Ex. 1: Statistical Use of the Cadential Six-Four in the Norton Scores

a. Percentage of Use of by Era

<table>
<thead>
<tr>
<th>Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renaissance (Josquin to Dowland)</td>
<td>0.26</td>
</tr>
<tr>
<td>Baroque (Monteverdi to Bach)</td>
<td>0.115</td>
</tr>
<tr>
<td>Classic (Scarlatti to Beethoven)</td>
<td>0.401 *</td>
</tr>
<tr>
<td>Romantic (Beethoven to Debussy)</td>
<td>0.197</td>
</tr>
<tr>
<td>Early Romantic (Beethoven to Verdi)</td>
<td>0.223</td>
</tr>
<tr>
<td>Late Romantic (Brahms to Debussy)</td>
<td>0.190</td>
</tr>
</tbody>
</table>

Note: The basis for the percentages in table A3 is explained in the main text: see rule 37 on p. 240.

from Meyer 2000/1992, p. 261

b. Percentage of Use by Composer

Figure 1 The data and calculations on which this graph is based are given in the appendix (tables A1 and A2). The dotted line represents what might be thought of as a general trend in the prevalence of the cadential 6/4 progression.

Ex. 2: Beethoven, Thirty-Two Variations in C minor, WoO 80, mm. 1–8 (1806)

<table>
<thead>
<tr>
<th>Movement</th>
<th>Chord</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>I</td>
<td>IV⁶</td>
</tr>
<tr>
<td>3-4</td>
<td>(♯4)</td>
<td>(♯4)</td>
</tr>
<tr>
<td>5-6</td>
<td>(♭5)</td>
<td>(♭5)</td>
</tr>
<tr>
<td>6-7</td>
<td>(IV)</td>
<td>V</td>
</tr>
<tr>
<td>7-8</td>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

Cadential 6/4 that may appear to be passing.
Ex. 3: Beethoven, Piano Sonata No. 4 in Eb, Op. 7, III, mm. 1–17 (1797)

1. Follows tonic. Note also the apparent six-fours on the downbeats of mm. 9 and 10.
2. Bass moves after $6\over 4$, eliding the dominant (locally, at least).

Ex. 4: Beethoven, “Pathétique” Sonata, I, mm. 132–135 (1798)

Cadential $6\over 4$ falls on weak beat.
Ex. 5: Beethoven, “Waldstein” Sonata, I, mm. 35–43 (1804)

Sixth and fourth resolve upward (cf. m. 37).

Ex. 6: Mozart, Concerto in D for Horn, K. 412, I, mm. 26–29

\[ \begin{array}{c}
\text{a) } 5 \\
\text{b) } 4 \\
\text{c) } 3 \\
\text{d) } 2 \\
\text{e) } 1 \\
\text{f) } 6 \\
\text{g) } 5 \\
\text{h) } 4 \\
\text{i) } 3 \\
\text{j) } 2 \\
\text{k) } 1 \\
\text{l) } 6 \\
\end{array} \]

\[ \begin{array}{c}
\text{a) } V^6_8 \\
\text{b) } V^4_3 \\
\text{c) } V^4_5 \\
\text{d) } V^3_7 \\
\text{e) } V^6_4 \\
\text{f) } V^3_7 \\
\end{array} \]

From Rothstein 2006, 277, Ex. 24
Ex. 7: Phish, “Poor Heart” (*Picture of Nectar, Elektra 1992*)

Hypermeter:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4, 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td></td>
<td>D, G</td>
<td>G7/B</td>
<td>C</td>
<td>C#7</td>
<td>G</td>
<td>D</td>
</tr>
</tbody>
</table>

You won’t steal my poor heart again. (R) You won’t steal my tape recorder. I’ll call the Lord, and he’ll put you in the pen. You won’t steal that thing again.

G: I – – V, I V5/I V IV vii°7/V I V7 I

Ex. 8: Radiohead, “2+2=5” (*Hail to the Thief, Capitol 2003*)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4, 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fm</td>
<td>Csus/E</td>
<td>Fm</td>
<td>Csus/E</td>
<td>Fm</td>
<td>(7 or 9)</td>
<td>Csus/E</td>
<td>F/E5</td>
</tr>
</tbody>
</table>

Are you such a dreamer to put the world to rights? I’ll stay home forever, where two and two always makes a five. —

I’ll lay down the tracks, sandbag, and hide. January has April showers, and two and two always makes a five. —

f: i (V5) i (V5), i V6 N (not cadential “64”)  

Inverted 4

Inverted 6

Ex. 9: Definition of Cadential Six-Four and Deviations

<table>
<thead>
<tr>
<th>Defining characteristics of cadential six-four</th>
<th>Deviation</th>
<th>Deviant Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Approach: Follows pre-dominant harmony (neither V nor vii°, nor I?)</td>
<td>Follows dominant or tonic harmony</td>
<td>Beethoven, “Pathétique” Sonata, I, m. 134 (cf. m. 135)</td>
</tr>
<tr>
<td>2. *Accentuation: Strong beat or more accented than resolution to V</td>
<td>Weak beat (rarest deviation?)</td>
<td>Beethoven, “Pathétique” Sonata, I, m. 134</td>
</tr>
<tr>
<td>3. Resolution: 6th and 4th resolve down by step, 6-3</td>
<td>Resolution is upward: 6-4-5</td>
<td>Beethoven, “Waldstein” Sonata, I, m. 41</td>
</tr>
<tr>
<td>4. *Intervals: 6th and 4th above bass</td>
<td>Inverted six-fours: I6 – V I – V</td>
<td>Mozart, Concerto in D for Horn, K. 412, I, m. 28</td>
</tr>
<tr>
<td>6. Bass Note: Dominant (5)</td>
<td>Other bass notes: iii4 – V</td>
<td>Beethoven, Thirty-Two Variations in C minor</td>
</tr>
<tr>
<td>7. *Tonic Pitches: Contains members of the tonic triad (1, 3, and 5)</td>
<td>Chromatic displacement: bVI4</td>
<td></td>
</tr>
<tr>
<td>8. Function: Dominant (V), with delay of leading tone (7)</td>
<td>“Plagal” cadential six-fours?: IV6 and ii6</td>
<td></td>
</tr>
</tbody>
</table>

* Most essential criteria (2, 4, 5, and 7). For a conventional example that satisfies all criteria above, see Beethoven “Waldstein” Sonata, m. 38 (above).

Also, melodic line: 3–2–1 is most definitive and common, but also possible are 1–7–1, 3–4–3, etc.
Ex. 10: Contrapuntal vs. Harmonic Means for Deviation

1. Counterpoint: Tonic pitches (from “I”) remain while figured bass (inversion) varies.

2. Harmony: Six-four intervals remain while triadic spelling or pitch collection varies.

NOTE: All cases preserve underlying syntactical role and dominant function.

Ex. 11: Cadential Six-Fours of Increasing Deviance

a. b. c. d. e.

I IV\(^6\) I I\(^6\) V\(^7\) I I V\(^7\) I III\(^6\) V\(^7\) I bIII\(^6\) V\(^7\) I

conventional … … contrapuntal deviations… … harmonic deviations… … bizarre

Ex. 12: Beatles, “Julia” (The Beatles [White Album], Capitol 1968)

1 2 3 4, 1 2 3 (&) 4=1

D Bm\(^7\) F\(^\flat\)m/C\(^\sharp\) D Bm\(^7\) F\(^\flat\)m/C\(^\sharp\) A D

Half of what I say is meaningless, but I say it just to reach you, Ju— li— a/Julia (vocal overdub)

D: I vi (iii\(^6\)) I vi iii\(^6\) V I

Passing \(^6\) 4

Altered cadential \(^6\) 4
Ex. 13: Liszt, *Année de pèlerinage* (Years of Pilgrimage): Italia, 2. “Il penseroso” (1839), mm. 1–9

Ex. 14: Reduction, Voice-Leading Analysis, and Normalization of mm. 1–8

a. Reduction

b. Voice-Leading Analysis

c. Normalized Reduction
Ex. 15: Prokofiev, “Classical” Symphony, Op. 25, III, mm. 1–12 (1917)

Not neighboring but altered (“wrong”) cadential Ⅵ, “Ⅳ.”
Ex. 16: Voice-Leading Analysis and Normalization of mm. 9–12

a. Voice-Leading Analysis

\[ \text{Gr}^6 \quad \text{V}_4^6 \]

("Flat" Cadential Six-Four)

From Fankhauser 2006, 204–205 (Exx. 10-2 and 10-3)

b. Normalization

Hypothetical “Shadow”
Ex. 17: Shostakovich, Piano Prelude, Op. 34, No. 10 (1932–33), mm. 1–18

A# / B♭ Problem

Ex. 18: Voice-Leading Analysis of mm. 1–18

Altered ("wrong") cadential 6, "fffI6."
Ex. 19: Shostakovich, Piano Prelude, Op. 34, No. 10 (1932–33), mm. 38–end

Ex. 20: Voice-Leading Analysis of mm. 39–53

Use of inverted $\frac{6}{4}$ as a conventional term with new meaning: irony.

From Fankhauser (forthcoming in Music Analysis)
Bibliography