

Music Theory Basics

Introduction to harmony

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(1st Edit)

Preface

This handout is meant to be a teaching aid, not a stand-alone reader. These topics are too densely presented here to be of any use to anyone trying to learn without the assistance of a trained music educator.

This packet will cover intervals of a second and third, major and minor scale construction, major and minor key centers, triad construction, and harmony of the major scale.

For contact information, and more pedagogical material, visit jimpiela.com.

OVERVIEW

Put simply, **music theory** is the study of how different notes work together, and how musicians and composers use those relationships to create and tension and release. The specific focus of this study is harmony – when two or more different notes are played at the same time.

Think of harmony as the “vertical” of music. Where melody moves horizontally from left to right, harmony builds off of individual notes, either below or above the melody.

INTERVALS: seconds and thirds

An **interval** is the relationship between two notes. The reason why scales and chords sound the same in different keys is because they follow the same interval pattern. Scales typically use very small intervals between each of their notes – called seconds.

There are two types of seconds: major and minor. **A minor second**, also referred to as a **half step**, are two notes are right next to each other in the chromatic scale (or on the keys of the piano). A minor second is the last interval of the major scale – between the 7th and 8th notes.

A **major second**, also be referred to as a **whole step**, is two half steps added together. A major second is the first interval found in the major scale, between the 1st and 2nd notes.



With these two intervals used in a specific pattern, we can create a major scale, which we will see in the next section.

Scales are built from seconds, and chords are built from thirds. Thirds are intervals that are slightly larger than seconds, and like seconds there are two types.

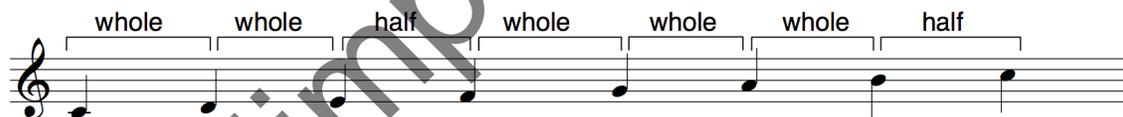
We get a **minor third** when we add three half steps together. A **major third** is four half steps.



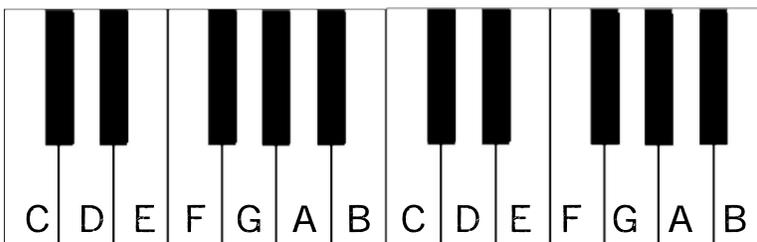
There are several more intervals and interval types, but with these four intervals, we can begin the construction of western tonal music.

SCALES AND KEYS: Major and Natural Minor

In a lot of ways, the **major scale** is the bedrock of western music. Almost everything we hear, from classical to the latest pop track, can be related back to the major scale. The major scale is built from a very specific series of half steps and whole steps:

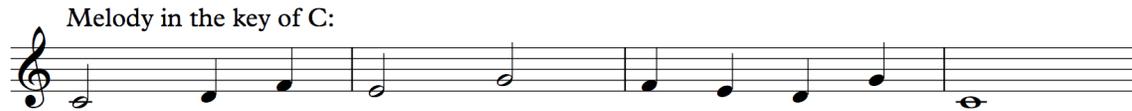


Another way to imagine this is to look at a piano layout. If we find C and start our scale there, and we play only the white keys, the whole steps will have a black key in between them, and the half steps are right next to each other.

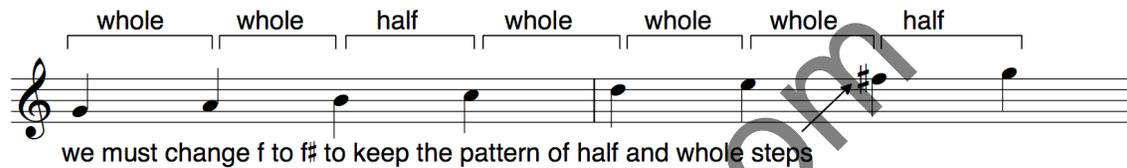


This sound is undoubtedly very familiar to your ear, and is probably one of the first things you worked on.

Now, instead of a series of notes, think of the notes of the major scale as a collection – some notes are more important than others (as we'll see) but they don't necessarily need to be played in a particular order. This "set" of notes is referred to as a **key**. The example below is definitely not a scale, but notice how it only uses the notes of the C major scale, with C being the strongest note (the melody starts and ends on a C). You would say this melody is in the key of C.



Different keys occur when we change the starting note of our scale, but keep the same pattern of half steps and whole steps. This requires adding a sharp or a flat to the key to maintain the pattern.



As we have 12 different chromatic notes, we can have 12 different major keys and 12 different major scales. Musicians organize these scales into what's called the **Circle of fourths**. (See attachment) Sometimes you will hear musicians call it the **Circle of 5ths**, which is exactly the same thing, only mirrored, with flat keys on the left and sharps on the right.

Next, Play and listen to this **minor scale**. It sounds completely different to the major scale, but these two scales are very much related:



This is called the **natural minor scale**, and it can also function as a **minor key**. But, if you notice, we have the same collection of notes as a major scale, the only thing that's changed is the starting note. We start our natural minor scale on the 6th scale degree of our major scale.

C major (labeled as "C:") and A minor (labeled as "a:") come from the same collection of notes, so we refer to them as **relative**. If someone were to ask you to play the "relative minor" of C major, you would play an A minor scale, and vice versa. We can also discuss the **parallel** major or minor, which is the scale we get when we change the pattern of intervals, but not the starting note. In other words, if we wanted the parallel minor to C major, we would get C minor, a minor scale starting on C.