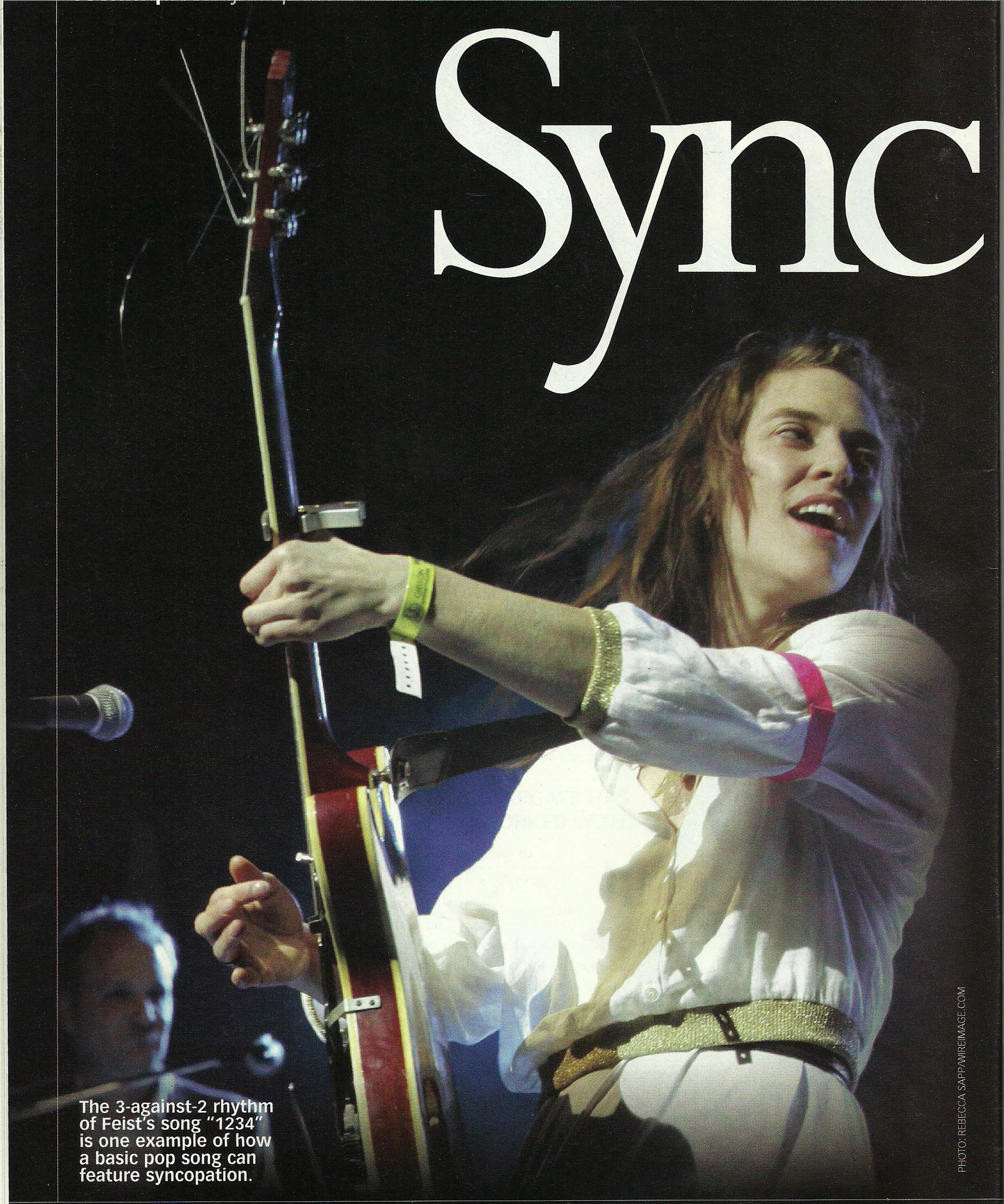
Sync



The 3-against-2 rhythm of Feist's song "1234" is one example of how a basic pop song can feature syncopation.

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Syncopation

From ragtime to rap, this technique of accenting weak beats gives jazz its drive, rock its back beat, and hip-hop its groove.

By Jon Chappell

Syncopation is the practice of upsetting or contradicting a piece of music's regular pulse or meter by displacing rhythms and applying accents in unusual places. You probably don't think about syncopation much, because it's present in just about all the music you listen to today. But syncopation was designed to be unexpected and to catch the listener off guard. So in order to understand and play syncopations correctly, you have to expect the unexpected.

METER AND PULSE

The division of time into measures that we use in Western musical notation assumes that the down beats in each measure receive the most emphasis. For example, in 4/4, we like to hear four main beats—we even like to hear beats 1 and 3 as "strong" beats, because they lead off each half of the measure. Of course, we often play notes that fall in between these quarter notes (like eighth notes and 16th notes). But in a steady pattern of eighth notes, the first eighth note of each pair would naturally get the emphasis by being played with a stronger attack—even if there were no accent marks to indicate as such in the music—because these first notes are "on" the beat. Try counting out loud "One and Two and Three and Four and." I'll bet you said the numbers louder than the word "and."

Scott Joplin

With syncopation, you don't just play the notes in between the main beats; you emphasize them to make them stand out. A syncopated version of the spoken passage above might be "one AND two AND three AND four."

Syncopation can take many forms: You can, for example, simply leave out the notes on the beat. This draws attention to any notes on *either side* of the beat. If you decide to emphasize the note just before a beat—and let it ring though the space where the beat would normally fall—you've created syncopation.

Or, you can look at syncopation as a shift in time: You could, for example, move a note that's regularly on the beat (a downbeat) to a typically unaccented position. Let's say you accent a note so that it's played one-half of a beat *before* the downbeat: You're executing a specific type of syncopation known as an *anticipation*. Anticipations are one of the most common types of syncopation, because there's nothing quite as attention-getting as displacing the most powerful beat in a measure—beat 1!

ALL TIED UP AND STRESSED

In music notation, we use *ties* and *dots* to indicate when notes are held longer than their normal division. So a good way to tell if a piece of written music has syncopation in it is to quickly eyeball it for ties and dots. This way you can scope out any potential "hazards" if you have to sight read it.

There are other ways to enhance notes besides shifting them. You can also accent them. This emphasis drives home the feel created by syncopation, by either propelling the music forward (in the case of anticipation) or holding it back (as in a slow back beat). Composers and arrangers often write accents on syncopated figures (or groups of notes) to spell out where the emphasis should go.

Now that we've discussed the basics, let's take a look at some well-known music that illustrates different applications of syncopation.

SYNCOPATION NOTATION

Example 1 shows syncopation's two primary written indicators: ties and dots. The first bar shows the beat in downstem quarter notes. Above it is a one-note unsyncopated melody in quarters and eighths. You could play this two-voice figure on the piano, guitar, drums, or any instrument that allows you to play more than one note simultaneously. You could even play this rhythm on your body—by tapping the quarter notes with your foot and speaking or clapping the upper-voice rhythms.

In bar 2, we take the melodic figure from bar 1 and create syncopation by *tying* some notes together. This produces melody notes that sound where you don't expect them, in between the beats—also called the *offbeats*. The addition of accents further enhances the notes' offbeat status. Bar 3 is the same figure seen in bar 2, but it's written with dots and ties instead of just ties. Syncopation involves both dots and ties, unless the pattern of notes itself is used to specifically put stress on the offbeats (as we'll see later in Ex. 4).

GETTING HEAVY INTO SYNCOPATION

In Ex. 2, we have two very famous guitar riffs from the classic rock era. Both are equally immortal, yet one is syncopated and one is not. By quickly glancing at the music, can you tell which is which just by the notation? Okay, here's the answer: The first line is the one with the syncopated riff, which you can see by its use of dots and ties. Rock riffs are good exercises for syncopation, because you never really think about whether they're syncopated or not, you just know them—and can play them, usually. If you slow these riffs down, and play them against a steady foot tap, you can really see if the notes are syncopated or straight. Deep Purple's "Smoke on the Water" is syncopated; Black Sabbath's "Iron Man" is straight.

ANTICIPATING THE STRONG BEATS

Example 3 is another well-known song that you probably don't think of for its unique syncopation qualities, but it illustrates a very important principle in syncopation. Notice that in bars 2 through 4, after the downbeat of bar 2, beats 1 and 3 are *anticipated*—that is, they are shifted to an eighth note before their usual place, and held through the following downbeat. Beats 1 and 3 are the strongest beats in the measure. So obscuring them by coming in early and holding them (which is accomplished by the tie) creates an unsettling effect.

SCOTT JOPLIN, KING OF SYNCOPATION

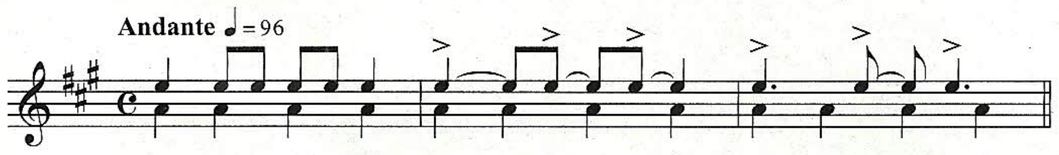
Scott Joplin is the most famous ragtime composer of all time. Ragtime is based on bold syncopation, featuring a steady oom-pah accompaniment in the lower part (the left hand of the piano), while a highly syncopated melody plays on top. Joplin composed around the turn of the 20th Century, and his mastery of syncopation and catchy piano melodies are heard in movies and commercials to this day. Joplin's music enjoyed a resurgence when it was featured prominently in the movie *The Sting*, though, curiously, the music was not of the time period in which the film is set. But the film's music director, Marvin Hamlisch, realized that the music was so evocative and dramatically fitting that he could live with the "musical anachronism" he was sometimes criticized for. The excerpt in Ex. 4, from the B section of "Pineapple Rag," is highly syncopated, as is all of Joplin's music, but you don't see any dots, and only the occasional tie (once every two bars).

So how is it syncopated? One clue can be found in the time signature. Joplin wrote most of his music in 2/4, an unusual meter for today, except in classical music. The syncopation occurs *within* the beat, on the 16th-note level. The syncopation doesn't often straddle a whole beat, which is where you would see ties. In this excerpt, Joplin also employs a syncopation device known as a *rotation*. In a rotation, an irregular rhythmic figure (in this case three 16th notes long) is repeated against the regular beat. Because the syncopated figure doesn't line up perfectly with the beat—but is repeated back to back—it "rotates" around the different parts of the beat. In Ex. 4, the figure is a 16th note and an eighth note (which totals three 16ths' time). The cycle first starts on beat 1, then starts again on beat 1-3/4, then on beat 2-1/2, then on beat 2-1/4. The figure then stops, but if it had kept going, it would have started on yet a different beat (beat 2) from the previous ones. Joplin abandons the rhythmic scheme and rejoins the pulse, because he doesn't want things to get *too* jagged. Also, he's setting up to repeat the same texture in the next two-bar phrase, but over a different chord. This is syncopated genius at its best!

EASY AS ABC—OR 1, 2, 3, 4

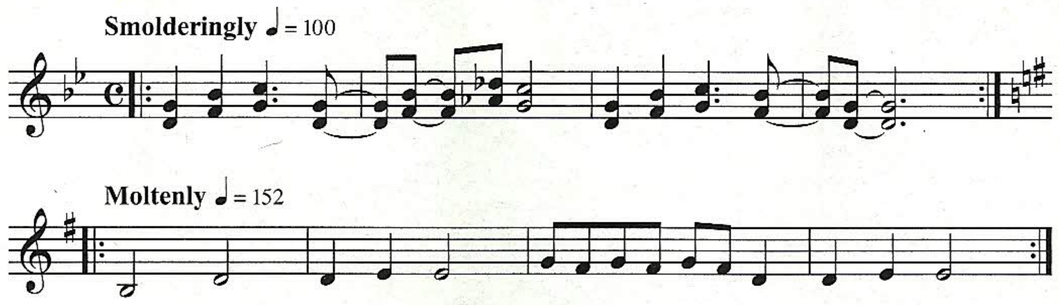
Sometimes syncopated music is deceptively difficult to observe. For example, Ex. 6 is an excerpt from Feist's "1234." It's a catchy melody that you might not think about much in terms of its vocal syncopation. In fact, it sounds alternately basic and whimsical. It

Example 1



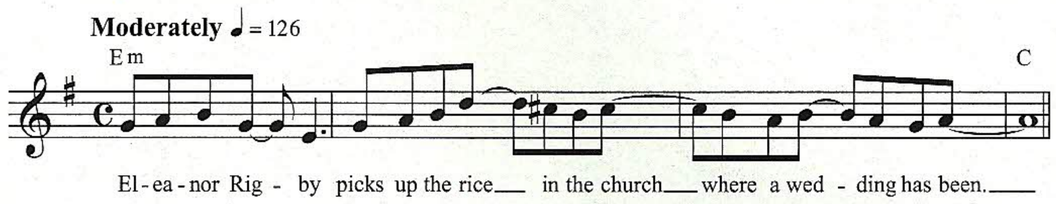
The downstem notes show the pulse, the upstem notes have the melody. The syncopation happens in bar 2. Bar three is the same figure as bar 2, but using dots and ties instead of just ties.

Example 2



Two classic rock riffs, one heavily syncopated, one not at all.

Example 3



There's a syncopation in bar 1, but beginning in the second half of bar 2, beats 1 and 3 are anticipated.

PHOTO: SKIP BOLEN/WIREIMAGE.COM

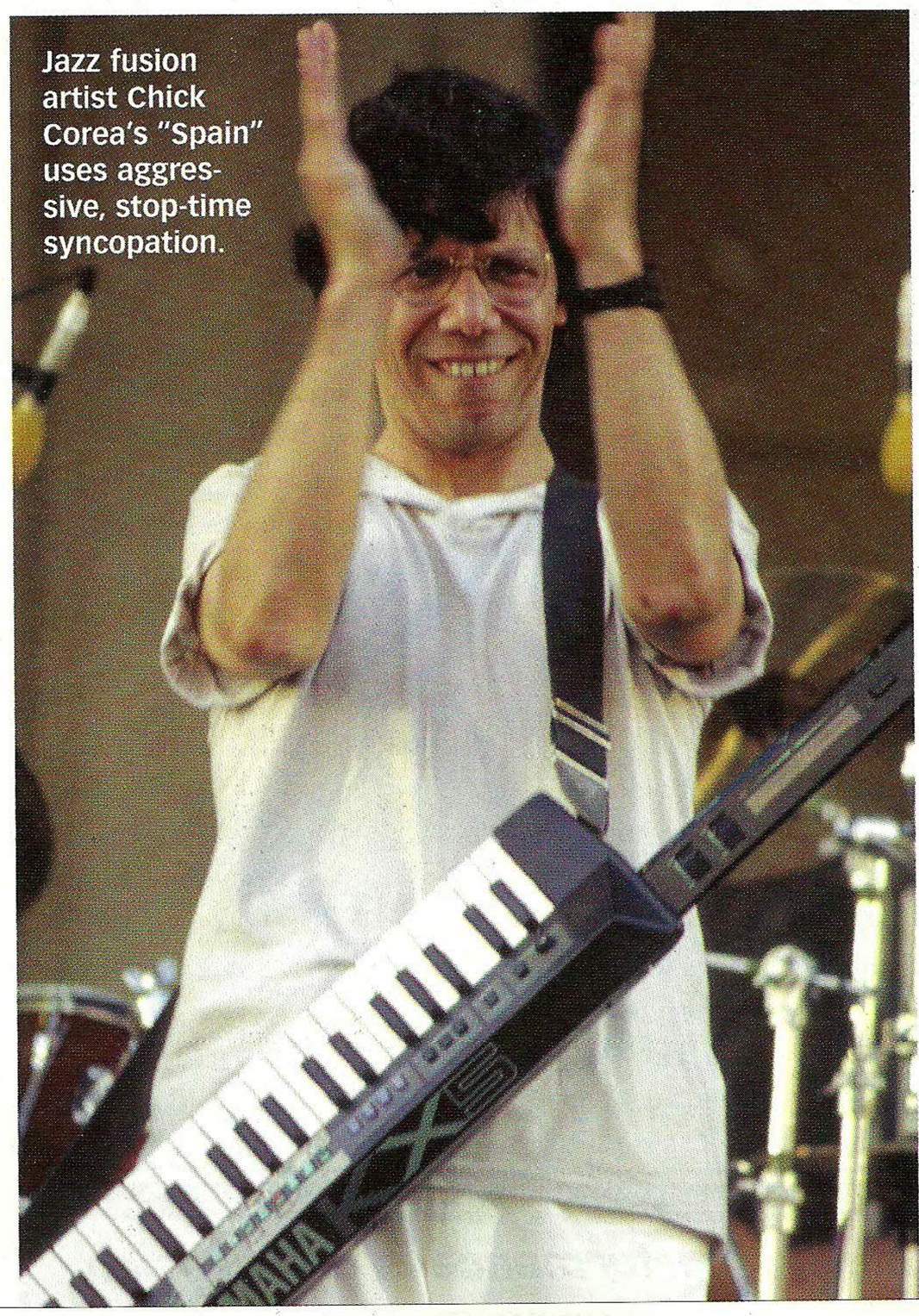
doesn't seem to have the powerful syncopated elements that the other classic examples we've looked at have.

However, when you view "1234" strictly through the lens of syncopation, it's quite interesting: The first four bars (written here as a two-bar phrase with repeats) have no syncopation whatsoever. In fact, it looks really simple as far as notes and rhythms go. But then look what happens at bar 3! It's highly syncopated and has wide interval leaps. Bar 4 is normal, but then bar 5 has a difficult quarter-note triplet—a type of syncopation that obscures beat 2 by playing a 3-against-2 rhythm over two beats. At beat 3, we get another syncopated figure, and bar 4 has syncopation on the first half of the bar.

For a completely different take on syncopation, look at modern jazz composer and pianist Chick Corea's "Spain." Here, the syncopated theme is aggressive and driving, where the full-band plays the melody in unison and hits the syncopated notes hard. The stop-time syncopation in the second section of the theme is very tricky, and often poses a hazard for musicians sight-reading the part.

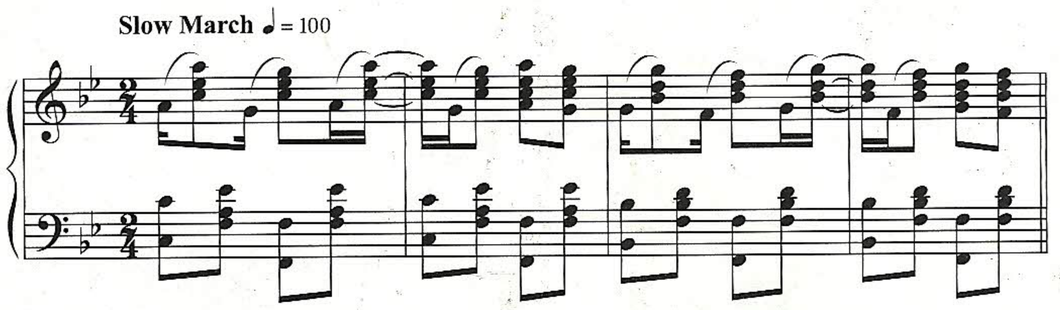
THE LATIN KEY TO SYNCOPATION

We usually think of syncopation as a momentary disruption of the pulse. But in some styles of music, syncopation takes on a larger, more fixed role. In Latin music, the clave (Spanish for key and pronounced KLAH-vay) rhythm is a two-bar syncopated phrase that serves as a structural element in the song.



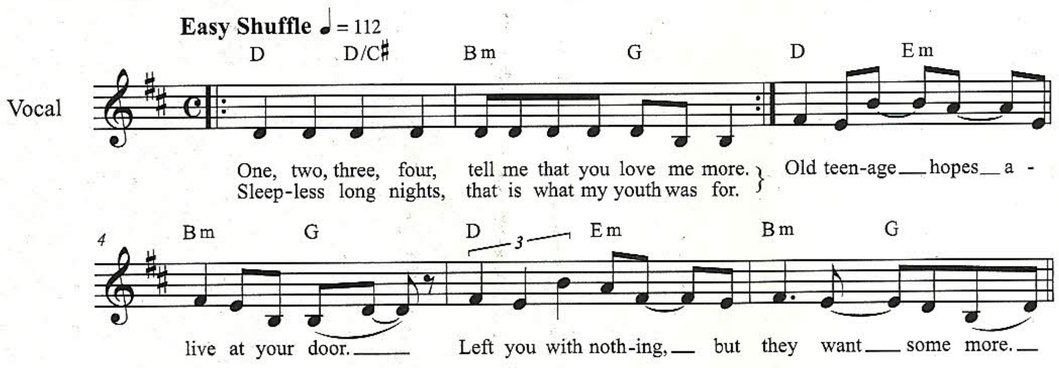
Jazz fusion artist Chick Corea's "Spain" uses aggressive, stop-time syncopation.

Example 4



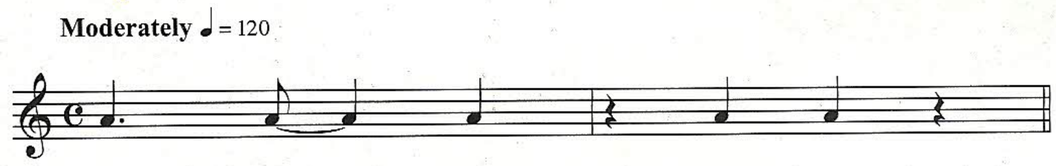
An excerpt from Scott Joplin's "Pineapple Rag," which features a highly syncopated right hand part against a regular oom-pah accompaniment in the right hand.

Example 5



Feist's "1234" provides a nicely balanced excerpt of straight vs. syncopated rhythms. The first four bars are completely straight; the second four are sophisticatedly syncopated.

Example 6



The clave rhtyhm is the heartbeat of many Latin music styles

It is played, uninterrupted, for entire sections of the song. Then other instruments can play with the clave. Dancers can coordinate their movements to it. Or, performers might play against the clave, which can be thought of as syncopating the syncopation!

The first bar of a clave rhythm is a dotted quarter note followed by an eighth note tied to a quarter note, followed by a quarter note. This serves to "hide" beats two and three by sounding the offbeat that comes in between them (see Ex. 6). The second bar of the clave employs syncopation in a different way: it omits beat one, and sounds the two beats we didn't get to hear in the first bar—beats two and three. Taken as a unit, these two bars produce a balanced phrase that is very infectious and has inspired a lot of great performances.

Syncopation can be found in virtually every piece of music we listen to. The trick is to recognize it when it happens and to think about how and why it's occurring. It's much easier to hear syncopation coming from within the same instrument—such as the piano, drums, or guitar. But you can hear syncopation between vocalists and instrumentalists, instruments against one another, and instruments against an implied beat—where no one is actually playing the beat, but the listener is expected to assume the existence of one. Keep an ear out for the different syncopated settings, and you'll soon have the feel for its powerful effect. T