The Composition Course

by

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Lesson No, 2

Motivic Manipulation

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Motivic Manipulation

A *motive*, also called a "motif," is a small musical idea used to create larger segments of music. In lesson 1, we noticed that several motives work together to create a phrase. In this lesson, we will investigate how the motive is manipulated to create and develop musical themes.

A motive can be modified in many ways, including stretching its length, restating it at other pitch levels, and even turning it upside down. Most of the examples given here will be for a single voice. Exercises in motivic manipulation for a single voice isolate the techniques and prepare one to apply these skills to imitative counterpoint for multiple voices, which we will explore in subsequent lessons.

WHAT IS A MOTIVE?

The Medieval Latin word for motive, motivus, means serving to move or inspire. A motive is a motivating idea in music. It can be melodic, harmonic, timbral, and/or rhythmic. It is an important part of a theme, and is often combined with other corroborating motives within a theme.

Activity 1. Listen

The following four compositions have memorable motives (see excerpts in figures 1 through figure 2). While listening to the suggested recordings, notice restatements and variations of the motives.

Johann Sebastian Bach, Ein musikalisches Opfer, BWV1079 - Movement 1: Ricercare a 3

This motive is the first part of a longer theme that was presented to Bach in 1747 as a challenge to test his genius. Bach, never one to be undone by a challenge, *improvised* a threevoice fugue on the spot! He went on to develop the theme in various canonic puzzles, as a trio sonata, and the piece de resistance: a six-voice fugue. Available recordings include Bach: *Organ Miniatures*; Christopher Herrick, Hyperion Records Ltd, London (1990).

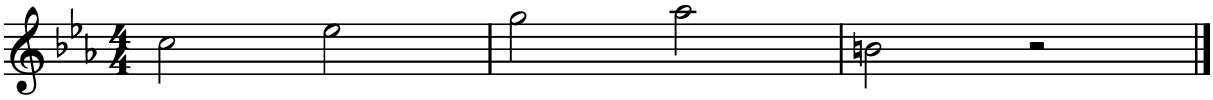

FIG. 1. "1. Ricercare a 3" from Ein musikalisches Opfer, BWV1079 by J.S. Bach, Measures 1-3

Ludwig van Beethoven, Symphony No. 5, Movement 1

One of the most famous pieces of all time is Beethoven's "Fifth." The powerful motive at the beginning of the first movement has inspired many composers, past and present, for over two hundred years since Beethoven composed it. Walter Murphy's famous disco hit "A Fifth of Beethoven" (1976) may be the most well known contemporary reinterpretation, but there are also contemporary samplings of this music by hip-hop artists and dance DJs. Original recordings available include *Symphony* No. 3 & No. 5; Philharmonic Promenade Orchestra of London, Sir Adrian Boult, Artemis-Vanguard (1965).

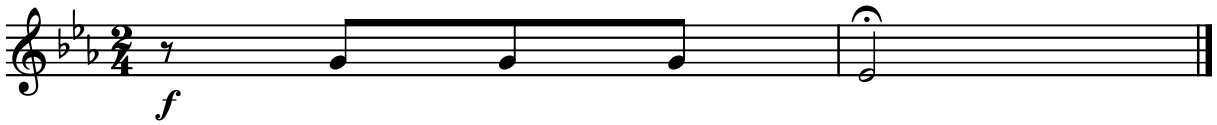

FIG. 2. "1. Allegro con brio" from Symphony No. 5by Ludwig van Beethoven, Measures 1-2

Hector-Louis Berlioz, Symphonie Fantastique," Op.14, "Reveries-Passions"

Berlioz, who considered Beethoven the greatest composer of all time, wrote *Symphoni*e Fantastique (1830) to describe his passion for a beautiful actress named Harriet Smithson, whom he pursued and then married. This motive, near the beginning of the first movement, is a short part of a much longer theme Berlioz called the *idee fixe*-the object of fixation, that is, his obsession for the love of his life. Available recordings include *Symphonie Fantastique: episode de la vie d'un artiste*; Orchestre Philharmonique des Pays de Loire, Fioretti (1994).

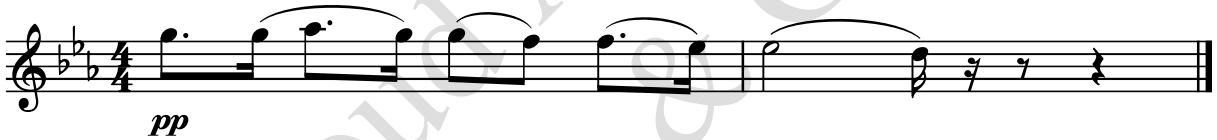

FIG. .3. "Revries-Passions" from Symphonie Fantastique, Op.14 by Hector-Louis Berlioz, Measures 3-4

Muzio Clementi, Piano Sonata in F-Sharp Minor, Op. 26, No. 2, Movement 1

Clementi was born almost twenty years before Beethoven, whom he met when both were in Vienna. While Clementi was well known on the European continent, he spent most of his life in England where he was also active as a music publisher and piano builder. Figure 3.4 presents the opening motive for this sonata. It is principal to the first theme and used extensively throughout the movement. Available recordings include *Horowitz Plays Clementi*; Vladimir Horowitz, RCA Records (1989).

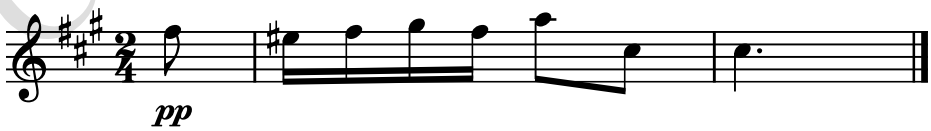

FIG. 4. "I. Allegro con espressione" from Piano Sonata in F-Sharp Minor, Op. 26, No. 2
by Muzio Clementi, Measures 1-2

Activity 1. Finding Motives in Popular Songs

Do you have a favorite piece of music that has a distinct motive? Whether you select another piece or one of the examples above, describe the motive and name a few reasons why you like it.
For example, here is the A section from a jazz melody. The four-note motive is interesting because it sounds very different as it moves up in pitch, recurs under different harmonies, and is transformed by adjusting intervals and using only part of the motive.

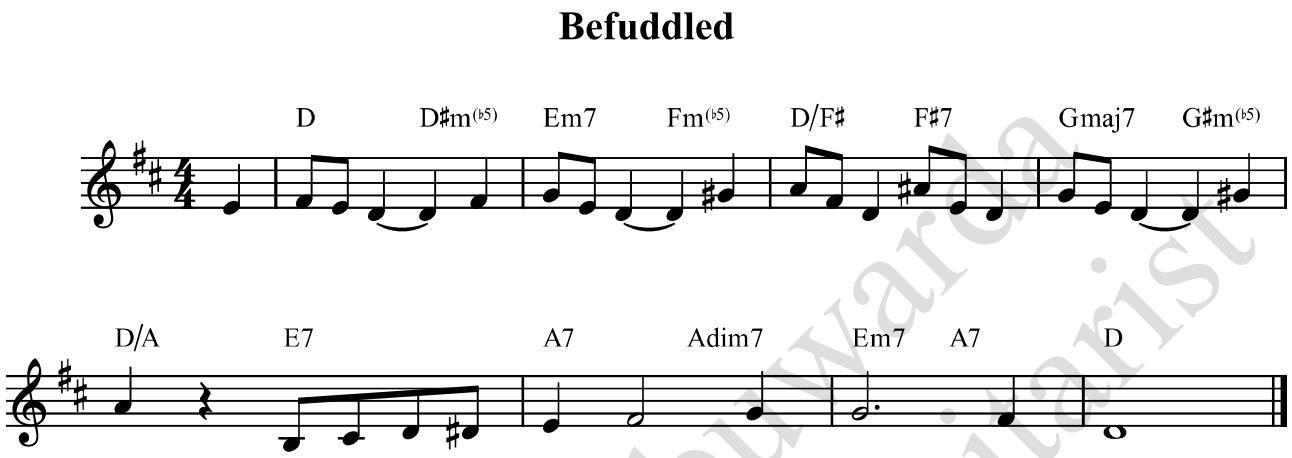

FIG. 5. Jazz Melody, A Section

HOW TO USE A MOTIVE AS A GENERATING DEVICE

Turn it upside down, backwards, stretch it, squeeze it. It's fun, it's a MOTIVE!

Sequence
Let's look again at this motive from Bach's 1. Ricercare a 3:

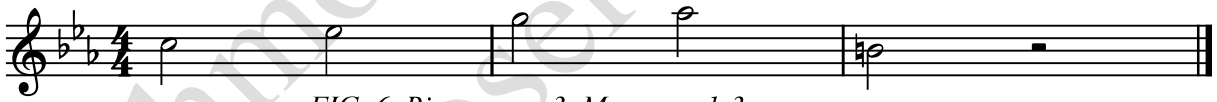

FIG. 6. Ricercare a 3, Measures 1-3

The alto voice plays this part of the theme again at measure 10. This time in half notes beginning on "G" instead of"C."

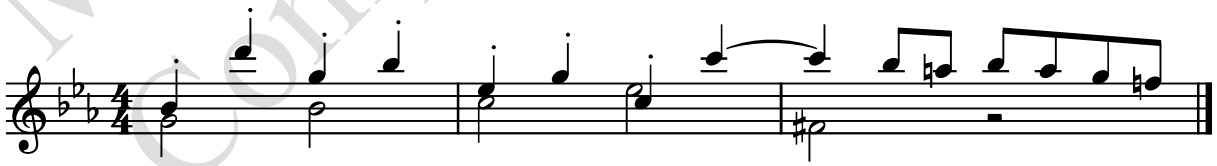

FIG. 7. "Ricercare a 3" Measure 10

When a motive is repeated but begins at a different pitch, it is called a *sequence*.

Real Sequence

If the repetition is exactly the same-that is, all the notes are the same distance apart from each other (intervals) as they were in the original version, then that sequence is said to be "real." Using a real sequence can be very helpful when moving from one key to another (modulation).

Tonal Sequence

Sometimes one or more of the intervals has been adjusted. Most often this is done to stay diatonic (in the key), rather than to modulate. This type of sequence is called "tonal." The sequence may be the most frequent way that a motive is manipulated.

Activity 2. Real vs. Tonal Sequences

Using Bach's motive from the Ricercare, answer the following questions:

Original Motive

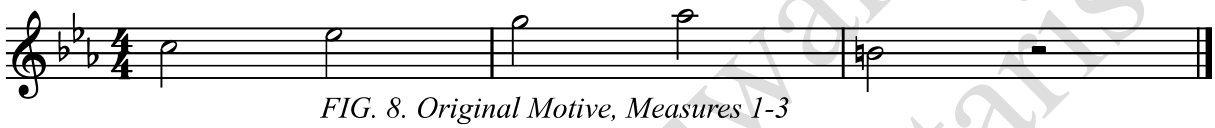

FIG. 8. Original Motive, Measures 1-3

1. Is this sequence tonal or real?
2. Which note changed?

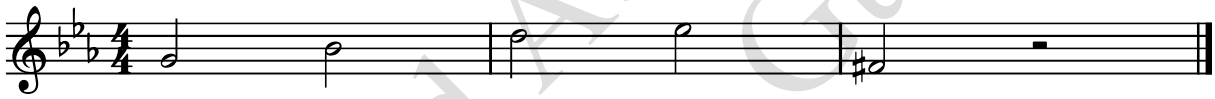

FIG. 9. Measures 10-12

Explanation: The sequence has been lowered a fourth except for the third note which has dropped a fifth. This is a tonal sequence because (at least) one of the notes has been changed. Another way of describing this is that one of the intervals has changed, that is, the intervaliic distance between the second and third notes has diminuted (shortened) from a third (in measures 1-2) to a second (in measures 10-11).

3. This same motive (see figure 3.9) recurs again in measures 46-48 (see figure 3.10), also as a sequence beginning on G. Compare figures 3.9 and 3.10. Are they the same?
4. Which note has changed from figure 3.9 to figure 3.1 O?
5. Compare figure 3.10 to figure 3.8. Is the sequence in figure 3.10 tonal or real?

FIG. 10. Measures 46-48

Explanation: Compared to the original sequence in m. 1, all the notes have been lowered by a fourth (including the third note).

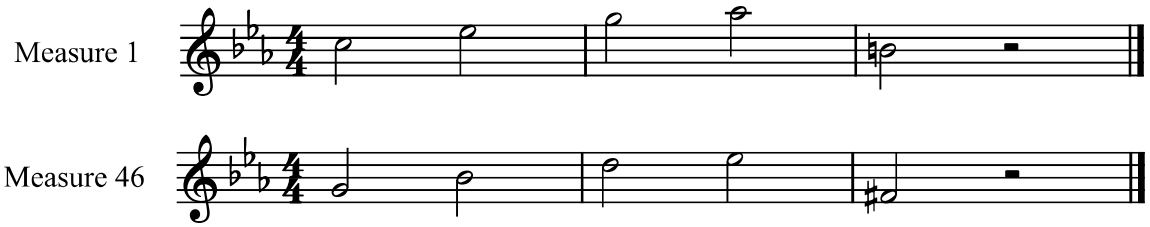

FIG. 11. Compare Measures 1-3 to Measures 46-48

In a real sequence, all of the intervals remain the same. In measure 46, all the intervals are the same as they were in measure 1, so this is a real sequence. The music is now in G minor, no longer in C minor.

MORE MOTIVE MANIPULATIONS

Rhythmic Augmentation

The augmentation of a motive uses a rhythmic permutation to "augment" the length of the motive. The most frequent usage is to make each note twice as long.

Here's the original Clementi motive:

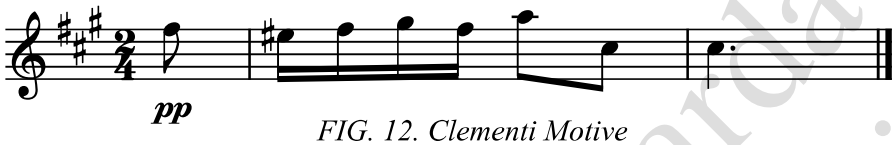

FIG. 12. Clementi Motive

Here's the Clementi motive with rhythmic augmentation:

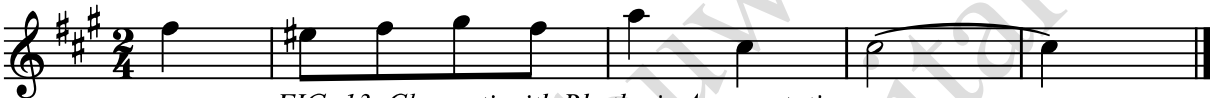

FIG. 13. Clementi with Rhythmic Augmentation

Diminution

Another rhythmic permutation is to "diminish" the length of the motive. Here's the motive from Bach's "Ricercare."

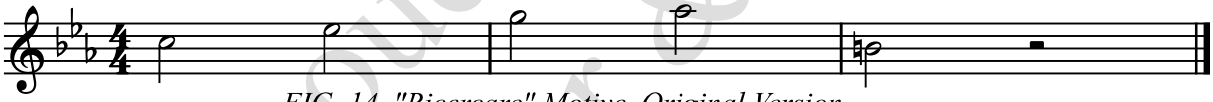

FIG. 14. "Ricercare" Motive, Original Version

Here is the same motive with diminution.

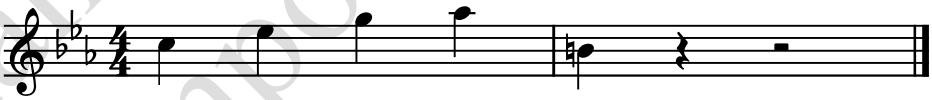

FIG. 15. "Ricercare" Motive with Rhythmic Diminution

CHANGING THINGS AROUND

Changing or Adding Notes

When does a dog turn into a chicken? You can have a black dog, a white dog, a speckled dog, or a tan dog; they are all dogs. But if you make too many changes then it may not be recognizable as a dog anymore!

It is the same with motives. You can add a note here or there, or change a note (as in the difference between a real and a tonal sequence) here or there. But if you make too many changes it will lose connection to the original motive.

Below is the Bach motive with a few changes that work.

• Filling in the scale degrees between chord members (which remain on the beat, in the motive) can be an effective way to develop a motive.

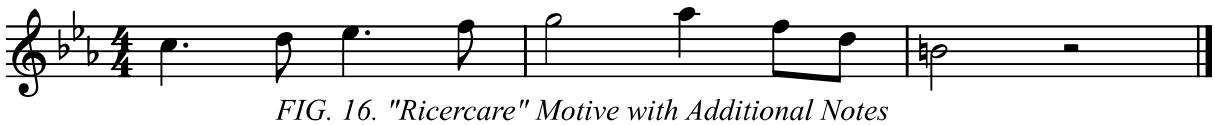

FIG. 16. "Ricercare" Motive with Additional Notes

• Change a note to support diatonic harmony:

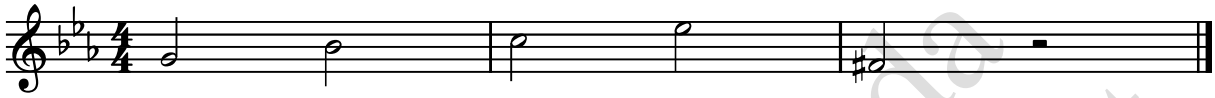

FIG. 3.17. "Ricercare" Motive on G (Tonal Sequence) with a Changed Note

Change of Mode

Jazz and other popular styles of music are often based on different modes. There are, for example, modes derived from the major scale (Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian) and those from the melodic minor scale (jazz minor, Dorian ♭9, Lydian augmented, Lydian dominant, Mixolydian ♭6, Semilocrian, Superlocrian). There are also alternative scales in both jazz and contemporary classical, for example: pentatonic, whole tone, and octatonic (also called symmetrical diminished scales). Scales and modes other than the traditional major and minor configurations are often used inside a tonal or modal framework to express varying levels of brightness and darkness and are appropriate for various chords.

In traditional classical music (also called the common practice period ca. 1750-1900), tonality is the harmonic framework in which the music occurs. Within this limitation, the term "mode" only refers to the color changes between a major scale and the minor scale that starts on the same note-that is, the parallel minor (e.g., C major and C minor). Returning to Berlioz' Symphonie Fantastique, the opening motive excerpted before (and below) occurs after a full voicing of the C minor chord and the motive itself is in C minor.

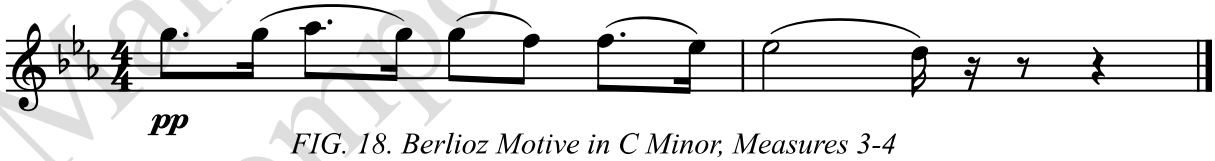

FIG. 18. Berlioz Motive in C Minor, Measures 3-4

When the full theme occurs in the flute, the key has changed to C major and this motive, occurring near the middle part of the theme, is stated in rhythmic augmentation with some slight durational variations and is clearly in C major.

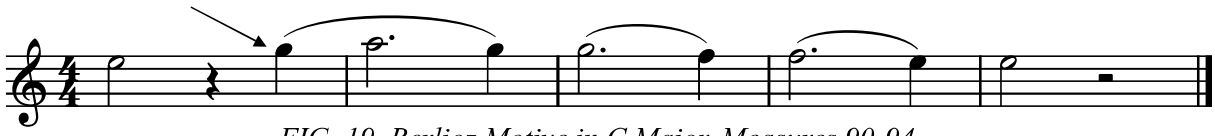

FIG. 19. Berlioz Motive in C Major, Measures 90-94

The traditional classical term for this, "change of mode," only refers to the shift from happy to sad with the same tonic note-for example, from C major to C minor; or from sad to happy, as in going from B minor to B major.
In jazz, mode change offers many other color modifications. Here's an originally happy melody in C major gradually descending into the darkness of C Locrian.

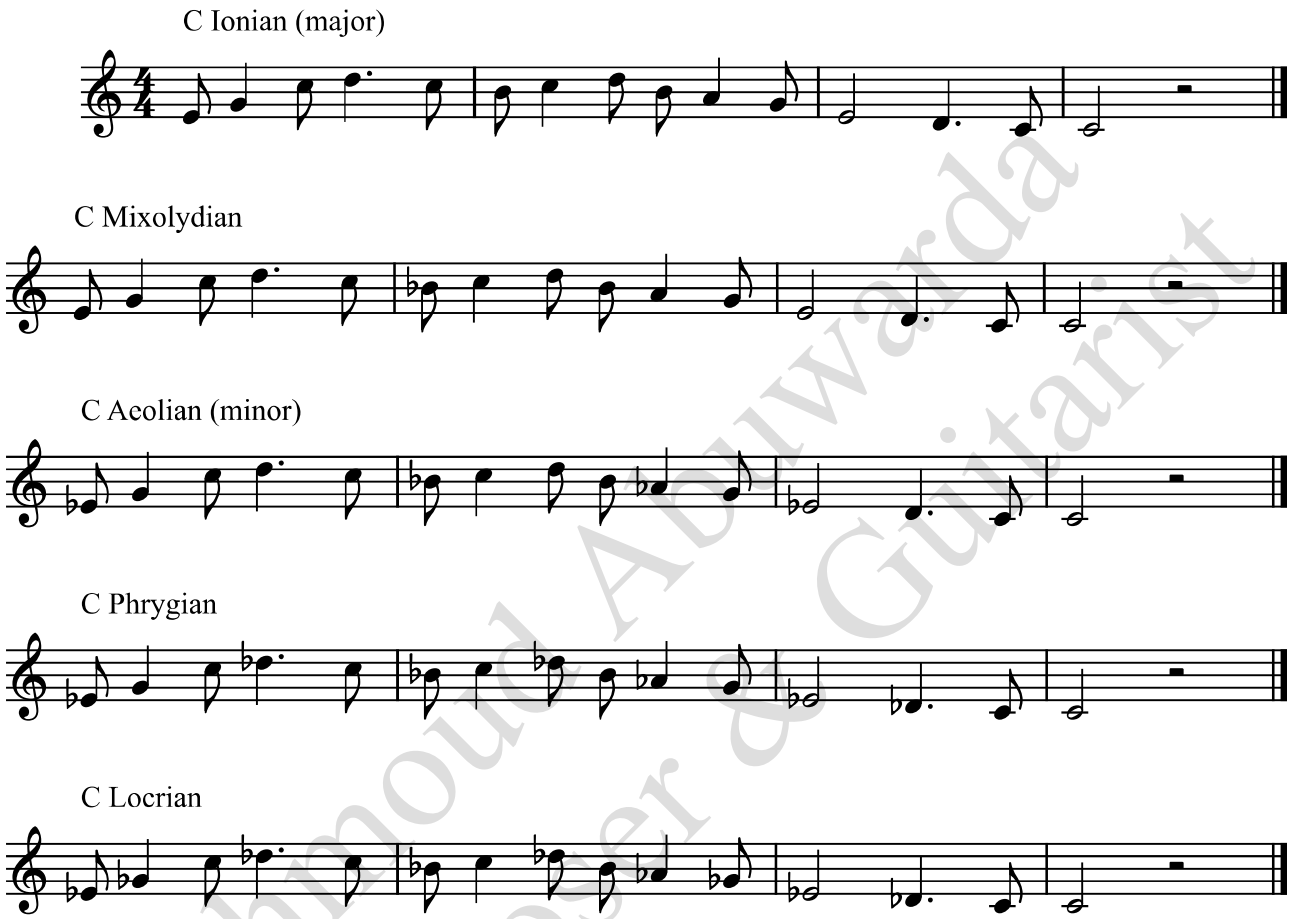

FIG. 20. Motivic Manipulation by Changing Modes in Jazz

INVERSION AND RETROGRADE

Inversion

Inversion is sometimes called "contrary motion," or "upside down." The notes go in the opposite direction but maintain the same (intervallic) distance from each other.
For example, if an interval in the original motive went down a third, at that same place in the inversion, that interval would go up a third.
Listen to (or play) Bach's "Invention No. 1 in C Major." Available recordings include Bach: Inventions, Sinfonia & Duets; Peter Serkin, piano, BMG Entertainment (1997).

Here's the original motive, beginning on C, in measure 1:

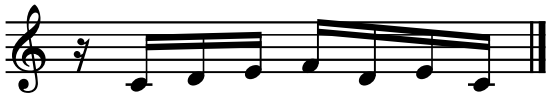

FIG. 21. Bach, "Invention No. 1," Measure 1

Here's the inverted version, beginning on A, in measure 3:

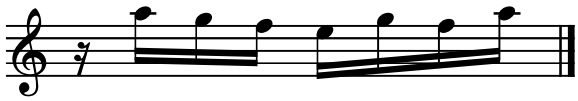

FIG. 22. Bach, "Invention No. 1," Measure 3

Bach's "Invention No. l" then goes on and sequences the inverted form four times.

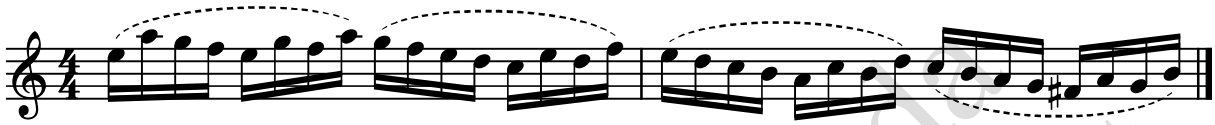

FIG. 23. Bach, "Invention No. 1," Measures 3-4

Retrograde

Retrograde means going backwards. The last note becomes the first and so on and so forth until the first is the last. Some motives are not well suited for retrograde treatment. However, the Bach "Ricercare a 3" motive works quite well backwards.

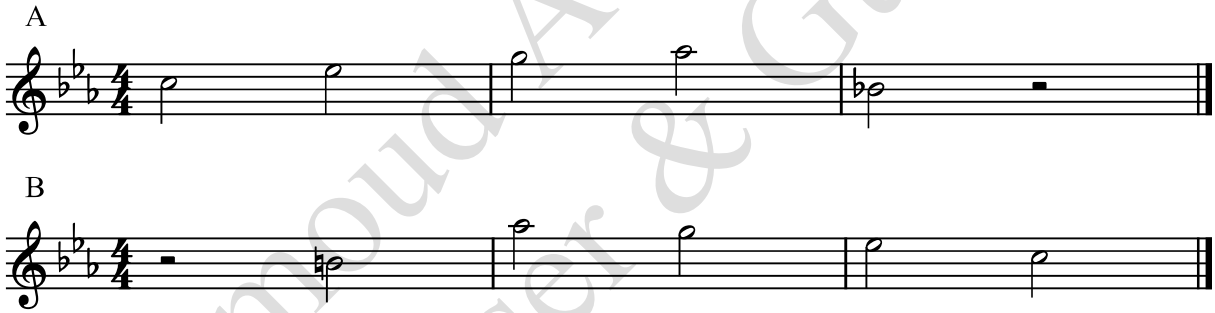

FIG. 24. Bach, "Ricercare a 3" (a) Original Motive, (b) Retrograde

Activity 3. Matching Manipulations

Here is a motive.

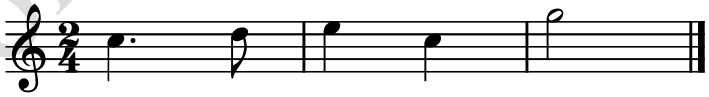

FIG. 25. Motive for Activity 3.3

Match the correct term with the motivic manipulation shown in the next page:

change of mode ***diminution*** ***retrograde inversion*** ***augmentation*** ***addition of notes*** ***sequence***

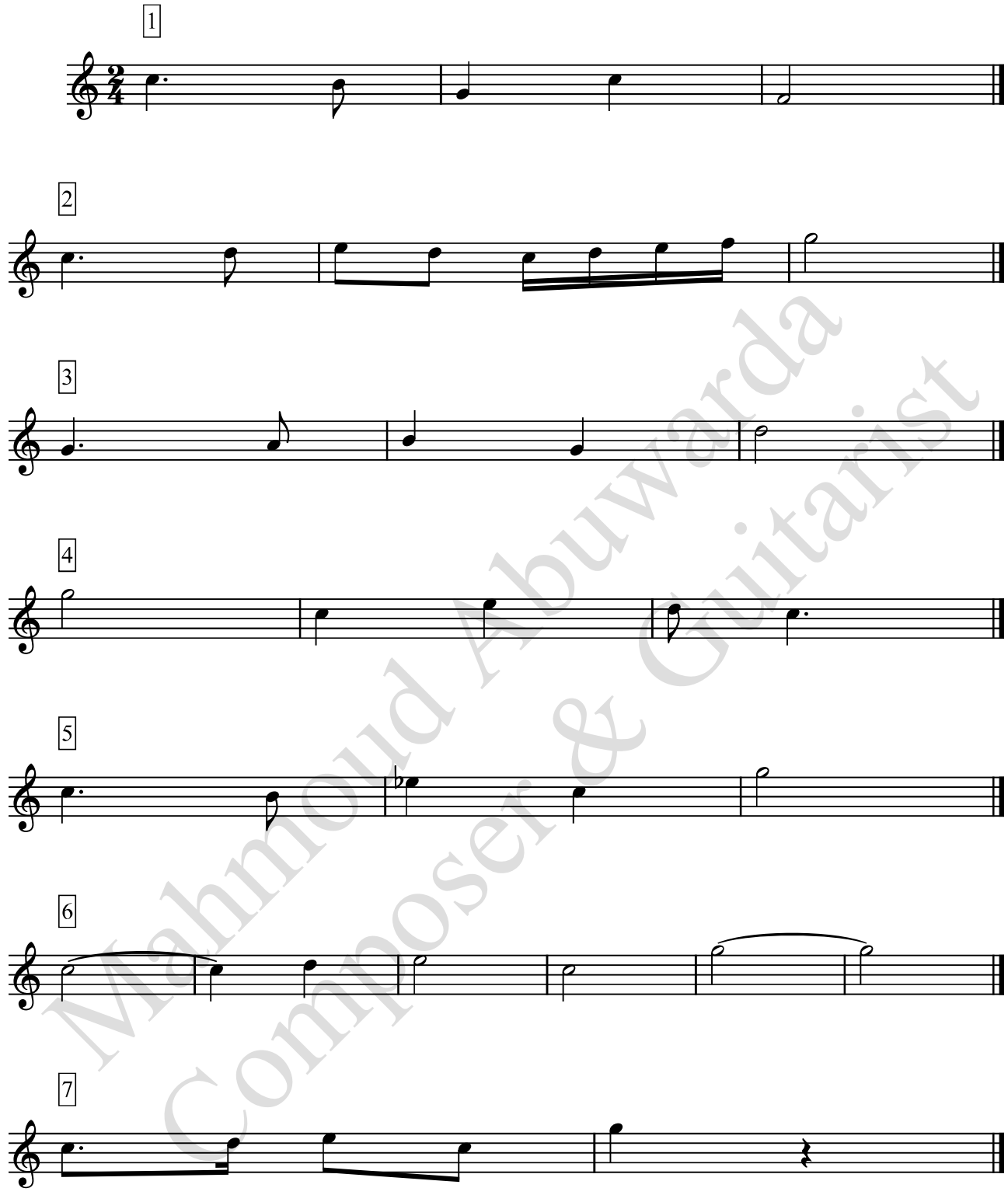

FIG. 26. Activity 3.3