(1974) to show the chromatic chord choices in that song can affect listener cognition using both strategies.

2.4 "Goodbye Yellow Brick Road"

Now that I've discussed the importance and possible affect of these chromatic chords in diatonic context, I will perform a close reading of Elton John's "Goodbye Yellow Brick Road" (1974), which contains multiple instances of chromaticism and a remote modulation. Figure 2.2 represents my analysis of the chords in Roman numeral notation with "|" bars separating measures. According to the figure, the song begins in the key of F major, but modulates briefly in the pre-chorus and chorus before returning back to F major. As in "Tiny Dancer," this direct modulation to the remote key of A♭ major or ♭III in both the pre-chorus and chorus mask the chromaticism of the F major's ♭VI as a diatonic ii^7 in A♭ major. Even though ii^7 is diatonic in the context of A♭, the first hearing of this jarring modulation is still consequently surprising.

♪ Goodbye Yellow Brick Road (F major) 2/2
Intro: (4 bars)
I V6 | vi vi42 | IV V64 V6 | I |

Verse: (16 bars)
ii^7 IV | V | I I6 | IV |♭VII | V | I | I | ii^7 IV | V | I I6 | IV |♭VII | V | I | I |

Pre-chorus: (6 bars)
(A♭) ii^7 IV64 | V^7 | I I6 | IV IV42 | ii^7 IV64 | (F) V |

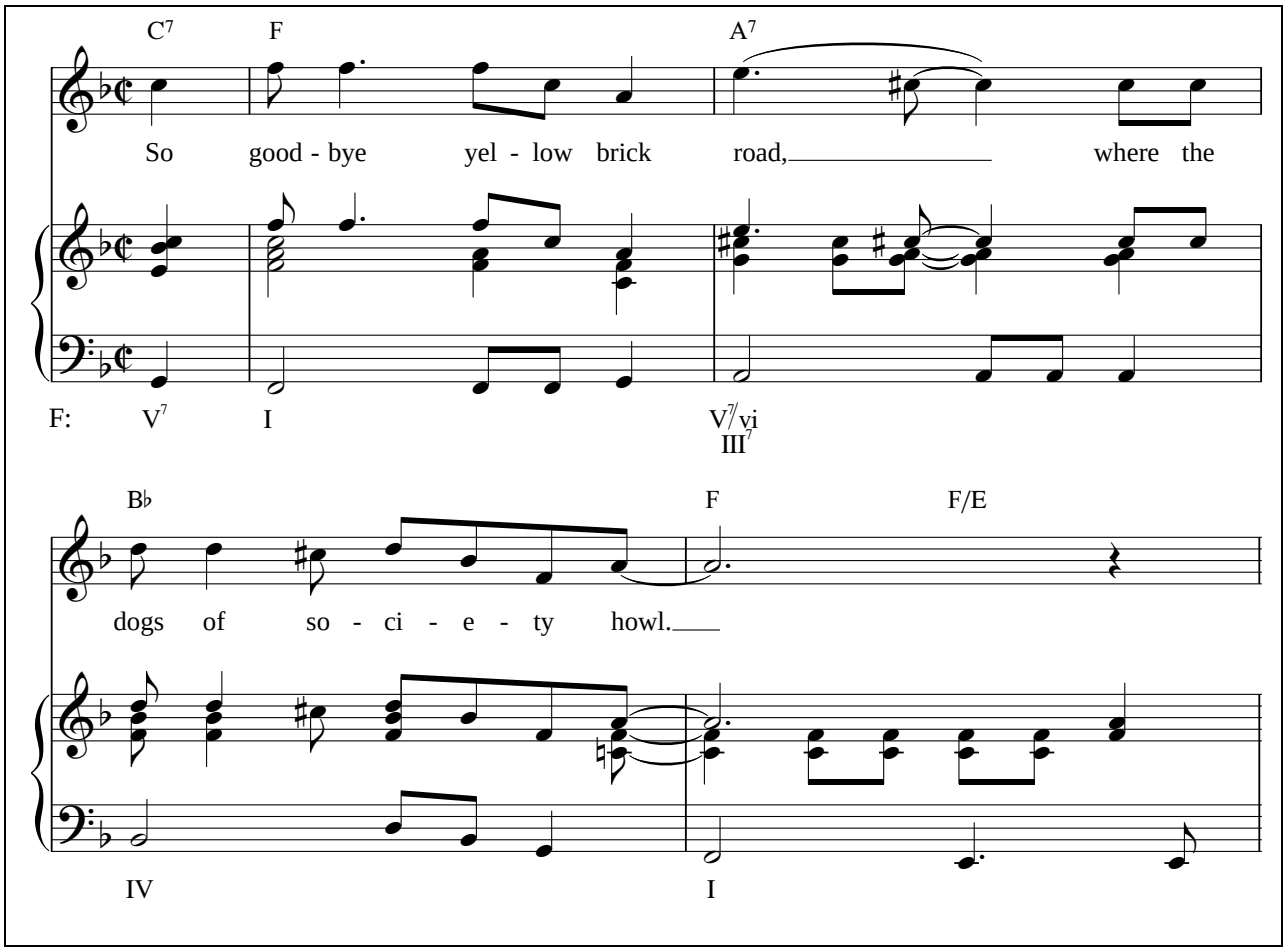
Chorus: (24 bars)
I | V^7/vi | IV | I | V^7/ii | ii^7 | V | I V6 | vi | V/vi | IV | |♭VI |♭VI ♭VII | I V6 | vi vi42| IV IV+V V |
(A♭) ii^7 | V | I | IV | ii^7 | (F) V | I | I |

Repeat Verse, Pre-chorus, and Chorus

Figure 2.2: Roman numeral representation of "Goodbye Yellow Brick Road" chords

Consider now the first phrase of the chorus in Example 2.13, which contains a V^7/vi or III^7 that behaves unpredictably, similarly to the example in "Someone Saved My Life Tonight." The modulation back to F major in the pre-chorus has set up a diatonic V–I as expectation for the chorus to continue on in the same fashion. In the second measure, the listener is confronted with an A-dominant seventh chord (V^7/vi), which violates schematic predictability in two ways. First, the F major I chord leads directly to this uncommon chromatic chord. According to Huron's schematic chord progressions chart based on Western popular music in Figure 2.3, where the darker bolded arrows indicate more frequent motion to and from certain chords, I does go to iii in major, but not as frequently as other chords.[39] Changing the mode of the chord from minor to major also lowers the schematic predictability. The second violation is that the A dominant seventh chord does not lead to an expected D chord, but instead to a B-flat major triad. As tonal listeners, we expect an applied dominant chord to resolve down a fifth, but that expectation is subverted here. As shown in Example 2.14, the voice leading of the tritone within the dominant chord predictably resolves outward to a 6^{th} between F and D, but in the middle voice instead of A we hear B♭. That is, instead of I-V/vi-vi we are presented with I-V/vi-IV. This substitution violates the listener's schematic prediction for which chord comes next, thus creating schematic surprise. One could also interpret this A dominant seventh chord more like a chromatic mediant on III, but I prioritize the applied dominant interpretation because of the dominant quality of the chord. In this case, the resolution of the chord is unexpected because it behaves more like a III chord, rather than a dominant. The approach to and departure from this chromaticized chord on A leaves the listener to re-evaluate this experience as pleasurable based on Huron's ITPRA principles of schematic surprise.

[39] This chart does not provide non-diatonic chords, including ♭III or ♭VII, but is still useful for studying how diatonic pop-rock harmonies progress from one to another.



Example 2.13: Original first four bars of the chorus “Goodbye Yellow Brick Road” (mm. 26–29)

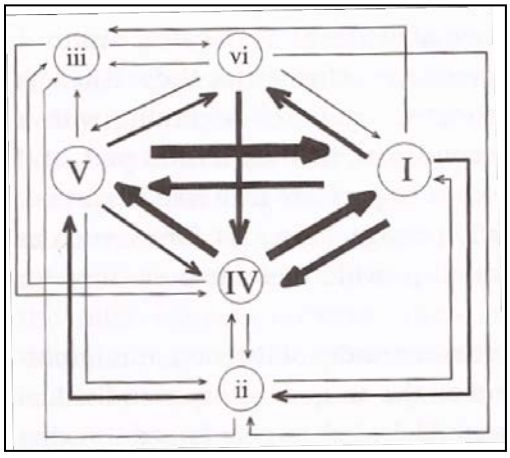
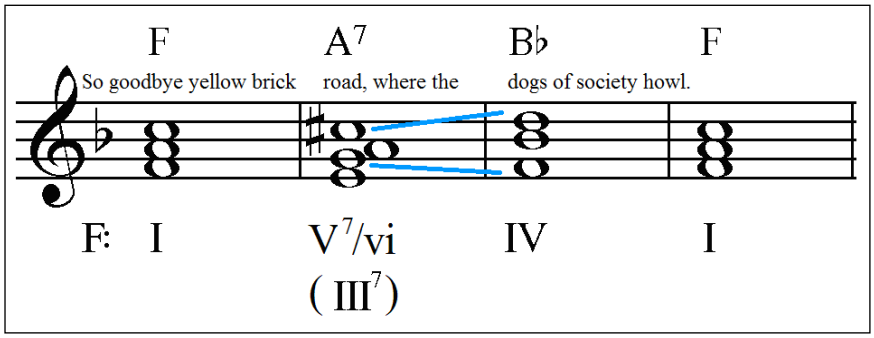


Figure 2.3: Huron’s schematic chord progression chart of Western pop-rock music[40]

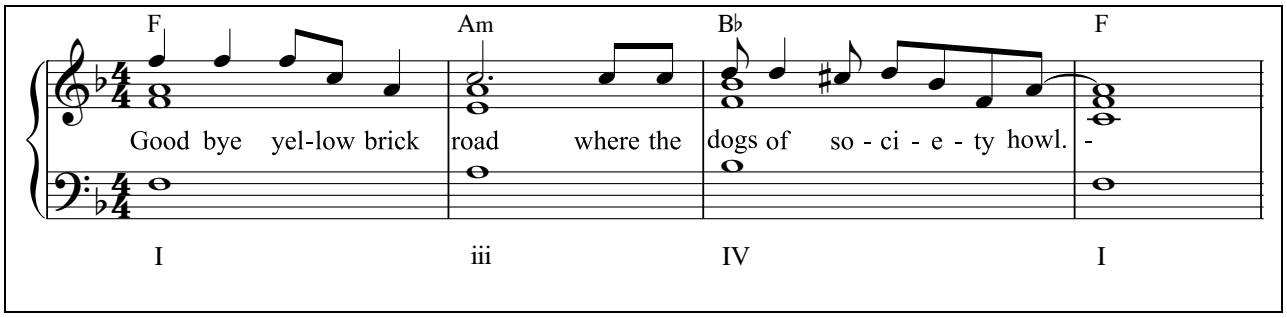
[40] Huron, *Sweet Anticipation*, 253.



Example 2.14: Tritone voice-leading resolving as expected,
but to B♭ major triad instead of D minor

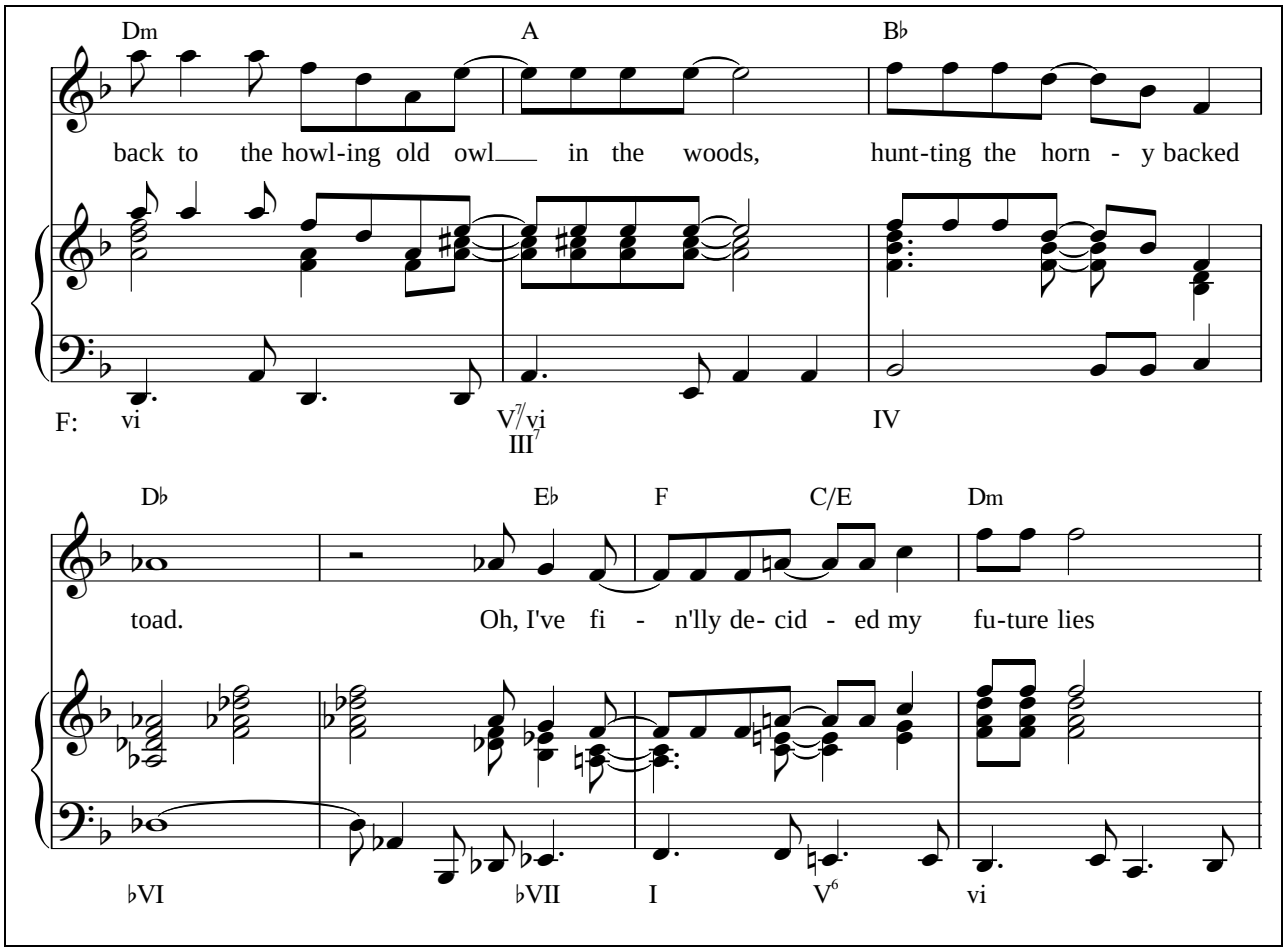
Example 2.15 shows the first four bars of the chorus recomposed to illustrate a more statistically predictable approach to the harmonic progression. My recomposition replaces chromatic chords with their diatonic equivalent on the same root. The A-dominant seventh chord in Example 2.13 becomes an A-minor chord in the second measure. By naturalizing the C♯, the chord acts diatonically as "iii", which is followed IV. This chord behaves more predictably, as shown in Huron's schematic chord progressions chart based on Western popular music (Figure 2.3). Notice that this chart differs slightly from the expected chord progressions in Western art music. Popular music is known for having a looser tonal structure than the dominant-tonic relationship of classical tonality because the IV and V chords carry the same weight at cadences.[41] By substituting a chromatic chord for its diatonic version, I have made the pitch material more schematically predictable by drawing on the diatonic chords contained in F-major. A listener could play through this phrase on the piano and find it schematically predictable, but maybe not as interesting as Elton John's version, because it does not violate our expectations.

[41] Nicole Biamonte, "Triadic, Modal, and Pentatonic Patterns In Rock Music." *Music Theory Spectrum* 32, no. 2 (2010): 95. Huron also mentions the growing importance of the subdominant chord in a comparison with baroque harmony, 253.



Example 2.15: Recomposed diatonic version of first four bars of the chorus

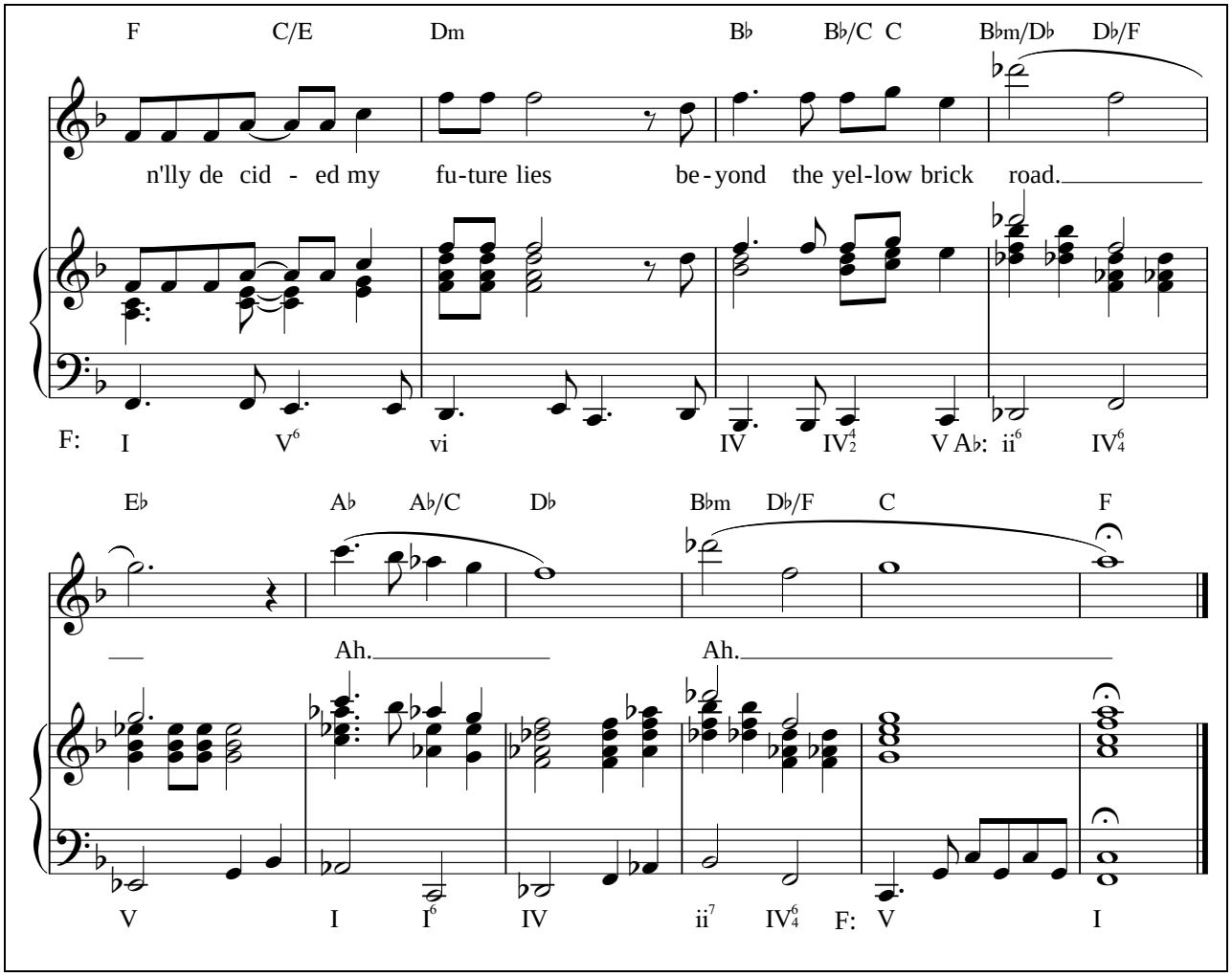
The examples of schematic surprise and predictability I have just shown are fairly straightforward and basic examples of these two phenomena. The end of the chorus serves as an instance that is more involved. After an eight-bar phrase, which ends in an authentic cadence on F-major, the chord progression used at the beginning of the chorus is referenced (I–V^7/vi–IV–I), but begins on D minor here in Example 2.16. The schematic predictability of the A-dominant seventh chord going to B♭ major has increased the dynamic expectation because the listener has already heard this progression. But, the D♭ chord that occurs on the fourth bar of the example (m. 38) is completely unexpected. This unpredicted chromatic chord on the flat submediant is held through the bar-line, as if being contemplated before returning through an Aeolian cadence to a more diatonic chord progression beginning on F major. At first the listener is surprised by the ♭VI sonority and may feel disoriented. This is schematic surprise, but through re-evaluation during the continuation to the well-known Aeolian progression (♭VI, ♭VII, I), the listener is reassured by the schematic predictability of the passage. Both contrastive valence and schematic predictability are operating within these short six bars. The ♭VI harmony will also play a pivotal role later in the chorus.



Example 2.16: Unexpected D-flat major triad in the middle of the chorus (mm. 35–41)

As shown in Example 2.17, the last ten measures of chorus continue to exploit a chromatic mediant relationship through the use of the ♭VI harmony. The phrase begins in F-major and appears to be idiomatically diatonic: I-vi-IV-V with the expected resolution again on F-major or I, but the listener is surprised by a tonicization of A♭ major. This tonicization is especially surprising considering it is built on a chord not found in the original key of F-major: ♭III. When the B♭ minor and D♭ major sonorities arrive in the fourth measure, the listener is expecting to hear a V-I cadence in F-major, based on schematic tonal expectations. But those expectations are thwarted not only by an evaded cadence, but a passage that uses the flat submediant scale degree to enact the tonicization of ♭III. The tonicization of an unrelated or

remote key area surprises the listener, but once the harmonies begin to function predictably in the new key, the listener is reassured once again by schematic predictability. Brain stem reflexes, contrastive valence, and schematic predictability effect the listener's enjoyment of this passage.



Example 2.17: Last 10 bars of the chorus (mm. 40–49) with tonicization of ♭III key

As noted, de Clercq and Temperley found chromatic mediant chords to be rather rare, and in his experiment Huron's test subjects described them as "bright", "warm", and "positive". As with the shorter examples, the chromaticism in this context could have a connection to the context of the song itself. Figure 2.4 shows the lyrics paired with the chord symbols above. The lyrics of "Goodbye Yellow Brick Road" depict a man who is reverting to his old small-town self

after having commercial success in the big city. The narrator is saying “goodbye” to the big city and the people who are trying to sell him out.

F A7
So goodbye yellow brick road
B♭ F
Where the dogs of society howl
D7 Gm
You can’t plant me in your penthouse
C F
I’m going back to my plough
Dm A
Back to the howling old owl in the woods
B♭ D♭
Hunting the horny back toad
E♭ F Dm
Oh I’ve finally decided my future lies
B♭ C B♭m/ D♭ D♭/F E♭
Beyond the yellow brick road
A♭ D♭ B♭m D♭/F C F
Ah. Ah.

Figure 2.4: Chord symbols above the lyrics in the chorus of “Goodbye Yellow Brick Road”

The rhyme scheme contains the words “road” and “toad” which are colored by the unexpected chromatic chords discussed above. The word “road” is colored with two chromatic mediants, the III and the ♭VI. According to Huron’s study, the participants valenced III as “warm, homely, mellow, and solemn” and the flat submediant chord as “hopeful, open, bright, powerful, heroic, and majestic.” [42] The first time the word “road” is sung, the narrator has made the decision to leave and is saying “goodbye.” In the fifth line, the word “toad” occurs in conjunction with ♭VI and brings the narrator to envision himself as the owl hunting the toad, or to be in charge of his own life once more. The decision may be solemn at first, but by the time we arrive “beyond the yellow brick road” the sonority has changed to be more powerful and majestic. The narrator is empowered by his decision to leave his unhappy lifestyle and return to a

[42] Huron, *Sweet Anticipation*, 272.

simpler way of life. The lyrics in this song could be playing on the emotions of the listener through the underlying mechanisms of emotional contagion and episodic memory.

Schematic surprise is aroused throughout the chorus in different ways. The A-dominant seventh chord (V^7/vi) at the beginning of the chorus initially surprises the listener, but when it returns again in the fifth line it is not as surprising, due to the dynamic expectation set up at the start. The next surprise comes in the sixth line when the word "toad" is sung on the D♭. The contemplative "holding back" of the steady quarter note pulse resting on this sonority subverts schematic surprise, but when the D♭ sonority arrives again at the end of the chorus, it has become a full-scale tonicization accompanying a soaring vocal line which leaps a diminished seventh to a high D♭ near the top of Elton's range.

2.5 Conclusion

The harmony in Elton John's music has been examined from several viewpoints. Huron's theory of expectations has informed the emotional affect of certain chromatic chords in diatonic context. These harmonic elements may contribute to the collective enjoyment of the music, due to a careful balance of both confirmation and violation of schematic and dynamic expectations within an individual song. When harmonies unfold to meet listener's expectations, listeners are pleased with the accuracy of their prediction and are psychologically stimulated by the prediction effect. On the contrary, when unexpected harmonies are encountered, the listener reacts negatively with surprise and must re-evaluate the experience. This re-evaluation can result in a continued negative evaluation or change to a positive one with contrastive valence. Juslin and Västfjäll outlined six underlying mechanisms through which emotions may be induced when listening to music: (1) brain stem reflexes, (2) evaluative conditioning, (3) emotional contagion, (4) visual imagery, (5) episodic memory, and (6) musical expectancy. Cognitive appraisal and