

The Underpinnings of Polychordal Dissonance and Consonance.

In the last article, *Polychords and the Jazz Improviser*, it was discussed how one can learn and apply polychords to an improvisation. Continuing with the last article, the understanding of polychordal consonance and dissonance will be explored. As many music students may remember from their studies of basic tertian harmony, the common pattern for harmonic movement follows the following formula: IV-V7-I. A simple analysis of this formula would conclude that the IV chord announces the dominant chord, which in this case produces the tension, and this tension is then resolved to the I chord. As this analysis has shown, polychords and other harmonic concepts operate under similar rules. Within this article, there will be two opposing viewpoints presented concerning polychordal dissonance/consonance.

Throughout this discussion of polychordal dissonance and consonance, the use of triads will be used in all examples. The use of triads in this discussion makes it easier for the novice student to grasp polychordal dissonance/consonance. When one begins to apply this idea to tertian harmony that is larger in scope than triads (i.e. seventh chords and larger), the larger harmonies tend to function differently regarding dissonance and consonance. For this discussion of polychordal dissonance/consonance to continue, one needs to draw a circle of fourths where "C" is at twelve o'clock and "F#" is at 6 o'clock. After completing this circle, one then needs to number the tonal centers, starting with "C" in a clockwise fashion. For example: C is I, G is II, D is III, and continue to number in like fashion.

One of the pioneering principles that Vincent Persichetti set forth in his *Twenty-Century Harmony*, was that if one were to continue around the circle, as described above, the polychords will become more dissonant. In contrast to Persichetti's principle of polychordal dissonance, another view on polychordal dissonance is that if one were to maintain the above mentioned circle of fifths, but unlike the previous example, one needs to renumber the chordal units. If one were to start with C and label it "I" and continue this process clockwise until they stopped at F#, one then should have labeled F# as "VII." If one were to start at "C" again and continue labeling the chordal units in a counter-clockwise fashion, one should end with an identical numerical pattern as previously described.

As a result of this labeling process, one will see that the polychordal units are symmetrical as opposed to Persichetti's polychordal principle. Due to this second labeling process, one can see that the extreme dissonance in this case, would be a polychordal unit that consists of C and F#. The next descending unit of dissonance would be one of the following: C & Db or C & B. On the extreme end of this dissonance, extreme consonance would be C & C and the next ascending order of dissonance would be either C & F or C & G.

The second approach to polychordal dissonance/consonance, tend to lend itself to improvisers and composers whom process information in a mathematical or analytical sense.

In the end, the composer and/or improviser has two methods in developing polychordal dissonance and consonance for their respective genre. In artistic terms, one is left to determine if either approach is conducive for themselves. One will determine which approach is ideal for them through practice and experience. To apply these ideals to an improvisation setting, one could follow the methods as laid out in *Polychords and the Jazz Improviser*. In contrast to improvisers, composers should start with a four bar phrase that has four or five polychordal units. From this example, one should then begin to compose through this predetermined chord progression.

About the Author

Andrew Hanna is the CEO & Production Manager of At Hand Productions, Inc. At Hand Productions (<http://www.AtHandProductions.com>) is a leading Philadelphia concert and theatrical production company. Andrew Hanna has 20 years of composition experience and 16 years of performance experience. His compositions range from duets to large theatrical productions such as *My Journal*, *Requiem for the Now*, and *Prophecies of War*.