

Ear Training Lesson Two

Intervals

The study of intervals has long been considered crucial to any serious student of music. The study of intervals is basically the study of musical relationships. By relationships I mean by analyzing the difference in distance between any two particular notes and naming that distance and in our case, also learning how to recognize that interval distance when you hear it.

Most universities with ear training programs use what I think is a very outdated method for teaching you to hear intervals. For the most part, they have you drill on hearing and singing that same intervals over and over again until you can recognize the distance between the two notes by ear. This is all well and good, but I don't feel it really helps in hearing tonal music, which is what more than 99% of the music in the world is.

The study of tonality, which is what we started in lesson one, is a way that I feel will get you to hear music intuitively. The key is not to hear all the individual intervallic relationships as simple distances, but to hear each note you hear as a part of a tonality. This method works much more faster, and is much more usable in real world musical applications.

If you are having a hard time following what I am saying about hearing an interval by it's place within a tonality and not just as a simple interval by itself, I think you will quickly understand by the end of this lesson. But first we need to do some simple interval theory so we can at least understand how to name ALL intervals that you may come upon in music. After that, we will finish up our study of intervals by learning how to hear them within a tonality.

Diatonic Intervals Of The Major Scale

I hope that after finishing Lesson One and the prerequisite lessons that you now have a solid grasp of all major scales and how to spell them. Make sure you do before moving forward with this lesson. Every little thing in this course builds upon the previous material so cutting anything short will just leave a gaping whole in your musicianship later. The first thing we are going to take a look at is the basic intervals found in the major scale by relating all of the tones of a major scale to the root. After we have established those notes, locating any interval by name will become very easy pretty quickly if you follow just a few rules. The following is a little diagram of the diatonic intervals of a basic C major scale. These intervals would be identical for each major scale. The only thing that would change are the notes themselves of course.

C to C = Perfect Unison
C to D = Major Second
C to E = Major Third
C to F = Perfect Fourth
C to G = Perfect Fifth
C to A = Major Sixth
C to B = Major Seventh
C up or down to C = Perfect Octave

As we can see from the little diagram above, we have only analyzed the intervals of each note within a major scale as compared to the root of the scale. When we do this you can see that we only have Major Intervals and Perfect Intervals. By knowing your major scales you should be able to easily figure out any of the intervals above. Lets take a look at a couple of examples. Remember, this method is only meant to enable you to be able to spell or name any interval in music. We will concentrate on hearing these intervals towards the end of this lesson.

If you want to know the name of the note an interval of a major third above A all you would need to do is take an A major scale like this A B C# D E F# G# and locate the third note. If you do that you will find that C# is the third note. So from that we can determine that A to C# is a major third. Lets do another, what do you think is a Perfect 5th interval above A? If you said E you would be correct since E is the fifth note of the A major scale and the fifth note of a major scale is always a Perfect Fifth above the root note.

Very quickly you should be able to figure out all major and perfect intervals by following these simple steps.

1. Locate the lowest note of the interval and use it as the root of a major scale.
2. Find the major or perfect interval that you want from the root note by locating it's place within the scale.

You may be asking yourself, "What if I need to know a particular interval below a certain note?". Well if that is the case you would simply take your given note say D, and the interval that you would like to know below that note, let's say a Perfect Fourth, then figure it out by determining which major scale uses D as it's fourth note. You should have said A major, and that will tell you that a Perfect Fourth below D is A.

The best way to drill yourself with all of these intervals is just to figure out and memorize a major second up from every note, then a major third and so forth. Eventually the idea is just to see these intervals so much that you know longer have to figure them out, you just automatically know them. This method is just a way of getting you there but is not meant to be used in a fast paced musical environment because you just won't have time to figure everything out. So try to memorize these intervals as soon as possible. I would suggest learning to memorize your Major 3rd intervals first, then Perfect 4ths, then Perfect 5ths, followed by the Major 2nd, Major 6th and finally Major 7th. Spend a few days memorizing each interval before working on the next.

I Thought There Were Other Intervals As Well?

There are!! Knowing the simple diatonic intervals found in a major scale like the diagrams above will speed up the process immensely in figuring out those other interval types. Make sure you memorize all of your basic diatonic major intervals first, then you can work on learning the other intervals with ease. What we will do is take what we know from the Major and Perfect intervals found in the major scale and alter them to locate the other intervals types. On the following page you will find another diagram explaining what happens to each interval type when it is altered. Before you do anything else, memorize these rules!!

Learning Your Minor, Diminished and Augmented Intervals

Minor Intervals: By **decreasing** the distance between two notes that are any Major interval apart by a half-step you will turn that major interval into minor. Lets look at a couple examples. A up to C# is a major third. If you lower the top note C# a half-step it will become C natural. The distance now between the two notes A to C is a minor third. Another way to decrease the distance between the two notes is to raise the lower note a half-step. Using the same major third interval of A up to C#, all we have to do to determine a minor third below C# is to raise A to A#. Our new minor third interval is now A# to C#. Practice doing this with all of the major intervals within a diatonic major scale so you can begin to memorize all of your minor intervals as well. Just remember there is only a half-step difference between the two.

Diminished Intervals: By **decreasing** the distance between two notes a Perfect interval apart you can figure out all of your diminished intervals. Lets take a quick look at a couple examples. A up to D is a perfect 4th interval. If we lower D by a half-step we will have a Db and the new interval A to Db would be a diminished 4th. By doing the same to the perfect 5th interval A to E we can easily determine that a diminished 5th above A is Eb.

Augmented Intervals: By **increasing** the distance between two notes a perfect interval apart you can easily determine all of your augmented intervals. Once again lets do a couple examples. With the interval of a perfect 5th A to E, we can easily determine the augmented 5th interval above A by raising E a half-step to E#. So our new augmented 5th interval is now A to E#. Practice this with all of your perfect intervals and memorize all of your augmented ones.

Enharmonics And Interval Names

By doing the last example above you may be saying to yourself "Instead of calling that note E# why don't I just call it F, it would make it a lot easier right?". Well, you may feel that it makes it a bit easier but unfortunately you would be wrong. The way intervals are spelled in music remains extremely consistent. You can understand this by taking a look at the natural notes below.

A B C D E F G

A is always some type of a 2nd interval from G below it and B above it.

A is always some type of a 3rd interval from F below it and C above it.

For example let's take a look at our augmented 5th example again. If A to E# is actually the same notes as A to F, why don't we just use those notes?

A to E# is called an augmented 5th and if we spelled it A to F we would now have to call the interval a minor 6th. Even though both of these intervals are exactly the same distance apart, we still need to name the actual interval by the letters that we use. This may seem a bit difficult to understand at the moment, but in the long run it makes everything much easier when spelling your intervals. You will quickly see that A up to any type of a D (Db, D or D#) is always some type of a 4th interval. If you understand this, spelling and altering your intervals should be relatively easy. If you have any other issues spelling your intervals just come to the support forum at www.GuitarLessons365.com/forum and ask your questions in the ear training section. :) There are other ways to get certain intervals in music, but what we have covered above will take care of 98% of every interval you will ever come across. Now lets get on to hearing these intervals!!

Hearing Intervals Within A Tonality

In lesson one you learned the concept of a tonality or key, and learned how to practice hearing and singing all seven of the diatonic notes of a major scale by assigning each note in the scale a solfege syllable. Since we are using the movable DO solfege system, no matter what major scale you are working with the root note will always be DO, the 2nd note will always be RE, the 4th note will always be FA and so forth. You have already put the work into learning what each of these solfege syllables sound like within a tonality, so now you should be ready to practice intervals using your solfege syllables.

The process is a pretty simple one and with practice you can make the exercises you create for yourself more and more challenging. You will start by practicing singing and playing all the intervals from the root note. In other words you will practice a major 2nd interval by giving yourself DO with the instrument of your choice, then singing RE by comparing the sound of RE compared with DO. It also helps to name the interval note so you can be working on your spellings at the same time.

You will continue practicing your major 3rds by giving yourself DO then signing MI above it. The further you get away from DO doing all of these basic diatonic intervals, you may have to run the sound of the scale through your mind really quick in order to find the note you want. That is fine, eventually you should be able to just jump to any random note within the key as long as you are given a DO since that is always the note that you will be comparing against. You should begin practicing all of your intervals by giving yourself different root notes as DO then sing either RE MI FA SO LA or TI above or below it. That way you will be practicing a Major 2nd, Major 3rd, Perfect 4th, Perfect 5th, Major 6th and Major 7th. What this does is begin to culture a very strong feel of the sound of all the notes within a key.

Why Is This Better Than The Traditional Way Of Teaching Intervals?

Well lets take a look and Perfect 5ths for a moment shall we? There are actually 6 perfect 5th intervals within one major scale. For example here is a C major scale C D E F G A B. The perfect 5ths are C-G, D-A, E-B, F-C, G-D, and A-E. So if you had traditional interval study you would hear one of these perfect 5ths and go “that's a Perfect 5th!!”, that's great, but which one was it? It is far more valuable to know WHERE you are within a key or tonality than to just know some of the random intervals the notes create. With this interval method, you will still know that it is a perfect 5th, but you will also know WHERE it is within a key and WHAT notes within a key it actually uses. This will help you develop an almost intuitive feel for every key, and it will also be extremely valuable when you approach music that changes keys because as soon as you know how to hear a key, when it changes or modulates to a different one it becomes VERY apparent.

So start hearing your intervals by practicing the basic ones above from DO. There will be more challenging ones coming soon, so make sure you are really paying close attention to the sound quality of every solfege syllable. It will become more and more like second nature to you before you know it. Remember, if you have any questions at all go to www.GuitarLessons365.com/forum and ask anything you want about this lesson in the Ear Training section of the forum. I will try and help you out the best I can. GOOD LUCK!!

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