6.13 Surviving Serialism 1: Basic Terminology
Read the "Set Theory Overview" page before this one.

Prime form

Classic serialism uses a particular ordering of the twelve pitch classes called a ***tone row*** or ***series***.

The "main row" used in a piece is called the ***prime form*** of the row. (Don't confuse this with prime form in set theory, which means something totally different.) Below is an example prime form.

Notice:

    1. It has one of every pitch class (one B♭, one B♮, one C♮, etc.)

    2. The first version of the row (usually the first in the piece) is designated P0 (prime zero, read "P zero").

    3. The row forms a particular pattern of up and down intervals. These are shown as half steps up or down.

Transposition

Transposition = keeping the same interval pattern and starting the row on a different pitch class.

Transpositions are designated by the number of half steps ***above*** P0.

*Caution: When transposing, always count half steps **ABOVE**. Adjust transpositions that are below P0 accordingly:*

    *In this case, 2 half steps below prime form zero = 10 half steps above, since A♭ is 10 half steps **above** B♭.*

Inversion

Inversion = the prime form with the direction of each interval reversed.

In this case, P0 starts with a one half step ***DOWN*** (B♭ to A) followed by four half steps ***DOWN*** (A to F), etc.

So I0 starts with one half step ***UP*** followed by four half steps ***UP***, etc.

Retrograde and Retrograde Inversion

Retrograde = the ***prime*** form read backwards, starting with the last pitch class and moving to the first.

In this case, R0 = C♯ (the last pitch class of P0), C♮ (the 2nd to last pitch class), E♮, B♮, A♭, F♯, G♮, E♭, D♮, F♮, A♮, B♭.

Notice: The number for the retrograde is ***always*** the number for the corresponding ***PRIME*** form.

      In this case, P0 starts on B♭ and R0 happens to start on C♯.

Retrograde inversion = the ***inversion*** form read backwards, starting with the last pitch class and moving to the first.

In this case, RI0 = G♮ (the last pitch class of I0), G♯ (the 2nd to last pitch class), E♮, A♮, C♮, D♮, D♭, F♮, F♯, D♯, B♮, B♭.

Notice: The number for the retrograde inversion is ***always*** the number for the corresponding ***INVERSION*** form.

    In this case, I0 starts on B♭ and RI0 happens to start on G♮.