Music 181: Inversions of Intervals, Compound Intervals, Consonance and Dissonance

I. Inversions of Intervals

Inverting an interval means flipping it upside-down, or reversing the relative positions of the two notes. In other words, inversion means raising the lower note an octave or lowering the upper note an octave.

Write the two possible inversions and compare them:

When you invert an interval
• the general name of the interval and its inversion always add up to 9.
• The specific name will always be the "opposite" (major becomes minor; minor becomes major; augmented becomes diminished; diminished becomes augmented; but perfect intervals retain their perfect quality under inversion).

<table>
<thead>
<tr>
<th>Major 3rd</th>
<th>Minor 6th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 2nd</td>
<td>Dim. 7th</td>
</tr>
<tr>
<td>Minor 7th</td>
<td>Major 2nd</td>
</tr>
<tr>
<td>Dbl. Aug 4th</td>
<td>Dbl. Dim. 5th</td>
</tr>
<tr>
<td>Perfect 4th</td>
<td>Perfect 5th</td>
</tr>
</tbody>
</table>

Identify the interval, then invert and identify the inversion
II. Compound intervals

Any interval larger than an octave (8va) is a compound interval; intervals smaller than an octave are called simple intervals.

Any compound interval can be reduced to a simple interval; in most musical contexts the compound interval and its simple counterpart are functionally equivalent. To reduce a compound interval to its simple equivalent, subtract one or more octaves. (Or to express the same thing numerically, subtract 7.)

E.g., a 12th is functionally equivalent to a 5th (12-7).

Simplify and identify both the simple and compound interval:

III. Consonance and Dissonance

Consonant: (in order)

- Perfect Prime (unison)
- Perfect 8va
- Perfect 5th
- Major and minor 3rds
- Major and minor 6ths

Perfect Consonances

Imperfect Consonances

Consonant or Dissonant (according to context)

- Perfect 4th

Dissonant:

- All 2nds
- All 7ths
- All augmented and diminished intervals