Chapter 7
A Shorter Catechism of Elementary Harmony

(1) When sounds of different pitch are properly combined and heard together, the resulting sound is called HARMONY.
(2) When single sounds follow one after the other, the progression is called MELODY. (See examples)

HARMONY

In the above example of Harmony there are four parts. The top and bottom parts are called the Extreme or Outside parts and the two parts between are called the Inner parts.

In choral music the different parts (i.e., Treble, Soprano, Mezzo-Soprano, Alto, etc.,) are usually written each upon a separate staff and placed one below the other. This is called writing in OPEN SCORE. In ordinary hymn-tunes, for instance, three or four parts are placed on two staves only. (e.g., the above example of Harmony.) This is called SHORT SCORE. Notice how the stems of the notes of each part are all turned either upward or downward, in order to distinguish one part from the other.

Intervals

A Consonant Interval (or Consonance) is an interval which is complete in itself, is pleasant to listen to, and does not require any other special interval before it or after it.

\[
\begin{align*}
&1 \quad 2 \quad 3 \quad 4 \\
\text{e.g.} &
\end{align*}
\]

A Consonant Chord (or Concord) is a chord in which all the notes make consonant intervals with one another.

Example:

If the student plays each of the above examples separately he will find that each by itself produces a satisfactory effect.
A Dissonant Interval (or Dissonance) is a combination of two notes which, when played together, produce an incomplete effect. A Dissonance requires some other special interval to follow.

Examples of Dissonant Intervals:

If the student plays each of the above pairs of notes he will find that the effect is most unsatisfactory and incomplete.

But, if a Dissonant Interval is followed by a Consonant Interval the result is definitely satisfactory and complete.

For instance, the above examples of Dissonant Intervals might be made to appear thus:

This function in Harmony is called a Resolution, and the Consonance which follows the Dissonance is called the Resolution of the Dissonance.

A Dissonant Chord (or Discord) is a chord which contains at least one dissonance among the intervals made between its various notes. That is to say, it is a chord in which two or more notes form Dissonant Intervals with each other, and which requires some special chord to follow it.

Examples of Discords:

But, as before, if each of the above Dissonant Chords is resolved by a Consonant Chord, the result is decidedly satisfying to the ear.

Intervals are always reckoned upwards from the "name note." For instance, the "third of C," means the third above C; the name note being always counted as the first note of the Interval. Thus C to E is called a third because it contains three degrees of the scale of C immediately following one another, namely C, D, and E.

When an interval is intended to be reckoned below the "name note" it is always stated so. Thus C to A immediately below is a third, and G to D immediately below is a fourth.
Degrees of the Scale

The first degree of the Scale is called the **TONIC** or **KEYNOTE**
" second " " " " " " " " SUPERTONIC
" third " " " " " " " " MEDIANT
" fourth " " " " " " " " SUBDOMINANT
" fifth " " " " " " " " DOMINANT
" sixth " " " " " " " " SUBMEDIANT
" seventh " " " " " " " " LEADING NOTE
(or SUPERDOMINANT)
(or SUBTONIC)

The above shows the Major Diatonic Scale of C with the names of the various degrees of the scale attached.

Observe that the Major Diatonic Scale ascends in whole tone Intervals with only two exceptions, those being from the Mediant to the Subdominant, and from the Leading Note to the Tonic. In these two cases the interval is only a semitone.

Any interval smaller than an octave is called a **Simple Interval**, and any larger than an octave is called a **Compound Interval**.

A Compound Interval is then composed of the Simple Interval to which it is related plus the Interval of the number 7 (being the seven degrees of the scale)

\[ \text{e.g. } \begin{array}{c} \text{ } \end{array} \] is an octave; but \[ \text{ } \begin{array}{c} \text{ } \end{array} \] is a **Compound Third** or a 10th, because it is composed of the 3rd—C to E + the interval of the seven degrees of the scale.

The octave C is not counted, because it is contained already in the interval of the 3rd—C to E.
Similarly a 9th is a Compound 2nd
an 11th” “ 4th
a 12th” “ 5th
a 13th” “ 6th
and a 14th” “ 7th

The next interval is called a “Double Octave” not, as one would imagine, a “Compound octave.”
But, to obtain greater accuracy, intervals are described by certain adjectives, namely: Perfect, Major, Minor, Augmented and Diminished.

The unison (i.e., the 4th, 5th, and 8th intervals are called “PERFECT,” and the 2nd, 3rd, 6th and 7th “MAJOR.”

Example:

```
    Perfect Union
→ Major Second  → Major Third  → Perfect Fourth  → Perfect Fifth  → Major Sixth → Perfect Seventh → Perfect Octave
```

and, an interval which is a chromatic semitone less than a Major Interval is called a Minor Interval. The same adjectives are utilised to describe Compound Intervals. For instance is called a Major 10th, and is called a Minor 13th, and so on.

An Augmented Interval is a chromatic semitone larger (as the name suggests) than a Perfect or a Major Interval. e.g., is an Augmented 4th.

A Diminished Interval is a chromatic semitone less than a Perfect or a Minor Interval, those more frequently used being the diminished 3rds, 4ths, 5ths and 7ths, especially the latter.

**Inversions**

When the relative position of two notes is changed by placing one of them an octave lower or higher than before, so that the lower one becomes the upper, and the upper one becomes the lower, the interval thus formed is said to be INVERTED.

Example is a Perfect 5th, but, by placing the C above G thus: and forming the inversion, the interval becomes a Perfect 4th.

The number of the inversion of an interval is to be found by subtracting the number of the interval itself from nine. In the above example (9 - 5 = 4).

*Rule:* Perfect intervals remain perfect when inverted.
Major intervals become minor when inverted.
Minor intervals become major when inverted.
Augmented intervals become diminished when inverted.
Diminished intervals become augmented when inverted.
Diagram showing Intervals and their respective Inversions

<table>
<thead>
<tr>
<th>OCTAVES</th>
<th>INTERVALS</th>
<th>SEVENTHS</th>
<th>SIXTHS</th>
<th>FIFTHS</th>
<th>FOURTHS</th>
<th>THIRDS</th>
<th>SECONDS</th>
<th>UNISONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PERFECT</td>
<td>MAJOR</td>
<td>AUGMENTED</td>
<td>PERFECT</td>
<td>DIMINISHED</td>
<td>MAJOR</td>
<td>DIMINISHED</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MINOR</td>
<td>MAJOR</td>
<td>MINOR</td>
<td>DIMINISHED</td>
<td>MAJOR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIMINISHED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIMINISHED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIMINISHED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIMINISHED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIMINISHED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIMINISHED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DIMINISHED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chords

A chord is a combination of not fewer than three notes, and that chord which is most frequently used is called the Common Chord.

The Common Chord is composed of:

"THE ROOT" = \{ the lowest note upon which the chord is built \\
\{ or the note from which the chord takes its name \} \\
+ a major or minor third above the Root. \\
+ a perfect fifth above the Root.

Example:-- \[ \text{MAJOR} \quad \text{MINOR} \]

Inversions of the above examples would be:

There are five Common Chords which are generally used in the Major Key and these are; the chords of the TONIC, SUPERTONIC, SUBDOMINANT, DOMINANT and SUBMEDIANT.

THE MAJOR COMMON CHORDS ARE |
| THE MINOR COMMON CHORDS ARE |

Chords of the \{ TONIC, DOMINANT and SUBDOMINANT \} |
| Chords of the \{ SUPERTONIC and SUBMEDIANT \} |
A chord containing only three notes is called a TRIAD.

\[ \text{e.g. } \begin{array}{c}
\text{\includegraphics[width=0.2\textwidth]{triad.png}}
\end{array} \]

Every common chord, therefore, is a TRIAD.

Taking the ordinary diatonic scale of C MAJOR and forming above each note of the scale a TRIAD, using only diatonic notes we get the result:

\[ \begin{array}{cccccccc}
\text{TONIC} & \text{SUPERTONIC} & \text{DIATONIC SCALE OF C MAJOR} & \text{LEADING NOTE} & \text{TONIC (Octave)} \\
\text{MEDIAN} & \text{SURBOMINANT} & \text{SUBMEDIAN} & \text{DOMINANT} \\
\end{array} \]

and so prove that the Common Chords of the TONIC, DOMINANT and SUBDOMINANT

\[ \text{viz.: } \begin{array}{c}
\text{\includegraphics[width=0.2\textwidth]{major_common.png}}
\end{array} \] \text{- are Major Common Chords}

TONIC DOMINANT SUBDOMINANT

and the Common Chords of the SUPERTONIC and SUBMEDIAN

\[ \text{viz.: } \begin{array}{c}
\text{\includegraphics[width=0.2\textwidth]{minor_common.png}}
\end{array} \] \text{- are Minor Common Chords.}

SUPERTONIC SUBMEDIAN

K.P. & Co, Ltd. 1881
Principal Chords used in the Average Composition for the Piano Accordion

<table>
<thead>
<tr>
<th>KEY</th>
<th>MAJOR COMMON CHORDS</th>
<th>MINOR COMMON CHORDS</th>
<th>CHORDS of the DOMINANT 7th</th>
<th>CHORDS of the DIMINISHED 7th</th>
<th>AUGMENTED CHORDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F#</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C#</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KEY</td>
<td>MAJOR COMMON CHORDS</td>
<td>MINOR COMMON CHORDS</td>
<td>CHORDS of the DOMINANT 7th</td>
<td>CHORDS of the DIMINISHED 7th</td>
<td>AUGMENTED 7th CHORDS</td>
</tr>
<tr>
<td>------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>----------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Db</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

K.P. & Co. Ltd. 8981