LEARNING MADE EASY

Fourth Edition

Music Theory

for dummies®

A Wiley Brand

Identify the building blocks of music

Understand music when you're playing, writing, or analyzing it

Listen to audio tracks online

Michael Pilhofer, MM
Holly Day

Music Theory

4th Edition

by Michael Pilhofer, MM and Holly Day

for dummies®
A Wiley Brand

Music Theory For Dummies®, 4th Edition

Published by: **John Wiley & Sons, Inc.,** 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

Library of Congress Control Number: 2019942839

ISBN 978-1-119-57552-8 (pbk); ISBN 978-1-119-57554-2 (ebk); ISBN 978-1-119-57551-1 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Contents at a Glance

Table of Contents

Introduction

What do you think of when you hear the phrase *music theory?* Does the image of your elementary school music teacher eyeing you from behind the piano pop into your head? Or perhaps you have flashbacks to a later image of fellow college students in theory classes determinedly trying to notate theremin whistles? If either of these ideas is anything close to your own perception of what music theory is, hopefully this book will be a pleasant surprise.

For many self-taught musicians, the idea of theory seems daunting and even a little self-defeating. After all, if you can already read guitar tabs and play some scales, why would you want to muddle what you already know with theory?

Even the most basic music theory training gives you the information you need to expand your range and abilities as a musician. A decent amount of note-reading ability enables you to play a particular type of music, whereas some basic knowledge about chord progressions can help you write your own music.

About This Book

Music Theory For Dummies, 4th Edition, is designed to give you everything you need to know to become fluent at knocking out a solid beat, reading musical scores, and learning to anticipate where a song should go, whether you're reading someone else's music or writing your own.

Each chapter is as self-contained as possible. In other words, you don't have to read every single chapter to understand what the next one is talking about. Reading the chapters consecutively does help, though, because knowledge of music builds from simple concepts to complex ones.

We cover a lot of territory in this book, from discovering the basics of note values and time signatures to dissecting lead lines and adding harmony to a melody to studying the standard forms that much of popular and classical music follow. So if you're new to the world of music theory, pace yourself while reading this book. Read it while you're sitting at your piano or with your guitar or whatever instrument you're working with next to you, and stop every couple of pages to

practice the information you read. If you were taking a music class, this book would cover several years' worth of information, so if you don't learn everything in one or two months, you should refrain from self-flagellation.

Foolish Assumptions

We assume that if you're reading this book, you love music, you want desperately to understand music and everything about it, and you're a nut for the complicated dance of perfect timing and arrangement of tones. At the very least, we assume that you have a couple of books of sheet music lying around that have been frustrating you, or you have an old piano in the corner of your house that you'd like to mess around with.

This book is written for the following types of musicians (which, frankly, covers the gamut):

- **The absolute beginner:** We wrote this book with the intent that it would accompany the beginning musician from his very first steps into note reading and tapping out rhythms all the way into his first real attempts at composing music by using the principles of music theory. Beginning musicians should start with Part 1 at the beginning of the book and just keep reading until reaching the back cover. The book is organized to follow the lesson plan that college music theory classes offer.
- **The music student who drifted away:** This book can also be helpful for the musician who took instrument lessons as a child and still remembers how to read sheet music but who was never exposed to the principles of building scales, following basic improvisation, or jamming with other musicians. Many folks fall into this camp, and, luckily, if you do, this book is designed to gently ease you back into the joy of playing music. It shows you how to work outside the constraints of playing from a piece of music and truly begin to improvise and even write your own music.
- **The experienced performer:** This book is also intended for the seasoned musician who already knows how to play music but never got around to working out how to read sheet music beyond the basic fakebook or lead sheet. If this description sounds like you, start with Part 1, because it specifically discusses the note values used in sheet music. If you're already familiar with the concepts of eighth notes, quarter notes, and so on, Part 2 may be a good starting point. In that part of the book, we lay out the entire music staff and match it to both the piano keyboard and the guitar neck for easy reference.

Icons Used in This Book

Icons are handy little graphic images meant to point out particular types of information. You can find the following icons in this book; they're conveniently located along the left-hand margins.

This icon highlights time-saving advice and information that can help you understand key concepts.

When we discuss something that may be problematic or confusing, we use this icon.

This icon flags information that's, well, technical; you can go ahead and skip it if you want to.

When we make a point or offer some information that we feel you should keep with you forever, we toss in this icon.

This icon points out audio tracks that relate to the topic currently being discussed in the book. You can access the audio tracks at `www.dummies.com/go/musictheory`.

Beyond the Book

In addition to the information and guidance about music theory that we provide in this book, you get access to even more online at `Dummies.com`. Check out this book's online Cheat Sheet for handy info regarding US and UK note names, time signatures, chord progressions, and more. Just go to `www.dummies.com` and search for "Music Theory For Dummies Cheat Sheet."

Where to Go from Here

If you're a beginning music student or want to start again fresh, plow through Part 1. If you're already familiar with the basics of rhythm and want to simply find out how to read notes, head to Part 2. If you're a trained musician who wants to

know how to improvise and begin to write music, Part 3 covers the basics of chord progressions, scales, and cadences. You can also check out Part 4, which discusses a variety of musical forms you can start plugging your own musical ideas into.

Relax and have fun with your quest into music theory. Listening to, playing, and writing music are some of the most enjoyable experiences you'll ever have. *Music Theory For Dummies,* 4th Edition, may have been written by teachers, but we promise, no clock-watching tyrants will show up at your door to see how fast you're making your way through this book! We hope you enjoy reading this book as much as we did writing it. Sit back, read, and then start your own musical adventure.

1 Getting Started with Music Theory

IN THIS PART . . .

Get to know music theory basics.

Understand notes and rests.

Read time signatures.

Figure out beat patterns and rhythms.

IN THIS CHAPTER

- Checking out a bit of music history
- Getting to know the basics of music theory
- Finding out how theory can affect your playing

Chapter 1

What Is Music Theory, Anyway?

One of the most important things to remember about music theory is that music came first. Music existed for thousands of years before theory came along to explain what people were trying to accomplish when pounding on their drums. So don't ever think that you can't be a good musician just because you've never taken a theory class. In fact, if you are a good musician, you likely already know a lot of theory. You simply may not know the terminology or technicalities.

The concepts and rules that make up music theory are much like the grammatical rules that govern written language (which also came along after people had successfully discovered how to talk to one another). Just as being able to transcribe language made it possible for people far away to "hear" conversations and stories the way the author intended, being able to transcribe music allows musicians to read and play compositions exactly as the composer intended. Learning to read music is a lot like learning a new language, to the point where a fluent person can "hear" a musical "conversation" when reading a piece of sheet music.

Plenty of people in the world can't read or write, but they can still communicate their thoughts and feelings verbally just fine. In the same way, plenty of intuitive, self-taught musicians have never learned to read or write music and find the whole idea of learning music theory tedious and unnecessary. However, just

like the educational leaps that can come with learning to read and write, music theory can help musicians master new techniques, perform unfamiliar styles of music, and develop the confidence they need to try new things.

Unearthing Music Theory's Beginnings

From what historians can tell, by the time the ancient world was beginning to establish itself — approximately 7000 B.C. — musical instruments had already achieved a complexity in design that would be carried all the way into the present. For example, some of the bone flutes found from that time period are still playable, and short performances have been recorded on them for modern listeners to hear.

Similarly, pictographs and funerary ornaments have shown that by 3500 B.C., Egyptians were using harps as well as double-reed clarinets, lyres, and their own version of the flute. By 1500 B.C., the Hittites of northern Syria had modified the traditional Egyptian lute/harp design and invented the first two-stringed guitar, with a long, fretted neck, tuning pegs at the top of the neck, and a hollow soundboard to amplify the sound of the strings being plucked.

REMEMBER

A lot of unanswered questions remain about ancient music, such as why so many different cultures came up with so many of the same tonal qualities in their music completely independent of one another. Many theorists have concluded that certain patterns of notes just sound right to listeners, and certain other patterns don't. Music theory, then, very simply, could be defined as a search for how and why music sounds right or wrong. In other words, the purpose of music theory is to explain *why* something sounded the way it did and *how* that sound can be made again.

Many people consider ancient Greece to be the actual birthplace of music theory, because the ancient Greeks started entire schools of philosophy and science built around dissecting every aspect of music that was known then. Even Pythagoras (the triangle guy) got into the act by creating the 12-pitch octave scale similar to the one that musicians and composers still use today (see Chapter 7). He did this via the first Circle of Fifths (see Chapter 8), a device still religiously used by musicians from all walks of life.

Another famous Greek scientist and philosopher, Aristotle, is responsible for many books about music theory. He began a rudimentary form of music notation that remained in use in Greece and subsequent cultures for nearly a thousand years after his death.

In fact, so much music theory groundwork was laid in ancient Greece that substantial changes didn't seem necessary until the European Renaissance nearly 2,000 years later. Neighbors and conquerors of Greece were all more than happy to incorporate Greek math, science, philosophy, art, literature, and music into their own cultures.

Putting the Spotlight on Music Theory Fundamentals

While it would be nice to be one of those people who can sit at any instrument and play beautiful music without any training whatsoever, most folks need some sort of structured instruction, whether from a teacher or from reading a book. In the following sections, we go over the basic information you need to start learning how to read music, play scales, understand key signatures, build chords, and compose with forms.

Understanding the foundation: Notes, rests, and beats

Learning how to read music is essential to a musician, especially one who wants to share his music with other musicians or discover what other musicians are playing. By studying the basic elements, such as time values of each type of written note (see Chapter 2), musical rests (see Chapter 3), time signatures (see Chapter 4), and rhythm (see Chapter 5), you put yourself on the path to mastering music. All these elements come together to establish a foundation that allows you to read, play, and study music.

Manipulating and combining notes

Reading musical notes on both the treble and bass clef staves as well as finding notes on the piano and guitar — the two most common instruments on which people teach themselves to play — are crucial to making and studying music. Chapter 6 gives you the full scoop.

When you can read notes on the staves, you can determine a musical piece's *key signature*, which is a group of symbols that tells you what key that song is written in. You can use the Circle of Fifths to help train yourself to read key signatures on

sight by counting the sharps or flats in a time signature. You can read more about key signatures and the Circle of Fifths in Chapter 8.

After you've become familiar with key signatures, you're ready to move on to intervals, chords, and chord progressions, which create the complexity of musical sound — from pleasing and soothing to tense and in need of resolution. As we discuss in Chapter 9, you build scales and chords using simple or compound intervals: melodic and harmonic. Chapters 10 and 11 show you everything you need to know about building chords and chord progression, as well as how to build and use extended chords.

LINKING THE KEYBOARD TO MUSIC NOTATION

Prior to the Renaissance period, few truly innovative changes occurred in music technology. Stringed instruments, woodwinds, horns, and percussion instruments had been around for thousands of years, and although they had experienced many improvements in design and playing technique, they were essentially the same instruments used by the people of ancient cultures. It wasn't until the 1300s that a brand new musical interface appeared: the keyboard.

With the invention of the keyboard came the beginning of modern musical notation — written music. The keyboard-notation link was fostered because of the ease of composing for full orchestras on the keyboard. Also, most newly commissioned work was created for keyboard instruments because of the public's perception of the keyboard as a superior instrument.

Fifteenth-century French composers began adding as many lines as they needed to their musical staves (see Chapter 6 to find out about the musical staff). They also wrote music with multiple staves to be played simultaneously by different instruments. Because the keyboard has so many notes available, separate staves for left- and right-handed playing began to be used. These staves are the bass clef and the treble clef.

As noted in Chapter 10, keyboards also had the advantage of being incredibly easy to build chords on. By the 17th century, the five-lined staff was considered standard for most musical instrumentation — probably because it was easier and cheaper to print just one kind of sheet music for musicians to compose on. The system hasn't changed much over the past four centuries, and it probably won't change again until a new, more-appealing instrument interface enters the scene.

Studying musical form and compositions

Most popular and classical music is composed using specific forms. A *form* is a structural blueprint used to create a certain type of music. The building blocks of form include musical phrases and periods (which we cover in Chapter 14), and rhythm, melody, and harmony enter the picture to create the *genre,* or style, of a piece of music.

When sitting down to write music, you have to choose what form you're going to follow: for example, classical or popular. You can choose from many different classical and popular forms, including sonatas, concertos, 16-bar blues, and verse-chorus form (Chapters 15 and 16 provide plenty of information on the forms you may encounter). You can create varied sound in whatever form you choose by playing with tempo, dynamics, and instrument tone color (see Chapters 12 and 13 for more).

Seeing How Theory Can Help Your Music

If you didn't know better, you may think that music was something that could start on any note, go wherever it wanted, and stop whenever the performer felt like getting up for a glass of iced tea. Although it's true that many folks have been to musical performances that actually do follow this style of "composition," for the most part these performances are confusing and annoyingly self-indulgent and feel a little pointless.

The only people who can pull off a spontaneous jam *well* are those who know music thoroughly enough to stack chords and notes next to one another so they make sense to listeners. And, because music is inherently a form of communication, connecting with your listeners is the goal.

Getting to know more about music theory is also incredibly inspiring. Nothing can describe the feeling you get when the light bulb goes off in your head and you suddenly realize you can put a 12-bar blues progression together and build a really good song out of it. Or when you can look at a piece of classical music and find yourself looking forward to playing through it for the first time. Or the first time you sit down to jam with your friends and find you have the confidence to take the lead.

REMEMBER

As a musician, the inescapable fact is this: What you get out of music is what you put into it. If you want to be able to play classical music, you must know how to sight-read and know how to keep a steady beat. If you plan to become a rock guitarist, knowing what notes you need to play in a given key is especially important. Knowing how to play music takes a lot of personal discipline, but in the end, it's worth all the hard work. Plus, of course, playing music is fun, and knowing how to play music well is incredibly fun. Everybody loves a rock star/jazz man/Mozart.

IN THIS CHAPTER

- Understanding rhythm, beat, and tempo
- Reviewing notes and note values
- Counting (and clapping) out different notes
- Getting to know ties and dotted notes
- Combining note values and counting them out

Chapter 2

Determining What Notes Are Worth

Just about everyone has taken some sort of music lessons, either formal paid lessons from a local piano teacher or at the very least the state-mandated rudimentary music classes offered in public school. Either way, we're sure you've been asked at some point to knock out a beat, if only by clapping your hands.

Maybe the music lesson seemed pretty pointless at the time or served only as a great excuse to bop your grade-school neighbor on the head. However, counting out a beat is exactly where you have to start with music. Without a discernible beat, you have nothing to dance or nod your head to. Although all the other parts of music (pitch, melody, harmony, and so on) are pretty darned important, without the beat, you don't really have a song.

REMEMBER

Everything around you has a rhythm to it, including you. In music, the *rhythm* is the pattern of regular or irregular pulses. The most basic thing you're striving to find in songs is the rhythm. Luckily, written music makes it easy to interpret other composers' works and produce the kind of rhythm they had in mind for their songs.

In this chapter, we provide you with a solid introduction to the basics of counting notes and discovering a song's rhythm, beat, and tempo.

Note: You may notice in this chapter that we've given two different names for the notes mentioned — for example, quarter (crotchet) note. The first name (quarter) is the common U.S. name for the note, and the second name (crotchet) is the common U.K. name for the same note. The U.K. names are also used in medieval music and in some classical circles. After Chapter 3, we use only the U.S. common names for the notes, because the U.S. usage is more universally standard.

Meeting the Beat

A *beat* is a pulsation that divides time into equal lengths. A ticking clock is a good example. Every minute, the second hand ticks 60 times, and each one of those ticks is a beat. If you speed up or slow down the second hand, you're changing the *tempo* of the beat. *Notes* in music tell you what to play during each of those ticks. In other words, the notes tell you how long and how often to play a certain musical *pitch* — the low or high sound a specific note makes — within the beat.

When you think of the word *note* as associated with music, you may think of a sound. However, in music, one of the main uses for notes is to explain exactly how long a specific pitch should be held by the voice or an instrument. The *note value*, indicated by the size and shape of the note, determines this length. Together with the preceding three features, the note value determines what kind of rhythm the resulting piece of music has. It determines whether the song runs along very quickly and cheerfully, crawls along slowly and somberly, or progresses in some other way.

When figuring out how to follow the beat, *rhythm sticks* (fat, cylindrical, hardwood instruments) come in real handy. So do drum sticks. If you've got a pair, grab 'em. If you don't, clapping or smacking your hand against bongos or your desktop works just as well.

REMEMBER

Eventually "hearing" a beat in your head (or "feeling" a beat in your body) is absolutely fundamental while you play music, whether you're reading a piece of sheet music or jamming with other musicians. The only way you can master this basic task is *practice, practice, practice.* Following along with the beat is something you need to pick up if you want to progress in music.

TIP

Perhaps the easiest way to practice working with a steady beat is to buy a metronome. They're pretty cheap (you may even be able to find an app for your smartphone). Even a crummy metronome should last you for years. The beauty of a metronome is that you can set it to a wide range of tempos, from very, very slow

to hummingbird fast. If you're using a metronome to practice — especially if you're reading from a piece of sheet music — you can set the beat to whatever speed you're comfortable with and gradually speed it up to the composer's intended speed when you've figured out the pacing of the song.

Recognizing Notes and Note Values

If you think of music as a language, then notes are like letters of the alphabet — they're that basic to the construction of a piece of music. Studying how note values fit against each other in a piece of sheet music is as important as knowing musical pitches because if you change the note values, you end up with completely different music. In fact, when musicians talk about performing a piece of music "in the style of" Bach, Beethoven, or Philip Glass, they're talking as much about using the rhythm structure and pace characteristics of that particular composer's music as much as any particular chord progressions or melodic choices.

In this section, we take a closer look at notes and what they're made of. We also discuss the basics on note values. For more in-depth info on notes, check out Chapter 6.

Examining the notes and their components

Notes are made of up to three specific components: note head, stem, and flag (see Figure 2-1).

- **Head:** The *head* is the round part of a note. Every note has one.
- **Stem:** The *stem* is the vertical line attached to the note head. Eighth (quaver) notes, quarter (crotchet) notes, and half (minim) notes all have stems.
- **Flag:** The *flag* is the little line that comes off the top or bottom of the note stem. Eighth (quaver) notes and shorter notes have flags.

FIGURE 2-1: The whole (semibreve) note has a head; the quarter (crotchet) note has a head and stem; and the eighth (quaver) note has a head, stem, and flag.

REMEMBER

Stems can point either up or down, depending where on the *staff* they appear (you find out all about staves in Chapters 4 and 6). Whether the stem points up or down makes no difference in the value of the note.

Instead of each note getting a flag, notes with flags can also be connected to each other with a *beam*, which is just a cleaner-looking incarnation of the flag. For example, Figure 2-2 shows how two eighth (quaver) notes can be written as each having a flag, or as connected by a beam.

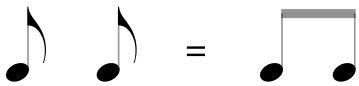

FIGURE 2-2: You can write eighth (quaver) notes with individual flags, or you can connect them with a beam.

Figure 2-3 shows four sixteenth (semiquaver) notes with flags grouped three separate ways: individually, in two pairs connected by a double beam, and all connected by one double beam. It doesn't matter which way you write them; they sound the same when played.

FIGURE 2-3: These three groups of sixteenth (semiquaver) notes, written in three different ways, all sound alike when played.

Likewise, you can write eight thirty-second (demisemiquaver) notes in either of the ways shown in Figure 2-4. Notice that these notes get *three* flags (or three beams). Using beams instead of individual flags on notes is simply a case of trying to clean up an otherwise messy-looking piece of musical notation. Beams help musical performers by allowing them to see where the larger beats are. Instead of seeing sixteen disconnected sixteenth (semiquaver) notes, it's helpful for a performer to see four groups of four sixteenths (semiquavers) connected by a beam.