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FROM KEYS AND SCALES TO RHYTHM AND MELODY, AN ESSENTIAL PRIMER ON THE BASICS OF MUSIC THEORY

THE MEDIANT IS THE THIRD NOTE OF A SCALE, FOUND HALFWAY BETWEEN THE TONIC AND THE DOMINANT.





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BRIAN BOONE and MARC SCHONBRUN

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# FROM KEYS AND SCALES TO RHYTHM AND MELODY, AN ESSENTIAL PRIMER ON THE BASICS OF MUSIC THEORY

# BRIAN BOONE and MARC SCHONBRUN

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## CONTENTS

#### INTRODUCTION

CHAPTER 1: THE BASICS OF MUSIC THE PERIODS OF "CLASSICAL" MUSIC TERMS TO KNOW TIME BASIC RHYTHMS METER

#### **CHAPTER 2: INTERVALS**

INTERVALS INTERVALS FROM SCALES THE SIMPLE INTERVALS ADVANCED INTERVALS INVERTED AND EXTENDED INTERVALS HEARING INTERVALS

#### CHAPTER 3: THE MAJOR AND MINOR SCALES

SCALES DEFINED SPELLING SCALES SCALE TONES THE DEFINITIVE AND DERIVATIVE APPROACHES DEGREES IN MINOR SCALES

#### CHAPTER 4: MUSICAL KEYS AND KEY SIGNATURES THE MUSICAL KEY ALL ABOUT KEY SIGNATURES RELATIVE MINOR KEYS MINOR KEYS ON PAPER

#### **CHAPTER 5: MODES AND OTHER SCALES**

MODES MODAL SCALES OTHER IMPORTANT SCALES

#### **CHAPTER 6: CHORDS**

CHORDS MAJOR TRIADS/CHORDS MINOR TRIADS/CHORDS OTHER TRIADS CHORDS IN SCALES SEVENTH CHORDS SEVENTH CHORD CONSTRUCTION CHAPTER 7: CHORD INVERSIONS AND PROGRESSIONS INVERTED TRIADS INVERTED SEVENTH CHORDS CHORD PROGRESSION DIATONIC PROGRESSIONS AND SOLAR HARMONY SOLAR HARMONY THE CHORD LADDER

#### **CHAPTER 8: EXPLORING HARMONY**

MELODY CHORD TONES AND PASSING TONES TRUE MELODIC HARMONIZATION SINGLE-LINE HARMONY JAZZ AND JAZZ HARMONY JAZZ PROGRESSIONS BLUES FORMS AND HARMONY

#### **CHAPTER 9: READING MUSIC**

TEMPO DYNAMICS NAVIGATION IN A SCORE

CHAPTER 10: EXPRESSION MARKINGS AND OTHER SYMBOLS EXPRESSION MARKINGS ARTICULATIONS OF LENGTH ARTICULATIONS OF STRENGTH PERFORMANCE INDICATIONS OCTAVE SIGNS MISCELLANEOUS SYMBOLS

CHAPTER 11: APPLYING MUSICAL THEORY KNOWLEDGE THE DIFFERENT TYPES OF INSTRUMENTS INSTRUMENT AND VOCAL RANGES TRANSPOSING MUSIC TRAINING YOUR EAR WHAT AM I LISTENING TO?

> FINAL EXAM: ANALYZING A PIECE OF MUSIC PHOTOGRAPHS ABOUT THE AUTHORS INDEX

## INTRODUCTION

Music theory is the study of music itself—it attempts to decipher why the patterns in music are what they are and how that in turn makes music work. Music is, after all, a highly intricate and structured art form that involves a great deal of math, science, and acoustics. And it's true that understanding music takes time and effort. But learning more about the music you love doesn't have to be a challenge! This guide will help you master the tools you need to read, play, and comprehend music.

This book is different from other books on music theory that you may have bought. Many theory books cater to the experienced musician and are filled with complex terms and assumptions that can overwhelm the everyday reader. These books also tend to focus on classical music and often ignore other types of music. In comparison, *Music Theory 101* presents the topic in a clear, easy-to-understand fashion that encompasses many musical genres and instruments.

Whether you play music or just want to know more about it, this book will help you understand how music works and how all its elements fit together. Music theory takes the *sounds* of music and translates them into *words*; it takes a look at how music has evolved over the years and explores what we can learn from those changes.

This book covers the essential aspects you need to know, such as:

- How to understand rhythm and time signatures
- How chords and scales are constructed
- How to write and understand traditional harmony
- How to identify keys and how keys are organized
- How to understand articulations and ornaments on written music
- How to use modes to expand harmony

Music theory doesn't have to be confusing or overly complicated. And while it can be true that learning music theory is not an easy task, this book will lead you through the process with confidence and clarity. So let's explore (and demystify) the fascinating world of music theory.

**Note:** In addition to examples in standard music notation, you'll also see guitar tablature included in many of the figures as well as guitar chord

diagrams. If you play guitar, you'll be able to play along with many of the examples included in this book and strum along with the harmonies to help you learn.

### Chapter 1

# The Basics of Music

Whether you are new to the study of music or are adept at reading and playing music, you need to have a firm grasp of the basics and an appreciation of its rich compositional history to understand music theory. With that in mind, this chapter offers an overview of the basic musical terms and concepts upon which music theory is built, as well as a brief history of musical styles.

# THE PERIODS OF "CLASSICAL" MUSIC

### A History of Styles

While there are more genres of music than we've got space to write them down, not to mention the subgenres of all of those, there are essentially a few overarching styles under which most music can be categorized. While all more or less follow the rules and structures of Western music theory, the following types of music also boast their own highly recognizable and innovative tropes, details, and traditions. Here's a brief history of symphonic and orchestral musical styles.

#### BAROQUE (C. 1600–1760)

Baroque music is complex, soaring, heavily ornamented, and undeniably grand, and is the basis for the classical and symphonic music that followed. The baroque period produced some of the most groundbreaking composers, including Johann Sebastian Bach, Antonio Vivaldi, and George Handel.

#### CLASSICAL (C. 1760-1820)

While you often hear the term *classical* in reference to any kind of music that involves a large group of varied instruments playing a complex, lyrics-free composition, the term is more accurately applied to a certain period in European music. And while "classical" music seems fancy and grand, classical composers actually tried to strip down music to its basic and most beautiful elements in favor of clear, strong melodies. Some of the best-known composers come from the classical period, such as Wolfgang Amadeus Mozart, Ludwig van Beethoven, and Franz Joseph Haydn.

#### ROMANTIC (C. 1780–1900)

In the romantic era, composers attempted to evoke particular feelings and even tell stories with emotional and slightly informal pieces. They idealized nature, love, spirituality, and foreign lands in a style similar to other storytelling forms, such as opera and ballet. Major romantic composers include Johannes Brahms, Pyotr Ilyich Tchaikovsky (a.k.a. Peter Ilich Tchaikovsky), and Richard Wagner.

#### MODERN (C. 1900–1975)

With musical traditions going back hundreds of years, one option for modern composers was to reject history, and its rules, and instead experiment. Consistent and pleasant melody, harmony, and rhythm was often downplayed in favor of dissonance, heavy use of minor keys, strange meter, and even random sounds. Some of the notable composers who shook things up during this period include Richard Strauss, Claude Debussy, Igor Stravinsky, and Erik Satie.

### Notable

Western music grew from European musical traditions. Those traditions started with the simple *monophonic* (or one-voice) chants used as a form of worship by monks. This was the most common type of music from about 350–1050, which means it took a good 700 years for *polyphonic* liturgical music (multiple voices singing different lines at the same time) to develop. Polyphonic music dominated from about 1050–1300, until more complex compositions and instrumentations began to emerge.

#### CONTEMPORARY SYMPHONIC MUSIC (C. 1975–PRESENT)

The history rejected by modernist composers has come full circle, with many musicians looking to the golden ages of the seventeenth and eighteenth centuries for inspiration and creating lush, textured, melodydriven symphonies. Other composers have continued to experiment with music, taking it to the very edge of logic and what could reasonably be called music, carrying on the avant-garde work of the early twentieth century. There's also been a movement toward minimalism. Influenced by rock-and-roll, minimalists favor sparse instrumentation to deliver short melodies that repeat and grow in complexity. Major names in the last forty years of composition include Philip Glass, John Adams, and Thomas Adès.

### Notable

All the music described in the previous section is Western, meaning that it stems from what's historically been called the West: Europe and later, the Americas. Asia, Africa, the Americas, and indigenous peoples throughout the world each have their own rich musical

histories—all of which can and have filled their own books. This book focuses almost entirely on the forms and systems of Western music.

# **TERMS TO KNOW**

### **Music Piece by Piece**

Music theory explores what has been done in other music in order to reach a greater overall understanding. Since you will see the language of written music throughout this book, you must be able to read it. You will need to read in multiple clefs, since standard notation uses treble and bass clefs at a minimum and often throws in alto clef too. Here is a basic review to help you make sense of what you are reading. There is also a somewhat detailed review of rhythms because it can be a difficult concept to understand; even if you know how to decipher the notes on a staff, you may still be uneasy with the counting aspect. If this chapter is already scaring you, you can get a brief tutorial on reading music in Chapters 9 and 10 of this book or you might want to pick up a book strictly on reading music and keep it around; it will help you greatly in understanding this material!

#### NOTES

What better place to start than with notes? Here's a short sample of music; try to dissect what's going on and see if you have all the information you need.



As you can see from this figure, this is a short excerpt from a piece of solo piano music. Here is what you are seeing:

**1.** There are notes placed on two musical staffs: one treble staff and one bass staff.

- **2.** The staffs are further defined by their clefs.
- **3.** The notes are identified only by use of a clef; otherwise, they are simply dots sitting on lines and spaces.

If you want to talk about the notes, you have to talk about clefs because clefs actually define the name of the notes in a staff.

#### CLEFS

A clef is a symbol that sits at the beginning of every staff of music. A staff contains five lines and four spaces. How do you know where the note A or the note C is? The missing element is the clef, which defines what notes go where and functions a lot like a map. Placing a treble clef at the start of the staff defines the lines and spaces with note names. The following figure shows the notes of a treble staff.



The treble clef circles around the note G. This is why it's commonly called the G clef. As for the notes, there is an important pattern. Look at the lowest line, which is designated E. Follow the musical alphabet to find where the next note is. The F is in the space just above the E. The staff ascends in this fashion—line, then space, then line—as it cycles through the musical alphabet (A-B-C-D-E-F-G).

The bass clef is a different clef than the treble and identifies not only different note names but also notes in different ranges. The bass clef is used for instruments that have a lower pitch, like a bass guitar. Even though the bass clef sits on the same five-line staff, it defines very different notes. Many musicians can read treble clef because it is the most common clef. It is more difficult, however, for many musicians to read bass clef. In order to make progress in understanding theory, you will need to be adept at reading all clefs. The next figure shows the notes of a bass clef staff.



### Notable

Even though you may understand the notes on both clefs, the only way to become proficient is to read other clefs as often as you can. Set aside a few minutes each day to look at other clefs so you can easily identify their notes. Since clefs define notes, think of being able to read in many clefs as a kind of musical literacy.

#### GRAND STAFF AND MIDDLE C

Grouping the bass clef and the treble clef together creates the grand staff. The grand staff is used in piano writing. To make a grand staff, connect a treble and a bass staff, or clef, with a brace, as shown in the following figure.



The grand staff reveals a very important note: middle C. The following figure shows a middle C.



When you look at the previous figure, can you tell whether the note belongs to the bass clef or the treble clef? Actually, it belongs equally to both. If you trace down from the treble clef, one ledger line below the staff is a C. If you look at the bass clef notes, one ledger line above the staff is also a C. They are, in fact, the same pitch on the piano. This note is called middle C because it's right in the middle of everything. Middle C will come up throughout this book, so keep track of it!

#### MOVABLE C CLEFS

The last type of clef is the C clef. Typically this clef is associated with the viola because it's the most common instrument that reads in C clef; however, other instruments read it as well. When the C clef is used with the viola, it is called the alto clef. Thankfully, this clef is very easy to read; the symbol for the C clef has two semicircles that curve into the middle of the staff and basically point toward the middle line, which is a C—and it's not just any C, it's middle C. The next figure shows the notes for alto clef.



Since this is a movable clef, you can place the clef anywhere you want; whatever lines the two semicircles point to become middle C. Some very old choral music uses a different movable C clef for each part (tenor clef, alto clef, and soprano clef). As long as you know that the clef always points toward middle C, you will be able to decipher the notes in this clef.

### Notable

When notes use ledger lines that are extremely high or extremely low, they can be difficult to read; it's much easier to read notes that sit in the staff you are reading. Using different clefs allows you to move the location of middle C so that the majority of your notes are in and around the staff.

#### ACCIDENTALS

Notes can be altered with the use of accidentals. If you've heard of B-flat (B  $\flat$ ) or C-sharp (C#), then you've heard of an accidental. Accidentals are used to raise and lower the pitch of a tone. There are two types of accidentals: single and double.

- A single accidental is the common  $\flat$  and  $\sharp$  symbol.
- A  $\flat$  lowers the pitch by one half step.
- A # raises a pitch by one half step.
- A 4 (natural) cancels an accidental (either in a measure or from the given key signature).

In addition to the simple sharp and flat symbols, you will also see double accidentals.

- A **I** lowers the pitch by two half steps.
- A \* raises a pitch by two half steps.
  A \(\beta\) cancels the double accidental in the same way it cancels the single accidentals.

# TIME

### **Gimmie a Beat**

Time is a fundamental aspect of music theory that is often left out of formal music-theory study. Time is more than just counting beats and bars. Time can dictate the feel and flow of a piece; even harmony has a rhythm to it, aptly called harmonic rhythm. You'll start with time signatures, as they are the first time-related aspect you need to understand in detail.

#### TIME SIGNATURES

Music is divided into bars, or measures, for reading convenience and for musical purposes. Most music adheres to a meter, which affects the phrasing of the melody. If you don't have a lot of experience reading music, rhythm can be a very difficult concept to grasp.

### Notable

A beat is a way of counting time when playing music. Beats are grouped together in a measure (the notes and rests that correspond to a certain number of beats). The grouping of strong and weak beats is called meter. You can find the meter signature (also called the time signature) at the beginning of every piece of music.

The most standard time signature is  $\frac{4}{4}$  time, which is also called common time and is abbreviated by this symbol: **c**. Common time looks like a fraction and signifies two things. First, the top number 4 means that every measure will have four beats in it. The bottom number 4 indicates what note value will receive the beat; in this case, 4 stands for a quarter note (J). So common time breaks up each measure into four beats, as a quarter note receives one beat. You can, of course, further divide the measure into as many small parts as you like, but in the end, it must still add up to four beats.

#### RHYTHM

Music is composed of pitch and rhythm. Although finer elements come into play later on, such as dynamics and expression, music can be made simply by knowing which note and how long to hold it. Without rhythm, people couldn't fully read music.

Rhythm is music's way of setting the duration of a note. Music accomplishes this task by varying the appearance of the notes that sit on the staff. Different rhythms indicate different note lengths. To get rolling, you need to hear about an essential concept: beat. Have you ever been to a concert and clapped along with 30,000 other fans? Have you noticed how everyone claps together in a steady pattern? Did you ever wonder how 30,000 people could possibly agree on anything? If you've been to a dance club, you may have noticed that there is always a steady drumbeat or bass line, usually up-tempo, to drive the music along. Those are examples of pulse and beat in music. Rhythm is a primal element, and pulse and beat are universal concepts.

# **BASIC RHYTHMS**

### You Have to Start Somewhere

In music, changing the appearance of the notes indicates the rhythm. Remember, the location of the notes is fixed on the staff and will never change. However, the note's appearance varies, indicating how long that note should be held. Now, here are the basic musical symbols for rhythm.

#### QUARTER NOTES

A quarter note ( $\downarrow$ ) is signified with a filled-in black circle (also called a notehead) and a stem. It is the simplest rhythm to discuss. Quarter notes receive one count; their duration is one beat (see the following figure).



#### HALF NOTES

The next in our series of simple rhythms is the half note (d). As you can see, the half note looks similar to the quarter note, except the circle is not filled in. Like a quarter note, the half note has a single stem that points either up or down. The half note receives two counts; its duration is two beats. In relation to the quarter note, the half note is twice as long because it receives two counts (see the next figure).



WHOLE NOTES

A whole note (**o**) is a rhythm that receives four beats. It's twice as long as a half note and four times as long as a quarter note—count to yourself: one, two, three, four. A whole note is represented as an open circle without a stem. It is probably the single longest rhythmic value that you will come across. Whole notes are easy to spot because they are the only notes that lack a stem (see the following figure).



**EIGHTH NOTES** 

The smallest rhythm you have encountered thus far is the quarter note, which lasts for one beat. Dividing this beat further allows musicians to explore faster rhythms and faster passages. Chopping the quarter note in half gives us the eighth note ( $\checkmark$ ), which receives half of one beat (see the next figure).



SIXTEENTH NOTES

The beat can be broken down even further for the faster note values. The next rhythm is the sixteenth note ( $\checkmark$ ), which breaks the quarter note into four equal parts and the eighth note into two equal parts (see the following figure).

Sixteenth Notes



FASTER NOTE VALUES