

# Chapter 1

## What Is Music Theory Anyway?

### *In This Chapter*

- ▶ Understanding the value of music theory
- ▶ Checking out a bit of music history
- ▶ Getting to know a few theorists
- ▶ Finding out why the piano is so central

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 by 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 already know a lot of theory. You just may not know the words or scientific formulas for what you're doing.

The concepts and rules that make up music theory are very much like the grammatical rules that govern written language — which also came along after people had successfully learned 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 makes it possible for other musicians to read and play compositions exactly as the composer intended. Learning to read music is almost exactly like learning a new language, to the point where a fluent person can “hear” a musical “conversation” when reading a piece of sheet music.

There are plenty of people in the world who can't read or write but can communicate their thoughts and feelings verbally just fine. In the same way, there are plenty of intuitive, self-taught musicians out there who 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 learn new techniques, perform unfamiliar styles of music, and develop the confidence they may need to try new things.

## *How Will Theory Help My Music?*

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

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

Learning about music theory is also incredibly inspiring. There's just no describing the light bulb that goes off in your head when you suddenly know how to 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.

It's our intention that the readers of this book will end up putting it down on a regular basis because the urge to try out a new musical technique is just too hard to resist.

## *The Old Lady and the Yardstick*

Yep, this is the image that a lot of us get when we think about music lessons: angry, elderly piano teachers who tap out the beat with yardsticks, sometimes inches from your knuckles. We promise, right here and now, that no angry old ladies with yardsticks will show up at your house upon purchase of this book. You can go through the chapters and principles as quickly, or as slowly, as you'd like without worrying about your knuckles.

However, 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 memorize sight-reading and know how to keep a steady beat. If you plan on becoming a rock guitarist, then knowing what notes you need to play in a given key is especially important. Learning 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.

And now for a little history.

## *The Birth of Music and Theory*

From what we 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. Bone flutes with five to eight drilled holes were being produced in the Henan Province in China that could play notes in both the five-note Xia Zhi scale and the seven-note Qing Shang scales of the ancient Chinese musical system. Some of the flutes found from this time period are still playable, and short performances have been recorded on them for modern listeners to hear.

All over the world, people were playing music — and not just on bone whistles and empty turtle shells. Pictographs and funerary ornaments have shown that by 3500 B.C., Egyptians had invented the harp — or at least were using it a lot — as well as double-reed clarinets, lyres, and their own version of the flute. By 2500 B.C., their neighbors across the Mediterranean, the Cycladians, eventually responsible for forming Greek culture, had adopted the lyre as well, while in faraway Denmark, the Danes had invented the first known trumpet.

By 1500 B.C., the Hittites of northern Syria had modified the traditional lute/harp design of the Egyptians 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. Guitars may look a lot sexier now and have a few more strings, but they follow the same basic design laid out more than 3,000 years ago.

There are a lot of unanswered questions about ancient music, not the least being 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 patterns *don't*. Music theory, then, very simply, could be said to be a search for how and why music sounds right or wrong.

It's only common sense to assume that if a Neanderthal, say, built a really awesome flute or laid out a catchy rhythm on the ol' hollow log, there had to be someone nearby who asked, "How the heck did you do that?" Voila! The birth of music theory. The purpose of music theory is to both explain *why* something sounded the way it did, and *how* that sound can be made again.

## *The Greeks: First Theorists*

Many people consider ancient Greece to be the actual birthplace of music theory. This is because, in that great, ancient Greek way of theirs, the ancient Greeks started entire schools of philosophy and science built around dissecting every single aspect of music then known. Even Pythagorus (the triangle guy) got into the act by creating the 12-pitch octave scale that we still use today. He did this via the very first Circle of Fifths (see the Cheat Sheet in the front of this book for an example), 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 stayed in use in Greece and subsequent cultures for nearly a thousand years after his death.

In fact, so much music theory groundwork was laid out in ancient Greece that there didn't seem to be a need to make any substantial changes to it 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.

Yet without the benefit of the unique social perspective and structure of Greek culture — that is, the belief that smart people should be allowed to just think about things for the benefit of society — the newcomers were pretty hard-pressed to expound on these ideals. Besides, ancient Mediterranean peoples had more than enough other things to keep them busy, such as wars, slave revolts, threats from barbarian hordes, the destruction of Rome, and the overall oppressive atmosphere that permeated the Dark Ages.

## *The Keyboard and Music Notation*

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

The first primitive keyboards had actually been in use since 300 B.C., when Ktesibios of Greece invented the one-note pipe organ. Romans adopted the design later for use in their arenas. It was absolutely the loudest instrument

around and was perfectly suited to herald the beginning and end of spectacles such as the Roman Games. Still, considering that if you were in the ring when you heard it, you were probably about to wrestle a lion, this early organ was probably not a very popular instrument among anybody but Roman aristocracy.

Pipe organs were also a fixture in the Catholic Church since the late 700s, but were only played at the whimsy of whichever Pope was presiding. St. Augustine was apparently uncomfortable with music and did not allow it to be played during services. Pope Gregory forbade priests from playing musical instruments, which meant that only the human voice was allowed in service. Outside of the Church, there were no keyboards for folk musicians to experiment on. Pipe organs are way too big to steal, so if a church was attacked and razed, the organ went down right along with it.

Because of the Church affiliation, too, organs (therefore keyboards) were considered much too sacred an instrument for ordinary people to learn how to play. So, when the harpsichord became available for public consumption, it was almost immediately considered a far superior instrument than the “peasant” instruments that had been around for millennia. When royalty wanted a music performance written and performed for an occasion, more than likely they wanted that performance to be on a harpsichord. This perception of the keyboard instrument belonging to a superior class carried on into the Baroque and Classical periods of music and has hold over public perception even today.

With the invention of the keyboard came the beginning of modern musical *notation* — written music. The keyboard-notation link has to do with the ease of composing for full orchestras on the keyboard, as well as the fact that most newly commissioned work was for keyboard instruments because of the previously mentioned superior public perception of the instrument.

Fifteenth-century French composers began adding as many lines as they needed to their musical *staves* (*or staves* — see Chapter 7 to find out all about the musical staff). They also wrote music with multiple staves to be played simultaneously by different instruments. Because there were so many notes available on a keyboard, a separate staff for left- and right-handed playing began to be used: the bass clef and the treble clef.

Keyboards also had the advantage of being incredibly easy to build chords on (Chapter 13 has a lot of discussion about this), and the principles of intervals (Chapter 10) and chord building were heavily explored by famous Baroque composers such as Heinrich Schütz (1585–1672), Jean-Baptiste Lully (1632–1687), Henry Purcell (1659–1695), Johann Sebastian Bach (1685–1750), George Frideric Handel (1685–1759), George Philipp Telemann (1681–1767), and Antonio Vivaldi (1678–1741).

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 probably won't change again until a new, sexier, more appealing instrument interface enters the scene.

But now that you know about how music theory started, let's get on to the real reason you picked up this book: to learn how music theory works.