

6.4 Additional Contemporary Scales

Scale = A melodic pattern of seconds (sometimes occasional thirds as well) spanning an octave. The pattern of intervals in the scale creates its characteristic sound. The major scale is one of many possibilities (W-W-h-W-W-W-h, see 1.4 Major Scales). Scales have 5 to 12 pitches.

Mode = 1. Often means "scale," especially scales other than major/minor, **OR**
 2. A scale that follows a "parent" scale pattern, but focuses on a scale step in the parent scale other than one. Ex: Dorian is the second mode of major. See 6.2 *The Diatonic Modes* for more.

5-note scales (pentatonic scales)

Major pentatonic scale on C (also called *anhemitonic*, meaning "no half steps.")

Like all scales, the major pentatonic comes in different "modes" depending on which note in the scale is used as the tonal center. Since it has five notes, the scale C-D-E-G-A has five different modes. The *fifth mode* (far right, below) is also called the *minor (or natural minor) pentatonic*.

Below are two more common pentatonic patterns. Each has five modes, just as the major pentatonic does.

6-note scales

Whole tone scale = A scale built from whole steps. Because the pattern repeats at the whole step, there are only two distinct possibilities, shown below:

Augmented or hexatonic scale = Scale that alternates between half steps and minor 3rds. The augmented scale pattern repeats at the major 3rd, so there are only four distinct possibilities.

7-note scales (heptatonic scales)

Although *synthetic* (i.e., arbitrary) scale patterns are possible, most 7-note scales are related to a "parent" major or minor scale. See 6.2 *The Diatonic Modes in Contemporary Music*.

8-note scales (octatonic scales)

Octatonic scales = A scale of alternating whole steps and half steps. Octatonic scales may be h-W or W-h. A whole-half octatonic is also called a *diminished scale*. There are three distinct octatonic scales.

Other scale terms

Modes of limited transposition = Scales from 6 to 10 notes with fewer than 12 transpositions. For instance, the whole tone scale can only be transposed 1 half-step without repeating pitches. The composer Olivier Messiaen used them. See 6.11 *Set Theory: Symmetric Sets*.

Microtonal scales = Scales that use intervals smaller than half steps. Common in non-Western music.

Synthetic scale = A scale based on an arbitrary interval pattern unrelated to major or minor scales. Whole tone, hexatonic, and octatonic scales are examples of *synthetic scales*.