MU 1310 (Feurzeig) Compound meter

At the beginning of this course, we studied meters where the beat divides into two equal parts, such as the quarter notes in 4/4 dividing into eighth notes. This is known as **simple** subdivision. 4/4 (or 4/2 or 4/8) can be called "simple quadruple time". 3/4 (or 3/2 or 3/8) is "simple triple time"; 2/4 (or 2/2, etc.) is "simple duple time".

In much music, however, the beat divides into **three** equal subdivisions. This is called **compound** subdivision and meters that do this are **compound meters**. *Compound* meter is not inherently *complex*: many simple tunes are in compound time, including the nursery rhymes "Hickory Dickory Dock", "Row Row Row Your Boat", "Humpty Dumpty", and "Pop Goes the Weasel".

Compound duple meter

Sing "Row Row Row" while tapping the beat with your hand or foot. Now sing it again, this time conducting in a 2-beat (duple) pattern). Notice that some beats have one syllable, some beats have two syllables, and some have three. Are the syllables in the two-syllable beats evenly spaced? What about the syllables in the three-syllable beats?

Going back to the beat-box notation we used when introducing simple meter, we can explore how the rhythms relate to the beats in compound meter.

Row	row	row your	boat
Gent - ly	down the	stream	
Mer - ri - ly	mer - ri - ly	mer - ri - ly	mer - ri - ly
Life is	but a	dream.	

Here are the rhythm syllables that correspond to this rhythm:

ta	**ta**	**ta da**	**ta**
Row	row	row your	boat
ta da	**ta da**	**ta**	**(ah)**
Gent - ly	down the	stream	
ta ki da	**ta ki da**	**ta ki da**	**ta ki da**
Mer - ri - ly	mer - ri - ly	mer - ri - ly	mer - ri - ly
ta da	**ta da**	**ta**	**(ah)**
Life is	but a	dream.	

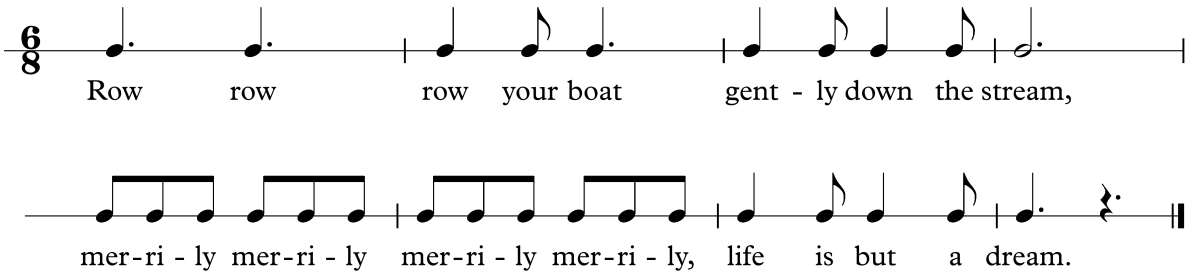
The beginning of a beat is vocalized with ***ta***. Three equal subdivisions are vocalized ***ta ki da***. Many beats contain only two events, in a long-short pattern; this is expressed ***ta … da***. A beat with two articulations in a short-long pattern, with the short note on the beat (a pattern less common in Western musical styles) is ***ta ki …*** In all these cases, the implicit background "grid" still has three subdivisions, as this chart illustrates:

ta	***ki***	***da***	three equal values
ta	_____	***da***	long-short
ta	***ki***	_____	short-long
ta	_____		full beat

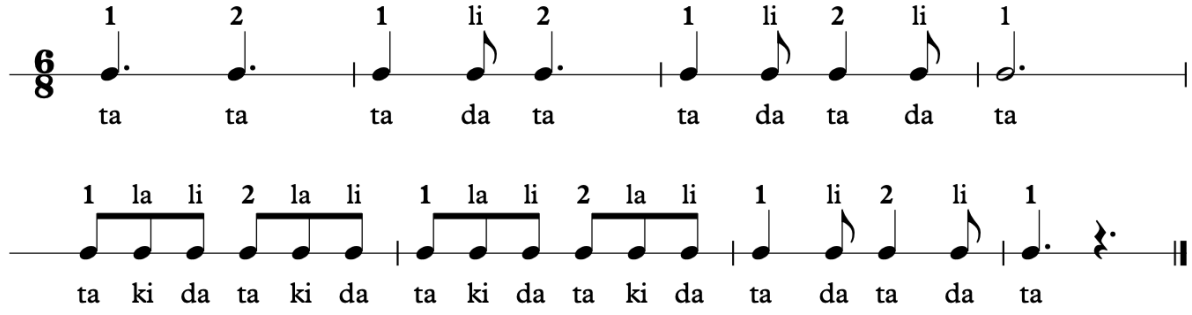
"Row Row Row" is in **compound duple** meter, meaning there are two beats to the bar (duple) and each beat is divided into three equal subdivisions, or microbeats—i.e. compound (3-part) subdivision.

But our notation system is based on durations dividing by **two**, not three (a whole note divides into two halves, a half note into two quarters, a quarter into two eighths, etc.). So when the beat divides into three, we work backwards from the subdivision value. You can start by assigning an eighth note as the subdivision value, and "compound" them in groups of three to form a beat value that is equal to three eighth notes: a dotted quarter note.

Here is "Row Row Row" in conventional rhythmic notation, with each beat given the value of a dotted quarter note (i.e. a duration equal to three eighth notes):

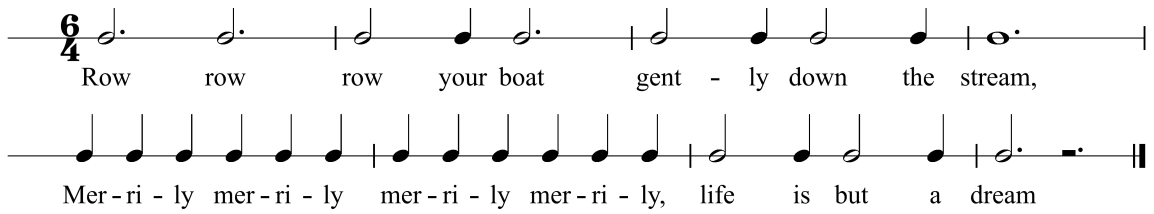


The traditional Western counting syllables that correspond to ***ta ki da*** are ***one-la-li two-la-li***. Here is "Row Row Row" in conventional notation with both syllable systems.

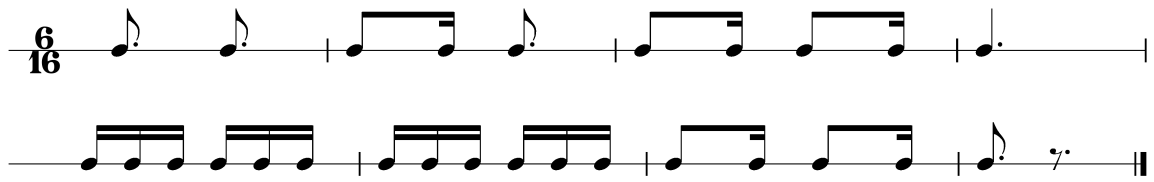


Note that the beat value in the above tune is a dotted quarter—**<u>not</u> an eighth note**. Unlike in simple meters, in compound meters you need to take the time signature denominator value and **triple** it to determine the beat value. How do you know when to do this? As a general rule, whenever the top number—the time-signature numerator—is 6, 9, 12, or any larger multiple of 3.

The most common beat value for compound meters is the dotted quarter. However, a compound beat can also be represented by a dotted half note (made up of three quarters) or a dotted eighth note (three 16ths). Here is "Row Row Row" re-notated in 6/4, with a beat value of a dotted half:



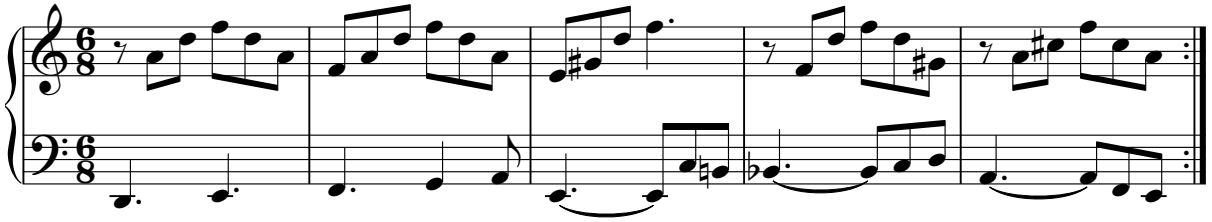
Here it is in 6/16, with a beat value of a dotted eighth:



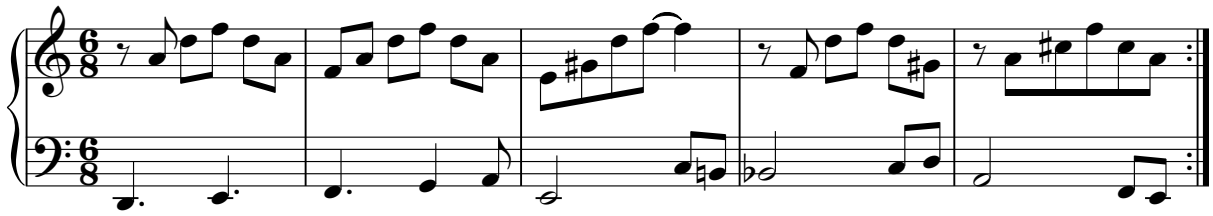
Just as in simple meters, where possible we beam together notes that belong to the same beat, but we do not beam across different beats. (In the 6/4 version above, there are no values shorter than a quarter note, so there is nothing we can beam.)

Don't make the mistake of reflexively beaming eighth notes in pairs. Make sure you are grouping according to the beat value (dotted quarter, or dotted eighth, or dotted half). Here is the beginning of the Beatles' "I Want You (She's So Heavy)" with incorrect and correct beaming.

with **correct** beaming:



with **incorrect** beaming:



Note the bass line in mm. 3-5. It may look more complicated in the correct version, but it is actually easier to read this way, because the dotted-quarter beat is what we feel as our metrical reference point. This reference point is clearly visible in the top version, while in the lower version, the second beat of the measures is "hidden" within the half notes. Put another way, the bass eighth note C in m. 3 is clearly felt as off the beat, but in the top version, it looks like the start of a beat.

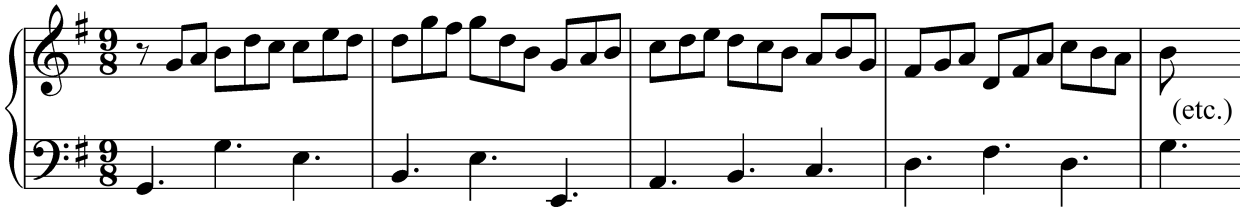
The beamed pairs of eighth notes at the beginning of measures 1, 4, and 5 in the treble are correct, because they are part of **three**-eighth-note groupings that include an initial eighth-note rest.



Compound triple & compound quadruple meter

6/8, 6/4, and 6/16 are all examples of compound duple meter. Compound subdivision of the beat can also occur in triple and in quadruple meters. Here is a well-known hymn setting by J.S. Bach in compound triple time. There are three eighth notes to the beat, and there are three beats (9÷3 = 3) per measure, so this is an example of **compound triple** time.

J.S. Bach, "Jesu Joy of Man's Desiring"



In **compound quadruple**, there are four beats to the measure, each dividing into three subdivisions. This is notated as 12/8 (4 x 3 = 12) or occasionally as 12/16. This is a very common time feel for blues and blues-related music.

Robert Johnson, "Sweet Home Chicago"

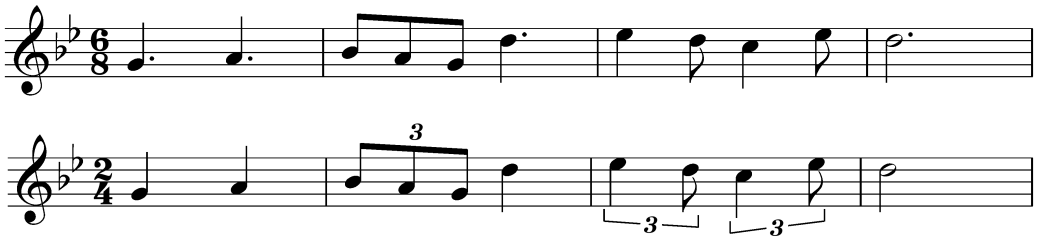


Often this notation is simplified to simple quadruple time, with the indication "swing eighths" or "shuffle feel". This tells the performer to play pairs of eighth notes in a long-short rhythm.



Triplets

A **triplet** is a way of indicating that a beat is divided into three equal subdivisions while still notating the music in simple meter. It is generally used when a piece is mostly in simple meter (most beats subdivide in two) but has **occasional** beats that divide instead into three, as in compound meter. It indicated with the number 3 over a group of beamed notes, or (for unbeamed notes) with a bracket to show the notes involved. The following rhythm is notated in both simple and compound meter and will sound identical in the two versions.



In fact, in "Jesu Joy of Man's Desiring" illustrated above, Bach actually used eighth-note triplets in simple (3/4) time; it was not originally notated in 9/8. This is because even though the triplets persist throughout the piece, only one part plays these triplets, while the singers and other players have only long values (a beat or more in duration). So presumably Bach wrote it in simple meter to make the notation less complicated for the great majority of the performers.

This table summarizes the most common compound time signatures.

Meter	with eighth-note subdivision	beat value	with quarter-note subdivision	beat value	with 16th-note subdivision	beat value	beats per measure
Compound duple	**6/8**	♩.	**6/4**	𝅗𝅥.	**6/16**	𝅘𝅥𝅯.	**2 !**
Compound triple	**9/8**	♩.	**9/4**	𝅗𝅥.	**9/16**	𝅘𝅥𝅯.	**3 !**
Compound quadruple	**12/8**	♩.	**12/4**	𝅗𝅥.	**12/16**	𝅘𝅥𝅯.	**4 !**

Further subdivision

The subdivisions of compound meter may be further divided into smaller values. Usually the second subdivision is by **two**: for instance, in 6/8, each dotted quarter divides into 3 equal eighth notes (the first subdivision) and each eighth note is divided into 2 sixteenth notes (the second subdivision). The vocal syllables are ***ta-va-ki-di-da-ma*** or ***1-ta-la-ta-li-ta 2-ta-la-ta-li-ta***.



This yields the syllables for the following common dotted rhythm:

