

**Maximizing the Benefits of Using Familiar Music
in Undergraduate Music Theory**

Ivan Jimenez

University of Pittsburgh

Helping students to explicitly connect the unfamiliar to the familiar has been identified as one of the most successful strategies for facilitating learning in undergraduate music theory classes (Fieldman, 2008; London, 1990; M. Rogers, 2004), K-12 musical education (MacCluskey, 1979; Pembroke, 1991; Regelski, 2004; Springer & Gooding, 2013), college teaching in general (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010), and other educational contexts (Nilson, 2010). One way the connection between the unfamiliar and the familiar is promoted in undergraduate music theory classes is to introduce new theoretical concepts by using musical examples or types of music students are likely to be familiar with (Hoag, 2013; Rosenberg, 2010, 2014; Turek, 2007). It is often assumed that by using familiar music or musical styles, new theoretical concepts are more easily understood and more likely perceived by students as being relevant (Boyle, Hosterman, & Ramsey, 1981; Folse, 2004; Pembroke, 1987; Ripley, 2011). There is also some empirical evidence that familiarity with a piece of music increases the intensity of the emotions that the music elicits and conveys (Ali & Peynircioğlu, 2010). fMRI studies have shown that familiar music triggers significantly more emotion-related brain activity and motor engagement than unfamiliar music, and that such effect does not depend on the listener liking the music (Pereira, Teixeira, Figueiredo, Xavier, Castro, & Brattico, 2011). The emotional intensity and motor engagement associated with familiarity is consistent with the notion that familiar music is generally better than unfamiliar music at creating and sustaining students' interest in class subjects and making theoretical concepts more memorable. Although introducing theoretical

concepts via familiar music may be a widespread practice among music theory instructors, relatively little has been written about the specific ways that the pedagogical benefits of such practice can be maximized. In this essay, I describe two classroom activities geared towards first-year undergraduate music theory students, where I attempt to maximize the pedagogical benefits of using familiar pieces of music when introducing, clarifying, or reinforcing theoretical concepts.

Class Activity No. 1: Qualia of Melodic Augmented Seconds

Students in undergraduate music theory classes are usually told to avoid melodic augmented seconds when writing chorale-style harmonizations or species counterpoint (Aldwell, Schachter, & Cadwallader, 2010; Clendinning & Marvin, 2011; Roig-Francolí, 2011). In the past, I had tried to deter my students from writing melodic augmented seconds in chorale-style harmonizations by pointing out its distinctive, often dissonant effect and the challenges the tuning of that melodic interval poses for sight-singers. However, no matter how much I talked about augmented seconds in class, or how many times I provided students with examples of the musical quality of augmented seconds effect by playing short melodies containing that melodic interval, close to half of my students would still include that melodic interval in their harmonizations every time they rose scale degree seven in minor key contexts. I also noticed that some students do not realize that their harmonizations included an augmented second even when they seem to have sang, played, or audiated the individual voices of their harmonizations. As a response to that problem, I recently designed a class activity to both heighten students' sensitivity to melodic augmented seconds and pique their curiosity about the general connection between theoretical concepts, such as that of the augmented second, and their various musical effects. This activity is meant to take advantage of students' familiarity with some relatively well-known melodies that use augmented seconds. However, as I will explain later, this activity is designed in a way that

students can still benefit, even if they are not familiar with the music or musical styles used in the activity.

I start this activity by projecting on a blackboard the musical notation of a well-known melody that contains several augmented seconds (e.g., “*Hava Nagila*”) without telling students the name of the melody. Then I ask students to raise their hands if they can identify the melody without singing it out loud. In addition to asking students not to sing the melody, I also ask them not to say the name of the melody in order to build suspense by keeping some degree of uncertainty regarding the identity of the melody. I assume that at least some students who know the answer are likely to want to verify that their answer is correct while those who do not know the answer are likely to be curious because I told them the melody was well-known, (and they saw that other students seemed to have identified the music). After some students raise their hands, I ask all students to identify the augmented seconds in the melody from its musical notation. This new question further delays a definitive response to the question about the title of the melody, and piques students’ curiosity about the way augmented seconds sound on that presumably familiar, but not-yet-fully identified, melody. I then play the melody and ask students to raise their hands if they have heard the melody before. More students raise their hands in response to this question than the first question, probably because different students are likely to have different audiation abilities. Finally, I provide the name of the melody and some information about its background. The manner in which familiar music is presented in this activity creates emotional and intellectual anticipation that is likely to magnify the emotional intensity already associated with experiencing familiar music. This activity is designed in such a way that guarantees that even students who are not familiar with the piece may benefit from this exercise. Students who are not familiar with the specific melody are likely to be at least vaguely familiar with similar melodies, and the combination of that general familiarity with the emotional and intellectual anticipation, and

socially experienced build-up previous to listening the melody, is likely to make the experience of that new melody and its connection to the concept of melodic augmented seconds highly memorable.

I repeat the same set of questions with other relatively well-known melodies that also include augmented seconds (e.g., Tchaikovsky's, *Marche Slave*; Dick Dale's version of *Miserlou*; Mussorgsky, *Night in Bald Mountain*; and the "*Quia Respexit*" from Bach's *Magnificat*). Although not all these melodies are equally likely to be familiar to my students, I make sure to start with those most likely to be familiar so I do not lose students interest due to the identification task being too difficult from the very beginning. After we have named all the melodies, I ask students to describe each of them with adjectives (e.g., exotic, psychedelic, dramatic, etc.) and to tell the class whether or not the presence of augmented seconds in the examples contributes to those general qualities. To facilitate our discussion, I play versions of the excerpts where the augmented seconds are avoided by replacing the #7 with ♭7 or the ♭6 with #6. Using music that students are very familiar with makes this activity particularly vivid, fluid, and engaging. Most students have heard pieces like *Hava Nagila*, *Miserlou*, and *Night in Bald Mountain* multiple times in their lives, and the "real-life" contexts where they have heard those pieces help students perceive the "qualities" of the music as richer and more vivid. Although listening to a piece for the first time can be an emotionally intense experience and trigger vivid extra-musical associations, students tend to make more nuanced and sophisticated observations when they are working with familiar contexts (Ambrose et al., 2010; Folse, 2004; N. Rogers, 2013). Familiarity also has an advantage when comparing original excerpts to versions where the augmented seconds are avoided by replacing the #7 with ♭7 or the ♭6 with #6. Over the years, I have noticed that students' reactions are stronger when the modified melody is a well-known melody, probably because

familiar melodies are deeply encoded in long-term memory, facilitating the comparison between original and modified melodies, and making the modified pitches more perceptually salient.

Familiarity also facilitates comparison among different examples. When asking students why augmented seconds in *Miserlou* (see example 1a) are less dramatic than the augmented seconds in Bach's excerpt (see example 1b) students do not need to hear *Miserlou* again in order to compare the quality of its augmented seconds to those in Bach's excerpt. Whereas the comparison of two unfamiliar pieces of music is affected by the constraints of short-term memory, the comparison between *Miserlou* and Bach's excerpt is greatly facilitated by *Miserlou*'s being stored in long-term memory. I have yet to find a student that reports never having heard *Miserlou* before. However, even if some students had never heard *Miserlou* before, general familiarity with that type of music is likely to confer some processing advantages in this comparative task.

Example 1a. Dick Dale, *Miserlou* [Egyptian Girl]
(originally a 1927 Greek popular song)



Example 1b. J. S. Bach, Magnificat, "*Quia Respexit*" [because he has noticed]



This class activity achieves two learning objectives. First, it connects students with a diverse set of memorable auditory images that can facilitate the aural identification of melodic augmented seconds in different contexts. Because this activity emphasizes the fact that these examples of melodic augmented seconds are widely popular, students are presented with a richer and more constructive understanding of augmented seconds that goes beyond seeing the intervals as merely an interval to avoid in writing assignments. Second, the discussion of the different musical effects of the same melodic interval in different musical contexts is likely to make students interested in how theoretical concepts may connect to the way music sounds, increasing the perceived relevance of music theory for musical experiences outside of the classroom.

Class Activity No. 2: From Species Counterpoint to Beethoven and Beyond

This activity is related to the topic of first and second species counterpoint. Whereas in the previous class activity the emotional intensity of familiarity is heightened by building anticipation previous to playing familiar melodies and identifying their names, in this class activity the emotional intensity of familiarity is magnified by revealing unexpected connections between unfamiliar and familiar music and by unexpectedly juxtaposing very different types of familiar music. I start this activity by asking my students to write in class a first species counterpoint to the cantus firmus c#-b-a-f#-g#-c#. I then ask them to imagine what the interaction between their two voices sounds like and to write down a couple of sentences about what they consider to be the most expressive moment in their short composition. I write one of their solutions on the board and ask several students to predict the most expressive moment in that counterpoint. Then we compare those predictions to the composer's written statement. I ask students to imagine the music and its expressive effect not only to encourage them to develop their audiation skills, but also to make their ears more receptive to the expressive nuances of their counterpoint exercise by creating emotional and intellectual anticipation before playing their counterpoint on the piano. After the

performance, we discuss how the actual sound of the music reveals expressive nuances that went undetected in the process of audiation. I ask them to play their counterpoints at home and to write a couple of sentences describing how accurate they were at predicting the most expressive moment in their short composition. In the session following the assignment, we play and discuss some of their short compositions and compare them to a solution where the top melody uses the pitches e-e-f#-d#-c#. I use this solution to connect first species to second species, but also to connect their assignments and the concept of species counterpoint to more elaborate music since that solution is taken from the contrapuntal framework of the opening five bars of Beethoven's *Moonlight Sonata* (see example 2a).

Example 2a. Opening bars from Beethoven's *Moonlight Sonata*.

The image displays two musical staves. The top staff, labeled 'Original', is in bass clef and shows the first five bars of Beethoven's *Moonlight Sonata*, featuring a complex texture with triplets and sixteenth notes. The bottom staff, labeled 'Underlying Framework', is in treble clef and shows a simplified harmonic structure with whole notes and half notes. A red box highlights the fourth measure of the framework, which contains a chord with a circled '4' below it, labeled 'passing tone (p)'. The framework is numbered 3, 4, 5, 8, 6, 5, 1 below the staff.

Prior to revealing to students the connection between this species counterpoint exercise and Beethoven's well known piece, I play different versions of that pitch framework, starting with two voices in half notes, then adding two more voices, then lowering the register, then adding the "correct" harmonic rhythm, and finally playing the first five bars from Beethoven's original. After playing each version, I ask students to raise their hands if they are able to identify the piece, but I ask them not to say the name of the piece out loud until I play the actual first five bars from Beethoven's original. I explain how the "b" in the opening bass line of Beethoven's piece can be described as a passing tone, and how passing tones relate to second species counterpoint. Then I

compare the beginning of Beethoven's *Moonlight Sonata* to other pieces that use the 8- $\flat$ 7- $\flat$ 6 in the bass and where the $\flat$ 7 can be analyzed as a passing tone because it is not accompanied by a change of harmony. The examples I provide are taken from Giazotto's *Albinoni's Adagio* (see example 2b), the aria "Erbarme Dich" from Bach's St. Mathew Passion, Christina Aguilera's "When You Put your Hands on Me," and the Red Hot Chili Pepper's songs "Hey" and "Death of a Martian."

Example 2b. Opening bars from Giazotto's *Albinoni's Adagio* transposed to C#m.

Originally in Gm

Original

Underlying Framework

1 2 3 4 6 d7 5 1

passing tone (p) passing tone (p) Chromatic chord

In this activity, there are two instances where the emotional intensity of familiarity (and its pedagogical benefits) is magnified by the element of surprise. The first surprise occurs when Beethoven's *Moonlight Sonata* is unexpectedly revealed to be the source of the bass line students have been working with. Not only are students likely to be more familiar with Beethoven's piece than with their recently composed short exercises, but they are also likely to be more familiar with arpeggiated full triads than with two-voice, homo-rhythmic (for another recent example of using the bass line of a well-known piece as cantus firmus in an undergraduate music theory class see Stevens, 2015). The second surprise occurs when discussing Aguilera's song after Bach's aria (see examples 2c and 2d).

Example 2c. Opening bars of Bach’s “*Erbame dich*” transposed to C#m.

Originally in Bm

Original

Underlying Framework

3 2 3 4 3 3 6

harmonic "passing tone" passing tone (p)

Example 2d: Opening bars of Christina Aguilera’s “*When You Put your Hands on Me.*”

Originally in Am

Original

Underlying Framework

1 4 7 7

harmonic "passing tone" Parallel 7th chords

This second surprise is greater than the first one because in addition to musical differences, Aguilera’s song and Bach’s aria carry extremely different extra-musical associations (for another example that uses stylistic contrast between “higher” and “lower” art forms to create a memorable learning experience see Allsup, 2011).

In both cases, Beethoven’s and Aguilera’s, the surprise created by the unexpected contrast is further intensified by the clear pattern preceding the moment of contrast. Beethoven’s excerpt is introduced when students have gotten used to expecting more examples of first-species counterpoint, and Aguilera’s excerpt is introduced when students have gotten used to expecting more examples of lyrical classical music as well as a gradual increase in motivic complexity.

As with the activity of augmented seconds, the effect created by familiarity in this activity is not an end in itself, but rather a tool in the service of a larger pedagogical goal. The element of surprise introduced by the contrast creates an emotional response that promotes students' engagement. Showing students examples from diverse musical styles heightens awareness of the ubiquity of passing tones in music, while familiarity with some of the examples makes that new awareness easier to remember. After introducing each new example, I ask students to identify similarities and differences between the new and previous example in terms of both musical elements and effect. In particular, I encourage them to focus on the musical effect of the $8\text{-}\flat 7\text{-}\flat 6$ bass and to compare it to other instances of passing tones in the examples.

Because of their long duration, these instances of $8\text{-}\flat 7\text{-}\flat 6$ in the bass are not the most typical examples of passing tones, but most of the excerpts used in this activity also include more typical "faster" passing that expose students to a wide range of different rhythmic possibilities of passing tones. Perhaps more importantly, slow passing tones in the bass are particularly salient and expressive events (regardless of scale degree), and the expressive component of these types of passing tones are heightened by students' familiarity with the pieces and their extra-musical associations, making this introduction to the concept of passing tones and second species particularly engaging and memorable for students.

Closing Remarks

Some instructors may be hesitant to rely on familiarity for their class activities fearing that it would be difficult to predict what their students are actually familiar with. In order to choose music that students are familiar with, I have found it useful to survey students at the beginning of each semester. For that purpose, I use two types of surveys: one where I ask them to mention pieces and songs they know well and another survey in which I play excerpts from different pieces and songs and ask them to report how many times they have heard that music before. I have also

found Kimberly VanWeelden's 2012 large-scale survey useful in helping me to narrow down my options for classical pieces for use in the type of survey in which I play music for students.

Another concern that may be raised by instructors is that some well-known pieces and songs tend to trigger negative emotional responses in listeners because they have heard that music too many times. However, there are several reasons instructors should avoid discarding a musical example based on the assumption that the example is too popular. First, some students may have heard a well-known piece of music less times than the instructor, and therefore be less likely to have developed negative emotional responses to the piece due to over-exposure. Second, different listeners react differently to "over-exposure," so even some students who have heard a well-known piece of music as many times as the instructor has, may not develop the sort of negative emotional responses that the instructor experiences. Third, even students who dislike a musical example because they have heard it too many times benefit from the pedagogical advantages of their familiarity with the music because the emotional intensity triggered by familiarity and the facilitation of mental processing due to repeated exposure, two key aspects that make familiar examples beneficial, are not dependent on liking. Finally, and perhaps most importantly, one of the most fascinating things about music theory is its capacity to allow us to hear familiar music with new ears (i.e., making the familiar unfamiliar). When we hear a piece of music with a particular conceptual framework in mind for the first time (e.g., focusing on the quality of its melodic intervals, or its harmonic connection to other pieces of music), we are hearing that music in a new way, and that new hearing is likely to bring new life to the music and renew our enjoyment of it (Allsup, 2011, Lagueux, 2012). I consider this to be particularly valuable lesson to share with our students, and one that makes the use of "over-played" music in a music theory class not only acceptable, but highly productive and effective.

Some instructors may also worry that spending time on things that students already know, such as well known classical pieces or popular songs, may take away time from introducing students to new concepts and pieces of music or musical styles that students are not familiar with. My view on that issue aligns with Brian Alegant's belief that music theory teachers can benefit from opening some extra spaces to dive more deeply into some concepts or pieces of music by being a little bit less concerned about covering "all" the topics and key repertoire (Alegant, 2014). I believe that familiarity offers some invaluable opportunities for deeper learning. Familiar pieces of music and styles allow a type of emotional involvement (regardless of actual musical preference) and a type of deeper and more fluent perceptual and cognitive process that grants them important advantages in the classroom over music that is less familiar. Additionally, when the unfamiliar is explicitly and carefully connected to the familiar, the emotional and processing benefits of the familiar can be transferred to the unfamiliar, making learning of new content and repertoires more engaging, efficient, and long lasting. The diversity created by including both familiar and unfamiliar music in the music theory classroom is also in line with the experience of students who inhabit a world that is increasingly more interconnected and eclectic. Students who experience diverse music in class will better able to share their knowledge in a variety of future musical and professional contexts.

References

- Aldwell, Edward, Carl Schachter, and Allen Cadwallader. 2010. *Harmony and voice leading*. (4th ed.). Cengage Learning.
- Alegant, Brian. 2014. "On 'Scuba Diving,' or the Advantages of a Less-is-More Approach." *Engaging Students: Essays in Music Pedagogy* 2.
- Ali, S. Omar and Zehra F. Peynircioğlu. 2010. "Intensity of emotions conveyed and elicited by familiar and unfamiliar music." *Music Perception: An Interdisciplinary Journal* 27(3): 177-182.
- Allsup, Randall Everett. 2011. "Popular Music and Classical Musicians: Strategies and Perspectives." *Music Educators Journal*. 97 (3): 30-34.
- Ambrose, Susan, Michael Bridges, Michele DiPietro, Marsha Lovett, and Marie Norman. 2010. *How Learning Works: Seven Research-based Principles for Smart Teaching*. Jossey-Bass: San Francisco, CA.
- Boyle, J. David, Glenn L. Hosterman, and D. S. Ramsey. 1981. "Factors Influencing Pop Music Preferences of Young People," *Journal of Research in Music Education* 29: 47-55.
- Clendinning, Jane Piper, and Elizabeth West Marvin. 2011. *The musician's guide to theory and analysis* (2nd ed.). New York: W.W. Norton.
- Hoag, Melissa. 2013. "Seven strategies for enabling student success in the first-year music theory sequence." *Journal of Music Theory Pedagogy Online* 1.
- Fieldman, Hali. 2008. "Review of Harmony in Context by Miguel Roig-Francoli; The Complete Musician: An Integrated Approach to Tonal Theory, Analysis, and Listening by Steven G. Laitz; The Musician's Guide to Theory and Analysis by Jane Piper Clendinning; Elizabeth West Marvin." *Music Theory Spectrum* 30 (2): 366-382.

- Folse, Stuart. 2004. "Popular music as a pedagogical resource for musicianship: contextual listening, prolongations, mediant relationships, and musical form." *Journal of Music Theory Pedagogy* 18: 65-79.
- Lagueux, Robert C. 2012. "Inverting Bloom's Taxonomy: The Role of Affective Responses in Teaching and Learning." *Journal of Music History Pedagogy* 3 (2): 119-50.
- London, Justin. 1990. "'One step up': a lesson from pop music," *Journal of Music Theory Pedagogy* 4 (1): 111-14.
- MacCluskey, Thomas. 1979. "Peaceful Coexistence between Pop and the Classics." *Music Educators Journal* 65 (8): 54-57.
- Nilson, Linda. 2010. *Teaching at its Best: a Research-based Resource for College Instructors*. 3rd edition. Jossey-Bass: San Francisco, CA.
- Pembroke, Randall G. 1987. "A stylistic analysis of selected pop songs, 1965-1984," *College Music Symposium* 27: 117-140.
- Pembroke, Randall G. 1991. "Exploring the musical side of pop." *Music Educators Journal* 77 (8): 30-34.
- Pereira, Carlos Silva, João Teixeira, Patrícia Figueiredo, João Xavier, São Luís Castro, and Elvira Brattico. 2011. "Music and emotions in the brain: familiarity matters." *PloS one* 6 (11): e27241.
- Regelski, Thomas A. *Teaching General Music in Grades 4-8: A Musicianship Approach*. New York, NY: Oxford University Press, 2004.
- Ripley, Angela N. 2011. "An investigation of pedagogical methods for increasing the perceived relevance of music theory courses to undergraduate music students." MA Thesis, Baylor University.
- Roig-Francolí, Miguel A. 2011. *Harmony in context* (2nd ed.). McGraw-Hill.

- Rogers, Michael R. 2004. *Teaching Approaches in Music Theory: An Overview of Pedagogical Philosophies*. 2nd edition. Carbondale: Southern Illinois University Press.
- Rogers, Nancy. 2013. "Modernizing the Minuet Composition Project." *Journal Of Music Theory Pedagogy* 27: 71-110.
- Rosenberg, Nancy. 2010. *From Rock Music to Theory Pedagogy: Rethinking U.S. College Music Theory Education from a Popular Music Perspective*. Ph.D. Diss., Boston University.
- Rosenberg, Nancy. 2014. "Bach, Beck, and Bjork walk into a bar: reclassifying harmonic progressions to accommodate popular music repertoire in the traditional music theory class." *Journal of Music Theory Pedagogy* 28: 163-97.
- Springer, D. Gregory, and Lori F. Gooding. 2013. "Preservice music teachers' attitudes toward popular music in the music classroom." *Update: Applications of Research in Music Education* 32(1): 25-33.
- Stevens, Daniel B. 2015. "Inverting analysis." *Engaging Students: Essays in Music Pedagogy* 3.
- Turek, Ralph. 2007. *Theory for Today's Musician*. New York: McGraw-Hill.
- VanWeelden, Kimberly. 2012. "Classical Music as Popular Music: Adolescents' Recognition of Western Art Music." *Update: Application of Research on Music Education* 20 (10): 1-11.