Tips and tidbits

MUSIC THEORY.aargh©

(For ringers: Session 3a: pitch)

The Major and Minor Scales

By Dr. Ona Pinsonneault

Now that we can find the *tonic* of a composition (see Session 1, November 2010 issue of Clapper Chatter) and can read a *key signature* (see session 2a in the January 2011 issue) it is time to read *scale.* This session will begin to examine Major and Minor scales.

When we spell the Major or Minor scale every letter of the musical alphabet is used, "A" through "G". This helps to determine if a note is called a *flat* or a *sharp.* A flat lowers a pitch by a half step (A to Ab) and a sharp raises the pitch by a half step (A to A#). Scales consist of an ascending series of *half steps* and *whole steps.* A *half step* is the shortest distance between two pitches. On the piano keyboard there are half steps between the white keys E---F and B---C. There are also half steps between white and black keys, for example, C---Db. A *whole step* is two half steps. On the piano keyboard there are whole steps between white keys C---D, D---E, F---G, G---A, and A--- B. There are also whole steps between white and black keys, for example, B---C#, E--- F#, Bb---C. And there are whole steps between black keys, for example, F#---G#. We spell the scale "A, B, C#, D, E, F#, G#, A" rather than "A, B, Db, D, E, F#, G#, A" in order that there are seven different letters in the scale.

A Major scale has whole steps between all the notes except pitches 3rd and 4th, and 7th and 8th. Those notes are separated by half steps. The "C Major scale" uses all the white keys on the keyboard. "C" is *tonic* and the pitches used are "C, D, E, F, G, A, B, C." (There are no sharps or flats in the key signature.) In order to have a major scale beginning on "D" the pitches used would need to be "D, E, F#, G, A, B, C#, D." (This spelling allows for whole steps between all notes except the 3---4 and the 7-- 8.) Since "F" and "C" will be consistently sharp in this scale those pitches are indicated in the *key signature.*

In the Minor scale the half steps occur between pitches 2---3 and 5---6, all of the other pitches are whole steps apart. If "A" is tonic and the pitches of the scale are "A, B, C, D, E, F, G, A" the scale is called "A Minor". (There are no sharps or flats in the key signature.) If the scale is minor and tonic is "D", the spelling of the scale will be "D, E, F, G, A, Bb, C, D." There are half steps between E---F, and A---Bb. "Bb" is part of this scale and will be in the key signature.

Until next time,

Dr. P

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(Further discussions and questions may be directed to the editor of Clapper Chatter, Judi Morton at editor@areaviiagehr.org.)

(For ringers: Session 3b: rhythm)

Why do composers sometimes pick the meters they do?

By Dr. Ona Pinsonneault

Celtic Praise (The Rap): Composer: Rolf Løvland; Arranged by Kevin McChesney; Publisher 1995 Universal Music Publishing - Norway, this arrangement 2009 by Universal Music Publishing. ("The Rap" was recorded by the Løvland's duo called "Secret Garden".)

When listening to Løvland's recording of "The Rap", one hears the beats organized in groups of eighth notes in this order: 3, 3, 2, and 2. Kevin McChesney has written these beats in a meter of 5 quarter notes per measure (5/4) because Løvland used this meter. Five quarter notes per measure equals 10 eighth notes. These are in groups of 3+3+2+2 eighths. Later in the composition, we see the meter of six, three, and seven quarters. The arranger said that the composer chose the "lowest common denominator" (the 4=quarter) and that he decided to do that also.

Modern rhythms are not always "square". They have been called complex, irregular, asymmetrical, unbalanced, combination, and additive meters. But, these meters do show the intent of the composer as far as accent. The first beat of the measure is more accented than the rest of the beats. As we discussed in the last column (Session 2b Jan. 2011) the purpose of a barline is to provide accent to the rhythmic organization of the composition. The barline in "Celtic Praise" clearly shows the intended rhythmic accent on the first beat of every measure. This makes measures of unequal lengths.

In Celtic Praise the barlines, and with them the accent of the rhythm, aid the reader in finding the organization of the phrases. After a small introduction, the first section consists of two phrases ending in measure 13. (Each section begins with a pick-up beat of two quarter notes.) These phrases are repeated in measures 14-22 (but written out because of added notes). Next there is a contrasting phrase to measure 28, then measures 29-34 repeats the phrase from measures 9-13. The rest of the composition repeats most of this music, but in the key of F Major; a small interlude takes the key from C Major to F Major, and a short codetta ends the piece firmly in F Major.

Performing the work is another issue. How are you to interpret the rhythmic patterns within each measure? All measures begin with groups of 3 eighth notes and most end with a group of 2 eighth notes. This is the sound of the composition, and is probably the best method for the interpretation of the beats. See if counting and conducting the eighth notes "one-two-three, one-two-three, one-two, one-two", etc. aids the readers of this asymmetrical, modern, and very interesting work.