

Equal division of the octave

This form of organization can apply at both small and large scales, i.e. the harmonic entities relating by equal division of the octave may be chords or they may be tonal centers of large sections of pieces.

At root, these harmonic possibilities arise because of the division of the octave into twelve semitones, and the many divisors of the number 12.

$12 = 6 \times 2$ semitones → whole tone scale

$12 = 4 \times 3$ semitones → fully-diminished seventh chords

$12 = 3 \times 4$ semitones → augmented triads

$12 = 2 \times 6$ semitones → tritones

If you plot the twelve pitch classes on a clock, the symmetrical divisions of the octave make nice geometrical shapes – hexagons, squares, and triangles (the diameters created by the tritones are less pretty).

Symmetrical tonal cycles may be either complete or incomplete. As indicated by the chart above, they involve motion by M2, m3, M3, or d5/A5. You speak, for example, of a ‘minor third cycle’, even though if you go through a complete cycle they can’t all be minor thirds – not, that is, if you don’t want to start with C major and end on D-double-flat major, to take one example. (Why is this?)

Symmetrical tonal cycles frequently arise as a result of

Chromatic sequences

A chromatic sequence is a sequence that repeats exactly, not adjusting intervals to respect the diatonic scale. In addition to chromatic versions of circle of 5ths sequences and 5-6 sequences, a variety of other chromatic sequences are also possible.