Music 11, 7/5/06

Homework assignment (due Friday, no exceptions):

p. 141-142	16-1	C,D
	16-2	D,E
	16-3	D,E
p. 143	16-5	C,D
p. 158	17-3	A,B,C
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The notes used in music are like the alphabet used in language. Each has a distinct sound. But not just any letter can be placed with any other letter in any context for meaning. Like letters in language, there is logic (and convention) to the ways notes are gathered and placed together in a tune. A composer writes a piece of music drawing on a *certain* collection of pitches. These collections are the notes that express a particular scale. The scale establishes internal relations among notes. Using a limited collection of notes, the composer is able to make a tune that has a logic, or is intelligible.

Scale: a collection of notes we can use as a foundation for a musical work. This collection underlies a piece of music. AND, it represents the *key*.

When we know the key of a piece of music, we can immediately understand the logic of its parts, and how they relate to the whole, and a bunch of other salient details...

So how do we realize, by looking at a piece of music, which series of notes, or which scale is its foundation? In other words, how do we know what key the piece is in?

A piece will undoubtedly have more than the 7 notes that make up a particular scale, and these "other" notes have meaning, too, but they have logic only in relation to the notes of the scale that expresses the work's key. There are simple ways to discover the key of a piece:

1. Try looking at the last note in the tune. A song will usually come to rest on the *tonic*, or the first note of the scale. It is relatively stable, and a common ending for simple tunes. If the last note is C, perhaps the key of the piece is C, and the foundation of the composition is the collection of notes represented by the C major (or minor) scale.

2. Check the beginning of the tune. Often, a composer will highlight the tonic by repeating it in the beginning. It is one way he or she might establish the key and set up the listener to understand the notes that come later.

3. Look at the key signature. This requires some explanation. In short, however, the key signature appears at the beginning of a piece, next to the time signature, and tells what collection of notes is the work's foundation. It looks like a grouping of # signs or a grouping of b signs.

## Keys and Key Signatures

When we make a scale beginning on different pitches, we always end up with different collections of notes. No two major scales are the same. One has 1 sharp note, another has 2 sharp notes, another has 7 sharp notes, another has 3 flat notes, etc.

When we make a major scale the sharps or flats we add to make the interval series "correct" are unique to that scale. For example, the scale beginning on G has one sharp (F#). Therefore, the key signature that represents the G-scale ("key of G") will be one sharp, placed next to the time signature. This tells the singer that the piece is "in G major," and that all the Fs in the piece should be sharp, because F# belongs to the unique key, G-major.

If a composer uses the Ab major scale as a collection of notes to write a song, he will (usually) tell the performer with the key signature, that like the scale for Ab major, Bb, Eb, Ab and Db will be recurring pitches.

Why is it good to know what key a piece is in?

Each member of a scale has a certain "character" in relation to other members. As we have seen, because of the asymmetrical placement of semitones in the scale, certain notes are "closer" to some notes than to others. And, music requires a sense of succession, tunes that start on one note, progress through others and then "land" on another note can create a kind of momentum, or energy. For these reasons (and others, too), notes in a scale are generally understood to have certain tendencies. Here are a few:

The 7<sup>th</sup> note in the scale tends to "want" to ascend, and land on the tonic. The 7<sup>th</sup> note is relatively unstable, and the tonic is relatively stable.

The second scale degree also tends toward the tonic. It seems to want to descend to the first note of the scale, which is its fundamental.

The tonic and the fifth note of the scale are usually restful. A tune can come to rest on the fifth without much frustration in the listener (compare this to landing on the seventh note, which has a strong tendency to drive toward its neighbor, the tonic).

[These relationships and dynamic personalities are difficult to hear at first, but much of it is intuitive, and as we further our exploration in melody and harmony, this will be easier to sense.]

In short, each note, in relation to the scale to which it belongs, has a dynamic property. The scale is not a mere collection, but a collection of tones that have individual relationships and characters.

Key Signatures (part 2)

Key signatures, as I said, are a group of sharps or flats that represent those altered tones in a given scale (each of which is unique). There is a conventional way of writing a key signature. The sharps or flats that are found in the key signature are not placed randomly. There is a pattern:

Sharps:	F#	C#	G#	D#	A#	E#	B#
Flats:	Bb	Eb	Ab	Db	Gb	Cb	Fb

If there are 3 sharps in a key signature, they will always be the *first* 3. And, they will be notated in the key signature in this order. If there are 4 flats in a key signature, they will always be the *first* 4 flats, and listed in this order. Memorize their order ("Fat Cats Get Drunk And Eat Beer").

Now we can finally look at a key signature and understand what it means. An easy (quick) way to know the key of a piece by looking at its key signature (works *most* of the time) is this:

If there are sharps in the key signature (if it is a "sharp key"), look at the last sharp, and move up one semitone. If there are 2 sharps in a key, the key is D major, because D is a semitone above C#, the last sharp.

If there are flats in a key signature (if it is a "flat key"), look at the second-to-last flat. THAT is the key. If there are 3 flats in a key signature, the key is Eb major, because Eb is the second-to-last flat.

## Scale Degrees

Each scale degree, since it is derived from the monochord that produces the fundamental, has a name in relation to the fundamental:

do	^1	tonic (this is the fundamental)
re	^2	supertonic
mi	^3	mediant
fa	^4	subdominant
sol	^5	dominant
la	^6	submediant
ti	^7	leading-tone
do	^1	tonic