# Tips and tidbits

# **MUSIC THEORY.aargh**©

### Why does the music sound the way it does?

(For ringers: Session 2a: pitch)

The Key Signature

By Dr. Ona Pinsonneault

ost of us remember "Every Good Boy Does Fine". What does that stand for? You are right, the lines on the treble clef. And the spaces are "FACE". What about the bass clef? GBDFA are the lines and the spaces are ACEG. (OK, you can make up your own acronym.) The lines and spaces are numbered from the bottom of the staff up. In the treble clef "E" is on the first line and "F" is in the first space. In the bass clef "G" in on the first line and "A" is in the first space. When you pick up your bells, you are reading a line and a space and your pitches correspond with the notes in your clef.

At the beginning of the score, between the clef sign and the "time signature" lies the "key signature". Sometimes there is nothing there, other times the space is filled with up to seven sharps or flats. The "key signature" tells the reader what pitches are consistently sharp, flat, or natural. If you have one sharp in the key signature it will be "F#". ("F" pitches in every octave will be sharps.) You read all other pitches as naturals. "F#" is on the 5<sup>th</sup> line in the treble clef and on the 4<sup>th</sup> line in the bass clef. If you have one flat in the key signature, it will be "Bb". "B" pitches in every octave will be flat and you read all other pitches as naturals. "Bb" will be on the 3<sup>rd</sup> line in the treble clef and on the 2<sup>nd</sup> line in the bass clef.

Sometimes an "accidental" occurs in the music. This appears as a sharp, flat or natural in a measure and it temporarily alters the pitch given in the key signature. This temporary alteration is restricted to one measure and one octave. So if there is an "Eb<sup>5</sup>" written in measure 3 and in measure 4 another "E<sup>5"</sup> appears, it will be a "natural" pitch in measure 4. Also if there is an "Eb<sup>5</sup>" written in measure 3 and another "E" in a different octave appears in measure 3, it will be read as a natural unless it also has a "flat" (accidental) written beside the note.

The term "key signature" is a misnomer. The only function of the "key signature" is to let the reader know how to read pitch. When we put together the key signature and "tonic" (see Session 1 in the November 2010 Clapper Chatter) then we can spell a scale. The scale will result in a tonality described as "Major", "Minor", "Modal", or one of several other possible tonalities. (More on that in Session 3!)

Until next time,

Dr. P January 2011

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

#### Why does the music sound the way it does?

(For ringers: Session 2b: rhythm) The Meter Signature

By Dr. Ona Pinsonneault

#### I have mail!

#### Dear Dr. P:

I am a ringer, turned director, with limited formal music training. I enjoy exposing my choirs to interesting music, which frequently involves mixed meters. My ringers are always asking me, "Why did they have to write it this way? Couldn't they have just picked ONE meter that would work for the whole thing?" Can you help me with a simple, easy to understand way to explain this to my ringers? Why do composers sometimes pick the meters they do?

## Sincerely,

#### **Rhythmic Sadist**

The "meter signature" is used to show where the regular recurring beats, grouped by accents, (indicated by the use of a bar line) occur in the score. For example if a meter is used with an upper number of three, there is an accent on the first of every three beats (as in a waltz).

It might be useful to know that music didn't always exist with meter signatures. Instead, music was grouped in units of twos and threes. We can still see some of this in our hymnbooks. There are hymns without meters. How do we know what to accent and how many beats are grouped together? Right, the words we sing tell us how. (I just opened a hymnbook and got only to page 22 before I found a hymn with no meter. And, this is only because my mother paper-clipped some previous pages together!) Anyway, units of twos and threes can be added together to form fours and sixes, etc.

As late in music history as Giovanni Pierluigi da Palestrina (1525-1594) no "bar lines" were written into the scores. But during this time (Late Renaissance) music began to be read by more people (enter Martin Luther and a few others) not just the educated few. A system of reading rhythm had to be developed that would be universal.

In the 20<sup>th</sup> and 21<sup>st</sup> centuries there are scores written in a great variety of meters. Composers use five, seven, and other irregular numbers (and fractions!) for the upper number in the signature. That number tells how many beats are grouped together before the next regular accent. As soon as you cross a "bar line" the first beat is favored (by accent) over all the rest in the measure. There are also non-vocal scores with no meters specifically showing "no accent", that all beats are equal.

The above information does not address specific repertoire written for handbells, but I hope to do that in future columns. For now, the meter chosen will best describe the sound that the composer wants to create. The composition may be based on poetry with equal or unequal beats. It may be angular or smooth. It may have repeated material or always new material, and so on.

Until next time, (I promise to address a specific composition's rhythmic issues then.)

Dr. P January 2011