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MTO 23.1 Examples: Temperley, Ren, and Duan, Mediant Mixture and “Blue Notes”

(Note: audio, video, and other interactive examples are only available online)

<http://www.mtosmt.org/issues/mto.17.23.1/mto.17.23.1.temperley.php>

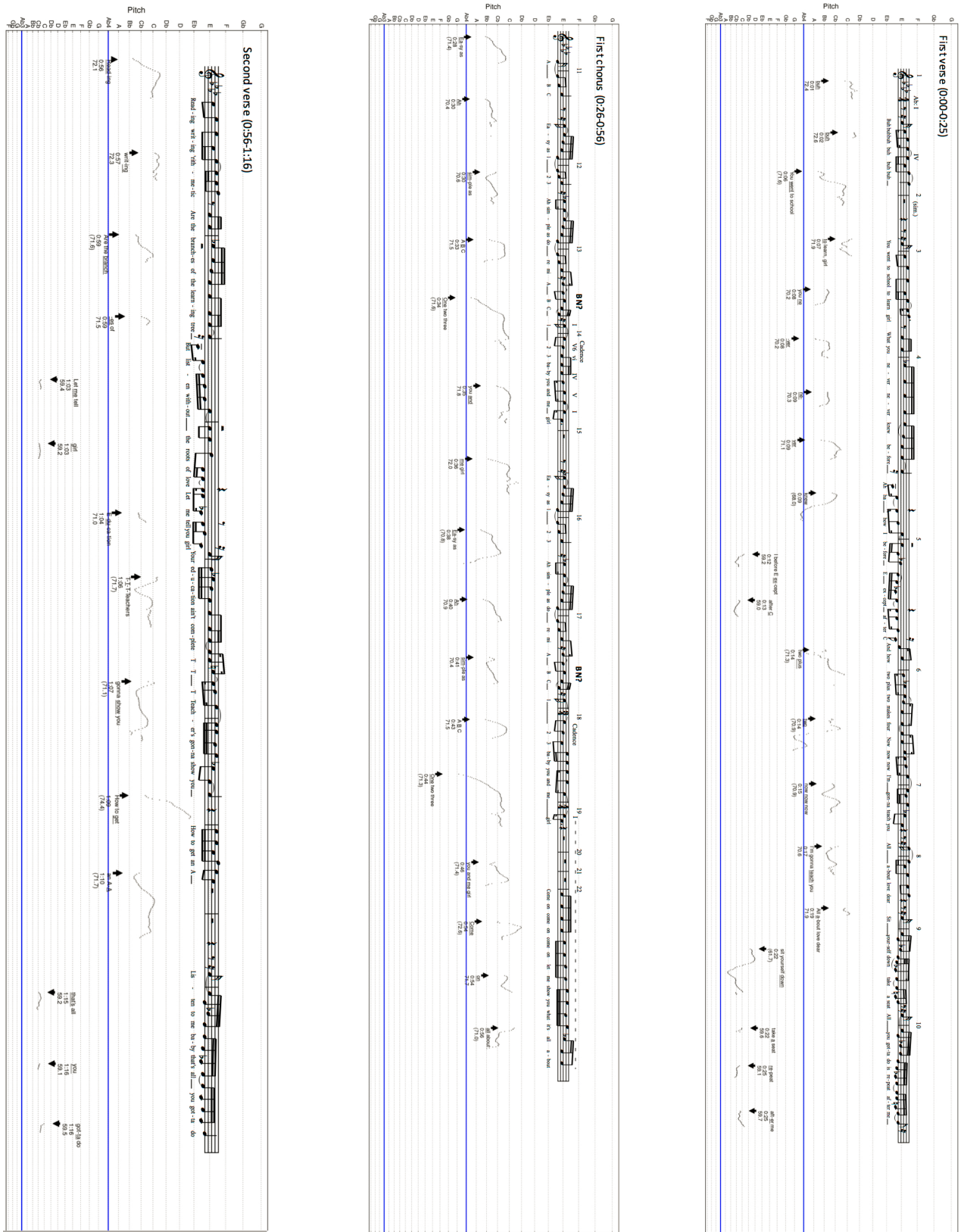
Example 1. Elvis Presley, “Jailhouse Rock.”

Eb: I

War-den threw a par-ty in the coun - ty jail —

The image shows a musical score for the first line of the song "Jailhouse Rock" by Elvis Presley. The notation is in 4/4 time, with a key signature of one flat (B-flat major). The melody is written on a single staff in treble clef. The first measure contains a whole note chord (Eb: I) and the lyrics "War-den". The second measure contains a quarter note (Bb) and the lyrics "threw". The third measure contains a quarter note (G) and the lyrics "a par-ty". The fourth measure contains a quarter note (F) and the lyrics "in the coun - ty". The fifth measure contains a quarter note (Eb) and the lyrics "jail". The sixth measure contains a quarter note (Eb) and the lyrics "jail —".

Example 3. “ABC,” showing the melody and the pitch contour of every mediant note. Each pitch contour is labeled with the syllable (underlined>), the onset time in seconds, and the mean pitch (see text for explanation). Blue lines indicate the tonic pitch-class, A. Five possible blue notes are labeled “BN?” above the score. The score is shown in six sections; click on a link below to see a section. Click on the score to enlarge it. The audio file contains the entire song: The original isolated vocal is on one stereo track, and a synthesized pitch contour generated from the output of the pitch-tracking algorithm on the other track.



Second chorus (1:16-1:58)

31 32 33 34 Cadence 35 36 37 38 Cadence 39 Cadence 40 Cadence 41 Cadence 42 43 5

Oh A— B C It's ea - sy as 1 — 2 3 Ah sim - ple as do — re mi A — B C — 1 — 2 3 ba-by you and me — girl — It's ea - sy it's like count - ing up to three Sing a sim - ple mel - o - dy — That's — how ea - sy love can be That's how ea-sy love can be Sing — a sim - ple mel - o - dy 1 — 2 3 You and me

Pitch contour graph showing frequency (Hz) on the y-axis (A4 to G4) and time on the x-axis. Key annotations include:

- 1:17 (70.8) A B C
- 1:18 (70.4) It's
- 1:19 (71.1) Ea sy as
- 1:21 (71.0) Ah
- 1:21 (70.4) sim ple as
- 1:23 (72.0) A B C
- 1:24 (71.6) Sing two three
- 1:26 (71.7) you and
- 1:26 (72.0) the girl
- 1:28 (71.9) It's ea-sy
- 1:29 (71.7) Sing up
- 1:30 (71.7) to three
- 1:33 (71.7) Sing a sim
- 1:35 (72.4) ple mel-o-dy
- 1:36 (70.6) That's how
- 1:37 (71.4) ea-sy love
- 1:38 (71.8) can be
- 1:39 (72.2) That's how
- 1:41 (72.1) ea-sy love
- 1:41 (72.6) can be
- 1:41 (72.1) Sing a sim
- 1:42 (71.4) ple mel-o-dy
- 1:42 (71.4) You and me

Bridge (1:59-2:16)

48 49 50 51 52 53 54 Cadence BN?

Shake it shake it ba - by Shake it shake it ba - by Ooh ooh Shake it shake it ba - by 1 2 3 ba - by Ooh ooh A B C ba - by Nah... nah Do re mi ba - by Now That's how ea - sy love — can be

Pitch contour graph showing frequency (Hz) on the y-axis (A4 to G4) and time on the x-axis. Key annotations include:

- 2:04 (72.3) ooh ooh
- 2:07 (70.9) Shake
- 2:07 (72.0) two three
- 2:09 (72.4) nah nah
- 2:09 (71.4) A
- 2:10 (71.3) B C
- 2:11 (71.8) ba by
- 2:11 (71.9) nah nah
- 2:12 (71.7) Do re mi
- 2:13 (72.4) That's how
- 2:13 (71.3) ea-sy love can be

Third chorus (2:17-2:43)

55 56 57 58 Cadence BN? 59 60 61 62 63 64 Cadence BN? 65

A B C It's ea - sy It's like count - ing up to three Sing a sim - ple mel - o - dy — That's — how ea - sy love can be Come on come on come on let me show you what it's all a-bout A B C It's ea - sy it's like count - ing up to 3 — Sing a sim - ple mel-o-dy — That's — how ea-sy love can be

Pitch contour graph showing frequency (Hz) on the y-axis (A4 to G4) and time on the x-axis. Key annotations include:

- 2:18 (72.0) It's ea-sy
- 2:19 (70.4) It's
- 2:19 (71.8) like
- 2:20 (72.0) Sing up to three
- 2:21 (72.1) Sing
- 2:22 (71.7) sim
- 2:22 (71.5) ple
- 2:23 (70.3) mel-o-dy
- 2:24 (71.8) That's how
- 2:25 (71.5) ea-sy
- 2:26 (71.5) love can be
- 2:27 (71.9) Come
- 2:28 (71.1) let me
- 2:29 (70.9) show you
- 2:30 (71.9) what it's
- 2:31 (72.4) all about
- 2:32 (72.4) A B C
- 2:33 (71.9) It's ea-sy
- 2:34 (72.4) it's like
- 2:35 (72.1) count-ing up
- 2:37 (72.1) Sing a sim
- 2:39 (71.9) ple mel-o-dy
- 2:40 (71.9) That's how
- 2:40 (71.9) ea-sy love can be

Table 1. Factors Influencing Choices Between $\hat{3}$ and $\flat\hat{3}$

in Rock Melodies

1. *Harmony.* Prefer a degree that fits the harmony as part of a major triad, minor triad, or dominant or minor seventh.
2. *Melodic Tendency.* Prefer $\flat\hat{3}$ in proximity to $\hat{1}$, and $\hat{3}$ in proximity to $\hat{5}$.
3. *Cadences.* Prefer $\hat{3}$ in a cadential tonic harmony or the approach to it.
4. *Verse/Chorus.* $\hat{3}$ is more preferable in chorus sections than in verse sections.
5. *Expressive Connotations.* Prefer to use $\hat{3}$ and $\flat\hat{3}$ in ways that are compatible with the emotional connotations of the lyrics: $\hat{3}$ tends to have more positive emotional connotations, $\flat\hat{3}$ more negative ones.
6. *Inertia.* Prefer to avoid placing $\hat{3}$ and $\flat\hat{3}$ in very close proximity to one another.

Example 4. (A) The Rolling Stones, “Satisfaction”; (B) Nirvana, “About A Girl.”

A.

E:I IV I

I — can't get no — sat - is - fac - tion —

B.

E:i bIII i bIII 2 2 2 VI

Example 5. (A) Three Dog Night, “Joy To The World”; (B) The Beatles, “Birthday”

A.

D: I

Je-re-mi-ah was a bull - frog Was a good friend of mine — I

B.

ne-ver un-der-stood a sing-le word he said — But I helped him a drink-in a wine —

A: I

You say it's your birth - day It's my birth-day too — yeah

Example 6. (A) Squeeze, “Is That Love”; (B) Nickelback, “How You Remind Me”

A.

The bet-ter bet-ter bet-ter it gets — The more — these girls for-get — that that is love —

B.

These five words in my head — scream are we hav-ing fun yet — Yeah — Yeah

Detailed description: The image shows two musical staves, A and B, in 4/4 time. Staff A is for Squeeze's 'Is That Love' and Staff B is for Nickelback's 'How You Remind Me'. Both are in the key of D minor (one flat). Staff A has lyrics: 'The bet-ter bet-ter bet-ter it gets — The more — these girls for-get — that that is love —'. Chord symbols above the staff are A:i, bVII, bII, bVI, V, and I. Staff B has lyrics: 'These five words in my head — scream are we hav-ing fun yet — Yeah — Yeah'. Chord symbols above the staff are C:i, bIII, bVII, IV, I (Chorus), and IV.

Example 7. (A) The Beatles, “Blackbird”; (B) The Beatles, “A Hard Day’s Night”

A.

In - to the light of a dark black night

B.

Will make me feel all right

Example 8. Crosby, Stills, Nash, & Young, “Woodstock.”

The image shows a musical score for the song "Woodstock" by Crosby, Stills, Nash, & Young. It features a vocal line in the upper staff and a guitar accompaniment in the lower staff. The key signature is one flat (F major/D minor) and the time signature is common time (C). The lyrics are: "And we got to get our-selves back to the gar - - - den". The guitar accompaniment consists of a simple arpeggiated pattern. Chord diagrams are provided for the guitar part: G: bIII, bVII, IV, and I. The vocal line is written in a simple, melodic style with a few accidentals.

And we got to get our-selves back to the gar - - - den

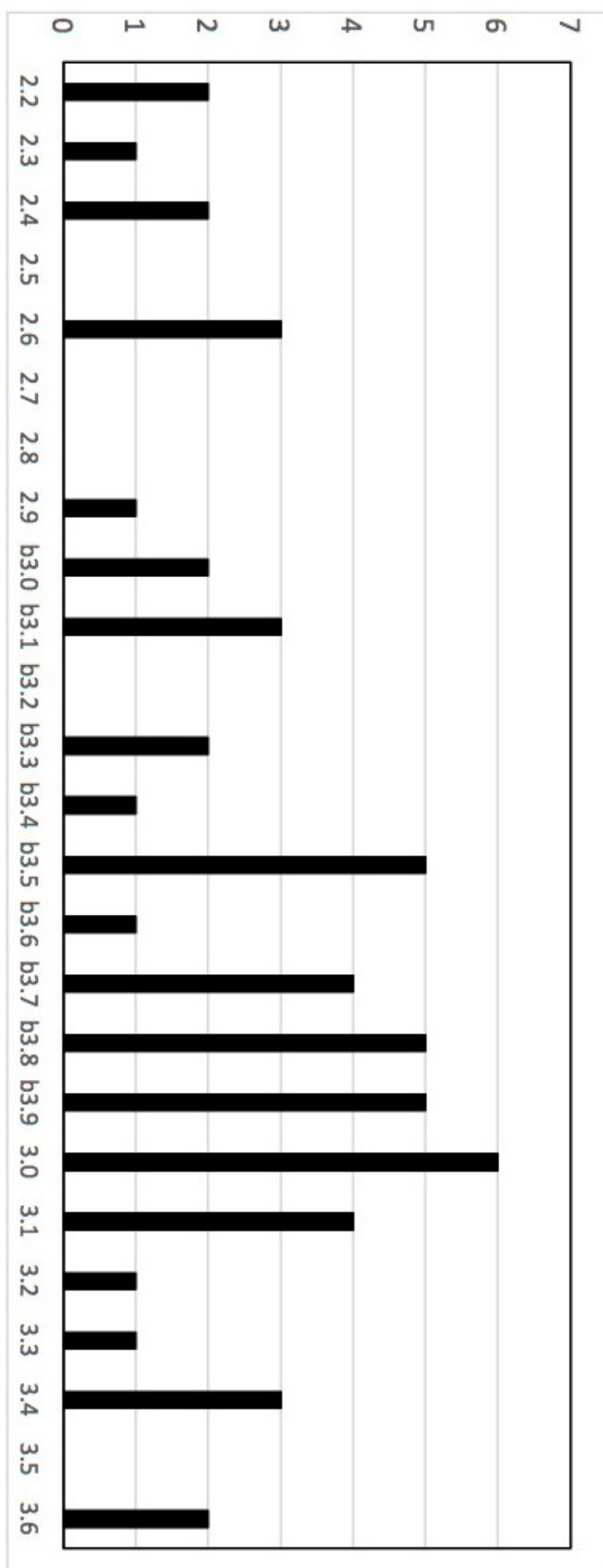
G: bIII

bVII

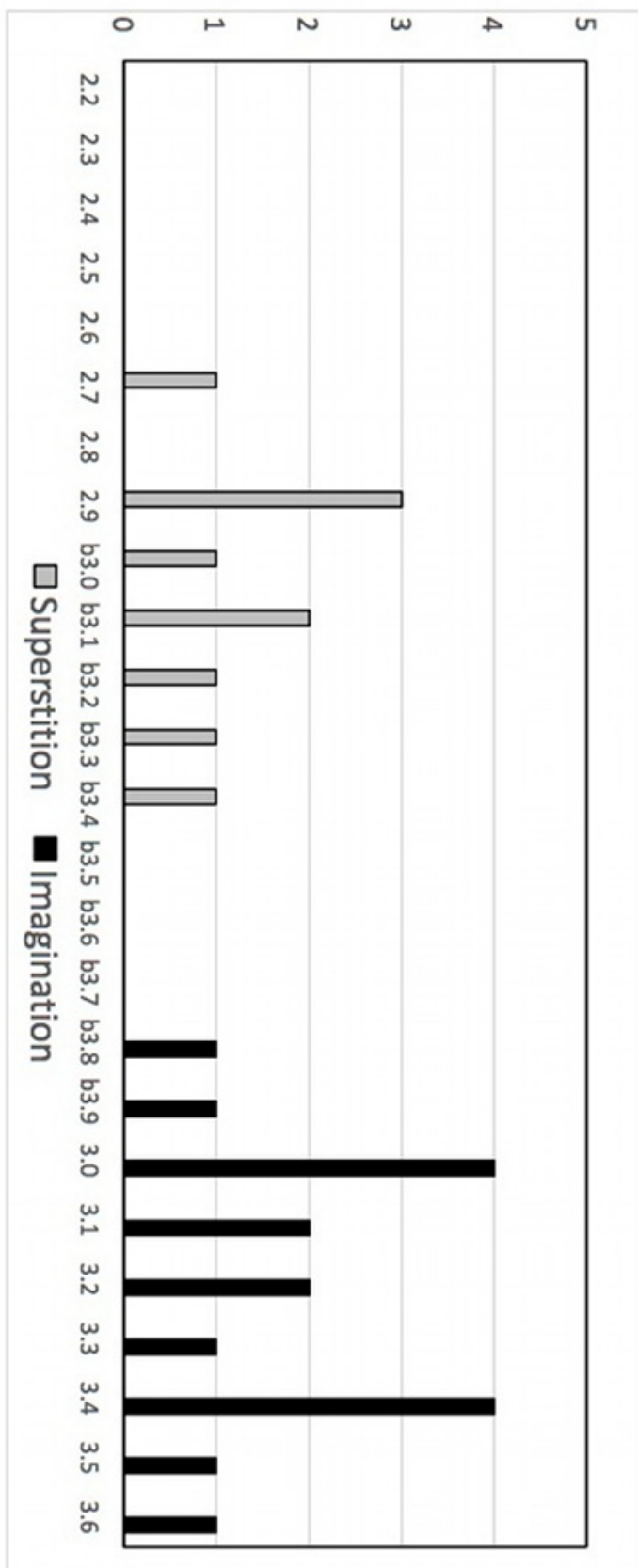
IV

I

Example 9. Distribution of mediant notes in “ABC” (Michael Jackson’s vocal only)



Example 10. Distribution of mediant notes in the Temptations’ “Just My Imagination” and Stevie Wonder’s “Superstition”



Example 11. Whitney Houston, “How Will I Know”, first verse (first half) and second verse. Note the use of $\hat{3}$ in the first verse and $\hat{3}$ at the parallel positions in the second (marked with asterisks on the notation and circles on the contour graph)

First verse
(Key: F#)

There's a boy - I know - He's the one I dream of Looks in - to - my eyes - Takes me to the clouds a - boy

There's a boy (70.3) I know (70.0) He's the (70.6) one I dream of (69.7) Looks in-to (70.1) my eyes (68.1) Takes me (67.7) to the clouds a-boy (67.7)

Second verse

Oh - oh - wake me I'm shak - ing Wish I had you near me now Said there's no - mistak - ing What I feel is real - ly love

Oh-oh wake (69.5) me I'm shak-ing (69.8) Wish I (70.7) had you near me now (69.1) Said there's no (70.0) mistak- (67.7) ing (69.6) What I (70.1) feel is real-ly love (69.1)

Example 12. The Eagles, “Take it Easy”, first verse (an isolated vocal track not used in released version of the song)

(Key: Ab)

Well I'm a run-nin' Tryin' to loos-en my load I got sev-en wom-en Four that wan-na own me Two that wan-na stone me One says she's a friend of mine

0:00 (59.7) 0:04 (59.9) 0:05 (58.6) 0:06 (58.8) 0:10 (59.8) 0:10 (59.7) 0:12 (58.1) 0:12 (58.2) 0:13 (57.6)

Db C Bb A Ab4 G F E Eb D C Bb A Ab3 Gb F