

15 ✧ Superduplets and supertriplets

The term *tuplet* is used for any even, irregular division of a pulse. We have already studied the most common tuplets: duplets and triplets. *Superduplets* and *supertriplets* are duplets and triplets that extend across two or more beats. We will study irregular divisions into five and seven parts—quintuplets and septuplets—in Chapter 16.

Key to performing any tuplet accurately is sensing the equal division of pulse being divided. Finding the correct syllables for the underlying attack points will help you do that. In this example, the superduplet aligns with *ta* and *di* of the simple division of the beat. Experiment by speaking the division of the beat, and clapping the duplet on *ta* and *di*, or have part of the class speak the background while others speak the duplet.

15.1

3/4

ta di ta di ta di ta di ta di ta di

15.2 Perform this first while conducting or clapping the beat, and then add the written clapping part. Practice at different tempos. Listen for the alignment on *ta* and *di*. Listen too for the composite rhythm produced by the two lines.

3/4

This preview contains only selected pages of each chapter.

- 15.3 Write a superduplet and a quarter note above each measure. Align the notes carefully. Write the composite rhythm syllables between the lines. Perform the rhythm as a speak and clap or a duet.

C ta di

15.4

- 15.5 Because the superduplet lines up with regular divisions of the beat, there are several ways to write the rhythm. In the following examples the superduplet rhythm is written without the duplet sign. Can you find it?

15.6

15.7 Supertriplets are triplets that span two or more beats. It is useful to think about the underlying compound division of the beat even in simple meter. These two examples would sound identical even though they are notated differently.

a.

b. The triplet over two beats in compound meter a regrouping of the regular division of the beat, and is very similar to a type of hemiola studied in chapter 9. If the division is clear, it is usually not necessary to write the triplet sign.

15.8 Here is an example of hemiola. In what other ways could this exercise be notated? Write some options on the score.

16 ✧ Irregular divisions of the beat

So far we have looked at the most common divisions of the beat into two (*ta-di*) and three (*ta-ki-da*), and subdivisions into four (*ta-ka-di-mi*) and six (*ta-va-ki-di-da-ma*). Theoretically beats can be divided into any number of divisions or subdivisions.

Of the many possibilities, irregular divisions into five and seven, called quintuplets and septuplets, are perhaps most common. So that we don't have to learn whole new sets of syllables for these unusual patterns, we will modify the syllables we already know. As you practice, take care to keep the division even. It is easy for irregular divisions to “swing” or get bunched up near the beginning or end of the beat if you are not careful. We will study irregular divisions over more than one beat in Chapter 20.

16.1 Be sure to keep the quintuplet even. Clap, conduct, or step to the beat.

ta ta di ta ka di mi ti ta ta ka di mi ti ta di ta mi ta

16.2 *Maestoso* – in the style of a fanfare

3/4

16.3

3/2

17 ✧ 4:3 relationships

“Four to three” relationships are closely related to the superduplets and supertriplets we studied in Chapter 15. The two most common relationships are the supertriplet over the span of four beats and the superquadruplet over the span of three beats. These are easier to see in pictures than explain in words.

Shown below are four even pulses (the superquadruplet) spread across three beats.

It aligns with the subdivision of the beats on the syllables *ta-mi-di-ka*.

The middle line shows the composite rhythm produced by the quadruplet and the beat.

As you perform the following exercises listen for the composite rhythm produced by the interaction of the lines, or in the case of single line exercises, the interaction of the tuplet with the underlying beat.

The following exercises provide two ways to begin to hear the superquadruplet over three beats. First do the exercise as a duet. Listen for the composite rhythm produced by the interaction of the two parts. Then do the exercise by speaking the top line and clapping the bottom line. Again, listen for the composite rhythm.

- 17.1 Repeat each section as often as necessary. Write in the composite rhythm if it helps you see the relationship. It should be the same for each measure.

17.2 Repeat each section as often as necessary to become familiar with the interaction between parts and the resulting composite. Strive for independence between parts and the ability to listen to each part as you perform.

17.3 This exercise introduces variations of the 4:3 composite rhythm in mm. 1 – 3 to help prepare for the superquadruplet in m. 4.

17.4

17.5 Layer exercise — Decide in advance or follow a leader's direction regarding how many times you will repeat each section and when each part will enter. Listen for the interaction between parts, especially the composite rhythm produced by the quadruplet.

I $\frac{3}{4}$ ||: J J J | J. J J :||: J J J | J. J J :||

II $\frac{3}{4}$ ||: J. J J J. | J. J J J. :||: J. J J J. J. | J. J J J. :||

III $\frac{3}{4}$ ||: J. J J J | J. J J J. :||: J. J J J. | J. J J J. :||

18 ✧ Asymmetric meters — 5 and 7 divisions

Asymmetric meters have beats of different lengths, or put another way, beat notes that do not divide into the same number of divisions. Most common are measures that have five or seven divisions in a measure.

Asymmetric meters are a bit like compound meters in that the meter signature shows us how many divisions of the beat are in a measure, but not how many beats. We must group the divisions to determine the beats. Meters with five divisions usually have two beats grouped by two and three. Often the grouping is made clear by the notation (mm. 1 – 4), but sometimes it is not (m. 5). You may conduct these examples in two, but the beats will not be the same length. If the tempo is very slow, the music may give the effect of changing meter, with the groupings of two and three actually being groupings of two and three beats. The following exercise at a slow tempo might sound like alternating 3/8 to 2/8, for example. Perform it at both a fast and slow tempo. What is the difference in the way you perceive the meter?

18.1

3 + 2 2 + 3

ta ki da ta di ta di ta ki da ta ki da ta di ta di ta ki ta da ta? ta ta ki?

Perform the following example clapping the lower line, and then conducting the beat. Alternate these two methods of performance and repeat until you are comfortable with the unequal beat lengths.

18.2

18.3

19 ✧ Asymmetric meters II — Other unusual groupings

A variety of asymmetric meters and unusual beat divisions are possible in music. This chapter explores some of the options.

- 19.1 The irregular grouping of 8 divisions as 3+3+2 is actually fairly common in popular music and music for television.



- 19.2 Compose a rhythm that fits the given meter. Be sure to notate it in a way that shows the groupings. Perform your rhythm.



- 19.3 Sometimes meters that appear regular can be grouped irregularly. Don't mistake these regroupings for duplets or triplets. The division of the beat—in this case the eighth note—should remain constant. Accents on *ta* will make the grouping clear.



- 19.4 *Allegro con brio*



19.5 In this example further division of the beat makes it possible to think of the example as mixed meter, with groupings indicated by the dashed line.

19.6 How will the triplets in m. 3 sound different from the three eighth notes in the same measure? The syllables will be the same. What will change? Clap the beats.

19.7

19.8

20 ✧ Complex issues in rhythm and meter

Because composers continue to explore new rhythmic relationships and find new ways to notate rhythm, no book on rhythm can ever be complete. This chapter will focus primarily on three areas of innovation: polymeter and cross-rhythm, non-metric rhythm, and unusual supertuplets. Once you have solved these rhythmic challenges, you should have the tools and the experience to tackle other complex rhythm. Exercises in this chapter may require more study and practice than earlier chapters—even rehearsal—but the rewards are well worth the effort.

Polymeter refers to the simultaneous use of two or more meters. **Cross-rhythm** may be used as a synonym for polymeter, or may be used to describe rhythms that imply conflicting meter, but are less regular than polymeter. There are a number of ways to create and notate polymeter or cross-rhythms. Study each example. How are metric accents created? What is the relationship between the meters?

20.1 Perform each line with the correct syllables based on the meter signature. Listen for ways in which meters interact.

Rewrite the first two measures with both parts in 6/8. There are at least two correct ways to notate *ta-di*.

20.5 Although both parts are written in 12/8, the accent patterns suggest changing metric relationships and the eventual creation of cross-rhythms.

The musical notation for exercise 20.5 consists of three systems, each with two staves in 12/8 time. The first system features a top staff with eighth-note groups (beamed eighth notes) and a bottom staff with quarter notes. The second system features a top staff with eighth-note groups and a bottom staff with eighth-note groups. The third system features a top staff with eighth-note groups and a bottom staff with quarter notes. Accents are placed on the first note of each eighth-note group in the top staves.

20.6 Accent the beginning of each group. Try clapping on each accented note. You may also perform it clapping *just* the accented notes (no speaking).

With vigor!

The musical notation for exercise 20.6 consists of two systems, each with two staves. The first system features a top staff with eighth-note groups and a bottom staff with quarter notes. The second system features a top staff with eighth-note groups and a bottom staff with quarter notes. The time signature changes from 12/8 to 9/8 and then to 6/8. A 'simile' marking is placed above the first staff of the second system. Accents are placed on the first note of each eighth-note group in the top staves.

21 ✧ Rhythm and meter – Early music and modern music

With the exception of exercises in Chapter 20, most of the rhythm studied so far has been based on music from between about 1600 and 1900, an era when major/minor tonality was at its most influential. Rhythm in music before 1600 and after 1900 was often quite different. This chapter will explore several specific examples of rhythm in both early and more recent musics. There is too much variety to consider every unique rhythmic or metric device, but this sampler will give you a taste of the fascinating variety that is present.

Music from before 1600 often used very complex metric relationships. Take time to understand the notation and plan your approach. Use syllables when they are helpful. Compare and contrast rhythm and meter in this music to what came later. What is similar? What has changed?

21.1 This excerpt based on music from the sixteenth century, mixes simple and compound divisions in some interesting ways.

The image displays five systems of musical notation, each consisting of two staves. The notation is a form of early rhythmic notation, likely mensural notation, using stems and flags to represent rhythmic values. The first system includes time signatures: the top staff has a 'C' with a '7' below it, and the bottom staff has a 'C' with a '3' below it. The notation shows a mix of simple and compound divisions, with various rhythmic patterns and rests. The piece concludes with a double bar line and two small circles.

21.11 Study the relationship between meters and tempos. How will an eighth note in the final measures compare in length to an eighth note at the beginning?

6/8 ♩ ♩ ♩ | ♩ ♩ ♩ | ♩ ♩ ♩ | ♩ ♩ ♩ | ♩ ♩ ♩ |

(♩ = ♩)

3/4 ♩ ♩ ♩ | ♩ ♩ ♩ | ♩ ♩ ♩ | ♩ - | ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

2/4 ♩ ♩ ♩ | ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩

3

3 5 (♩ = ♩)

3

21.12 This exercise shows a type of polymeter associated with the Russian composer Igor Stravinsky (1882 – 1971). The notation of the lower voice suggests a constant 2/4 meter for that part even though it is written with meter changes like the upper voice. Perform it both ways.

5

3/4 3/8 2/4 3/4

3/4 3/8 2/4 3/4

21.18 Write in the slashes and triangles for the last two lines.

21.19 Repeat Part I several times, then add Part II. After several repetitions, add Part III. Listen for the interaction of the parts, especially the alignment of rests. This exercise can be clapped, spoken, or played on percussion instruments.

I $\frac{10}{8}$ ||: :||

II $\frac{8}{8}$ ||: :||

III $\frac{7}{8}$ ||: :||

21.20 Begin with Part 1; add Part II; then Part III. Or have each performer perform each line as in a canon.

I $\frac{3}{4}$ ||: :||

II $\frac{3}{4}$ ||: :||

III $\frac{3}{4}$ ||: :||

These final two pieces by composer **David Madeira** (b. 1982) may require a bit more study and practice than some earlier examples, but they will reward the effort.

21.21 Shifting layers of cross-rhythms are a key component of recent innovations in rhythm.

The first system consists of three staves. The top staff has a 4/4 time signature and contains four measures of quarter notes. The middle staff has a 4/4 time signature and contains four measures of rests. The bottom staff has a 4/4 time signature and contains four measures of eighth notes beamed in pairs. The system concludes with a double bar line, followed by a 2/4 time signature and two measures of quarter notes.

The second system consists of three staves, all in 4/4 time. The top staff has four measures of quarter notes. The middle staff has four measures of eighth notes beamed in pairs. The bottom staff has four measures of eighth notes beamed in pairs. The system concludes with a double bar line, followed by a 3/4 time signature and two measures of quarter notes.

The third system consists of three staves, all in 3/4 time. The top staff has four measures of quarter notes, with the last two measures marked with a triplet bracket. The middle staff has four measures of eighth notes beamed in pairs. The bottom staff has four measures of quarter notes. The system concludes with a double bar line, followed by a 3/4 time signature and two measures of quarter notes.

The fourth system consists of three staves, all in 5/4 time. The top staff has four measures of quarter notes, with the last two measures marked with a triplet bracket. The middle staff has four measures of eighth notes beamed in pairs. The bottom staff has four measures of quarter notes. The system concludes with a double bar line, followed by a 5/4 time signature and two measures of quarter notes. A tempo marking "(♩ = ♩)" is placed above the second measure of the final staff.

The fifth system consists of three staves, all in 2/4 time. The top staff has four measures of quarter notes. The middle staff has four measures of quarter notes. The bottom staff has four measures of eighth notes beamed in pairs. The system concludes with a double bar line, followed by a 2/4 time signature and two measures of quarter notes.