focus to the physical nature of the sound: the relationship of each note to the tonal center; the sizes and feelings of these vertical intervals, as well as those of the horizontal intervals between the successive notes of the tune; the shapes and phrases in the melody; the pulse of the tune and the rhythms that overlay it; the patterns of your finger movements; and your own physical experience of the music. Store this awareness *inside* of yourself instead of externalizing it, relegating it to written music. If you enjoy computer metaphors, store the tune on your huge internal hard drive, not on a removable disk that you put away in some desk drawer. The more you cultivate this internalizing mode of learning, the more natural and sophisticated it will become.

## OTHER AIDS TO MEMORY

Each tune has a name, or several names, which belongs with the tune for a reason. Often the reason is unknown or obscure to us, and many people seem to have trouble maintaining the connections between tunes and their names. Make an effort to establish this connection early on, even if its meaning is mysterious to you. You may remember the tune better by connecting it to an image, a person, even to an uncertainty or a curiosity; and to the larger world of the tradition. Connect the tune also to the time, place, people, and circumstances that surrounded you as you first heard it or began to learn it.

Notice these things about the tune: its tonal center, its mode, its first few notes, its meter, its dance tune type. Link all of these things to the name of the tune. Later, remembering or hearing the first few notes will bring the entire tune back to you in a flash.