MTO 24.2 Examples: White, Feedback and Feedforward Models of Musical Key

(Note: audio, video, and other interactive examples are only available online)  
http://mtosmt.org/issues/mto.18.24.2/mto.18.24.2.white.html

Example 1a and b. Feedforward and Feedback ways of schematizing how key interacts with other musical parameters.
Example 2. Mozart, Piano Sonata, K. 284, iii, mm. 1–8 (slurring from Breitkopf edition)

Example 3. Grieg, “The Mountain Maid,” op. 67, no. 2, mm. 4–7, along with tonal analyses provided by two computational models

<table>
<thead>
<tr>
<th>Key-profile model’s key solutions:</th>
<th>A-flat major or F minor or D-flat major</th>
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<tbody>
<tr>
<td>Chord-progression model’s analyses:</td>
<td>f: bVII V7 i bVI</td>
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<tr>
<td></td>
<td>D-flat: ii7 – V7 I</td>
</tr>
</tbody>
</table>
Example 4. A feedback loop between key and chord grouping

Example 5. A hypothetical toy chord-progression model, with arrows representing the most probable between-chord successions
Example 6. A probabilistic analysis of Mozart K. 284, iii, mm. 1–8, using the syntax of Example 5

Example 7. The percentage of key assessments on the Kostka-Payne corpus that agreed with the instructor’s edition, divided by model
Example 8. Cross entropy results for each corpus-based model

![Cross entropy results for each corpus-based model](image)

Example 9. Comparing graders’s assessments of both groups of analyses

![Comparing graders’s assessments of both groups of analyses](image)
Example 10. Percent of participants who correctly distinguish the human/computer analysis (dotted lines show the 95% confidence window for a $p < 0.05$ binomial distribution)

Example 11. Human (left) and computer (right) analyses of mm. 29–37 of Brahms’ “Und gehst du über den Kirchhof” op. 44, no. 10