

MTO 23.1 Examples: McClimon, Transformations in Tonal Jazz

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

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

Figure 1a. The bridge of “All the Things You Are” (Jerome Kern/Oscar Hammerstein)

A ⁻⁷		D ⁷		G ^{maj7}			
F ^{♯-7♭5}		B ⁷		E ^{maj7}		C ^{7♯5}	
F ⁻⁷							

Figure 1b. A four-voice realization of the chord symbols

A ⁻⁷	D ⁷	G ^{maj7}	F ^{♯-7♭5}	B ⁷	E ^{maj7}	C ^{7♯5}	F ⁻⁷
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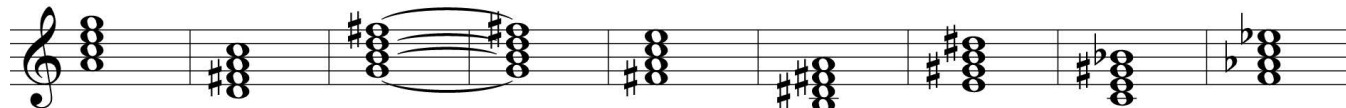


Figure 1c. Guide-tone lines highlighting efficient voice-leading. (Common tones are indicated by ties)

A ⁻⁷	D ⁷	G ^{maj7}	F ^{♯-7♭5}	B ⁷	E ^{maj7}	C ^{7♯5}	F ⁻⁷
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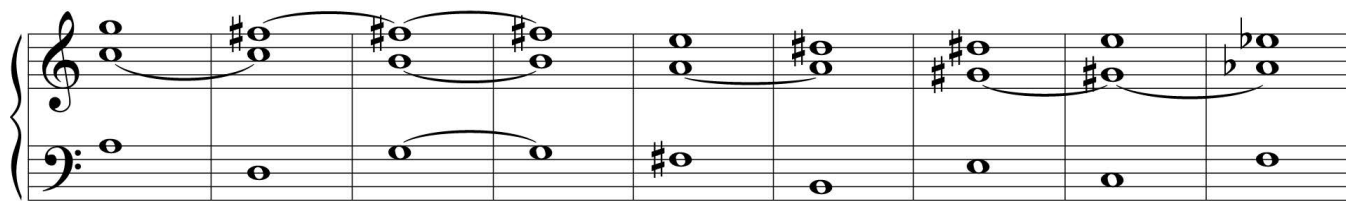


Figure 1d. Broken into smaller units, highlighting ii–V–I progressions

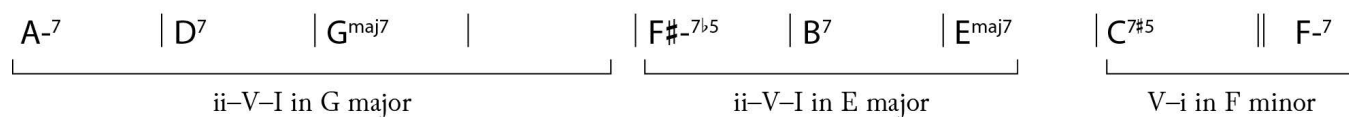


Figure 2. A transformation network for a ii–V–I in C major: $Dm^7-G^7-CM^7$

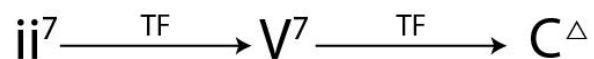


Figure 3. The underlying transformation graph for a single ii–V–I progression

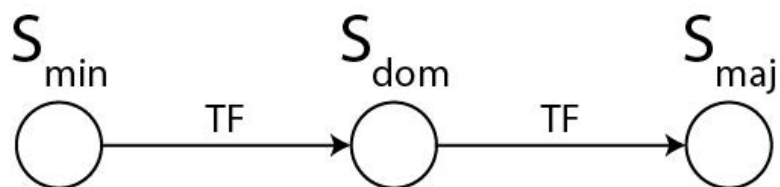


Figure 4. Voice leading in the ii–V–I progression

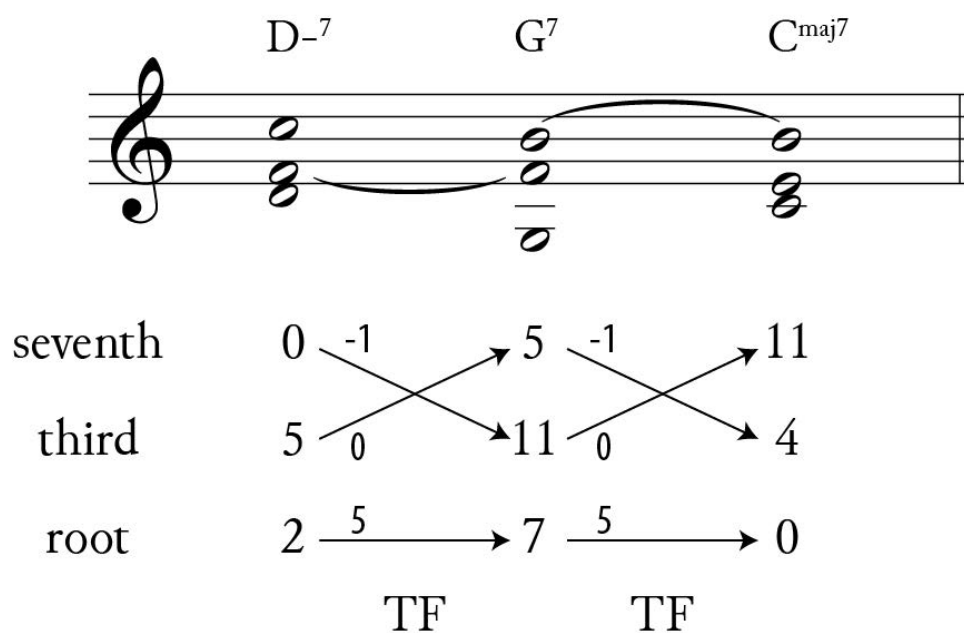


Figure 5. A transformation graph (left) and transformation network (right) for a small portion of ii–V space

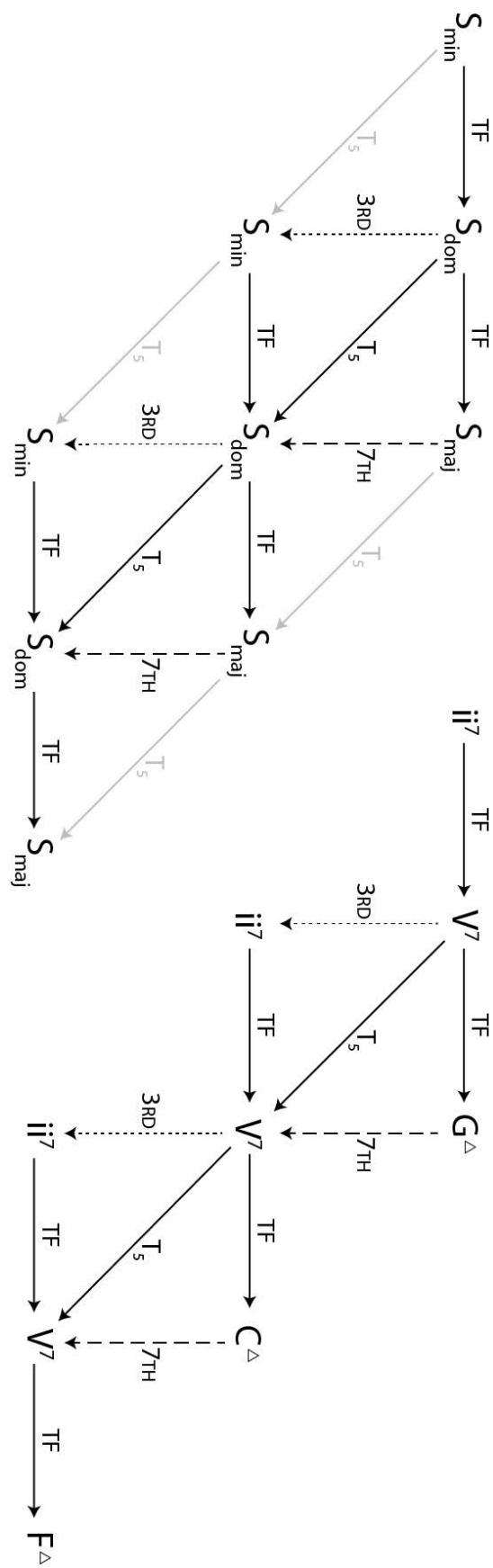


Figure 6. The complete ii–V space, arranged around the circle of fifths

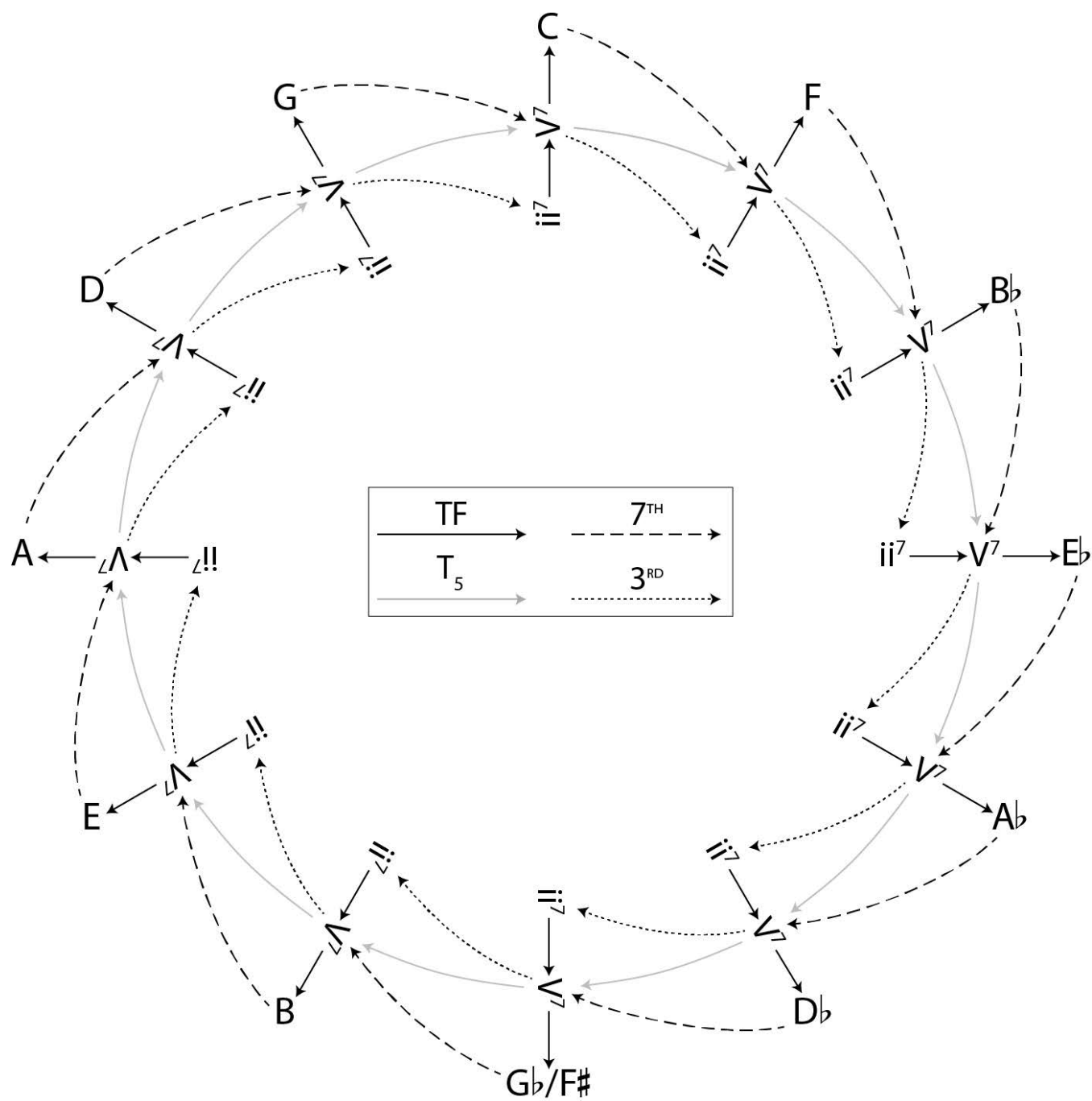


Figure 7. Changes for the A section of “Ceora” (Lee Morgan)

$A\flat^{\text{maj}7}$		$B\flat^{-7}$ $E\flat^7$		$A\flat^{\text{maj}7}$		$E\flat^{-7}$ $A\flat^7$	
$D\flat^{\text{maj}7}$		D^{-7} G^7		C^{-7}		$F^{7\#9}$	
$B\flat^{-7}$		$E\flat^7$		C^{-7}		F^7	
D^{-7}		G^7		C^{-7} F^7		$B\flat^{-7}$ $E\flat^7$	

Figure 8. Changes for the B section of “Ceora” (Lee Morgan)

$A\flat^{\text{maj}7}$		$B\flat^{-7}$ $E\flat^7$		$A\flat^{\text{maj}7}$		$E\flat^{-7}$ $A\flat^7$	
$D\flat^{\text{maj}7}$		D^{-7} G^7		C^{-7}		$F^{7\#9}$	
$B\flat^{-7}$		$E\flat^7$		$C^{-7\flat5}$		$F^{7\#9}$	
$B\flat^{-7}$		F^7		$A\flat^{\text{maj}7}$		$B\flat^{-7}$ $E\flat^7$	

The diagram illustrates a gene regulatory network. At the top, a legend defines the symbols: a solid arrow for TF (Transcription Factor), a solid arrow for T₅ (Transcription Start Site), a dashed arrow for T₆ (Transcription Start Site), a dotted arrow for 3RD (Regulatory Domain), and a dashed arrow for 7TH (Regulatory Domain). The network consists of several gene models represented by V₇ and C_Δ nodes. These nodes are interconnected by solid, dashed, and dotted arrows, representing different types of regulatory interactions. The nodes are arranged in a hierarchical manner, with V₇ nodes at the top and C_Δ nodes at the bottom. The network shows a complex web of interactions, including self-loops and cross-regulation between different gene models.

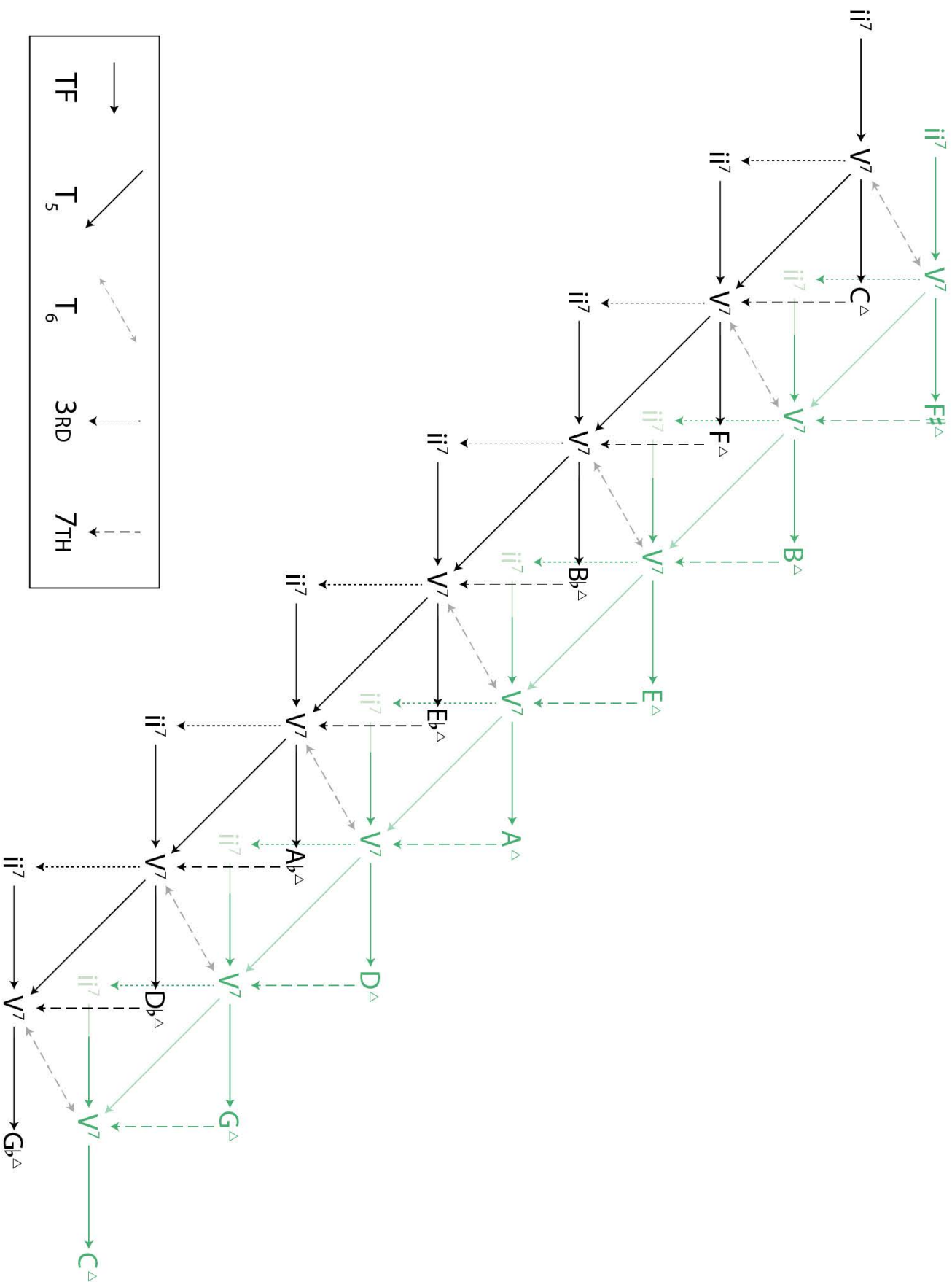


Figure 10. The Möbius strip at the center of ii–V space

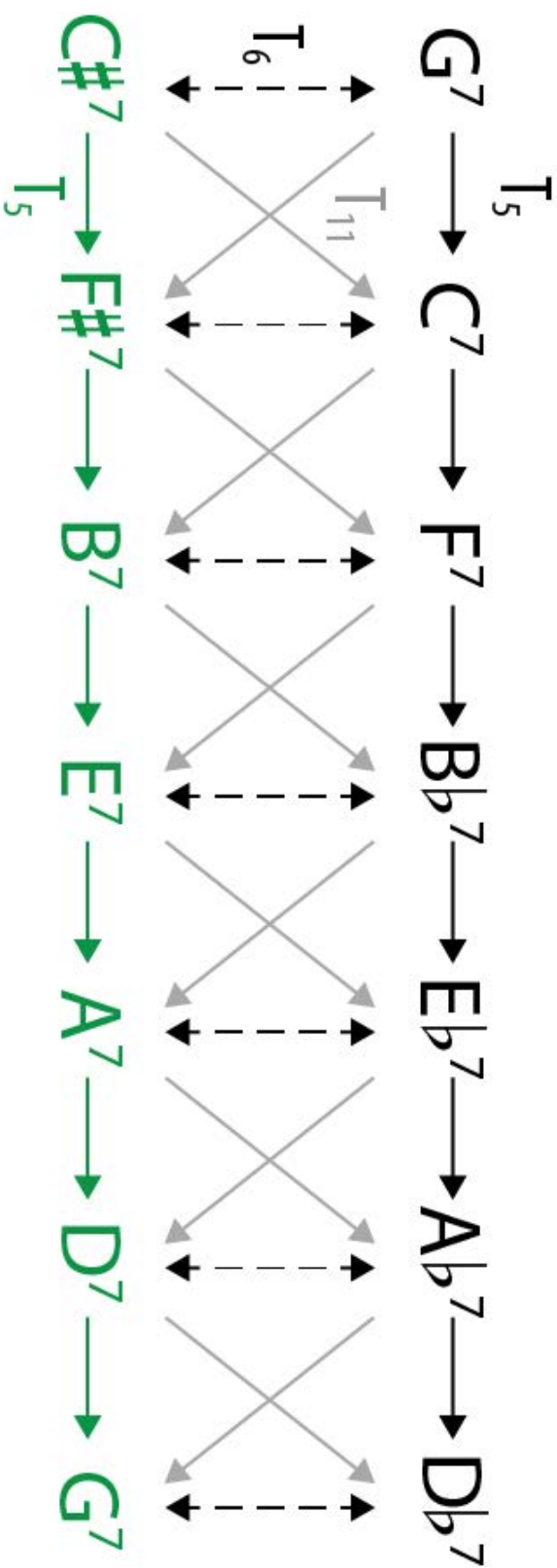


Figure 11. Voice leading in the TF (left) and TF_T (right) transformations, compared. The colored arrows indicate how the transformations are defined: although there is a common-tone F between $Dm7$ and D^b7 (and likewise with the C^b/B between D^b7 and $CM7$), the definition of TF_T does not use these relationships

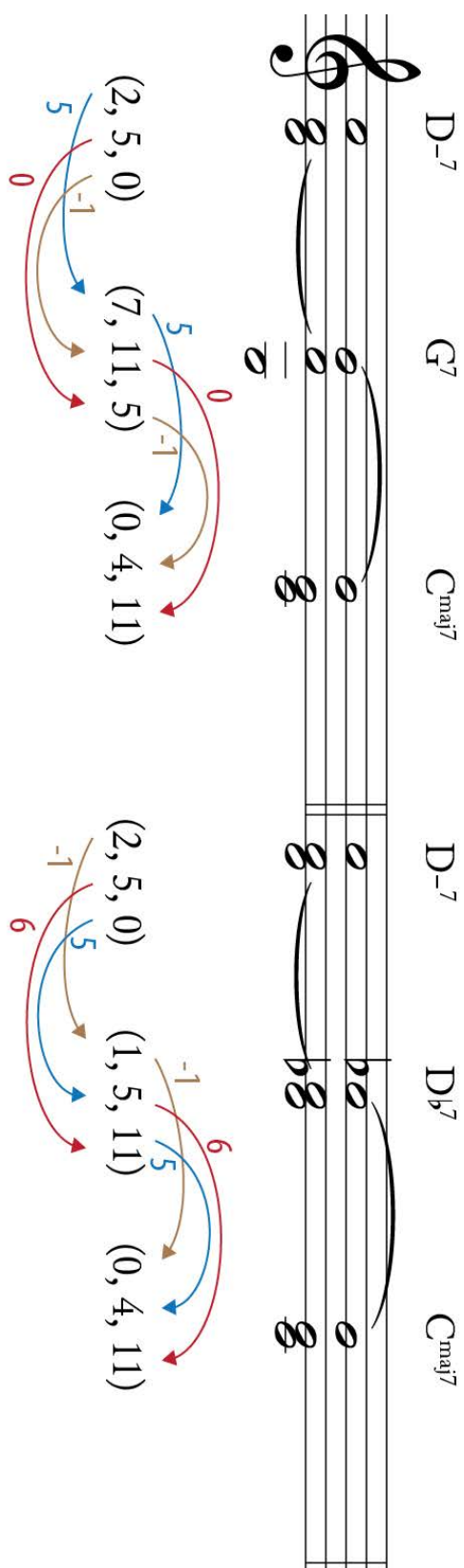


Figure 12. A transformation network for a small portion of ii–V space, with tritone substitutions shown in green

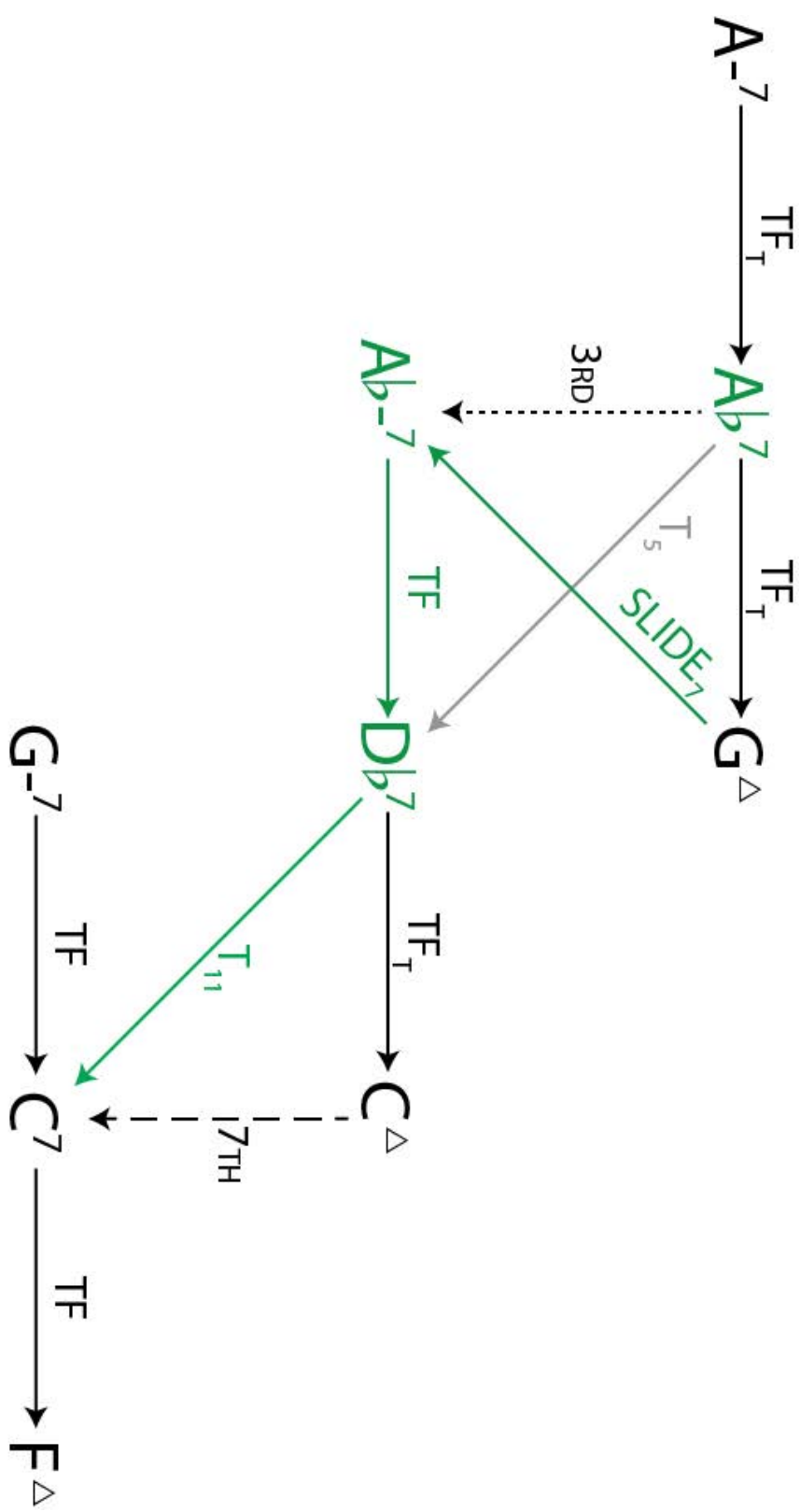


Figure 13. The SLIDE_7 transformation from $D\flat M7$ to $Dm7$ in mm. 5–6 of “Ceora.”

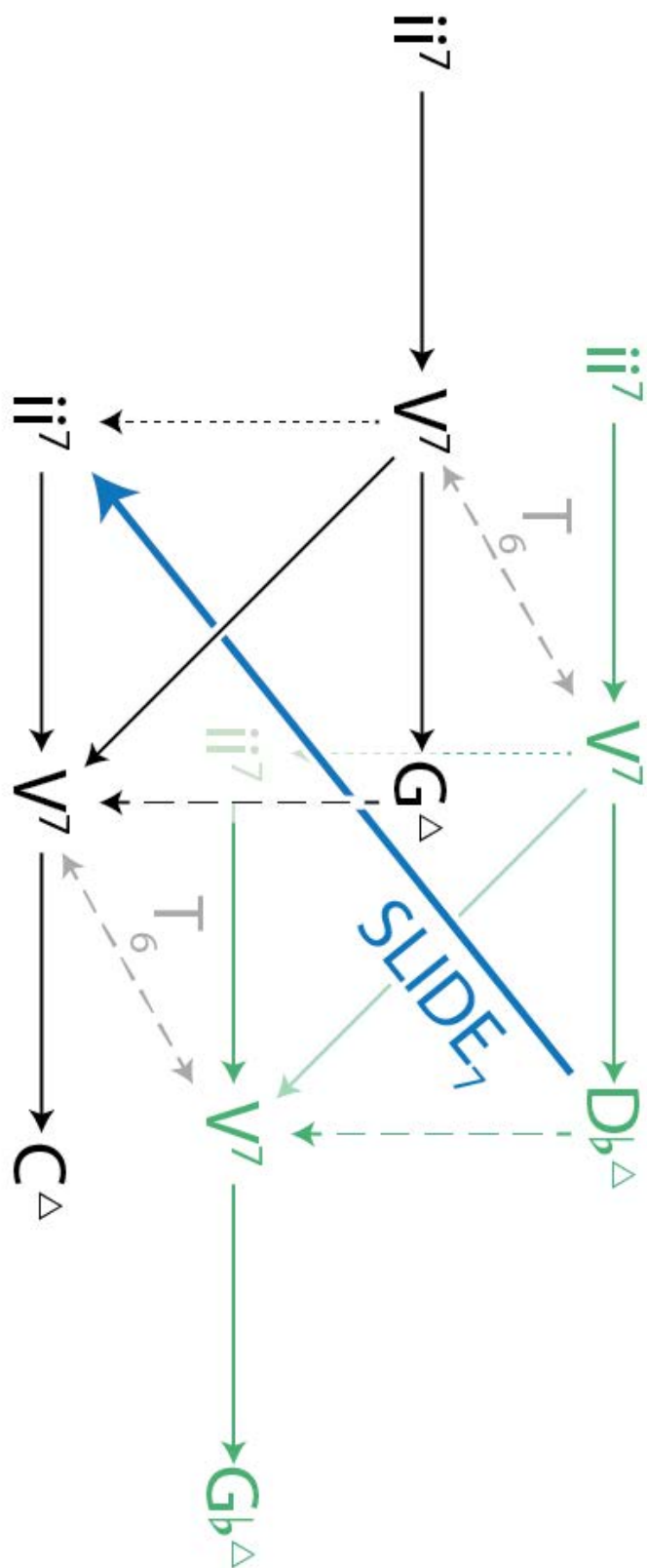


Figure 14. Changes for “Blues for Alice” (Charlie Parker)

F ^{maj7}		E ^{-7b5}	A ⁷		D ⁻⁷	G ⁷		C ⁻⁷	F ⁷	
B ^{b7}		B ^{b-7}	E ^{b7}		A ⁻⁷	D ⁷		A ^{b-7}	D ^{b7}	
G ⁻⁷		C ⁷			F ^{maj7}	D ⁷		G ⁻⁷	C ⁷	

Figure 15. Transformations involving minor tonic chords

The figure displays musical notation for several chords in C major and C minor, along with transformations between them. The notation is organized into two systems of staves.

System 1 (Left):

- Staff 1:** Contains three chords: $C^{\Delta 7}$ (C major triad), $C_{-}^{\Delta 7}$ (C minor triad), and C^{-7} (C minor seventh chord). A dotted arrow labeled "3RD" points from the first chord to the second, and a dashed arrow labeled "7TH" points from the second to the third.
- Staff 2:** Contains three chords: G^7 (G dominant seventh), $C_{-}^{\Delta 7}$ (C minor triad), and D_{b}^7 (D minor seventh).

System 2 (Right):

- Staff 3:** Contains two chords: D_{b}^7 (D minor seventh) and $C_{-}^{\Delta 7}$ (C minor triad). A curved arrow labeled "tf" points from the first chord to the second.
- Staff 4:** Contains two chords: D_{b}^7 (D minor seventh) and $C_{-}^{\Delta 7}$ (C minor triad). A green curved arrow labeled "tf_t" points from the first chord to the second.

Figure 16. A small portion of ii–V space, including minor tonic chords

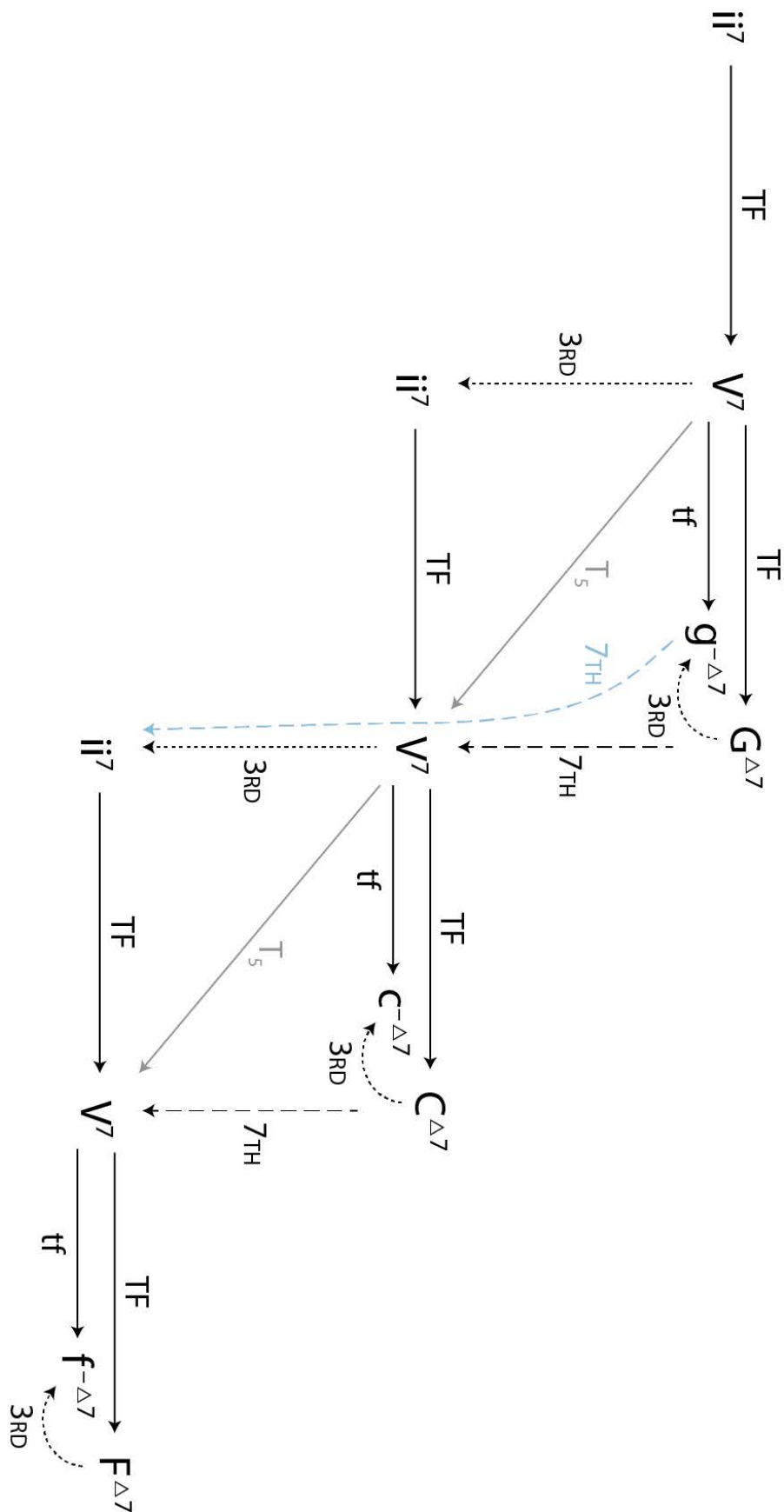


Figure 17. Changes for “Solar” (Miles Davis)

C-		G- ⁷	C ⁷	
Fmaj ⁷		F- ⁷	B ^b ⁷	
E ^b maj ⁷	E ^b - ⁷ A ^b ⁷	D ^b maj ⁷	D- ⁷ ^b 5 G ⁷ ^b 9	:

Figure 18. A generic version of ii–V space, with unspecified tonic chords

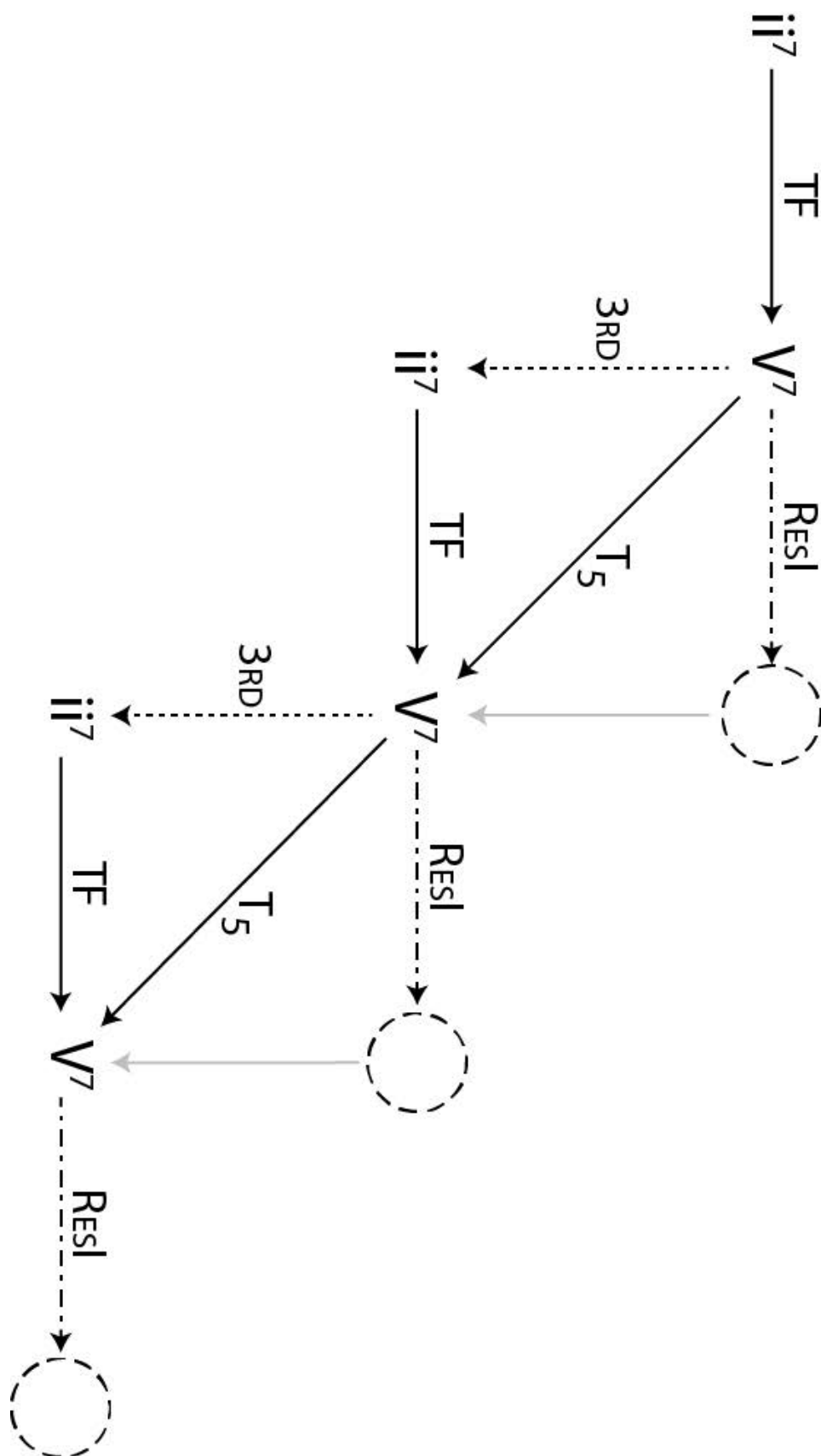


Figure 19. Voice leading in the TF_{blues} transformation

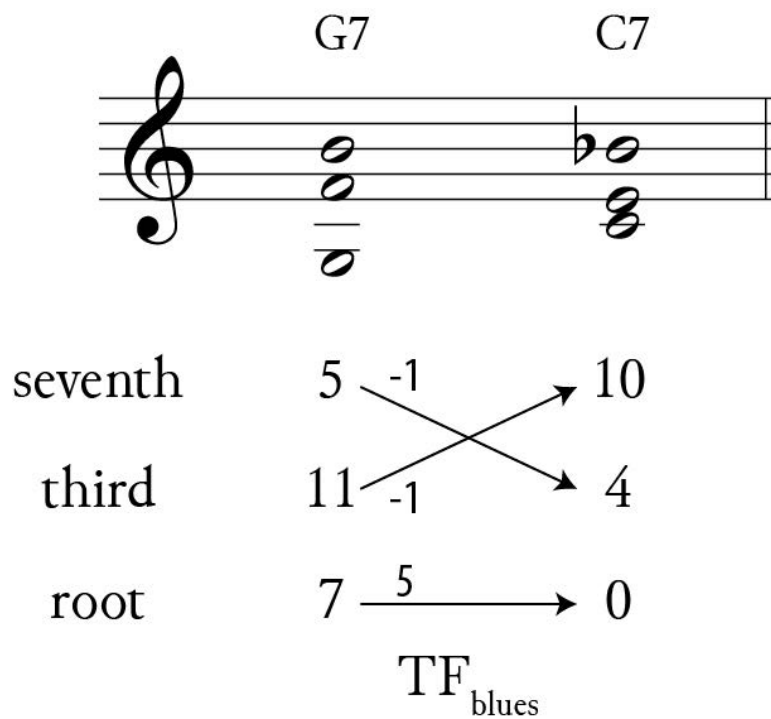


Figure 20. $B\flat 7$ as both dominant (left) and tonic (right)

$$\left\{ \begin{array}{l} (\hat{4}, A\flat) \\ (\hat{7}, D) \\ (\hat{5}, B\flat) \end{array} \right\} \qquad \left\{ \begin{array}{l} (\flat\hat{7}, A\flat) \\ (\hat{3}, D) \\ (\hat{1}, B\flat) \end{array} \right\}$$

Figure 21. A small portion of “blues ii–V space.”

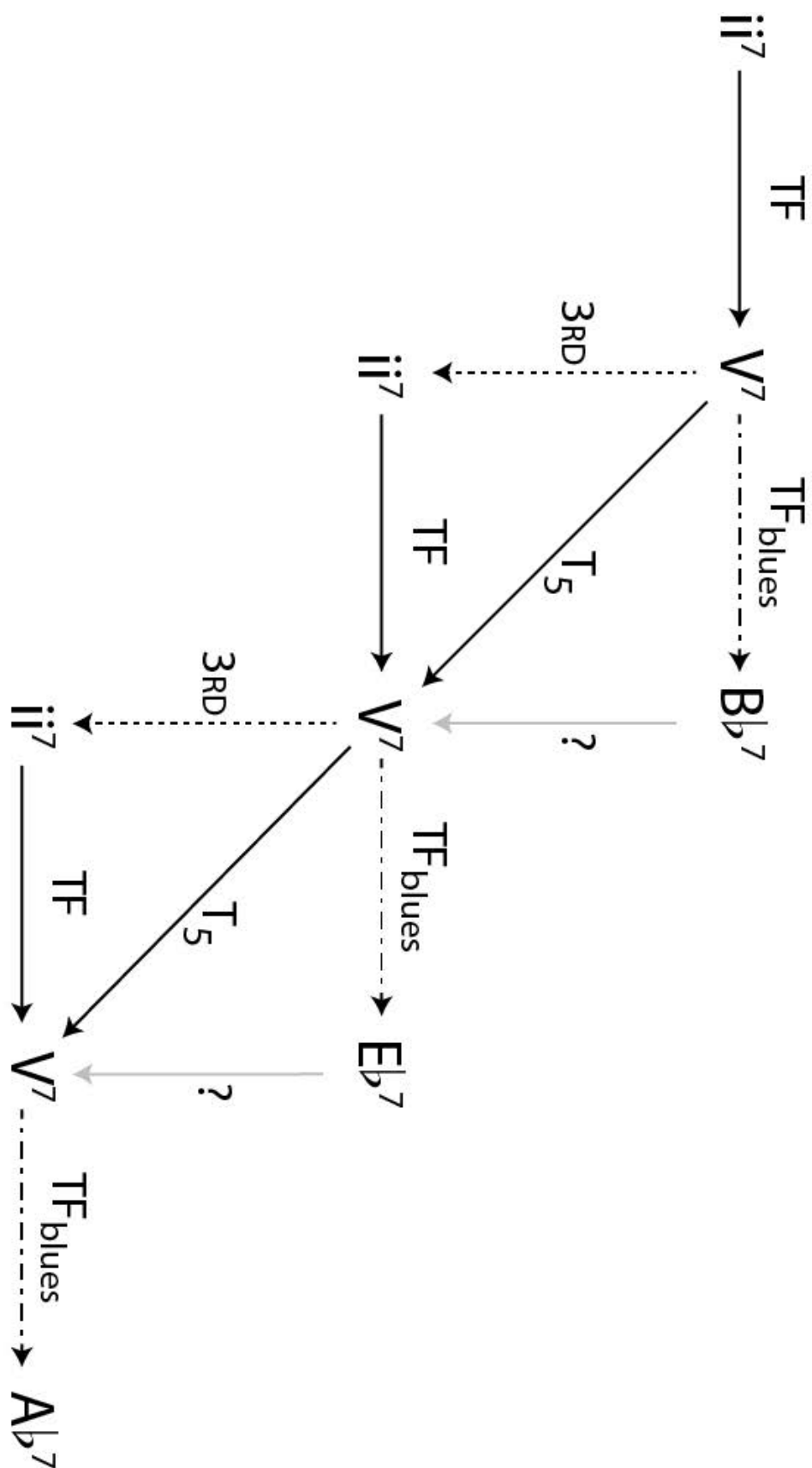


Figure 22. A pivot fifth between $B\flat 7$ as dominant and $B\flat 7$ as tonic

$$\left\{ \begin{array}{l} (\flat\hat{7}, A\flat) \\ (\hat{3}, D) \\ (\hat{1}, B\flat) \end{array} \right\} \xrightarrow[\text{"pivot fifth"}]{(5\text{th}, 0)} \left\{ \begin{array}{l} (\hat{4}, A\flat) \\ (\hat{7}, D) \\ (\hat{5}, B\flat) \end{array} \right\}$$

Figure 23. A portion of ii–V space, conformed to the white-key diatonic circle of fifths

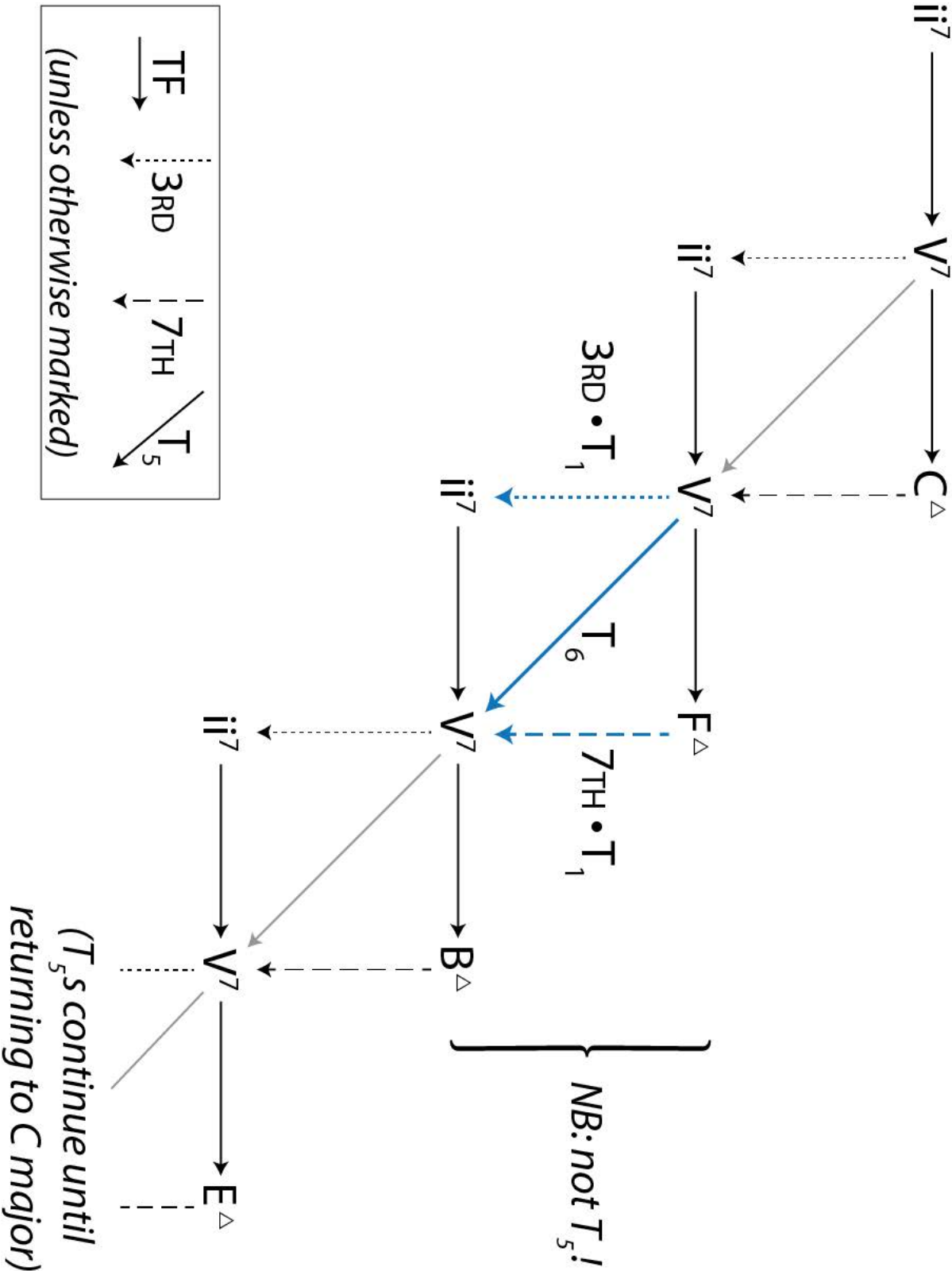


Figure 24. An $A\flat$ -major diatonic ii–V space, arranged in descending steps

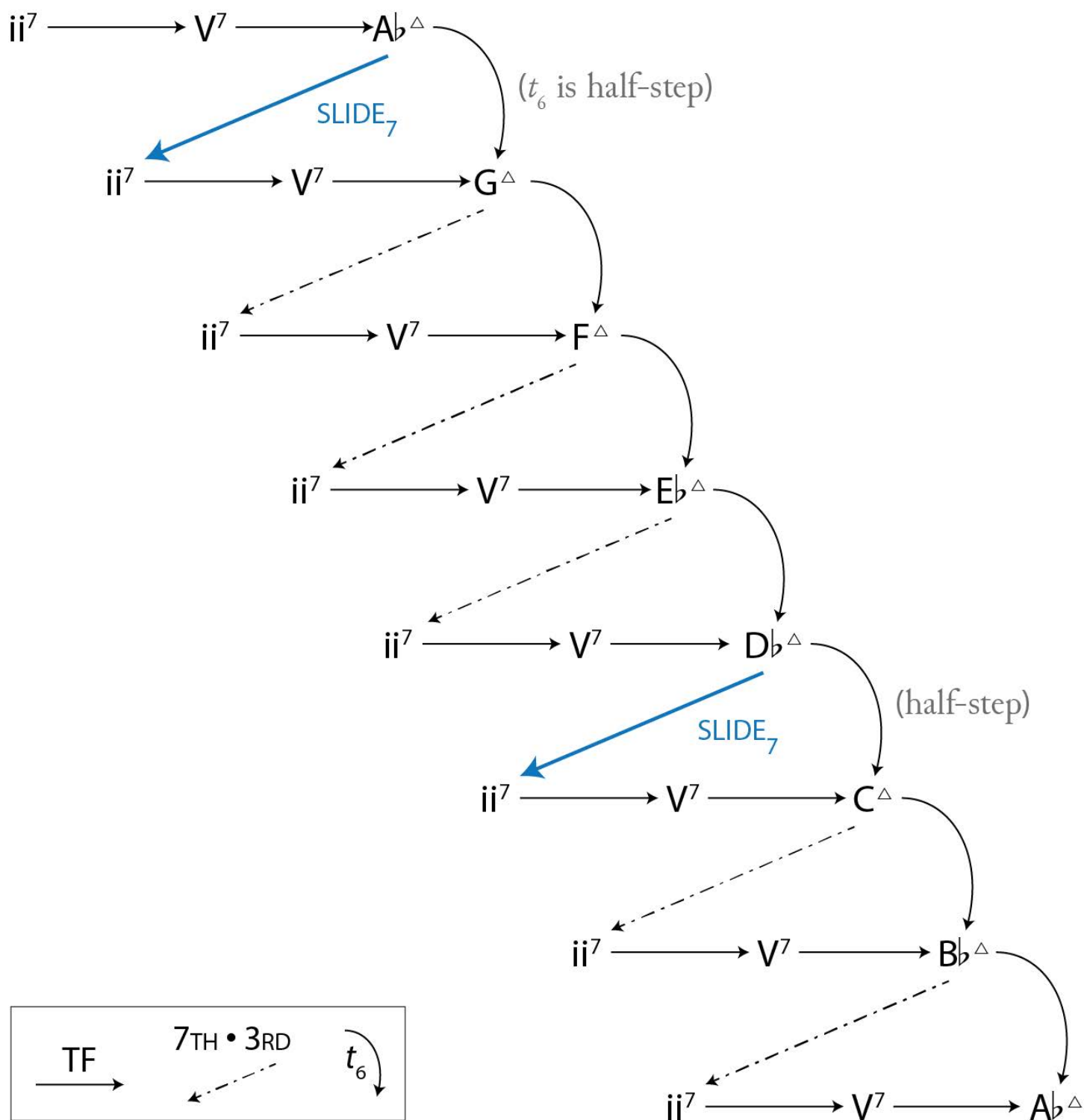


Figure 25. An analysis of “Ceora” in diatonic ii–V space

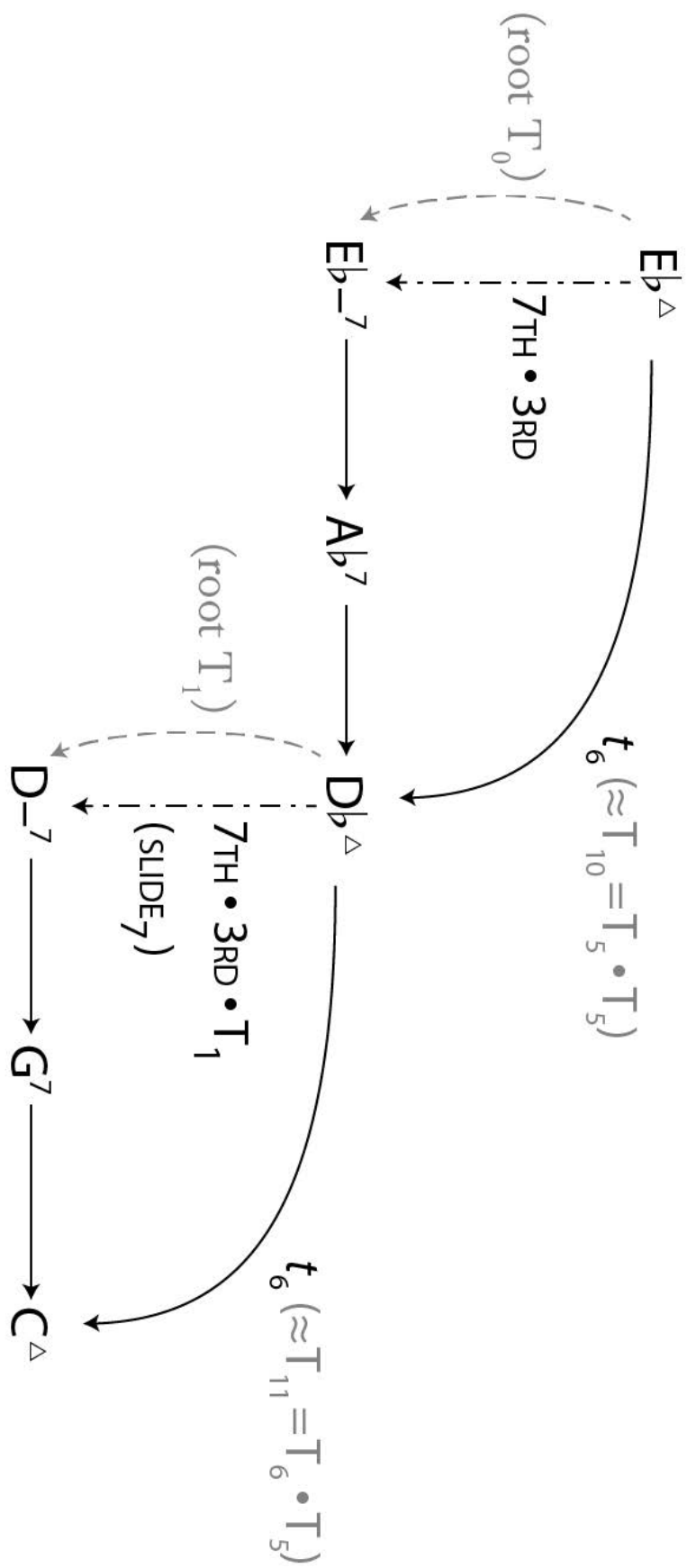


Figure 26. The diatonic seventh chords in F major, arranged around the diatonic circle of fifths

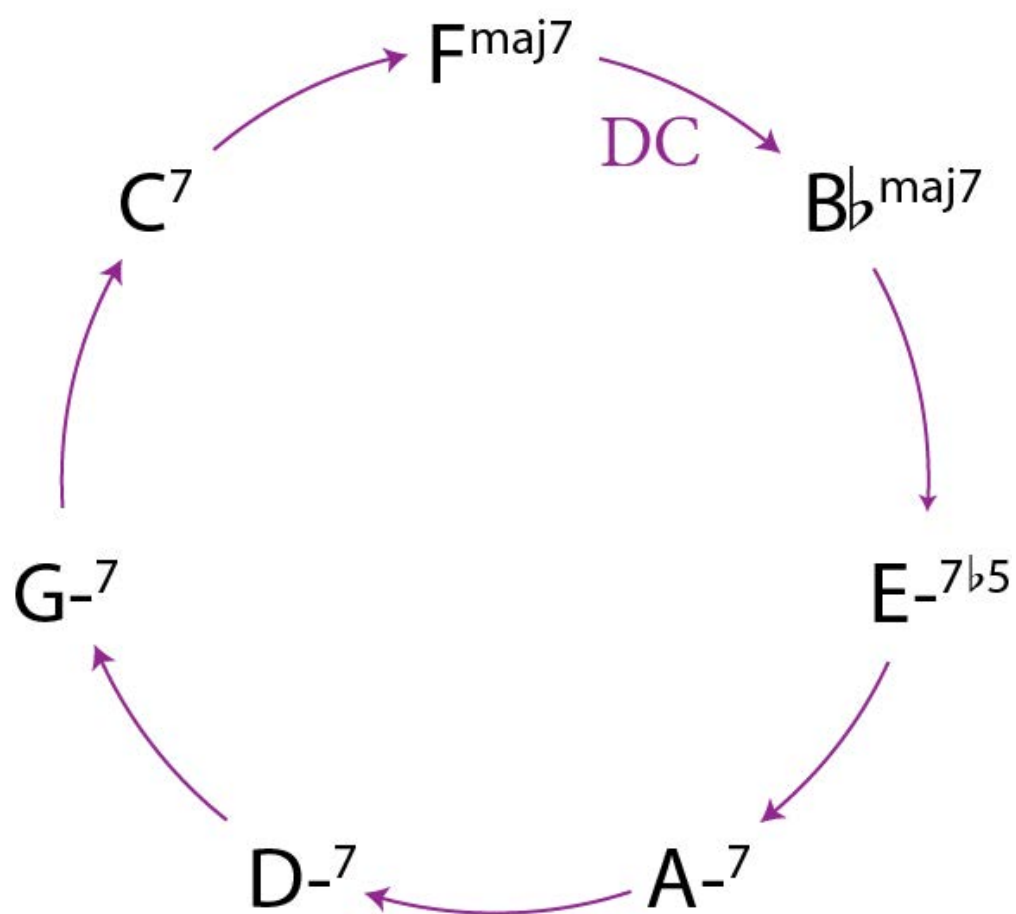


Figure 27. A possible derivation of “Blues for Alice,” mm. 1–5, from a diatonic model

