

# 12-Tone Method of Composition

Chromatic scale

Chromatic scale rearranged.  
(Row from Schoenberg's Suite, op. 29)

0 4 3 7 11 8 9 6 5 1 2 10

The above row used to form a melody (Arnold Schoenberg : Suite, op. 29, mvt. I, mm. 5-7, violin)

*Allegretto* (♩ = 72)

*grazioso* **H**

*p*

**Flg**

*sfz*

**T**

1. The original row (prime) may be stated in four row permutations : prime (P), inversion (I), retrograde (R), retrograde inversion (RI). Each row permutation may begin on any of the 12 notes in the chromatic scale resulting in 48 possible rows. These 48 rows may be expressed graphically by a matrix.
2. The tones must be used in the order of one of the above four row permutations.
3. The tones must not be repeated after they are left (exception: trills between adjacent notes in a row).
4. The tones (pitch classes) of each row may appear in any octave designation.
5. A row may begin on any of its members.
6. Different row permutations may be used simultaneously.

The four row permutations for the row in Schoenberg's Op. 29 :

**P-0 (Prime)**

**R-10 (Retrograde)**

**I-0 (Inversion)** \*

**RI-10 (Retrograde Inversion)**

\*Note the use of octave displacement and enharmonics.

- In the EARLY stages of 12-tone composition, Schoenberg suggested the following guidelines (Keep in mind that in the early uses of the 12-tone method, Schoenberg was trying to form a complete break with traditional harmony. These guidelines were not necessarily followed in the later works.):
1. Avoid tonal structures (V-I).
  2. The repetition of tones was to be delayed as long as possible.
  3. Octave doublings were disallowed.
  4. To create unity and coherence, a single row was used to generate pitch material for an entire composition.
  5. Each tone of the row was considered equal to but independent from all the other tones in the row.
  6. Traditional compositional procedures (connection of ideas, contrast, unification, variation, etc.) should be used.