

## Technique #2 – Harmony

Conventional harmonic structures are basic materials of the vocabulary. However, a more complex harmonic language is required to express contemporary musical ideas.

### - superimposed thirds

The addition of a third above a 7<sup>th</sup> produces a 9<sup>th</sup> chord. The example below shows the dominant major ninth structure in its most usual arrangement with the root in the bass and the ninth in the soprano.

Musical notation for Debussy's *Pelleas and Melisande*, p7. The score is in G major and 3/4 time. It features two staves: an upper staff labeled 'Orch.' and a lower staff. The upper staff contains a sequence of chords: a G7 chord with a 9th (B4) in the soprano, followed by a G7 chord with a 9th (B4) in the soprano, and finally a G major triad. The lower staff contains a sequence of chords: a G7 chord with a 9th (B4) in the soprano, followed by a G7 chord with a 9th (B4) in the soprano, and finally a G major triad. The notation includes fingerings (1, 3) and dynamics (mf).

*Debussy, Pelleas and Melisande p7*

The addition of another third above a ninth produces an 11<sup>th</sup> chord. The augmented 11<sup>th</sup> seems to produce a richer sound, and is a great favourite with jazz composers and arrangers. Examine the example below.

Musical notation for Bloch's *Violin Sonata*, p23. The score is in G major and 2/4 time. It features three staves: an upper staff, a middle staff, and a lower staff. The upper staff contains a sequence of chords: a G7 chord with a 9th (B4) in the soprano, followed by a G7 chord with a 9th (B4) in the soprano, and finally a G major triad. The middle staff contains a sequence of chords: a G7 chord with a 9th (B4) in the soprano, followed by a G7 chord with a 9th (B4) in the soprano, and finally a G major triad. The lower staff contains a sequence of chords: a G7 chord with a 9th (B4) in the soprano, followed by a G7 chord with a 9th (B4) in the soprano, and finally a G major triad. The notation includes fingerings (1, 3) and dynamics (mf).

*Bloch, Violin Sonata p23*

Continuing the process of building chords in superimposed 3rds leads with the addition of a 3<sup>rd</sup> to the 11<sup>th</sup> chord, to the 13<sup>th</sup> chord. A diatonic 13<sup>th</sup> chord contains every note of the scale, but often there is some chromatic alteration. The example below is one of the most common usages.

Musical notation for Ravel's *Piano Concerto*, p73. The score is in G major and 2/4 time. It features two staves: an upper staff labeled 'Pft.' and a lower staff. The upper staff contains a sequence of chords: a G7 chord with a 9th (B4) in the soprano, followed by a G7 chord with a 9th (B4) in the soprano, and finally a G major triad. The lower staff contains a sequence of chords: a G7 chord with a 9th (B4) in the soprano, followed by a G7 chord with a 9th (B4) in the soprano, and finally a G major triad. The notation includes fingerings (1, 3) and dynamics (mf).

*Ravel, Piano Concerto p73*

### - polychords

Sonorities which can best be understood as combinations of conventional chords are designated *polychords*. Only triads and seventh chords are united in polychordal formations. The elements of individual chords within a polychord are united with each other and isolated from those of other chords by means of color, range and/or spacing to emphasize the distinctive polychord quality. Remote polychordal associations are most attractive. One of the first to be used joined major triads a tritone apart. This polychord figures prominently in *Petrouchka*, with the trumpets and cornets playing the C major figure, and horns sustaining the F# major triad. Strings and woodwinds and piano alternate between the two.

Stravinsky, *Petrouchka* p65

In the example below, for the first time in history, a systematic use of chords is made of stacked fourths moving in parallel motion, called *planing*. This music is atonal, without key, the first in history. It is also unmeasured and without meter. The quartal chords are complex, because the fourths are not all perfect. One of them is augmented. This results in parallel tritones within the stacked quartal harmonies, all unresolved.

Satie, *Etoiles*

Debussy was perplexed and irritated when Satie's music began to receive recognition, which he apparently believed deflected attention from his own work. Satie wrote, "One person who isn't pleased is the good Claude. It's really his fault; if he had done sooner what Ravel -- who makes no secret of the influence I had on him -- has done, his position would be different. . . . I am not angry with him about it. He's the victim of social climbing. Why won't he allow me a very small place in his shadow? I have no use for the sun." Debussy jealously reacted by making cruel jokes about Satie and his music, which created a breach in their friendship. When Debussy died in 1918, Satie did not attend his funeral.

Next, when three or more consecutive scale steps occur simultaneously, the resulting structure is known as a cluster. Extended clusters are better suited to the piano than to other instruments. The example below includes all the notes of a chromatic octave.

Bartok, *Piano Concerto No. 2* p57

In the example below, a cluster on the black keys is followed by a cluster on the white keys.

Ives, *Song: Majority*

Used sparingly and with discretion clusters add a curious bit of colour to the harmonic repertoire.