## Eighth Note Subdivisions

In the previous chapter, we considered subdivisions of the measure down to the quarter note level. But when I stated that there were only eight rhythmic patterns of division and subdivision that can occur in simple duple meter, I was not restricting consideration to quarter notes. The exact same eight patterns characterize rhythms involving eighth notes, sixteenth notes, and beyond. In this chapter, we discuss how these patterns are expressed in eighth note values and how recognizing these patterns is the key to successfully writing and reading all eighth note rhythms. We will also look at the notational rules for beaming and rests.

## The Eight Basic Patterns in Eighth Note Subdivisions

As I said before, the same eight patterns we saw with quarter note subdivisions also apply to eighth note subdivisions. Of course, the patterns will be twice as fast, and hence last half as long. So if we wish to use eighth notes as our subdivision, we need to begin not with a whole $4 / 4$ measure as our starting point, but with a half measure. That is, if there are exactly eight ways of subdividing a whole measure of $4 / 4$ using quarter notes as the smallest subdivision, then there are also exactly eight ways of subdividing a half measure of $4 / 4$ using eighth notes as the smallest subdivision. It is important to start with the half measure when dealing with eighth note subdivisions so that there will still be only eight patterns to consider.

Hopefully, the following will make this clear. Here are the same eight patterns we have been studying, presented in the same order, but instead of being written in whole notes, half notes, and quarter notes, they are written in half notes, quarter notes, and eighth notes, with dotted lines indicating the half measure divisions:


Take a moment to compare these to the original set of eight and verify they really are identical aside from being twice as fast.
Notice also I have used the same Takadimi syllables for these rhythms that I did when writing these rhythms with quarter notes as the subdivision. While any system of rhythmic solfege could potentially be used in this way, Takadimi is one of the few systems I am aware of that actually does so. And this is the beauty of the Takadimi system - a given rhythmic pattern is always sung using the same syllables, regardless of the subdivision used.

Note also that $2 / 4$ ends up being just half a measure of $4 / 4$ and can therefore be sung using the same syllables:


## Resolution and Syncopation

Everything I have observed thus far about rhythmic resolution and syncopation applies in exactly the same way regardless of subdivision. It isn't just that beat 2 tends to resolve to beat 3; more generally, "ka" tends to resolve to "di" regardless of subdivision. Similarly, "mi" tends to resolve to the next "ta," and to a lesser extent, so does "di." Syncopation still consists of any rhythm that includes "ka" with no following "di", or that has "di" or "mi" with no following "ta."


All we need to do is add one observation, and that any "ta" that occurs after an imaginary bar line is still weaker than one that occurs after the actual bar line. Which is to say, beat 1 remains the strongest beat in a measure, and the "ta" on beat 3 tends to resolve to the "ta" on beat 1 . So it is still a (very mild) form of syncopation to have a note on beat 3 of a measure but none on beat 1 of the following measure, just as it was when we had only quarter note subdivisions:


Being able to define eighth note syncopation in terms terms that are virtually identical to how we defined quarter note syncopation starts to get to the heart of why learning to recognize these patterns can be so helpful in sight reading and in recognizing rhythms aurally. Any given pattern sounds essentially the same regardless of whether it is written in quarter note or eighth note subdivisions - the only difference is the speed. Here, for example, is pattern 7 (ta-ka-mi) written both ways. If you play the first version fast enough, or the second version slow enough, they are identical:


## Clarifying the Beat

Knowing that all the rhythms one sees (well, except for tuplets, which will be covered later) in $4 / 4$ time are just combinations of these same eight patterns greatly simplifies the task of playing those rhythms. We barely have to count any more; we just recognize and play these patterns. Most jazz is written using quarter note and eighth note subdivisions only, so just knowing these two different forms of the eight patterns will take you far.
Sixteenth note subdivisions do occur, of course (and are more common in rock/funk), but we will get to those in the next chapter, and you will see soon enough that they really do not add any new complications.

In order for all of this to work, we have to be sure to always write rhythms in a way that make the eight basic patterns clear. There is no way to mess up the versions with quarter note subdivisions - any way of filling a $4 / 4$
measure with quarter notes, half notes, dotted half notes, and whole notes is perfectly fine. But recall that the patterns with the eighth note subdivisions are predicated on the assumption that we are only dealing with a half measure at a time. Thus, whenever we are working with eighth note subdivisions, we must write our rhythms in such a way that we can clearly see the two halves of the measure independently.

What this ends up meaning in practice is that we cannot beam eighth notes across an imaginary bar line that divides the measure in two. If eighth notes occur on either side of that imaginary bar line, we must break the beam there. So instead of this (in which it is not clear where or what the patterns are):

we write this (in which the patterns are clear):


Similarly, a single note cannot start in the first half of the measure and carry across an imaginary bar line that divides the measure in two. If we wish to achieve that sound, we should write the note as two notes tied together across that imaginary bar line. So instead of this:

we write this:


This applies even to rhythms that contain no actual eighth notes but nonetheless involve eighth note subdivisions. I am speaking of rhythms containing dotted quarter notes. Counting a dotted quarter note requires eighth note subdivisions, and thus measures containing dotted quarters are subject to these same rules, even if no actual eighth notes are present. So instead of this:

we write this:


The concept is simple: whenever there are eighth note subdivisions in a $4 / 4$ measure, we must mentally divide the measure into two half measures. Beams and notes must be broken across the imaginary bar line that divides
the measure in two. Another way of saying this is what we must expose beat 3 ; another is to say we must avoid obscuring beat 3 . In general, we can say that the goal is to clarify the beat. No matter how we word the rule, if we follow it correctly, we will find that within each half measure, there are only eight possible rhythmic patterns - the same eight rhythmic patterns we have been studying.

So really, understanding and following this rule makes writing rhythms involving eighth note subdivisions easy. There is never any guesswork involved - simply divide the measure in two and fill in each half with one of the eight patterns. Since there are only eight patterns, it really should not take long to get good at recognizing them aurally and translating them to the correct written notation.

Similarly, reading rhythms involving eighth note subdivisions is always a simple matter of looking at the two halves of the measure and recognizing the pattern in each half.
There are only a few of exceptions to these rules (you knew there had to be exceptions). The following two rhythms are considered fine even though the dotted half note straddles the imaginary mid-measure bar line:


These are considered to be simple enough rhythms to not need further subdivision. Some editors express rules of rhythmic notation by talking about what beat positions different notes values can start on; we will consider this approach in more detail later. But the logic here is that if a dotted half note can start on 1 or 2 when no eighths are involved, then it should still be OK even after introducing eighths.
Some editors consider the same to be true if the dotted half is tied to the nearest eighth:


However, other editors would say that as long as a tie is going to involved anyhow, we should break the dotted half up to expose beat 3 and make the patterns more recognizable:


Either of these notations could be considered correct. Some editors even allow for a double dotted half:


I think you will find, however, that double dots are not used very often any more, and I definitely recommend avoiding them. They are less familiar to most people, and they don't fit nicely into the eight patterns and thus require a musician to think or count rather than simply recognize patterns.

Allowances are also made for rhythms like these:


The idea again is, if a half note is allowed to start on beat 2 in a measure without eighth notes, it should still be allowed to start one beat 2 even if eighth notes are present. This seems fair, although it is possible to get carried with this type of reasoning.

One more example of a special case that is sometimes allowed is a syncopated quarter note on $2 \&$ that straddles the middle of the measure. Some editors never allow it, but others allow it if the entire measure is full of such syncopated quarter notes:


The version at right has the advantage of making the consistent / repeating nature of the rhythm more clear - it is a series of syncopated quarter notes.
There is one final observation I need to make about the idea of dividing the measure in two. I have said this is necessary any time a measure contains eighth note subdivisions. But just because a measure does not contain eighth note subdivisions does not mean we cannot divide the measure in half and act as it there were eighth note subdivisions for the purposes of assigning Takadimi syllables. Consider a measure consisting of four quarter notes would normally either be seen as a full measure of pattern 3 (ta-ka-di-mi) in quarter note subdivisions. But what if we chose to see it as two half measures? Each half measure of two quarters each would then be seen as pattern 2 (ta-di) with implied eighth note subdivisions:


Which is correct? This is not a science; there does not need to be one correct answer. If the piece is mostly breaking down into quarter note subdivisions, then it would be most natural to do so for this measure as well:


But if the piece mostly breaks down in eighth note subdivisions, then it won't hurt to see a measure of quarter notes in that same light:


## Beaming and Rests

Generally speaking, we beam eighth notes together in groups of four, or groups of two adjacent eighths that make up a single beat. In pattern 3 ("ta-ki-di-mi"), you have the option of beaming all fourth eighth notes together as I have, or beaming them in groups of whole beats. So either of the following are acceptable:


I prefer beaming the groups of four together to make the division of the measure into two half measures as clear as possible.

Patterns 6, 7, and 8 illustrate the general case well. In patterns 6 and 8 , the two eighths are adjacent and they make up a single beat, so they are joined together. In pattern 7, the eighths are not adjacent, so they are not joined together. Here are those patterns again, this time dispensing with the formality of drawing in the imaginary mid-measure bar lines:


These are the only patterns where beaming is involved. Things get a little more interesting when eighth rests are introduced, however.

In cases where there is one eighth rest and three eighth notes, one might ask whether it is permissible to beam the remaining three eighths together. Most editors forbid beaming together three eighth notes when followed by a rest:


Some, but not all, allow beaming three eighths together when a rest comes first:


I assume the reason for this is that three beamed eighths at the beginning of a pattern can be mistaken for a triplet, but after an eighth rest, we have already seen enough to know we are not looking at eighth note triplets (rules for triplets will be discussed later).

A single rest in the middle of the eighths give us the choice between breaking the beam or to continuing it over the rest, and both methods are considerable acceptable:


When two eighth rests and two eighth notes are present, there are several combinations we need to consider. Basically, the only hard and fast rule here is this: do not beam two adjacent eighth notes together unless they form a single beat. So the first example below is wrong; the rest are potentially acceptable:


The last of these is at least somewhat suspect, though, since two eighths beamed together normally start on the beat. I actually prefer the unbeamed variants in all of the cases above.

Finally, we should also take another look at the special rules for rests that were introduced for the original eight
patterns. Good news: there is actually nothing new here. The same special rules for rests that applied to whole measures with quarter note subdivisions also apply to half measures with eighth note subdivisions. Just as we did not allow dotted half rests, we do not allow dotted quarter rests:


And just as we did not allow a half rest to start on beat 2 - "ka" - we do not allow a quarter rest to start on "ka" (beat 1\&), either:


## Aural Skills

A. The following rhythms all contain eighth note subdivisions and thus need to be broken down into half measures. Sing these examples using the Takadimi syllables.
1.

2.

3.

4.

B. The following examples all include patterns with rests that make them look different from - but sound similar to - one of the eight basic patterns. Sing through these and familiarize yourself with the different ways the patterns can be written.
5.

6.

7.

C. The following example include rests on - or ties into - the first beat of the half measure ("ta"). Sing these examples (mouthing the silent "ta") to become familiar with the patterns that result.
8.

9.

10.

11.

D. The following examples include syncopation - "ka" without "di," "mi" without "ta," and "di" without "ta." Sing through these with emphasis on the syncopations.
12.

13.

E. From the Real Book, try singing the following songs in Takadimi syllables:

- Au Privave
- Blue Bossa
- Broadway
- Captain Marvel
- Daahoud
- Desafinado
- Don't Get Around Much Anymore
- E.S.P.
- Guilty
- Little Boat
- Memories Of Tomorrow
- Once In Love With Amy
- Pent Up House
- Recorda-Me
- A String Of Pearls
- Thou Swell
- Topsy
- Triste
- Woodyn' You
- You're Nobody 'Til Somebody Loves You

