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### The Strategic Half-diminished Seventh Chord and The Emblematic Tristan Chord: A Survey from Beethoven to Berg

*Zusammenfassung:* Der strategische halbverminderte Septakkord und der emblematische Tristan-Akkord von Beethoven bis Berg im Überblick. *Der halbverminderte Septakkord tauchte im 19. Jahrhundert als bedeutende eigenständige Harmonie und als Angelpunkt bei der chromatischen Modulation auf, bekam aber eine besondere symbolische Bedeutung durch seine Verwendung als Motiv in Wagners Tristan und Isolde. Seit der Premiere der Oper im Jahre 1865 läßt sich fast 100 Jahre lang die besondere Entfaltung des sogenannten Tristan-Akkords in dramatischen Werken verfolgen, die ihn als Emblem für Liebe und Tod verwenden. In Alban Bergs Lyrischer Suite und Lulu erreicht der Tristan-Akkord vielleicht seine höchste emblematische Ausdruckskraft nach Wagner.*

If Wagner's *Tristan und Isolde* in general, and its Prelude in particular, have stood for more than a century as the defining work that liberated tonal chromaticism from its diatonic foundations of the century before it, then there is a particular focus within the entire chromatic conception that is so well known that it even has a name: the Tristan chord. This is the chord that occurs on the downbeat of the second measure of the opera. Considered enharmonically, this chord is of course a familiar structure, described in many textbooks as a half-diminished seventh chord. It is so called because it can be partitioned into a diminished triad and a minor triad; our example shows it in comparison with a minor seventh chord and an ordinary diminished seventh chord.

*Langsam und schmachtend* \*

The musical notation shows three chords in a sequence. The first chord is a half-diminished seventh chord (F7b9), the second is a minor seventh chord (F7), and the third is a diminished seventh chord (F7b9). The chords are shown in both treble and bass clefs. The half-diminished seventh chord is marked with an asterisk (\*). The chords are labeled as 'half-diminished seventh', 'minor seventh', and 'diminished seventh' respectively.

Example 1

The half-diminished seventh chord is well known from long before Wagner as a classical harmonic resource, normally found in two basic functions. These

are the supertonic seventh in the minor mode, and the leading-tone seventh chord in the major mode.

2

C: II<sup>7</sup>  
Eb: VII<sup>7</sup>

Eb: V<sup>7</sup>(=VII<sup>7</sup>)

C: II<sup>7</sup> V Eb: V<sup>7</sup> I

Example 2

In either case, the root-position triad that is the presumptive basis of the chord is a diminished triad. The half-diminished seventh thus has a weakened tonal function in root position because a diminished triad cannot serve as a temporary tonic, attended by a secondary dominant. Thus the classical use of the half-diminished seventh chord is very often defined by an adjunct tonal function; II<sup>7</sup> in minor, for instance, characteristically appears in first inversion (II<sup>6/5</sup>), in which the three lowest factors are identical with the minor subdominant triad, and the harmony actually functions as a subdominant with the supertonic root superposed as an added sixth above the bass. Similarly, the leading-tone seventh chord in major has a classical function of an incomplete dominant ninth, its four factors having the same voice-leading as they would if a dominant root were actually present. II<sup>7</sup> in minor typically would precede dominant harmony, while VII<sup>7</sup> (or V<sup>09</sup>, as it is called in some texts) would precede tonic harmony.

#### Wagner and before

One can point to a few special uses of the half-diminished seventh chord before Wagner that seem to foreshadow his expanded use of it. Many writers have called attention to the passage in Beethoven's Piano Sonata in E<sup>b</sup> major, Op. 31, No. 3,<sup>1</sup> shown in Example 3.

The minor subdominant with added sixth is preceded, in the opening motive of the movement, by the major form. When the minor form does arrive, Beethoven increases the harmonic ambiguity by changing the position of the chord to a root-position II<sup>7</sup>, resolving the seventh downward as an appoggiatura to form a diminished seventh chord.

1 *In Theory Only*, 1/8, 27 (November 1975): "Where Have We Heard This Before? (continued)"

3

p

Example 3

Another adumbration of the Tristan chord is this one from Chopin's G minor Ballade, Op. 23<sup>2</sup>:

4

ff

Example 4

The half-diminished seventh is a pivot chord in a remote modulation from A major to E<sup>b</sup> major. It is strongly emphasized in the modulation, but as a nondominant it has no particular tendency, and its cadential value is essentially suspended until its resolution to the dominant of E<sup>b</sup>; what makes it so striking is its duration, a climactic passage in one of the most boldly original works of the nineteenth century.

Wagner's liberation of the half-diminished seventh chord began with his use of it for obscuring tonal progression, indeed, for temporarily suspending the sense of tonality in unusual progressions, irregular resolutions, and remote modulations. In whatever position, the half-diminished seventh chord essentially combines a stable triadic component, the subdominant, with an additional factor whose root function, if it is perceived at all, is unstable and uncertain. This very ambiguity of root function was exploited by Wagner for its atmospheric qualities that later would become an important ingredient in Debussy's impressionism. An early example is this one from *Das Rheingold*, just before Scene 2:

2 *In Theory Only*, 1/5, 8 (August 1975): "Where Have We Heard This Before?"

Example 5

What is particularly striking is the emphasis given to the A minor triad with added F#; the orchestration gives the greater weight to the A minor factors (woodwinds in quarter-notes), but the F#, though seemingly a decorative element in the violin, is clearly perceived as part of the harmony.

More than any other composer, it was Wagner who elevated the half-diminished seventh chord to a special psychological status, who endowed it with a symbolism that is at once broadly drawn and rapier-sharp. Notwithstanding that he began to use it well before *Tristan und Isolde*, beginning especially in the *Ring* operas, it is the half-diminished seventh chord (considered enharmonically) that appears in *Tristan und Isolde* that remains the classic and even all-defining example. The half-diminished seventh chord in *Tristan und Isolde* symbolizes above all the association of Love and Death. Because the subject has been dealt with at length by many others, there is no need to dwell here on the ways in which the opera's most characteristic harmonic sonority penetrates the entire work.

Example 6

What is fundamentally different about the initial *Tristan* context is that the chromatic enharmonic reinterpretation forces an unexpected resolution. The Tristan chord is no longer a half-diminished seventh chord in a diatonic context but an augmented sixth chord with one factor substituted by an appoggiatura. It was natural for Wagner to seize upon the enharmonic ambiguity of his newly discovered sonority to project the structural and functional climax of the entire Prelude (see Example 6):

The half-diminished seventh chord furnishes a special unifying dimension within the cosmos of leitmotives that dominate Wagner's *Ring des Nibelungen*, where it more generally suggests (but not exclusively) dramatic tension associated with treachery and betrayal (Hagen's motives in *Die Götterdämmerung*, Alberich's Curse from *Das Rheingold* on). It is one of the constituent harmonies, alternating with the diminished seventh chord, underlying the "Ring" motive in its various transformations, and relating this motive in turn to the "Curse" motive. Some of the most dramatically charged, even frightening moments in *Die Götterdämmerung* are underlined by the sudden tonal ambiguity concomitant with unexpected appearance of the half-diminished seventh chord. Who can forget Siegfried's arrival on the shore before the Hall of the Gibichungs (with the "Curse" motive), the sinister muted strings of Hagen's Watch, or Brünnhilde's shriek of terror on seeing Siegfried disguised as Gunther?

At the moment just before Siegfried's murder in Act III of *Götterdämmerung*, the "Curse" motive is adumbrated by a sliding chromatic succession of parallel half-diminished seventh chords, demonstrating for this chord a textural flexibility hitherto shown only by the diminished seventh (e.g., in *Tannhäuser*; but of course chromatic successions of diminished sevenths can be found abundantly as far back as Bach) and the augmented triad (in Loge's music and elsewhere).

Example 7

The half-diminished seventh also alternates with a dominant seventh sharing two common tones, in the sequential "Starke Scheite" motive of the Prelude to Act I and the Immolation scene in Act III. As for the half-diminished

seventh in Wagner's last opera, perhaps the most striking, and most pregnant with symbolism, of all post-*Tristan* instances in Wagner's works occurs in Act II of *Parsifal*, at the moment of Kundry's kiss:

Example 8

### From Wagner to Debussy

The immense impact of Wagner on the music of his successors is one of the truisms of music history, and its obvious parameters are easy enough to assess. If volumes have been written about Wagner's transformation of music for the stage, about his dramatic aesthetic, about the *Leitmotiv* principle and the "symphonic" conception of dramatic narration, hardly less has been written about his personal transformation of chromatic harmony and its influence on the idioms of composers as different as Verdi, Debussy, a generation of Austro-Germans, or a dozen different nationalists from eastern Europe to the United States. The decade after Wagner's death revealed an accelerating tendency for composers to absorb particular aspects of his chromaticism into their own styles. The most essential aspects of Wagner's chromaticism, especially the freeing of tonal harmony from the bounds of regular phrase structure within a single key, and the projection of continuous modulation through different points of tonal stability indefinitely in time, could be most clearly perceived and understood when correlated with dramatic narration and development, whether in Richard Strauss's operas or in Bruckner's symphonies. But if Wagner's chromaticism is a process, even an overall formal conception, it also deals with specific structures and quanta, and the Tristan chord is one of these, one which for upwards of a century has been identified by name in a vast theoretical literature. We can identify the Tristan chord in its most general sense, as the nonspecific half-diminished seventh chord, or we can be as specific as we like, identifying the Tristan chord by its characteristic spacing, register, or even specific pitch-classes. The point of this essay is that for over a century the Tristan chord, appearing in a work by any of dozens of composers after Wagner, has been emblematic: in whatever context, it never fails to an-

nounce to the listener that the composer knows that *Tristan und Isolde* has been there before. In some works the chord is even symbolic: there is a poetic or dramatic connection, or a psychological one whose meaning may or may not be revealed subsequently but which is undoubtedly present and may be surmised.

Dvořák's *From the New World* Symphony uses the half-diminished seventh as a chromatic slider in a simple modulation; this passage is in a sense a slower and more easily apprehended version of the *Götterdämmerung* passage cited above. The modulation from F minor to F# minor proceeds by chromatic motion of the uppermost part from C to F#, settling on the D# half-diminished seventh chord; the D# is clearly the structural root in the bass, but the melodic structure of the texture above leads the ear much more strongly to a perception of F# minor. (Example 9)

Example 9

Example 10

The beginning of the Scherzo movement of Bruckner's Ninth Symphony (Example 10) illustrates the half-diminished seventh chord as an initial gesture in hovering tonality, hovering about a C# minor added-sixth chord for 41

measures before shifting (one cannot call it resolving) to a more stable D minor. Even Bruckner's spelling is ambiguous, with the added sixth notated as B<sup>b</sup>.

The close-position spacing of the chord has a characteristic sound. Within five years after this Scherzo was first set down, Debussy would include the same chord in root position as the first chordal sonority of his *Prélude à l'Après-midi d'un faune*, thereby establishing the C# minor pole of relative tonal stability in a conspicuously bipolar piece. The progression is comparable to Wagner's "Starke Scheite" motive (Example 11) in that its other component is a dominant seventh sharing two common tones.

Example 11

Debussy's early cantata *La Damoiselle élue*, though it demonstrates a remarkable foreshadowing of many features of his maturity, retains some significant vestiges of his absorption in Wagner, as the following unabashed (and entirely appropriate) recollection of *Tristan* shows:

Example 12

Several writers have pointed to Debussy's alleged quotation of the opening cello gesture from *Tristan* in the middle section of *Golliwogg's Cake Walk*. This resemblance may well be merely accidental. If Debussy had genuinely wanted to cite *Tristan* here, he surely would have chosen the Tristan chord itself, rather than the melody that initiates it. Moreover, what possible symbol-

ism there could be in such a gesture is hard to imagine, one that is surely more esoteric than the *en famille* quotations in Saint-Saëns's *Carnaval des animaux*.

Debussy's most significant tribute to Wagner is of course his opera *Pelléas et Mélisande*, and it may not be an exaggeration to say that his most pellucid tribute to *Parsifal*, whose music he loved best of all of Wagner's, is at the moment in Act IV Scene 4 where Pelléas kisses Mélisande:

Example 13

### After Debussy

What emerges from an examination of a seemingly random collection of twentieth-century works is that the half-diminished seventh chord in general, and particularly the Tristan chord in its characteristic spacing, carried a special cachet or even fascination, whether or not composers may have identified the harmony with Wagner's use of it in *Tristan und Isolde* or any of the symbolic values they attached to it there. What these values may have been is not to be determined here or even at all; what is plain is that composers seized upon the half-diminished seventh sound and displayed it with special prominence. Here are a few examples:

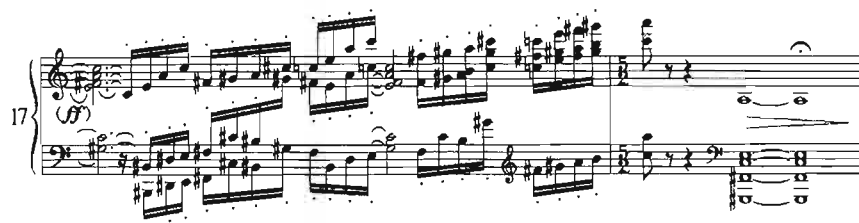
Example 14: Schoenberg: *Gurrelieder*, *Prelude*, just before Song 1 (1901-11)



Example 15: de Falla: La Vida breve (1905)



Example 16: Stravinsky: Solovei (*The Nightingale*), Prelude to Act I (1909)



Example 17: Holst: The Planets, No. 1, Mars (1914)



Example 18: Villa-Lobos: Uirapurú (1917)

The example from Schoenberg's *Gurrelieder* seems not much different from the impressionistic atmosphere of *Das Rheingold*. It is the situation of the chord that lends it special prominence, at the very end of the long orchestral Prelude and rising slowly like a curtain going up on stage, and immediately followed by the first vocal entrance in the work.

Example 15, a sigh of love and dread from Manuel de Falla's opera *La Vida breve*, veils the *Tristan* effect with a different inversion and spacing, but the chromatic wedge motion in the outer voices, and the agreeable mixture of modes (enharmonically C minor with added sixth), are a giveaway.

Stravinsky's *Nightingale* Prelude seems to combine his youthful admiration for the Wagner of *Tristan* and the Debussy of *Nuages*; echoes of some of this can be found in *The Firebird*, written the next year and already a much more original and mature achievement in its harmonic vocabulary. (Our *Nightingale* example is found at the thirteenth measure, at the first point of sustained texture in the opera.)

Holst's *Tristan* chord, surmounting a pedal point, forms a prominent cadential point in the middle of the *Mars* movement. It reduces the six-part nearly polychordal harmony that precedes it, and its top voice, A, connects it to the melody of the section immediately following.

Villa-Lobos's *Uirapurú*, a ballet from his early Paris years, might be less closely connected psychologically to Wagner than to Stravinsky; the scenario shows some obvious resemblances to both Stravinsky's *Firebird* and the "Beauty and the Beast" story (treated by Ravel in *Ma Mère l'Oye* of 1909-10). But the psychological importance of the chord may be guessed from its placement in the very first measure of the work. The G pedal in the high violins is analogous to the G# pedal in the bass of the Holst example.

### Berg

Alban Berg was fully aware of the structural significance of the half-diminished seventh chord, and its flexibility in projecting tonal ambiguity, when he completed his analytical *Guide to Schoenberg's Gurrelieder* in early 1913. He refers to it several times in connection with specific motives, particularly in connection with Waldemar's "Es ist Mitternachtszeit" (No. 7) and the Song of the Wood Dove (No. 10). Here is what he says about the former (the musical example to which he refers, showing measures 572-580, is not included here):

The harmonies shown in the smaller staff under this example demonstrate that in each of the four passages *B, C, D, E*, at  $\oplus$  the often-mentioned half-diminished seventh chord appears, namely: *B*, three times in sequence; at *C*, as if produced from the minor triad on  $B^{\flat}$  by the arrival of the new root *G*; at *D* in the actual treatment of the "Tristan chord" (which resolves to the diminished seventh chord having as its root the same step [*G*] as the preceding half-diminished seventh chord); finally, at  $E\oplus$ , melodically paraphrased. Therefore this group of passages *BCDE*, formed from different components and seemingly *unconnected*, is held *together* as though by *one single* motive, that is, a chord; and each fragment is the

most natural continuation of what goes before it, since each amounts to a *variation* of one and the same thought.<sup>3</sup>

Berg's analysis is silent about the psychological connection of these harmonies with the motivating aspects of the drama. Jens Peter Jacobsen's text for the *Gurrelieder*, in Robert Franz Arnold's translation, is not much like a Wagner libretto in verse, but the legend itself is strongly Wagnerian, with conspicuous parallels to *Der fliegende Holländer* in its account of Waldemar's blasphemy and the Wild Hunt, and to *Tristan und Isolde* in its absorption in love that can be fulfilled only in death. It is no coincidence that the *Gurrelieder's* Tristan-like fixation on love and death is most strongly projected in the two songs mentioned above, and that this fixation is symbolized with particular poignancy by the half-diminished seventh chord. (The only other conspicuously motivic half-diminished seventh chord in the *Gurrelieder* is in the "Wild Hunt" music at the beginning of Part III at "Erwacht, König Waldemars Mannen wert!", this harmony itself deriving from the end of Part II; it reappears shortly before the Melodrama.)

I do not propose to sift Berg's early works for half-diminished seventh chords, even though it might be amusing to compare, say, his *Traumgekrönt* (Seven Early Songs, No. 4) with Debussy's *Recueillement* (Five Poems of Baudelaire, No. 4) in looking for ways in which these composers absorbed augmented-sixth harmony into a nondominant-seventh environment. It is more important to identify and validate Berg's use of the Tristan chord as an actual musical symbol, a phenomenon which occurs with particular significance in two late works, the *Lyric Suite* and *Lulu*, and perhaps others as well. In those works the Tristan chord always appears in the characteristic spacing of Wagner's original, with the minor triad in the upper three voices and the bass a tritone below the third.

The most famous of all of Berg's Tristan chords is, of course, the passage at mm. 26-27 of the *Largo desolato* in the *Lyric Suite*, a literal quote of the first two measures of Wagner's opera seemingly in passing but in the most despairing emotional context. It is perhaps the most obviously symbolic of the many expressive gestures in the *Lyric Suite* that remained for many years a complex assortment of tantalizing details. What Adorno discerned as a "latent opera" in the *Lyric Suite* had, in this quotation, a specifically operatic origin. As Douglass Green wrote in his pathbreaking article of 1976, announcing the discovery and identification of a vocal text underlying the sketch of the *Largo desolato*:

3 Berg, A. *Schönberg: Gurrelieder: Führer (Große Ausgabe)*, Vienna, Universal Edition, No. 3695 (1913), 42-43. See also *Journal of the Arnold Schoenberg Institute*, Volume XVI 1/2 (1993).

There can be no doubt that the referential content running through the successive movements has to do with experiences of love. The quotations from Zemlinsky's *Lyric Symphony* and from Wagner's *Tristan und Isolde*, along with the tempo markings, would show this even if one were not able to discern it from the sound of the music itself.<sup>4</sup>

In 1977, shortly after learning of Green's identification of Berg's use of the Baudelaire-George text, George Perle, in a triumph of investigative musicology, located a copy of the published miniature score of the *Lyric Suite*, marked extensively by Berg as a love offering for Hanna Fuchs-Robettin. Reporting the discovery, Perle commented on Green's findings:

We have suddenly been given a text for the last act of this "latent opera." And a whole new level of meaning now hangs on the *Tristan* quotation when the latter, with all its attendant associations, is seen as a setting of the line from George's translation of the Baudelaire poem: "Nicht einmal Bach und Baum noch Feld noch Herde."<sup>5</sup>

The text line, the eighth in the sonnet, is the psychological center of the poem, and is musically closely preceded by the end of a short palindrome marking the geographical center of the movement itself (between mm. 23 and 24). Berg arranged the serial structure of the *Tristan* quote in detail in the short-score sketch examined by Green; prior to that, he had worked out some details in a pocket memo book.<sup>6</sup> (This sketch is incomplete and very messy, but it does indicate already the apparent distribution of the quartet instruments.) A detailed structural analysis of the *Tristan* quote has been published by Joseph N. Straus.<sup>7</sup>

A more subtle appearance of the Tristan chord in the *Lyric Suite* has not previously been remarked by other writers. This is the final chord of the second movement, *Andante amoroso* (m. 150) sustained after the pizzicato C's in the cello ("Wie aus der Ferne: 'Do -do'") have died away. Here the Tristan chord is transposed down a perfect fifth, but otherwise maintains its characteristic spacing (Example 19). The signification is plain: Hanna's children had run off to play somewhere else, while Alban and Hanna are left to contemplate their love for each other.

4 Douglass M. Green, "Berg's *De Profundis*: the Finale of the *Lyric Suite*," *International Alban Berg Society Newsletter*, V (June 1977), 18.

5 George Perle, "The Secret Program of the *Lyric Suite*," *International Alban Berg Society Newsletter*, V (June 1977), 5.

6 Oesterreichische Nationalbibliothek F21 Berg 479/30, pages 27' and 28.

7 Joseph N. Straus, "Tristan and Berg's *Lyric Suite*," *In Theory Only* VIII/3 (October 1984), 33-41; see also the responses by Douglass M. Green, *ibid.*, VIII/6 (April 1985), 4-5, and by Mark DeVoto, *ibid.*, 8/4-5 (January 1985), 3. See further Claudio Spies, review in *Music Library Association Notes*, September 1982, 204.



Example 19

Here the Tristan chord, when considered together with the low C in the bass, is intervallically similar to the Holst and Villa-Lobos examples already cited.

In *Lulu* Berg used the Tristan chord twice, in Acts II and III. If he used it in Act I, as would be strongly suggested by his predilection for symmetries in other parameters of the opera, it has not been discovered. (He did, however, include Wagner in Act I, at mm. 1143-1147, where fragments of "Treulich geführt" from *Lohengrin* appear at the point where the Prince tells Alwa of his intention to marry Lulu.<sup>8</sup>)

In the first scene of Act II, which dramatically projects a bizarre blend of low comedy and catastrophe, Alwa's declaration of love for Lulu ("Mignon, ich liebe dich," mm. 335-336) is almost a casual interlude, not quite real and rudely interrupted by Lulu's "Ich habe deine Mutter vergiftet." But the seeming unreality of this moment underscores the private psychological meaning of the Tristan chord which is sustained in the middle of the texture: it refers to Alban Berg himself, in the person of the composer Alwa, declaring his love for Hanna Fuchs-Robettin, his secret love and his muse in composing the opera. (Berg wrote to Hanna that he was writing *Lulu* inspired by her, though of course not *about* her.)<sup>9</sup> This Tristan chord is scored for muted strings and vibraphone but is otherwise identical to the archetypal Tristan chord, in precisely the same register and transposition as the second measure of Wagner's opera.

In Act III, mm. 1291-1293, when Lulu is alone with Jack in her bedroom, the Tristan chord is transposed down a minor sixth but otherwise is in its characteristic spacing. Sustained through a little more than two measures, it is the entire accompaniment to Lulu's "Nein, nein, nein, nein!", her last words before the *Todesschrei* (Example 20).

8 Patricia Hall, "Role and Form in Berg's Sketches for *Lulu*," in David Gable and Robert Morgan, editors, *Alban Berg: Historical and Analytical Perspectives*, Oxford, Clarendon Press (1991), 245.

9 *International Alban Berg Society Newsletter*, VI (June 1978), 2-3.



Example 20

As in the *Lyric Suite*, Berg's use of the Tristan chord here symbolizes love and death, but this time with a bitter irony that is unthinkable in the earlier work. With this devastating and final tragic statement, Berg may well have sealed the emblematic Tristan chord for all time. The legacy of Wagner's revolution in operatic structure reaches a climax in *Lulu* as a whole, and Berg's muted backward glance to *Tristan und Isolde* is merely the crowning gesture.