TEACHING 3/8 AS A PRELUDE TO TEACHING 6/8

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Students oftentimes have more difficulty counting, performing, notating, and transcribing rhythms in compound meters than in simple meters. Quite often, this is a natural consequence of having learned previously (in middle school band or choir, or any other number of pre-college musical experiences) to count and understand 6/8 (or other compound meters) as essentially simple meters: i.e., 6/8 has six beats in a measure and the eighth note gets the beat.[1] In my experience, most students in beginning theory and aural skills classes tend to conceive of beats—all beats—as undotted notes dividing in two, and subdividing in four. The concept of a dotted note getting the beat is often quite foreign and confusing, and understanding how the beat divides into three parts, and subdivides into six parts, can be quite challenging.

For example, in an exercise that asks students to beam notes to reflect a given meter, it is common to find compound meter rhythms beamed as though they are in simple meters. Thus, when asked to beam the following rhythm in 6/8:

students often beam the pattern incorrectly, as three beats in 3/4:

rather than beaming it correctly, as two beats in 6/8:

[1] I have encountered this issue every semester I have taught compound meters to incoming students for the entirely of my teaching career.

Similar notational errors likewise occur when a student is taking rhythmic dictation. Upon hearing the example above performed correctly as a 6/8 pattern, students will often provide the incorrect 3/4 notation. Concomitant with this, counting and performing rhythms in compound meters, whether as individual rhythmic patterns, or rhythms in singing exercises, also tends to be more challenging for students than performing equivalent patterns in simple meters. Another manifestation of this confusion occurs when students are given a measure of rhythmic notation and asked to provide the correct time signature, based on how the notes are beamed. Using again our above example, the correctly beamed 6/8 pattern will often be misidentified as 3/4. Many such errors abound.[2]

This is not to say that students cannot perceive a 6/8 pattern as having two beats - quite the contrary. When asked to tap beats, conduct, or march to music in 6/8, music which the students hear but do not see, they almost overwhelmingly tap or conduct two beats to a measure.[3] The concept of the dotted beat and its concomitant notation appears to be the stumbling block.

I suggest that for such students, whether music majors, or non-majors in general education music courses, or even high school students, it can be helpful to begin with the simple meter 3/8 as a springboard to 6/8, and to compound meter in general. However, before discussing 3/8 and 6/8, we need to consider briefly common counting systems in simple and compound

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[2] In my many years of teaching, I have encountered all the above problems, and countless more.

[3] I recently conducted a non-formal experiment over several class periods in my non-major music theory class, asking students to tap the beat to several examples in 6/8, which I played at different tempi, to see how much of a difference that would make (if any). Students did not see a score, they just listened. In all cases, with the exception of one student on one example at one tempo, everyone tapped two beats.

meters, to choose the system that best supports this approach. Therefore, this paper begins with a brief discussion of such systems and proposes an adaptation for counting in simple and compound meters, then demonstrates how 3/8 can profitably be used to prepare students for compound meters.

Current Counting Systems

The most ubiquitous way of counting simple meters in the United States (*1 e & ah, 2 e & ah*)[4] is referred to as the American system, and appears to have been developed and introduced by Haskell Harr in his 1937 *Drum Method*.[5] In this system, all beats begin with an ordinal number, and there is a unique syllable for each division and subdivision through four parts in simple meters.[6] Unfortunately, there is no such uniformity in this country for counting divisions in compound meters, with a number of different systems currently in use. (The same is true for counting triplets in simple meters.) My research suggests the three most common ways to count

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[4] Paul C. Varley, Jr., "An Analysis of Rhythm Systems in the United States: Their Development and Frequency of use by Teachers, Students, and Authors; and Relation to Perceived Learning Preferences" (Ed.D. diss, University of Missouri-St. Louis, 2005), ii.

[5] Haskell Harr, *Drum Method* (Chicago: M. M. Cole Publishing Co., 1937), 14-15, 41. For more on Harr, see Varley, "Analysis." Edwin Gordon refers to the *1 e & ah* system briefly, saying only: "With the introduction of instrumental music in the United States, the use of time-value names became popular, and "1 e and a" was employed as a time-keeping device to serve as a support system." *Learning Sequences in Music: A Contemporary Music Learning Theory* (Chicago: GIA publications, Inc, 2007), 80.

[6] Post Harr, others have added words for further subdivisions or irregular groupings, whose number of syllables match the number of divisions, e.g., *trip-l-et*, *2-quin-tup-l-et*, etc.

three-part divisions, whether in simple or compound meter, are ***1***23 ***4***56; ***1***&a ***2***&a; and ***1***23 ***2***23.[7] Likely, most of us were taught one of these ways. That is not surprising, since Haskell Harr himself was inconsistent: in his drum and orchestra method books, books that were widely disseminated and extremely influential, Harr used both ***1***23 ***4***56 and ***1***&a ***2***&a for compound meter divisions, and ***1***23 ***2***23 for triplets in simple meter. Thus, Harr introduces three different ways of counting the three-part division of the beat. Eventually, all three ways were adopted by others for counting divisions in compound meters.

Let us begin by considering the potential confusion that can arise with ***1***23 ***4***56 and ***1***&a ***2***&a. Since there are not six beats in a compound duple meter (6/8, 6/4, etc.), we ought not teach students to count the divisions of the beat as though they are the beats themselves (i.e., *123456*), just as we do not teach students to count eighth notes in 2/4 as *1 2 3 4*. Counting a compound duple measure as ***1***23 ***2***23 is somewhat better, since it makes clear there are two beats in a measure, each of which is divided into three parts. But this conflates (and confuses) beat numbers and division numbers. With this method of counting, there will be *three* metrically distinct positions within a measure that all receive the number "2." And what if one is to count subdivisions? Similarly, counting ***1***&a ***2***&a has the advantage of placing the beats correctly, and making clear there are two beats in a measure, each of which is divided into three parts. And, unlike the ***1***23 ***2***23 method, ordinal numbers appear only at the beat points, so there is no

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[7] Another counting system is the McHose/Tibbs system (often referred to as the Eastman system). All beats also begin with an ordinal number, and there are unique syllables for divisions in simple and compound meters (*one-te* and *one-la-lee,* respectively). See Allen Irvine McHose and Ruth Northup Tibbs, *Sight-Singing Manual*, 2nd ed. (New York: Appleton, Century, Crofts, Inc., 1945).

conflation of beats and divisions. This would have been an ideal way to count the divisions, but unfortunately it uses two of the same syllables (*&* and *a*) that are used for different metric positions in simple meter: *1 e & ah*.[8] Thus, it can be easy for students to confuse the simple duple 2/4 rhythmic pattern, *1 (e) & a* () with the compound duple pattern when counted *1 & a* ().

Proposed Counting System

Since a three-part division of a beat sounds and feels the same in any meter, it makes sense to count it the same way in any meter.[9] This is analogous to counting the two-part division of the beat in simple or compound meter as *1&*, something many do already. What I propose is consistent for both simple and compound meters, and can function as a logical extension of the

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[8] It is also hard to imagine what syllables could have been used for subdivisions in this system.

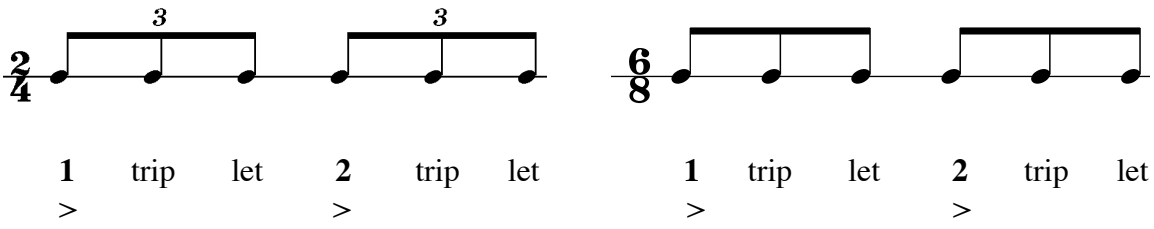
[9] The McHose/Tibbs and Takadimi systems both follow this principal, intoning all like divisions consistently with the same syllables. In the McHose/Tibbs system, all two-part divisions are intoned *one-te*, and all three-part divisions are intoned *one-la-lee*. In Takadimi, all two-part divisions are intoned *ta-di*, and all three-part divisions are intoned *ta-ki-da*. However, Takadimi is not a counting system, as it employs no numerals. For more on Takadimi, see Richard Hoffman, William Pelto, and John W. White, "Takadimi: A Beat-Oriented System of Rhythm Pedagogy," *Journal of Music Theory Pedagogy* 10 (1996): 7–30.

Harr system: count all three-part divisions as triplets, regardless of meter, [10] as shown in Example 1:[11]

[10] I recognize that some instructors may be opposed to calling the normal division in a compound meter a triplet, since they regard the word "triplet" as indicating a borrowed division from compound to simple meter. However, I believe the pedagogical gain of consistency, whereby a rhythmic pattern maintains the same sound and feel no matter the meter, outweighs the potential concern of calling this figure a triplet when in a compound meter. I believe there is pedagogical merit in describing all equal three-part divisions as triplets, and all equal two-part divisions as duplets, thereby teaching students that (a) duplets are the normal division in a simple meter, and the borrowed division in compound meter; and (b) the triplet is the normal division in compound meter, and a borrowed division in simple meter. We should consider that many students, having dealt primarily with undotted beat values, already believe any three-part division is a triplet. Further, maintaining the same term for the triple division has another advantage: students can already be taking dictation in protonotation of examples that include borrowed divisions, like "One, two, buckle my shoe," shown below, even before they have been introduced to time signatures. And, as pointed out in footnote 9, McHose/Tibbs and Takadimi follow the same principal in labeling all three-part divisions the same, regardless of meter.

[11] David Newell also advocates this method of counting compound meters in his book, *Teaching Rhythm* (San Diego: Kjos Music Press, 2008). He is is the only other person I am aware of who does so.

Example 1



For subdivisions, I propose using a single syllable, "*a*" (*1-a-trip-a-let-a, 2-a-trip-a-let-a*), rather than six unique syllables.[12] In this way, the triple division remains clear (*1-trip-let*), while the metrically weaker subdivisions share a single, simple syllable.[13] This approach necessitates teaching triplets in simple meter before beginning 3/8 or 6/8, but many textbooks already do that.

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[12] This is similar to the McHose/Tibbs system, where subdivisions are all intoned as *ta*. Subdivisions in simple meter are thereby intoned *one-ta-te-ta*, while subdivisions in compound meter are intoned *one-ta-la-ta-lee-ta*. Newell also uses *a* for subdivisions in compound meter.

[13] In my experience working with students, a system such as Takadimi that uses six distinct syllables for the six-part subdivision can become unwieldy, even if one substitutes an ordinal number in place of the first syllable. Consider that, including the note itself, an undotted note can be undivided, divided, or subdivided into just eight rhythmic patterns ($2^{n-1} = 2^3 = 8$: *ta, ta-di*, *ta-ka-di-mi*, *ta-di-mi*, *ta-ka-di*, *ta-ka-mi*, *ta-mi*, and *ta-ka*), whereas a dotted note can be undivided, divided, and subdivided into 32 rhythmic patterns ($2^{n-1} = 2^5 = 32$). Trying to keep six distinct syllables straight for all these possible patterns tends to lead to cognitive overload for many of my students. While I believe the Takadimi system has many benefits, I have found it to be difficult to use with students when subdividing into six parts. And, ultimately, my goal is to make it as easy as possible for my students.

I should point out that in my own teaching, I teach the sounds of the two- and three-part divisions long before introducing time signatures. Starting at the beginning of the semester, I devote a few minutes at the beginning of almost every class period to tapping out and reciting two-and three-part divisions, alternating between *ta-di* and *1 &*; and *ta-ki-da* and *1-trip-let,* respectively.[14]

As we begin our unit on rhythm, before introducing time signatures, I explain that beats sometimes divide regularly in two parts (which we call simple meter), and sometimes divide regularly in three parts (which we call compound meter). We then practice notating these rhythmic patterns in protonotation (as, for example, "Bah, Bah, Black Sheep" for two-part divisions, and "Witch, Witch" for three-part divisions).[15] Learning patterns this way, prior to learning time signatures, enables students to take dictation in protonation with patterns that would be more difficult if they had to think in terms of time signatures and borrowed divisions. For example, "One, Two, Buckle My Shoe," has both two- and three-part divisions.[16] Students notate two-part divisions as:

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[14] We use chopsticks, always tapping the left one on the desk for the beat, while for divisions, we tap the left chopstick on top of the right one. This ensures the beat is louder than the division. I say nothing about time signatures; I tell my students only that we are learning rhythmic patterns (which get increasingly more difficult as the semester progresses).

[15] "Witch, witch, fell in a ditch. Picked up a penny and thought she was rich."

[16] Many nursery rhymes have variations in the words themselves and the rhythms. I recite it this way: "One, two, buckle my shoe; Three, four, open the door; Five, six, pick up sticks; Seven, eight, lay them straight; Nine, ten, do it again."

and three-part divisions as

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Thus, they are learning to hear and feel the difference between the two types of divisions (and can notate it) before adding in the complication of a time signature.

Simple 3/8 As One Half Measure Of Compound 6/8

Almost without exception, the beats and divisions in music written in 3/8 are beamed together in a single grouping (including eighth, sixteenth, and even 32nd notes), making the entire measure indistinguishable from a single beat of music notated in 6/8. If we survey the 3/8 keyboard music of Bach, for example, we find that all such Two- and Three-Part Inventions, Little Preludes and Fugues, Preludes and Fugues in Books 1 and 2 of the Well Tempered Clavier, and various dance movements from the suites, follow this beaming convention. Invention No. 6 in E major, BWV 777, is particularly interesting, because even with its many 32nd notes, all measures are beamed as single groupings. Many works by other composers similarly follow this convention; several such examples are shown in the Appendix. Yet we tend to count the two meters differently: we count 3/8 in the more straightforward manner of a simple meter, as we do with 3/4, whereas we count 6/8 in one of the less consistent ways shown above.

If we survey theoretical treatises, we find support there, too, for this paper's recommended pedagogical approach. Beginning with tempo, the theorist Kirnberger, among others, says that the larger the lower number of a time signature, the faster the tempo; thus, 3/8 would be faster than 3/4: "The character of 3/4 appears to be gentle and noble, particularly when it consists only or at least mostly, of quarter notes. But 3/8 meter has a liveliness that is

somewhat frolicsome." [17] Kirnberger's later comments suggest a similarity of character and tempo between music written in 3/8 and 6/8. Regarding compound meters, Kirnberger says: "There are melodies in which it is obvious that whole measures are alternately strong and weak, so that a whole measure is heard as only one beat. [Thus] two measures must be grouped together to form just one, whose first part is accented and the other unaccented . . . [resulting] in compound meters, namely . . . compound 6/8 from two combined measures of 3/8, etc." [18] In other words, much music in 3/8 should have one single strong beat at the beginning of the measure, with all other notes sounding as divisions or subdivisions. And, in fact, during the 18th century, some French musicians still recommended conducting a fast triple meter with one downbeat of two pulses, and one upbeat of one pulse (or the reverse). Erwin Bodky, author of

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[17] Johann Philipp Kirnberger, *The Art of Strict Musical Composition*, trans. David Beach and Jurgen Thym (New Haven-London: Yale Univ. Press, 1982), 400. Kirnberger's discussion is found in Vol. 2, Part I, Chapter 4, "Tempo, Meter and Rhythm" (1776).

[18] Kirnberger, 398. As early as 1696, French theorist Étienne Loulié wrote of compound duple meter: "Since this meter is composed of two triple meters, students can conduct each [of these] in three beats, making two measures out of one." Loulié may be the first theorist to use the term "compound duple." See Loulié's *Elements or Principles of Music*, translated and edited by Albert Cohen, in Musical Theorists in Translation, Vol. VI (New York: Institute of Medieval Music, 1965), 31. For an in-depth discussion of this topic, see George Houle, *Meter in Music, 1600-1800* (Bloomington: Indiana University Press, 1987), chapters 1 and 2.

The Interpretation of Bach's Keyboard Works, believes that, with the exception of just four keyboard works, all of Bach's other 3/8 keyboard pieces have just one beat to the bar.[19]

Transitioning From 3/8 To 6/8

It may behoove us, then, to begin by teaching slow 3/8 as a simple meter variant of 3/4. I suggest practicing typical rhythmic patterns one finds in both 3/8 and 6/8 (several of which are shown below in Example 2). At this point, the instructor should explain that in 2/8 and 3/8, entire measures are often beamed in one single grouping. This accustoms students to seeing (and feeling) these compound meter patterns, beamed as a single group, while still having the luxury of counting them as a simple meter:

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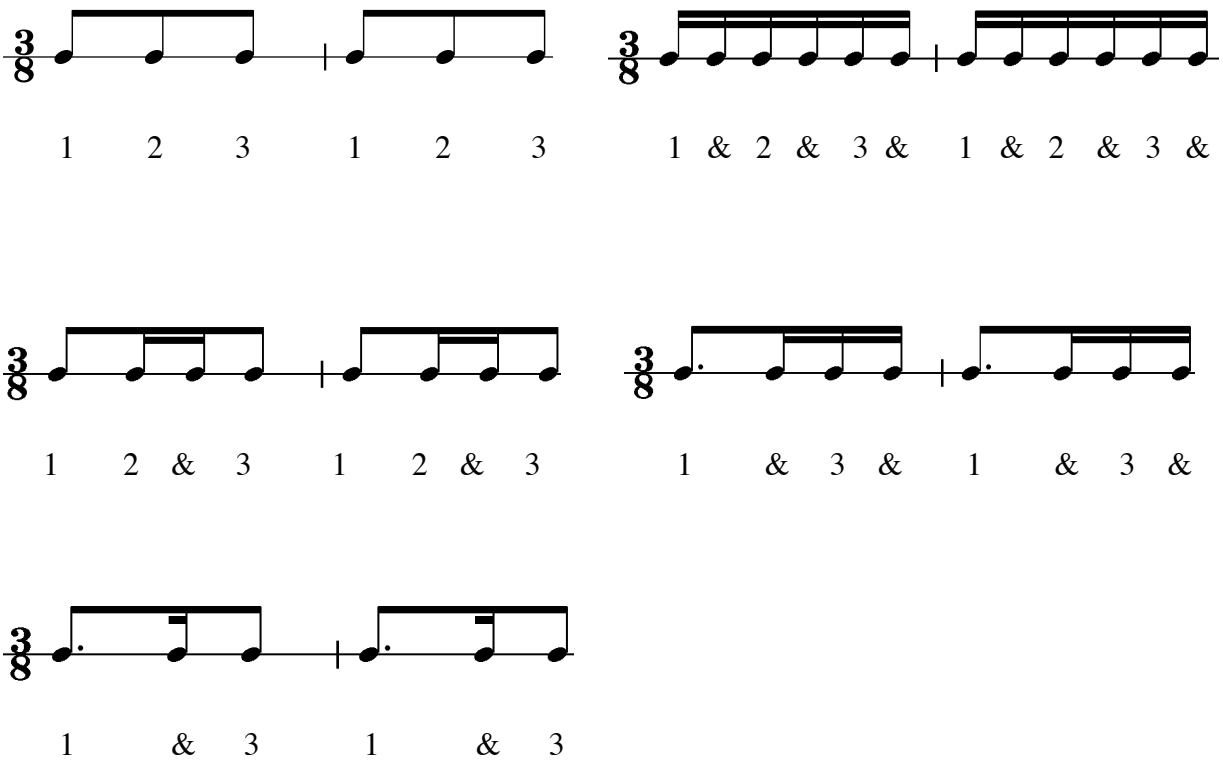
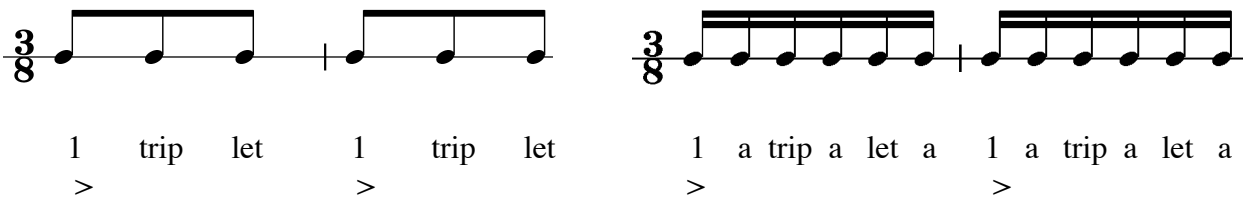
[19] Erwin Bodky, *The Interpretation of Bach's Keyboard Works* (Cambridge, MA: Harvard University Press, 1960), 134. Brodky's exceptions are Invention No. 6, Sinfonias 11 and 13, and Duet 1, all of which he believes take the eighth as the beat, for three beats. He also says these are almost without exception disguised dance pieces, some passepieds, others having elements of the corrente. He asserts that all should have a tempo of approximately ♩. = 60, just as he asserts various minuets and correntes in 3/4 should have a tempo of approximately 𝅗𝅥. = 60. On p. 135, he asserts that the average speed of ♩. = 60 is correct for all pieces of allegro character in 6/8, 9/8, and 12/8 as well; and 𝅘𝅥𝅯. = 60 is correct for all pieces of allegro character in 6/16, 9/16, and 12/16. He also points out there is an upper limit of speed because of the mechanism of the harpsichord, and how fast a string or wind player can play individual notes (p. 144 and 236). His Appendix B provides many tables of examples with suggested tempo markings.

Example 2



In transitioning to fast 3/8, the instructor should stress that fast 3/8 sounds more like a single beat divided into three parts (i.e., a triplet) than three beats.[20] Therefore, students should now count as triplets, one beat to the bar, accenting the first beat only (shown in Example 3):

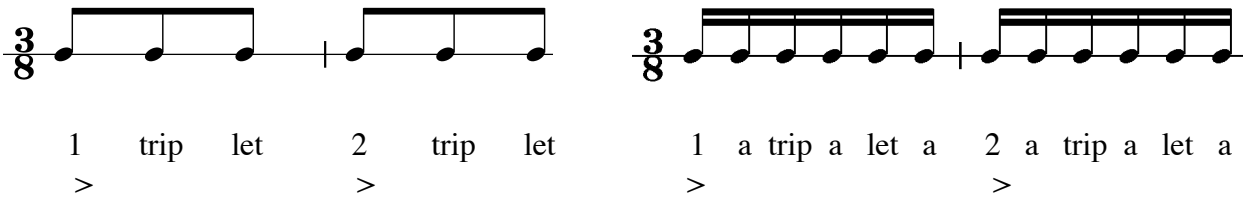
Example 3



[20] The instructor might also mention to students that there are fast, one-to-the-bar 3/4 pieces, such as Viennese waltzes.

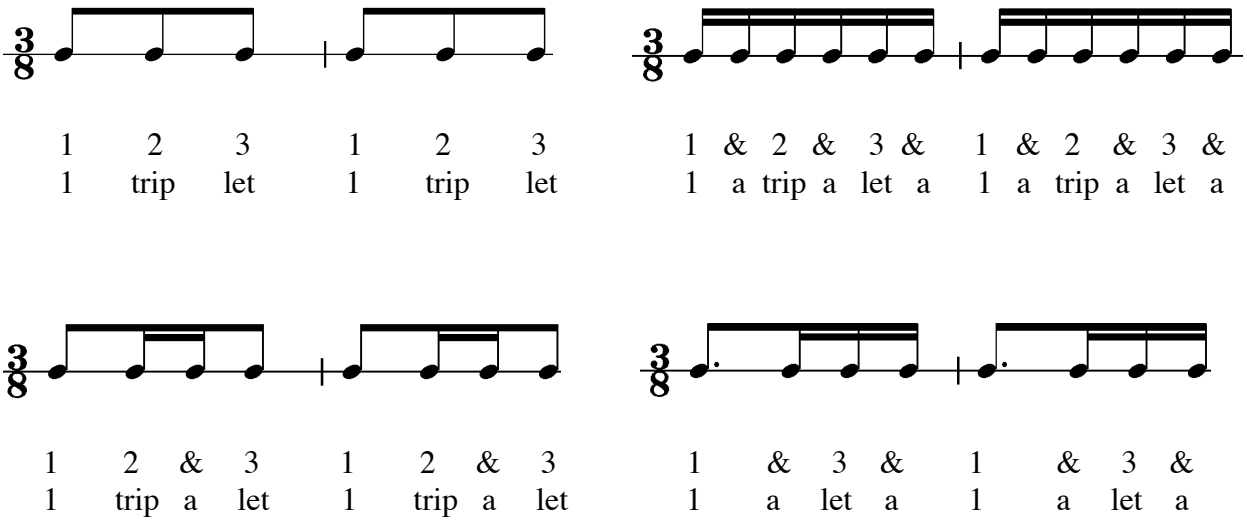
An instructor may also choose, as soon as the counting switches to one beat per bar, to start counting two measures at a time: *1-trip-let*, *2-trip-let*, to more closely approximate 6/8 (as in Example 4).

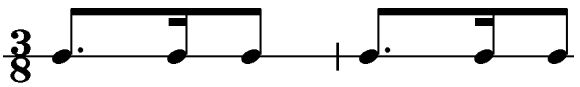
Example 4



At this point, I overlay the two counting systems to reinforce that the sound of the patterns does not change, just the counting syllables, depending on the tempo (slow 3/8 or fast 3/8), as shown in Example 5:

Example 5

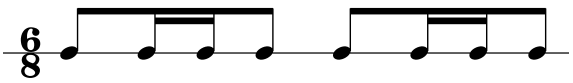




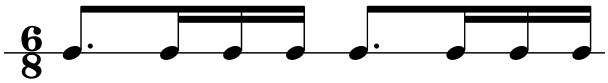
1 & 3 1 & 3
1 a let 1 a let

Thus, each 3/8 measure pattern can be taught as a rhythmic cell, first counted as in a simple meter, then counted as a single beat pattern. Seeing, hearing, and performing the patterns commonly found in 3/8 with just one beat to the bar provides a strong foundation for the introduction of compound meters, as these individual measures can subsequently be understood to be equivalent to half a measure of the compound 6/8. These rhythmic patterns can now be easily transferred to the corresponding 6/8 patterns (or 9/8 or 12/8), as in Example 6:

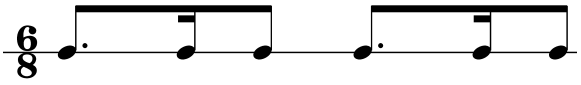
Example 6



1 trip a let 2 trip a let



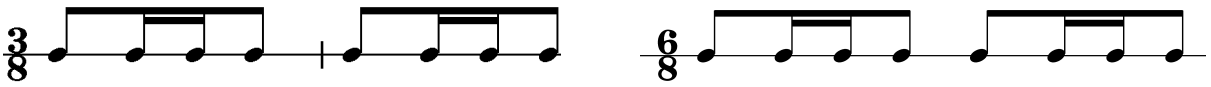
1 a let a 2 a let a



1 a let 2 a let

And for extra reinforcement, an instructor can of course show the 3/8 and 6/8 examples side by side, as in Example 7:

Example 7



1 trip a let 2 trip a let 1 trip a let 2 trip a let

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Summary

The approach suggested above has much to recommend it:

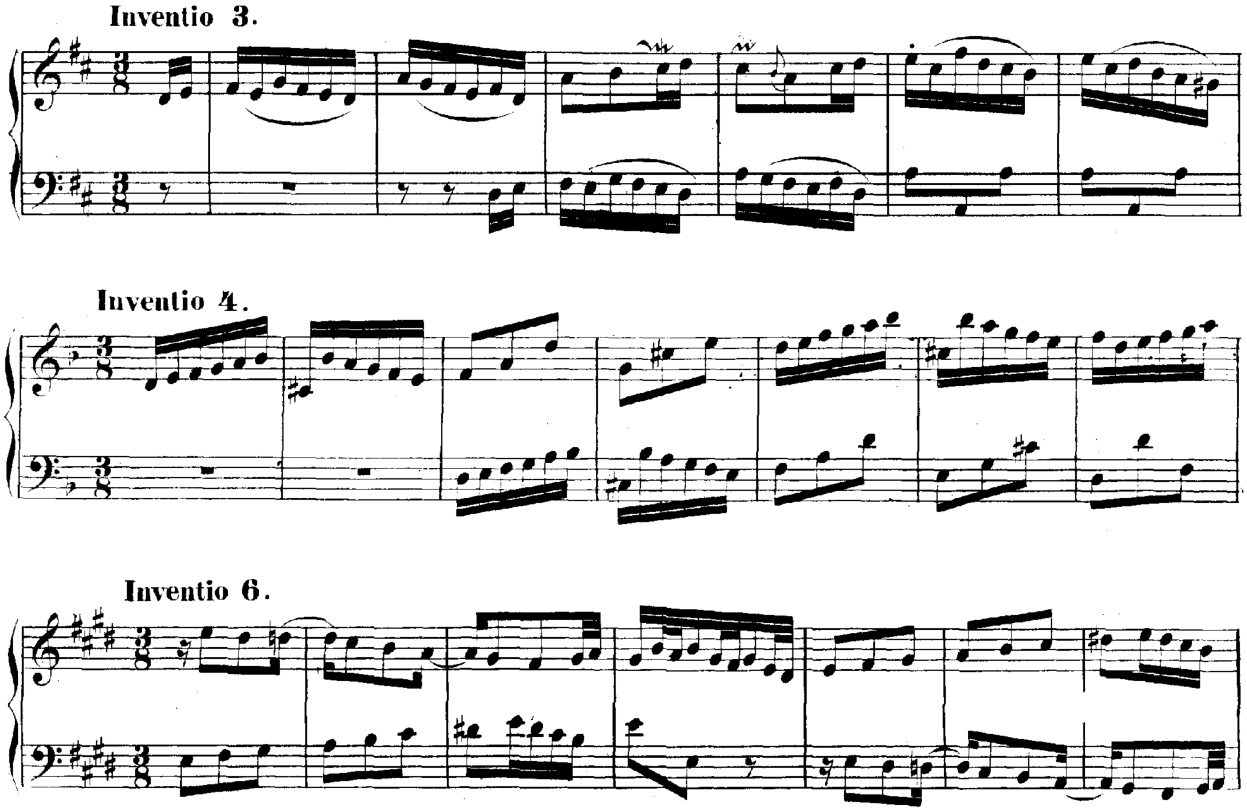
1. It accustoms students to seeing, counting, and feeling single beamed groupings in 3/8 that are standard beat patterns in 6/8, 9/8, and 12/8.
2. It equips students to count with both a simple-meter beat pattern when necessary for slower, weightier, and more subdivided 3/8 pieces, and also with a compound-meter beat pattern for the more typical, faster, lighter, and less subdivided 3/8 pieces.
3. It gives students a logical and consistent way of counting divisions in compound meters, consistent with how they count triplets in simple meter.
4. It allows students to transition smoothly and seamlessly from counting in simple meters to counting in compound meters.

I have found this method of counting to be easily comprehensible by my students, and successful, and recommend others adopt it as an additional way of helping students work with compound meters.

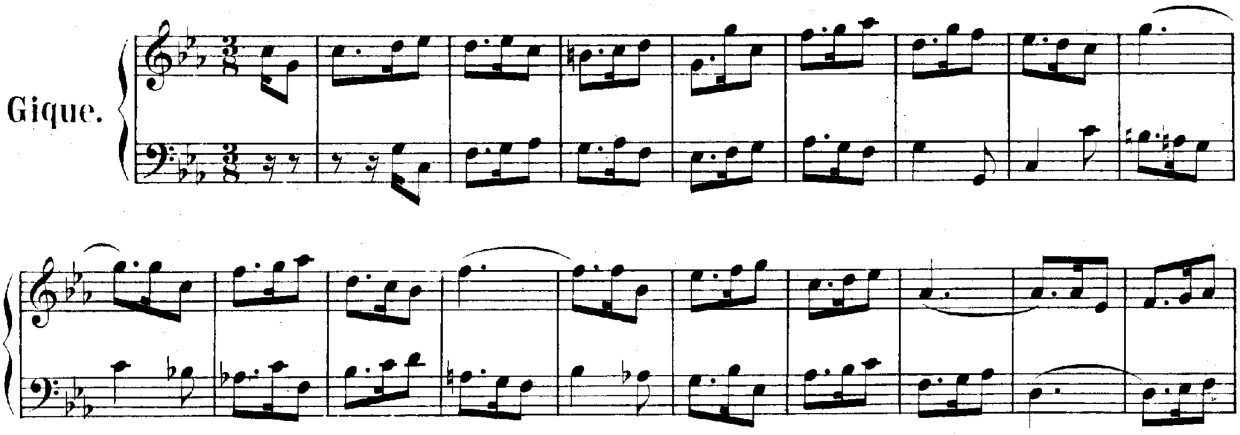
Appendix 1

Examples of Music Written in 3/8, Each Measure Beamed Identically to a Single Beat in 6/8

Bach, *Two-Part Inventions*, No. 3, BWV 774; No. 4, BWV 775; No. 6, BWV 777

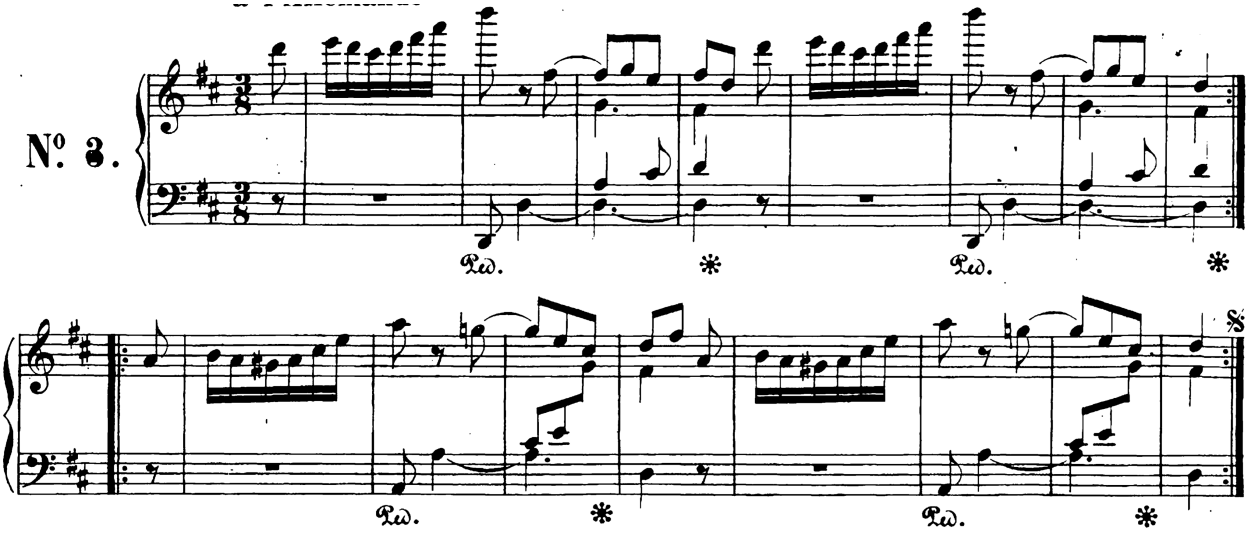


Bach, "Gigue," from *French Suite No. 2 in C minor,* BWV 813

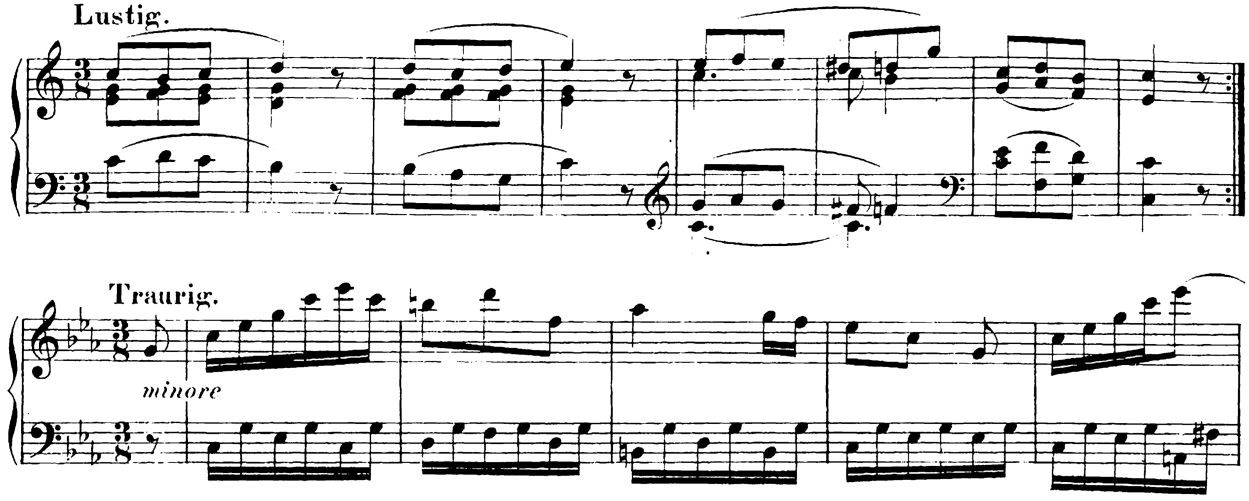


Mozart, *Piano Sonata No. 2 in F major*, K. 280, 3rd mvt.

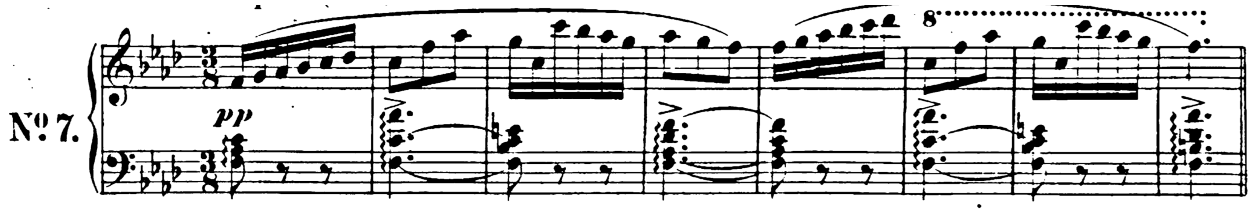
Beethoven, *Bagatelle*, Op. 119, No. 3



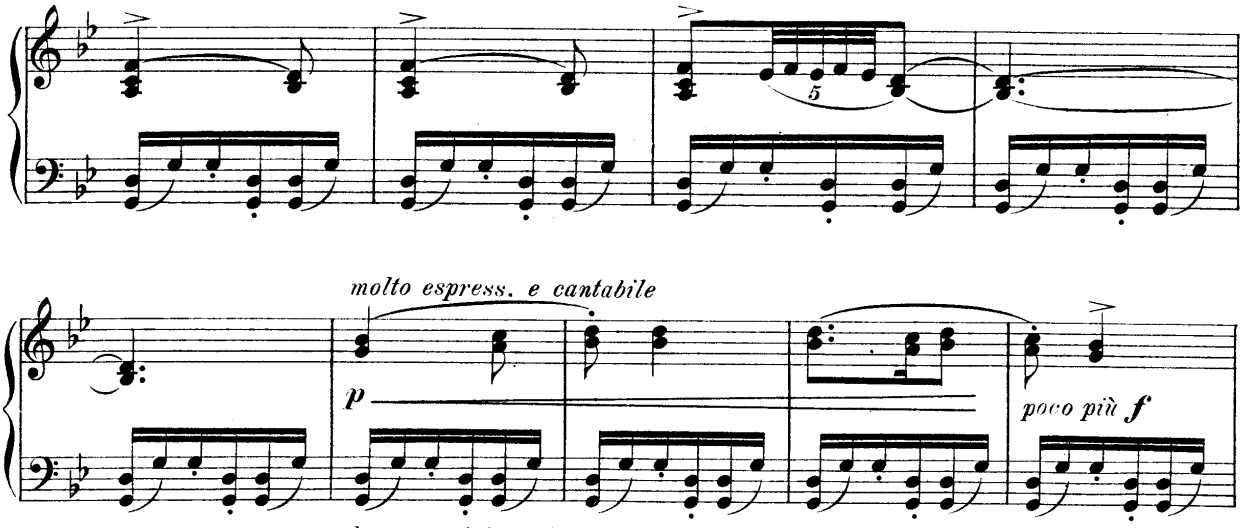
Beethoven, *Bagatelle*, WoO 54, "Lustig und Traurig"



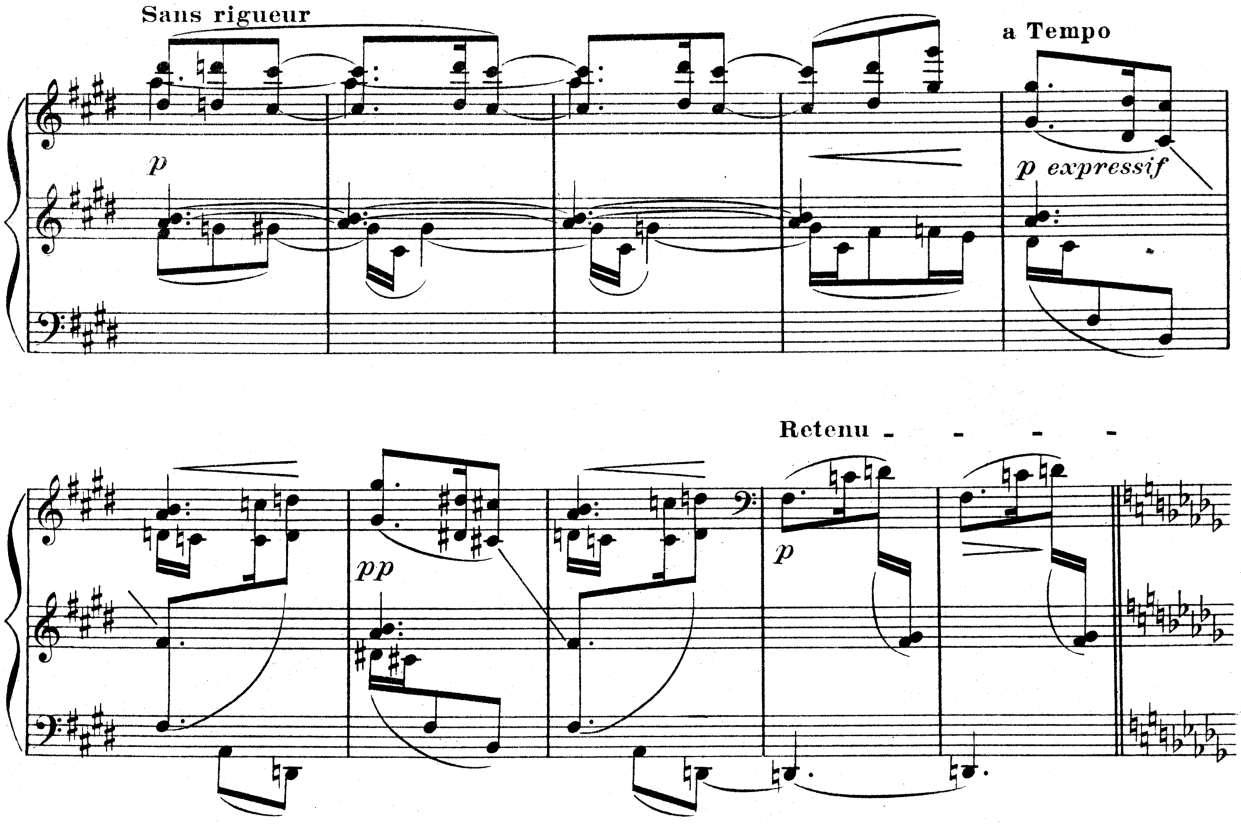
Schumann, *Papillions*, Op. 2, No. 7



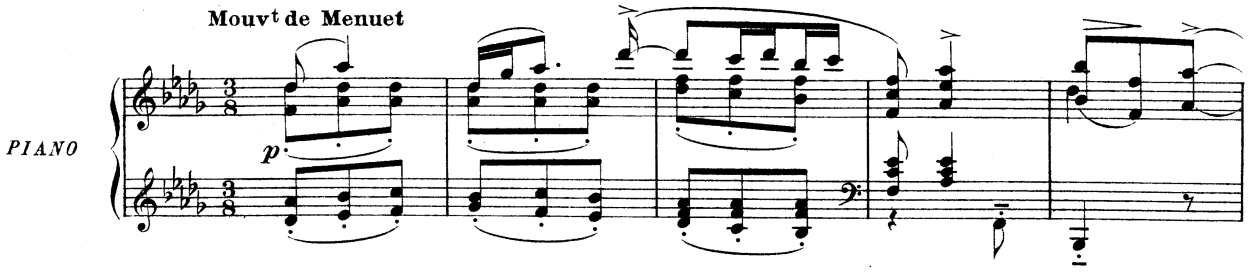
Tchaikovsky, "Arabian Dance," from *The Nutcracker*, Op. 71



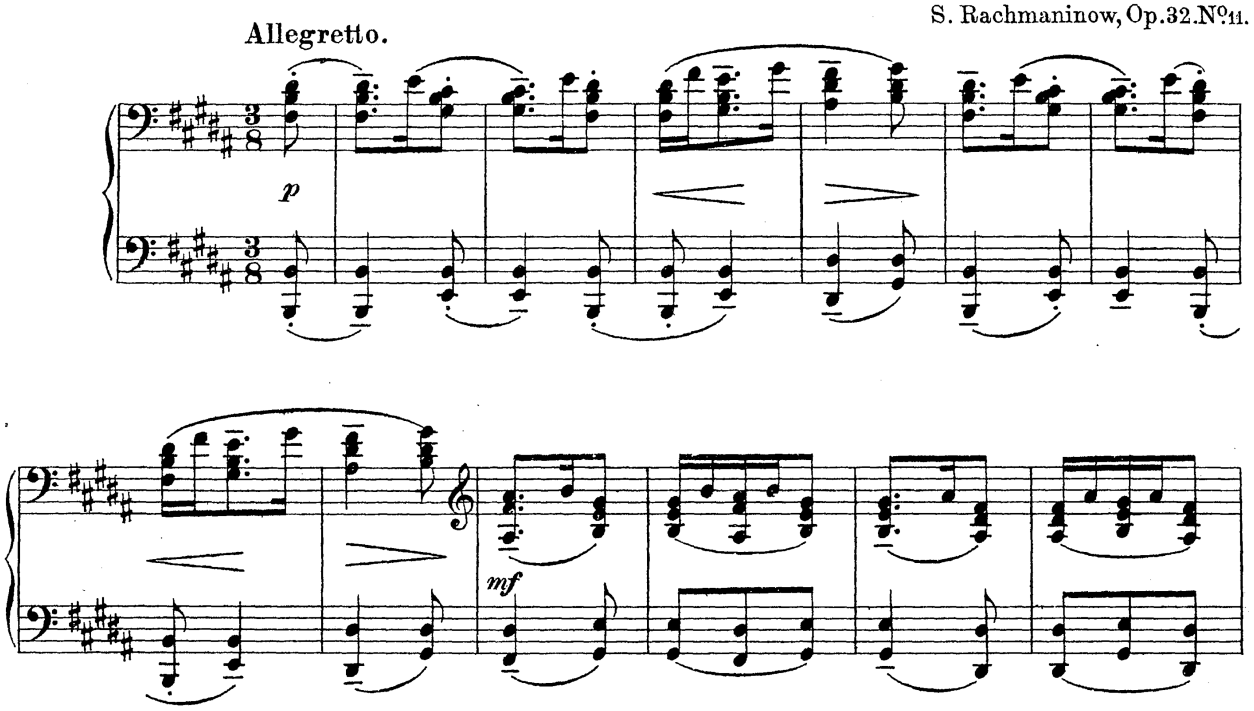
Debussy, *Préludes*, Book 2, "Les fées sont d'exquises danseuses"



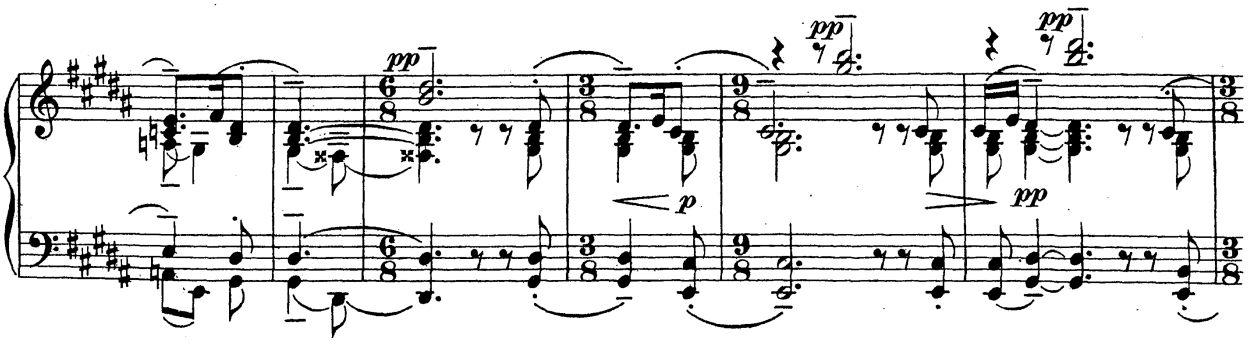
Ravel, *Sonatine*, 2nd mvt.



Rachmaninov, *Preludes*, Op. 32, No. 11



☆ Note how Rachmaninov conveniently switches from 3/8 to 6/8 to 9/8 and back to 3/8 in measures 48-53:

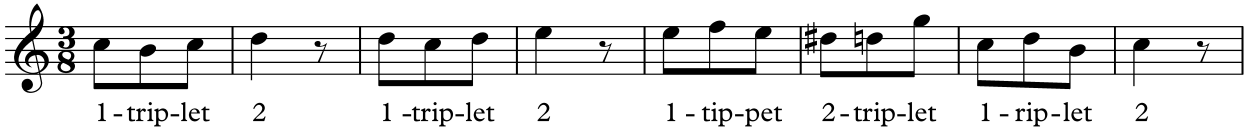


Appendix 2

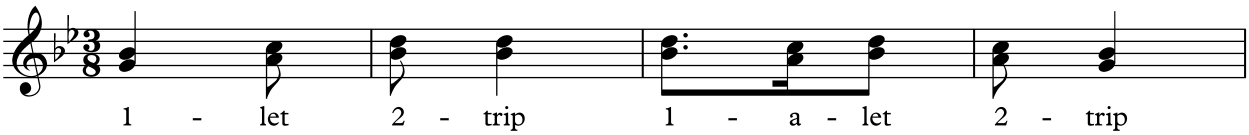
To demonstrate how this approach can be incorporated into actual musical examples, I have compared some of the 3/8 examples in Appendix 1 to a few analogous examples in 6/8, showing how the syllables may be transferred from one meter to the other.

A. Examples with ♩♩♩ and ♩♪ patterns:

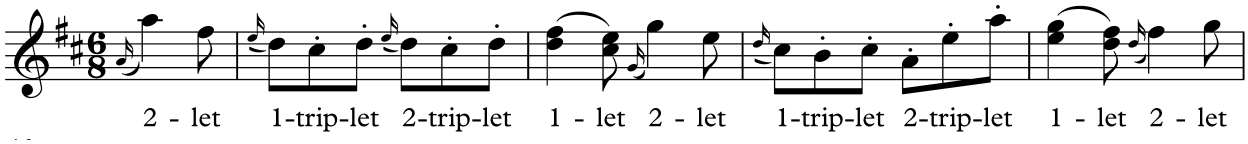
1. Beethoven, *Bagatelle*, WoO 54, Lustig und Traurig



2. Tchaikovsky, "Arabian Dance," from *The Nutcracker*, Op. 71

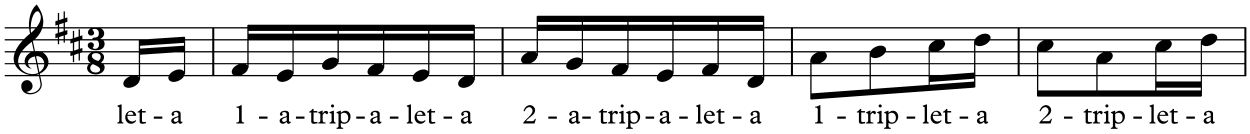


3. Mozart, *Piano Sonata in D,* K. 311, 3rd mvt.

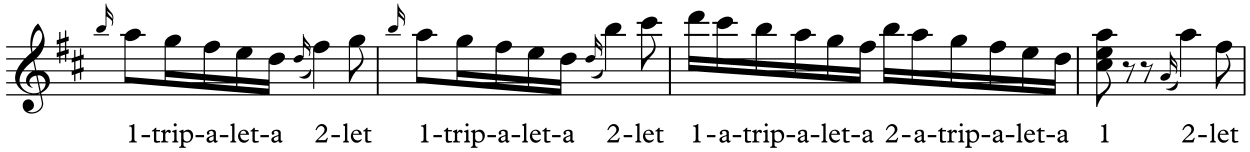


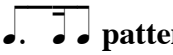
B. Examples with  ,  , and  patterns:

1. Bach, *Invention No. 3 in D major*, BWV 774

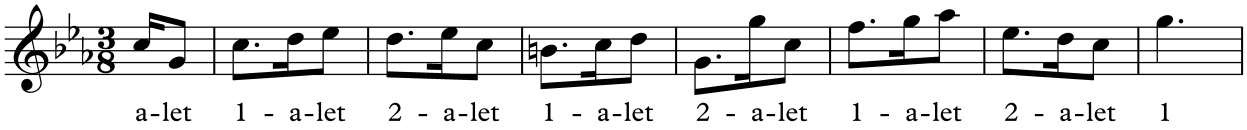


2. Mozart, *Piano Sonata in D,* K. 311, 3rd mvt. (mm. 5-8, in 6/8 - I have omitted syllables for the grace notes for this early exercise.)

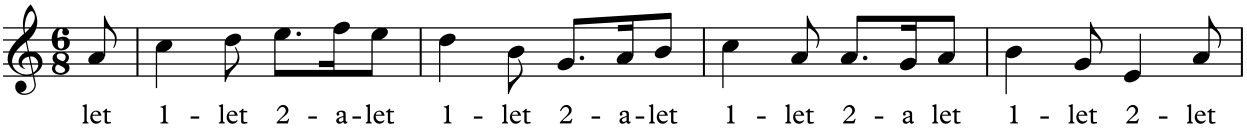


C. Examples with  patterns:

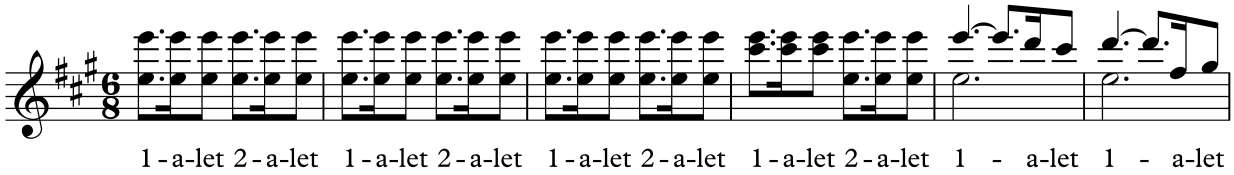
1. Bach, "Gigue," from *French Suite No. 2 in C minor,* BWV 813



2. Greensleeves (traditional)



3. Beethoven, *Symphony No. 7 in A major*, Op. 92, mvt. 1 (mm. 63-68)



Bibliography

Bodky, Erwin. *The Interpretation of Bach's Keyboard Works*. Cambridge, MA: Harvard University Press, 1960.

Gordon, Edwin. *Learning Sequences in Music: A Contemporary Music Learning Theory.* Chicago: GIA publications, Inc, 2007.

Harr, Haskell. *Drum Method*. Chicago: M. M. Cole Publishing Co., 1937.

Hoffman, Richard, William Pelto, and John W. White. "Takadimi: A Beat-Oriented System of Rhythm Pedagogy." *Journal of Music Theory Pedagogy* 10 (1996): 7-30.

Houle, George. *Meter in Music, 1600-1800*. Bloomington: Indiana University Press, 1987.

Kirnberger, Johann Philipp. *The Art of Strict Musical Composition*. Trans. David Beach and Jurgen Thym. New Haven-London: Yale Univ. Press, 1982.

Loulié, Étienne. *Elements or Principles of Music*, translated and edited by Albert Cohen, in *Musical Theorists in Translation*, Vol. VI. New York: Institute of Medieval Music, 1965.

McHose, Allen Irvine, and Ruth Northup Tibbs. *Sight-Singing Manual*, 2nd ed. New York: Appleton, Century, Crofts, Inc., 1945.

Newell, David. *Teaching Rhythm*. San Diego: Kjos Music Press, 2008.

Varley, Paul C. Jr., "An Analysis of Rhythm Systems in the United States: Their Development and Frequency of use by Teachers, Students, and Authors; and Relation to Perceived Learning Preferences." Ed.D. diss, University of Missouri-St. Louis, 2005.