Aspects of Harmonic Progression Theory in Paul Hindemith’s Craft of Musical Composition

The problem of harmonic progression in post-tonal music is among the most difficult to define. The tonal system’s diatonic scale step harmonies are organized in a hierarchy which emphasizes fifth-progressions. However, most post-tonal theory is concerned with either the labeling of vertical sonorities or manipulations of ordered sets. It has been suggested that the ear attempts to reconcile atonal structures with the received tonal tradition’s typical structures, and that ultimately listeners hear all music as referencing tonality at some background level. If this is the case, how much impact does traditional harmonic progression have on the succession of chords in post-tonal music? The question of why one sonority is followed by another, or how thesesuccessions are related at a structural level is generally unaddressed in post-tonal harmonic analysis. In this regard, the theory proposed by Hindemith in his 1937 text may lay the groundwork for the development of theories of progression in post-tonal music. Hindemith’s theory is intended to be applicable to both tonal and post-tonal music. By studying tonal, extended tertian, and post-tonal works, conclusions regarding tendencies of harmonic progression may be drawn. In this paper, analyses of C.P.E. Bach’s Sonata in A Major, H. 186, II; Robert Schumann’s “Ich grolle nicht” from Dichterliebe; Chopin’s Prelude in e Minor, Op. 28, No. 4; Berg, “Traumgekront”, from his Seven Early Songs; and Schoenberg’s Six Little Piano Pieces, No.6 will be examined to determine what if any principles of harmonic progression hold constant from tonal practice.

C.P.E. Bach’s Sonata in A Major, H. 186, second movement, written in 1779, is a typical piece of the Empfindsamerstil movement. Its sighing motives and highly ornamented melodies are expressive of the movement’s aesthetic. Hindemith’s Craft tells us to expect a great deal of chord groups I¹ and I², and they are the most populous here, but group VI, the ambiguous diminished triad, appears, as well as group II, especially the IIb subset. An examination of the degree fluctuation shows a number of circle-
progression patterns (root motion by descending fifths). Measures 8-9 show a brief passage of parallel group I² chords, culminating with a tonic I chord.

Harmonically, tonicization of the fourth scale-step is problematic for Hindemith’s theory, as the privileging of the fifth suggests that IV has greater import than it does aurally (measures 5-6, 12-13, 18-20). While the A tonality, and later the F-sharp, are structurally more significant, a simple reading of root motion would seem to suggest that the D has an importance that is not supported by a careful listening. Tonicizations such as these should be compared to the score before drawing deeper conclusions. Progressions in this piece follow the Series 2 guidelines, generally. Root movement by fifths and fourths is common, stepwise root motion is less frequent, and usually as a precursor to fifth-based movement. Third-movement is infrequent, seen in sequential patterns (connecting fifths by step, as in measures 6-7, and 18-19) and in the gaps between phrases in new tonalities (mm. 5 and 14-15). These root motions are the common gestures of the tonal practice, and this piece exemplifies that practice.

Schumann’s *Ich grolle nicht*, dating from 1840, is separated from the Bach sonata by sixty years. In this time, harmonic practice had expanded and evolved, but the generalities of harmonic progression were mostly unchanged. Root motion by fifths predominates, although the tendency to obscure this root motion has increased. The bass and root have become more dissociated, the use of pedals and common tones making the bass more linear and melodic than functional. The use of group III harmonies has increased, especially IIP², and harmonic fluctuation is smoother than in the Bach. A gradual increase and decrease in tension is seen, rather than the sudden spike and drop of the group VI chords in the Bach. Root motion by fifths is still the most common progression, although the species of chords have expanded. Mediant relations are more common and step progressions are infrequent. The use of mediant relation chords becomes more common in the Romantic era, and Schumann emphasizes
the common tones between these chords.

Chopin’s e minor prelude Op. 28, No. 4, is laden with chords difficult to analyze in traditional terms. Many of these chords arise as unprepared or unresolved nonharmonic tones appear. Step progressions play a role in this, as the accompanimental chords move almost entirely by downward step. As the bass descends to the fifth of the key, other voices move at different rates, giving the linear motion primacy over harmonic motion. The separation of bass and root functions is taken further here, and the continual stepwise motion emphasizes this. The harmonic language is more diverse than in the Schumann song, and ambiguous group VI chords are more frequent. The question of whether to treat each vertical structure as a new chord or to treat some harmonies as contrapuntal, arising from voice leading and containing nonharmonic tones is difficult to answer. The melodic line can determine the classification somewhat. For example, taking the C5 in the melody (mm.1-2) as an upper neighbor tone, and not a chord member, allows for a more regular harmonic rhythm. This is complicated in m. 3, where the C is consonant to the group IIb² chord. Group II chords form an important part of the harmonic ambiguity in this piece, especially those chords that form half-diminished sevenths, or alternately, minor chords with added sixths. Hindemith reads them as the latter, with the fifth of the minor triad as the “best” element. The use of step progressions in each voice further divorces functionality from bass motion, as each line’s stepwise descent blurs the vertical sonorities. The principles outlined by Hindemith’s theory for progression are generally upheld here, most root movement is by fifths, less frequently by thirds, and in few passages, by seconds. Harmonic fluctuation shows that, as in previous examples, a gradual increase in tension (in this piece usually from groups I and II to III, IV, or VI) is followed by a resolution to group I chords. Although the chord roots center around E, the first coincidence of root and bass on E occurs only at measure 21.

These three works exemplify a tonal application of Hindemith’s theory and show the typical
harmonic progressions of tonal music. Roots move generally by fifths, movement by seconds or thirds serves as an approach to movement by fifths, as at cadence points. Chords beyond groups I, II, or III are rare, with the exception of group VI diminished seventh chords, which grow in prominence as the tonal language expands. Generally, nonharmonic tones are easily recognizable, and the decision to exclude certain pitches from the chordal analysis can be justified easily from tonal contexts. Tonal centers are created, as Hindemith saw it, from the reinforcement of certain root motions and scale degrees. This is clearly demonstrated in the pieces analyzed above. As the language of tonality dissolves in the works of the Second Viennese School, can these principles of progression be upheld? Some theorists have read atonal or post-tonal harmony as distant extensions of tonal principles. From Prokofiev’s “wrong notes” to Schoenberg’s atonal avoidance of thirds and fifths, the lack of surface references belies the ultimately tonal way we listen to music, and the way we attempt to reconcile these harmonic structures with common practice harmony.

Berg’s Seven Early Songs skirt the edges of atonality. They predate his study with Schoenberg, but demonstrate a looser tonality than the preceding Chopin. “Traumgekront” has a key signature of two flats, but a panoply of accidentals, blurring the tonal center. The few major triads (chord group I¹) are embroidered with appogiaturas and chromatic passing figures. Suspensions and syncopated bass lines obscure the progressions. No root progression by fifths occur, but plagal cadences abound, as do progressions by seconds. A common harmonic ploy is a sequence of different chord groups with the same root, which is then repeated at another pitch level. This is seen at mm. 2-3, and the analogous passage at mm. 17-18. Again, harmonic tension builds gradually, in combination with the common roots, and secundal progressions. A C tonality is eventually established, and the piece closes on a G chord (group I¹).

Schoenberg’s Op. 19, No. 6 Klavierstücke, composed in 1911, predates his serial technique, and
consists entirely of chords from groups III and IV. While in a tonal context, these harmonies would be points of great tension, the group III harmonies provide moments of relaxation in this setting. This almost aphoristic piece, while containing only one root motion by fifth (at measure 5), shows in its fluctuation the same gradual building and dissipation that the Chopin prelude did. Harmonically, the tendency to hear bass notes as roots is confounded in the Hindemith analysis. Measure 5’s final beat, a group IV² chord with F as its root, looks in the score, and sounds to the ear as an altered dominant chord on E, the bass note. The resolution in measure 6 to a different chord of the same group, and with the same theoretical root prolongs the ambiguity. This same confusion of root and bass occurs in the final measure. The sonority (from bass to treble) is [8 T 7 0 5 9 6 E]. The A-flat, being the final pitch heard as well as the lowest pitch, takes on the character of a possible root. However, the B-flat that precedes it is the actual root in a Hindemithian reading. In either case, it provides a less than satisfactory cadence, ending on a group IV² chord, with a greater tension than the preceding measure. This may be an intended effect, as the piece was composed on the day of Mahler’s funeral, and Schoenberg was a notoriously emotion-driven composer. The root movement suggests an underlying B-flat center. The first quasi-cadential point, at m. 6, is rooted on F; the final chord, at m. 9, is rooted on B-flat, a fifth relation. However, not much else reinforces this possibility, as the first five measures vacillate between chords rooted on B-natural and C, before reaching the group IV² chord on F at the end of m. 5. Although the root motion of the Hindemithian reading and the aural perception of root motion may disagree, one aspect that holds true is the fluctuation pattern. Even in an explicitly non-tonal framework, Schoenberg is treating less dissonant harmonies as points of release. The three strophes of the composition end with group IV² chords, and begin with group III² chords. The progress to the close of each phrase is characterized by a gradual increase in density and dissonance, even within a chord group.
A subtle step progression appears in this piece, extending from the initial B5 through the whole of the piece and closing on A-flat1 in the final measure. This progression, again, should not be construed as a Schenkerian *Urlinie*. The Hindemithian step progression is a structural scalar line, but is not necessarily tied to function.

It appears in these analyses that root motion of a second, especially a minor second, becomes more common in the Second School’s work, as the fifth-based root motion fades away. Chords of group I are almost entirely absent, appearing in the early Berg song only as heavily embellished sonorities, laden with suspensions, appoggiaturas, and escape tones. Chords of group III are more common, and in the Schoenberg seem to “replace” the major or minor triad as a lull in harmonic tension.

In these analyses, it can be seen that the fifth-based root motion that Hindemith privileges becomes less dominant (as it were), and secundal motion gains prominence. The principles of harmonic fluctuation remain viable, even in the aphoristic context of the Schoenberg piece. The idea of a tonal center being defined by the root motions surrounding it is difficult to reconcile in this context. The tendency to hear the bass note of a complex chord as its root occasionally conflicts with the calculated root; sometimes only slightly, as in the case of half-diminished seventh chords, which can be dealt with, even in traditional terms as nearly equal analyses, but in other cases, such as the cadence point in the Schoenberg, the root (F) conflicts dramatically with the aurally perceived root (E). However, in combination with set theory, Schenkerian analysis, and aural analysis, identification of both perceived and calculated roots, and of structural sonorities is possible. Having determined these elements, it may be possible to combine multiple analyses to develop a more thorough theory of harmonic progression in post-tonal music.
General progression observations: $I_2$ - $III$ - $I_2$ → $VI$. Always avoid IV or V in altered dominant progressions.

| $I_2$ | $III$ | $I_2$ |

Circle progression

Tonization at $III$ is problematic.


