MTO 23.1 Examples: McClinton, 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)

\[
\begin{align*}
A^7 & | D^7 & | G^{maj7} & | \\
F^{b7} & | B^7 & | E^{maj7} & | C^{7#5} & |
\end{align*}
\]

F^7

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

Figure 1c. Guide-tone lines highlighting efficient voice-leading. (Common tones are indicated by ties)
Figure 1d. Broken into smaller units, highlighting ii–V–I progressions

\[
\begin{array}{c|c|c}
A^7 & D^7 & G^{maj7} \\
\text{ii–V–I in G major} & & \\
\hline
F^{\flat75} & B^7 & E^{maj7} \\
\text{ii–V–I in E major} & & \\
\hline
C^{75} & F^7 \\
\text{V–I in F minor} & & \\
\end{array}
\]

Figure 2. A transformation network for a ii–V–I in C major: Dm7–G7–CM7

\[
\begin{array}{c}
i^{i7} & \overset{TF}{\rightarrow} & V^7 & \overset{TF}{\rightarrow} & C^\Delta \end{array}
\]

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

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

\[
\begin{array}{c}
D^{\flat7} & G^7 & C^{maj7} \\
\text{seventh:} & 0 & -1 & 5 & -1 & 11 \\
\text{third:} & 5 & 0 & 11 & 0 & 4 \\
\text{root:} & 2 & 5 & 7 & 5 & 0 \\
\hline
\text{TF} & \text{TF} & & & & \\
\end{array}
\]
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)

\[ \begin{array}{c|c|c|c|c|c}
A_{b}^{\text{maj}7} & B_{b}^{7} & E_{b}^{7} & A_{b}^{\text{maj}7} & E_{b}^{7} & A_{b}^{7} \\
D_{b}^{\text{maj}7} & D^{7} & G^{7} & C^{7} & F^{7}\#9 & \\
B_{b}^{7} & E_{b}^{7} & C^{7} & F & \\
D^{7} & G^{7} & C^{7} & F^{7} & B_{b}^{7} & E_{b}^{7} \\
\end{array} \]

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

\[ \begin{array}{c|c|c|c|c|c}
A_{b}^{\text{maj}7} & B_{b}^{7} & E_{b}^{7} & A_{b}^{\text{maj}7} & E_{b}^{7} & A_{b}^{7} \\
D_{b}^{\text{maj}7} & D^{7} & G^{7} & C^{7} & F^{7}\#9 & \\
B_{b}^{7} & E_{b}^{7} & C^{7} & F^{7}\#9 & \\
B_{b}^{7} & F^{7} & A_{b}^{\text{maj}7} & B_{b}^{7} & E_{b}^{7} \\
\end{array} \]
Figure 9. The complete ii–V space, showing tritone substitutions.
Figure 10. The Möbius strip at the center of ii–V space
Figure 11. Voice leading in the TF (left) and TF\textsubscript{T} (right) transformations, compared. The colored arrows indicate how the transformations are defined: although there is a common-tone F between Dm7 and D\textsubscript{b}7 (and likewise with the C\textsubscript{b}/B between D\textsubscript{b}7 and CM7), the definition of TF\textsubscript{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♭M7 to Dm7 in mm. 5–6 of “Ceora.”
Figure 14. Changes for “Blues for Alice” (Charlie Parker)

\[
\begin{align*}
F^{\text{maj}7} & \quad | \quad E_{-7}^{b5} \quad A^{7} \quad | \quad D_{-7}^{7} \quad G^{7} \quad | \quad C_{-7}^{7} \quad F^{7} \quad | \\
B_{b}^{7} & \quad | \quad B_{b}^{7}_{-7} \quad E_{b}^{7} \quad | \quad A_{-7}^{7} \quad D^{7} \quad | \quad A_{b}^{7}_{-7} \quad D_{b}^{7} \quad | \\
G_{-7}^{7} & \quad | \quad C^{7} \quad | \quad F^{\text{maj}7} \quad D^{7} \quad | \quad G_{-7}^{7} \quad C^{7} \quad |
\end{align*}
\]
Figure 15. Transformations involving minor tonic chords
Figure 16. A small portion of ii–V space, including minor tonic chords
Figure 17. Changes for “Solar” (Miles Davis)

\[
\begin{array}{c|c|c|c|c}
C- & | & G-^7 & | & C^7 \\
F maj^7 & | & F-^7 & | & Bb^7 \\
Eb maj^7 & | & Eb-^7 & Ab^7 & Db maj^7 & | & D-^7b5 & G^7b9 :|
\end{array}
\]
Figure 18. A generic version of ii–V space, with unspecified tonic chords
Figure 19. Voice leading in the $T_{\text{Fblues}}$ transformation

![Voice leading diagram]

- Seventh: 5 → 10
- Third: 11 → 4
- Root: 7 → 0

$T_{\text{Fblues}}$

Figure 20. $B_b7$ as both dominant (left) and tonic (right)

\[
\begin{align*}
\{ (4, A_b) \} & \quad \{ (b7, A_b) \} \\
\{ (7, D) \} & \quad \{ (3, D) \} \\
\{ (5, B_b) \} & \quad \{ (1, B_b) \}
\end{align*}
\]
Figure 21. A small portion of “blues ii–V space.”
Figure 22. A pivot fifth between $\text{B}^\flat 7$ as dominant and $\text{B}^\flat 7$ as tonic

$$
\begin{align*}
\left\{ & (\hat{b}^\text{7}, \text{A}^\flat) \\
& (3, \text{D}) \\
& (1, \text{B}^\flat) \right\} & \xrightarrow{(5\text{th},0)} & \left\{ & (\hat{4}, \text{A}^\flat) \\
& (7, \text{D}) \\
& (5, \text{B}^\flat) \right\}
\end{align*}
$$

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

(Unless otherwise marked)

(T's continue until returning to C major)

NB: not T's!
Figure 24. An $\text{Ab}^\text{b}$-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.