

Melodic Pitch Structures in Hugo Wolf's Augmented-Triad Series

Timothy R. McKinney

Hugo Wolf (1860-1903) was first and foremost a composer of songs, and his position in the history of the Romantic German Lied rests firmly on his genius for representing poetic ideas through musical means. His songs are often described as the ideal synthesis of music and word, the perfect blend of declamation, melody, and harmony. Wolf is credited with having developed an innovative and intensely personal harmonic style as a result of this attempt to express poetic meaning through music, and his music was attacked by many of his contemporaries for its progressive, chromatic harmonic language. He responded to this charge in the following passage of a letter written in 1890:

The reproach [that I] commit successions of unresolved dissonances could do me no harm, for the simple reason that I am in a position to demonstrate how each of my boldest discords can be justified by the strictest rule of the theory of harmony.¹

Wolf does not elaborate further, leaving one to wonder how he might have supported this claim. His songs were written in the period in which the gradual breakdown of traditional tonality begun in the latter half of the nineteenth century prepared the way for the development of new tonal systems in the beginning of the twentieth century. In many of his songs he stretches traditional tonality to its very limits, and, in a few, goes beyond its boundaries.² The present study focuses on one compositional technique that, despite Wolf's words to the contrary, is not adequately explained by traditional theories of harmony: the use of streams of consecutive augmented triads, which I call the "augmented-triad series." I will first consider the overall shape of the augmented-triad series, and then investigate its inner workings through analytical procedures drawn from twentieth-century theories of pitch-class set structures.³

¹Reprinted in *Hugo Wolfs Briefe an Emil Kauffmann*, ed. Edmund Hellmer (Leipzig: Breitkopf & Härtel, 1903), 8. (Der Vorwurf: ungelöste Dissonanzenreihen zu begehnen, konnte mir nichts anhaben, und zwar aus dem einfachen Grunde, weil ich im Stande bin nachzuweisen, wie nach der strengsten Regel der Harmonielehre jede meiner noch so kühnen Dissonanzen zu rechtfertigen ist.)

²For an examination of tonality in Wolf's music, see Deborah Stein, *Hugo Wolf's 'Lieder' and Extensions of Tonality* (Ann Arbor, Michigan: UMI Research Press, 1985); and Timothy R. McKinney "Harmony in the Songs of Hugo Wolf" (Ph.D. dissertation, University of North Texas, 1989).

³The analytical methodology employed follows the theoretical and notational conventions established in Allen Forte, *The Structure of Atonal Music* (New Haven and London: Yale University Press, 1973), with the following exceptions: all pitch-class sets are shown in set-class (prime) form to facilitate comparison, and a lower-case "i" following a set indicates that the set appears in inverted form.

General Characteristics of the Augmented-Triad Series

The augmented triad is an ambiguous sonority in its own right; it is a symmetrical structure, dividing the octave equally into major thirds. Because all of its intervals are the same size, it has no distinct inversions (by interval structure), and it has only four mutually exclusive transpositions. The augmented triad occurs in several functional contexts in traditional tonality, which enhances its inherent ambiguity. Some of the guises in which the augmented triad may appear are illustrated in Figure 1: it occurs in the harmonic minor system when the third degree substitutes for the second degree within the dominant chord, as on the third beat of Figure 1a (marked by an asterisk); it may be formed by raising the fifth of the dominant triad, as in Figure 1b; or through chromatic passing motion it may appear as some type of dominant-preparation, one form of which is seen in Figure 1c.

The augmented triad therefore exists on the fringes of the traditional tonal system, appearing only as a substitute for, or an alteration of, something else. Intense tonal ambiguity ensues when this sonority is pushed to the forefront and used successively at different pitch levels. Parallel streams of augmented triads disrupt any sense of traditional harmonic progression, and in effect suspend functional tonality until traditional harmonic functions return.⁴

Successions of augmented triads are occasionally found in the works of previous nineteenth-century composers (most notably Liszt),

⁴The notion that the effects of tonality could be temporarily nullified through certain chord progressions was held by Arnold Schoenberg, who coined the term “suspended tonality” to describe such passages, and who mentions Wolf in this connection: “As for suspended (*aufgehoben*) tonality, the theme is undoubtedly the crux of the matter. It must give opportunity for such harmonic looseness through its characteristic figurations. The purely harmonic aspect will involve almost exclusive use of explicitly vagrant chords.... Examples from the literature are easy to find in the works of modern composers, as well as in sections of Bruckner’s and Hugo Wolf’s music.” Arnold Schoenberg, *Harmonielehre*, 3rd. ed. (Vienna: Universal Edition, 1922); translated by Roy Carter as *Theory of Harmony* (Berkeley: University of California Press, 1978), 384. See also translator’s note (n. 1), 383.

Figure 1. Some traditional uses of the augmented triad

The image shows a musical score for 'Jesu meine Freude' by J.S. Bach. It consists of three measures labeled 'a', 'b', and 'c'. Each measure features a treble and bass clef with a key signature of one sharp (F#). Measure 'a' shows a sequence of chords: a triad (F#, A, C), a dyad (F#, A), a triad (F#, A, C), and a dyad (F#, A). An asterisk is placed above the first triad. Measure 'b' shows a sequence: a triad (F#, A, C), a dyad (F#, A), a triad (F#, A, C), and a dyad (F#, A). An asterisk is placed above the second triad. Measure 'c' shows a sequence: a triad (F#, A, C), a dyad (F#, A), a triad (F#, A, C), and a dyad (F#, A). An asterisk is placed above the third triad. The text 'Bach, Jesu meine Freude' is centered below the score.

Figure 2. Wolf songs containing augmented triad series

| <u>Song</u> | <u>Series</u> |
|---|-------------------------------------|
| Das verlassene Mägdlein, <i>Gedichte von Eduard Mörike</i> #7 | 4-3-2-3-2 and 2-1-4-1-4 |
| Nimmersatte Liebe, <i>Gedichte von Eduard Mörike</i> #9 | 2-1-4-3-2-1 |
| Lied vom Winde, <i>Gedichte von Eduard Mörike</i> #38 | 4-3-2-3-2-3-2 |
| Bei einer Trauung, <i>Gedichte von Eduard Mörike</i> #51 | 1-4-3-2-1-4-3 |
| Abschied, <i>Gedichte von Eduard Mörike</i> #53 | 3-2-3-2-3 |
| Mignon II, <i>Gedichte von J. W. v. Goethe</i> #6 | 3-2-1-4-3-2-1-4-3 |
| Gutmann und Gutweib, <i>Gedichte von J. W. v. Goethe</i> #13 | 3-2-1-4-3 |
| Die Spröde, <i>Gedichte von J. W. v. Goethe</i> #26 | 2-1-2-1 |
| Dank des Paria, <i>Gedichte von J. W. v. Goethe</i> #30 | 4-3-2-1-4-3 |
| Grenzen der Menschheit, <i>Gedichte von J. W. v. Goethe</i> #51 | 1-4-1-4-3-2-3-2 and 4-3-2-1-4-3-2-1 |
| Mein Liebster ist so klein, <i>Italienisches Liederbuch</i> #14 | 3-2-1-4-3 and 4-3-2-1-4-3 |

and they occur in at least eleven of Hugo Wolf's songs.⁵ Analysis of these songs reveals several consistencies in Wolf's use of consecutive augmented triads: (1) adjacent augmented triads are always a half-step apart; (2) the prevailing motion within a series of augmented triads always involves a chromatic descent or repetition of adjacent pairs of augmented triads (determined by pitch class, not actual spelling); (3) non-chord tones seldom appear; (4) certain bass-note patterns tend to predominate; and (5) consecutive augmented triads are used in association with texts that describe melodramatic, bizarre, supernatural, or mysterious phenomena, or that express extreme emotional or physical sensations or disorientation.

Whereas the present study focuses on linear pitch structure within the augmented-triad series, and not on the relationship of the series to the overall tonal scheme of a given song, it is important to note that the augmented-triad series found in Wolf's songs act as tonally ambiguous interpolations within more or less traditional tonal structures.⁶ The first and last chords of the augmented-triad series usually play a role analogous to those illustrated in Figure 1, and functional designations can be assigned to them. Conversely, I will not attempt to show the chords within the augmented-triad series in relation to a tonal center because such a series cannot be understood in terms of traditional

⁵Liszt's "experimental" music, in which successions of augmented triads are sometimes found, has been examined in Allen Forte, "Liszt's Experimental Idiom and Music of the Early Twentieth Century," *19th-Century Music* 10/3 (Spring 1987), 209-228. Forte also uses concepts drawn from set theory in his analyses, and, combining these concepts with Schenkerian-based analysis, finds certain pitch collections (manifested in either the vertical or horizontal plane) to be significant both at the surface and on deeper structural levels. My study concentrates solely on surface-level linear melodic structures within Wolf's strictly organized successions of augmented triads, and thus has a different focus and scope than the harmonic/tonal approach assumed by Forte to explicate a variety of musical structures.

⁶For discussions of the effect of the augmented-triad series on tonality, see Paul Charles Boylan, "The Lieder of Hugo Wolf: Zenith of the German Art Song" (Ph.D. dissertation, University of Michigan, 1968), 54-56; and McKinney, 501-525. See also the following note.

harmonic progression.⁷ Instead, each chord is designated by an arabic numeral depending upon its pitch content: any augmented triad that contains the pitch class C is labeled as 1, those containing C# as 2, those with D as 3, and those with D# as 4.⁸ The actual spellings of the chords can be taken into account in as much as they shed light on Wolf's thought process, but the use of arabic numerals is a convenient means for defining motion within a given series, and for comparing one series with another. This analytical notation clearly displays the chromatic descent or repetition of adjacent pairs of half-step related augmented triads that always govern Wolf's augmented-triad series, as may be seen in Figure 2.

Wolf's augmented-triad series can be grouped according to the three basic shapes represented in Figure 2. To the first and larger group belong those series that contain a continuous chromatic descent: "Nimmersatte Liebe," "Bei einer Trauung," "Mignon II," "Gutmann und Gutweib," "Dank des Paria," the second series in "Grenzen der Menschheit," and both series in "Mein Liebster ist so klein." To the second group belong those series consisting entirely of the repetition of a single pair of augmented triads: "Abschied" and "Die Spröde." A third, hybrid group contains those series made up of a mixture of repeated pairs and chromatic descents: both series in "Das verlassene

⁷Such an attempt was made in Wilhelm Jarosch, "Die Harmonik in den Liedern Hugo Wolfs" (Ph.D. dissertation, University of Vienna, 1927), 93-94. Jarosch asserts that a succession of consecutive augmented triads "... in no way constitutes suspension of the tonality. On the contrary, the augmented stands clearly for the usual triad and ... [the series] acts as simple connection of the subdominant with the tonic—both with altered fifth—, usually continued in whole-tone sequence." Jarosch offers no justification for finding tonic and subdominant functions within the augmented-triad series other than concluding that Wolf's harmony always works within the boundaries of tonality. (... ist keinerlei Aufhebung der Tonalität zu konstatieren. Im Gegenteil, der übermässige steht deutlich für den gewöhnlichen Dreiklang und ... stellt sich als einfacher Verbindung der Subdominante mit der Tonika—beide mit alterierter Quint—dar, meistens in einer Ganztonsequenz weitergeführt.)

⁸I eschew the option of beginning with zero (0) rather than one (1) because transpositional relationships to a fixed referential point, while implicit, are less significant to the present study than are ordinal designations.

Mägdlein,” “Lied vom Winde,” and the first series in “Grenzen der Menschheit.” The basic shape of an augmented-triad series will affect its pitch content if not its actual intervallic structure. For example, in the absence of non-chord tones, a continuous chromatic descent involving all four augmented triads will encompass all twelve pitch classes whereas a repetition of two augmented triads that are a half-step apart produces only six pitch classes, yet identical interval classes (ic) occur in both shapes.

Wolf consistently organizes the augmented-triad series in the same basic ways, and the sequential structuring of melody, harmony, and rhythm that Wolf imposes on the series lend to it a degree of coherence despite the absence of traditional harmonic progression and tonal paradigms. Also because of this strict sequential structure, and because of his sparing use of non-chord tones, the musical vocabulary of such passages is extremely limited: virtually all simultaneities are augmented triads, set class [0,4,8] (3-12). The texture of these passages is also quite consistent: the piano part contains blocked or arpeggiated augmented triads with little or no melodic elaboration; melodic material usually appears in the voice part.

The basic issues in my study have been to determine the ways in which Wolf creates melodic structures within this very limited vocabulary, to single out those pitch collections employed most often by Wolf, and to determine whether he builds relatively traditional melodic structures out of these pitch collections, or whether he emphasizes those collections that are least likely to form traditional melodic structures.

Pitch Structures within the Augmented-Triad Series

The number of possible melodic motives in the augmented-triad series is small, again due to the symmetrical structure of the augmented triad and to Wolf's sequential organization of the series. A melodic motive appearing completely within one chord of the series could only be set class [0,4,8]. As demonstrated in Figure 3, adding a single non-chord tone to the augmented triad does not create a great deal of

Figure 3. Sets created by adding one tone to the augmented triad

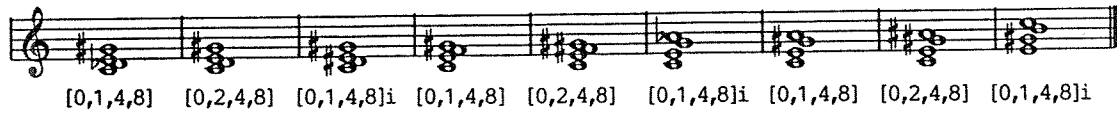


Figure 4. Possible subsets of the hexachord formed by two augmented triads that are one half-step apart

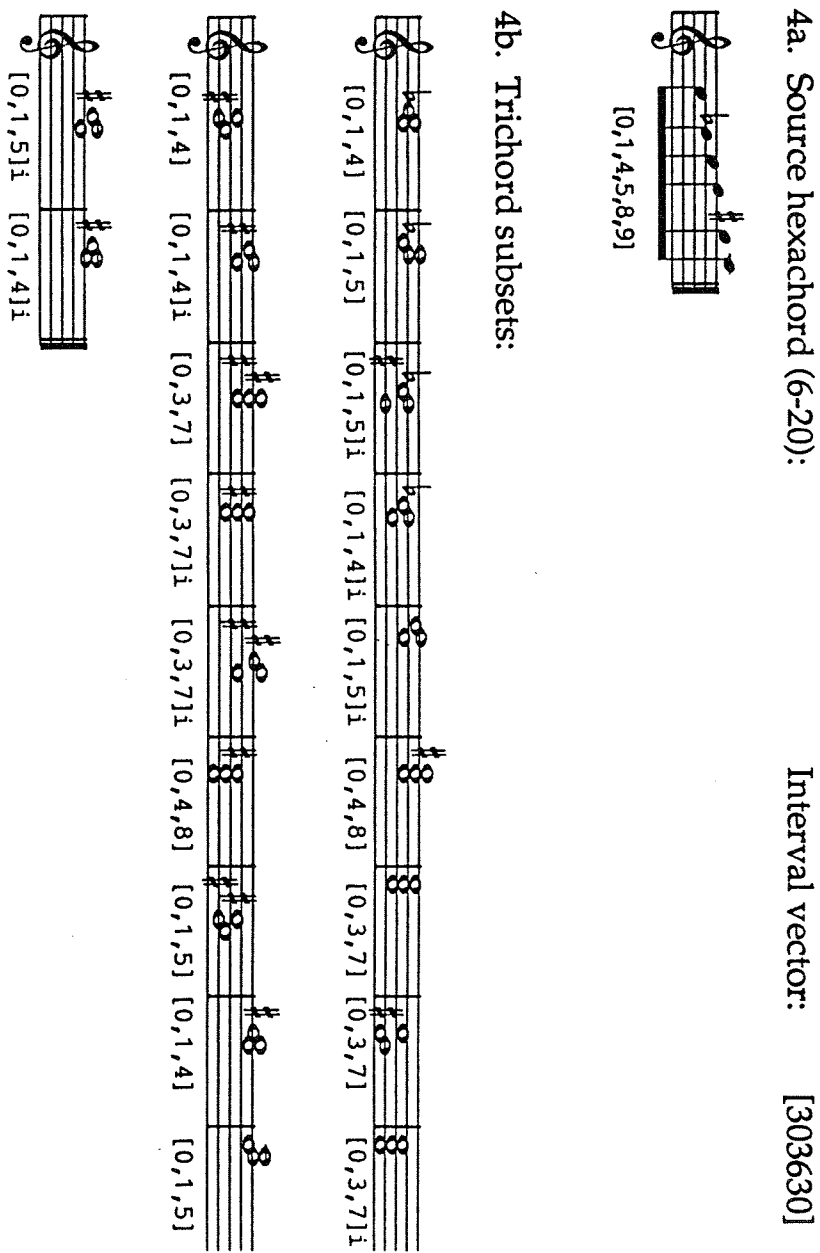


Figure 4 continued

4c. Tetrachord subsets:

$[0,1,4,5]$ $[0,1,4,8]$ $[0,3,4,7]$ $[0,1,5,8]$ $[0,1,4,8]i$ $[0,1,4,5]$ $[0,1,4,8]$ $[0,1,5,8]$ $[0,1,4,8]$

$[0,3,4,7]$ $[0,3,4,7]$ $[0,1,4,8]i$ $[0,1,5,8]$ $[0,1,4,8]i$ $[0,1,4,5]$

4d. Pentachord subsets:

$[0,1,4,5,8]$ $[0,1,4,5,8]i$ $[0,1,4,5,8]$ $[0,1,4,5,8]i$ $[0,1,4,5,8]$ $[0,1,4,5,8]i$

variety because the added tone will be either a half-step or whole-step away from an existing chord tone, resulting in set class [0,1,4,8] or [0,2,4,8] (4-19 and 4-24, respectively).⁹ Wolf solves this problem by using three- or four-note motives, often clearly delineated by rests, that extend across a chord change.

The number of three-note (trichord) and four-note (tetrachord) set classes obtained by using chord tones from two adjacent augmented triads is still quite limited (see Figure 4). The hexachord formed by two augmented triads a semitone apart would be represented in integer notation as [0,1,4,5,8,9], or set class 6-20 (see Figure 4a); thus the only distinct trichords that may be extracted are [0,1,4], [0,1,5], [0,3,7], and [0,4,8] (set classes 3-3, 3-4, 3-11, and 3-12, respectively), as shown in Figure 4b. Of these trichords, [0,3,7], representing the major and minor triads, has the broadest application in traditional melodic writing. Only four distinct tetrachords may be extracted: [0,1,4,5], [0,1,5,8], [0,3,4,7], and [0,1,4,8] (set classes 4-7, 4-20, 4-17, and 4-19, respectively). As shown in Figure 4c, all others represent transpositions or inversions of these four sets. Five-note sets are even more limited; as shown in Figure 4d, all may be reduced to [0,1,4,5,8] (set class 5-21).

Much more variety can be obtained by selecting tones from three adjacent augmented triads, as demonstrated in Figure 5, yet Wolf's linear motives usually involve tones from only two augmented triads. Conversely, the 6-35 hexachord formed by two augmented triads that are a whole-step apart contains even fewer unique subset structures than 6-20: as shown in Figure 6, it contains only three unique trichords, three unique tetrachords, and one unique pentachord. Furthermore, an augmented-triad series built on a whole-step relationship between adjacent triads cycles through only two of the four possible augmented triads, and therefore introduces only six of the twelve pitch classes. Both of these characteristics of a whole-step sequence (reduced numbers of interval classes and pitch classes) favor a half-step sequence in order to obtain a greater sense of motion and a less monotonous collection of intervals with which to work.

⁹Also noted by Forte, "Liszt's Experimental Idiom," 218.

Figure 5. Possible subsets of the set formed by three augmented triads that are a half-step apart

Source Set: [0,1,2,4,5,6,8,9,10]
 Trichords: [0,1,2] [0,1,3] [0,1,6] [0,2,5] [0,2,7] [0,3,6]
 Tetrachords: [0,1,2,4] [0,1,3,4] [0,1,2,5] [0,1,2,6] [0,1,5,6] [0,1,3,5] [0,2,3,6]
 [0,2,3,7] [0,1,4,6] [0,1,5,7] [0,1,4,7] [0,2,4,7] [0,3,5,8] [0,2,5,8]
 Pentachords: [0,1,2,4,5] [0,1,2,5,6] [0,2,3,4,7] [0,1,3,4,7] [0,1,4,5,7]
 [0,1,3,7,8] [0,1,4,5,8] [0,1,3,5,8] [0,1,4,6,9] [0,1,2,5,8]

Figure 6. Possible subsets of the set formed by two augmented triads that are a whole step apart

Source Set: [0,2,4,6,8,10] (6-35) Interval vector: [060603]
 Trichords: [0,2,4] [0,2,6] [0,4,8]
 Tetrachords: [0,2,4,6] [0,2,4,8] [0,2,6,8]
 Pentachords: [0,2,4,6,8]

Because the pitch collections listed in Figures 4a through 4d appear in the context of an augmented-triad series, a restriction is automatically placed on the arrangement of their elements: a major third (or its inversion) will be an adjacency within any ordering compatible with Wolf's augmented-triad series. This has an obvious and immediate effect on voice-leading and melodic construction. For example, the target trichords [0,1,4], [0,1,5], and [0,3,7] each contain three distinct interval classes, one of which is a major third (ic 4). When any of these trichords is drawn from the tones of only two half-step related augmented triads, obviously two of the trichord's elements must come from the same augmented triad; any two tones of an augmented triad will form ic 4, therefore ic 4 will always be an adjacency.

The chance for variety comes with the third and final element of the trichord: it may be separated from one member of the major third by a distance of either ic 1 (minor second or major seventh), ic 3 (minor third or major sixth), or ic 5 (perfect fourth or perfect fifth). As demonstrated in Figure 7, each trichord has only four possible orders (designated O1 through O4) when extracted from the tones of two augmented triads, with each order having a distinct interval-class succession (ics), indicated by the hyphenated interval-class numerals. For example, the first order (O1) for trichord [0,1,4] contains a descending half-step (or ascending major seventh) followed by an ascending major third (or descending minor sixth), resulting in interval-class succession 1-4.

The four orderings of each trichord produce a total of only six unique interval-class successions: ics 1-4 and 4-1 are shared by the first two trichords, ics 3-4 and 4-3 by the first and third trichords, and ics 5-4 and 4-5 by the second and third trichords. Because the members of each of these shared pairs of interval-class successions bear a retrograde relationship, there are actually only three unique collections of successive intervals (1-4, 3-4, and 4-5). Again it is the rigid organization of Wolf's augmented-triad series that reduces the total number of sets, the variety of interval classes within these sets, and the number of orderings for these sets.

Figure 7. Linear orderings for trichords [0,1,4], [0,1,5] and [0,3,7] occurring between two augmented triads that are a half-step apart (Notes beamed together belong to the same chord)

The figure displays three musical staves in treble clef, each showing a sequence of notes with fingerings. The notes are grouped into chords, with some notes beamed together. The trichords are labeled as follows:

- Top Staff:** Labeled $[0,1,4]$ and $[0,1,5]$. The sequence of notes is: 01, 02, 03, 04, 01, 02, 03, 04, 01, 02, 03, 04. Fingerings are indicated below the notes: 1-4, 3-4, 4-1, 4-3, 1-4, 5-4, 4-1, 4-5.
- Middle Staff:** Labeled $[0,3,7]$. The sequence of notes is: 01, 02, 03, 04, 01, 02, 03, 04. Fingerings are indicated below the notes: 3-4, 5-4, 4-3, 4-5.

The Chromatic Descent Series

Turning now to specific musical examples, we shall consider those songs containing augmented triad series governed by a continuous chromatic descent. The series from “Nimmersatte Liebe,” the first song written by Wolf that contains an augmented-triad series, illustrates several of the points made thus far (Example 1). Notice the strict triadic use of the augmented chords in the piano accompaniment while the voice part carries the melody. Although there are numerous registral shifts in the placement of the augmented triads, analyzing the pitch content of the chords in the series reveals the chromatic descent governing the passage (which may be seen in the arabic numerals below each chord: 2-1-4-3-2-1). The bass line in mm. 29-34 is organized sequentially as well, first rising a minor third and then falling a semitone (disregarding octave displacements).

One possible segmentation of the vocal melody is suggested by the alignment of melodic motives with phrases of the text, resulting in the trichord [0,1,4] at the beginning of the series in mm. 29-30, the tetrachord [0,1,2,4] (4-2) in mm. 30-32 and again in mm. 32-34, and the pentachord [0,1,2,4,5] (5-3) in mm. 34-36, which carries over into the return of traditional harmonic functions. The trichord [0,1,4] that opens the series is a subset of both the four- and five-note sets that follow, although its importance in the passage is not readily apparent in a segmentation that follows the phrasing of the text.

Comparison of the melody of “Nimmersatte Liebe” with that of “Bei einer Trauung” in Example 2 reveals that the same basic melodic material is worked out in both.¹⁰ The melody of “Bei einer Trauung” clearly begins with two statements of [0,1,4] in mm. 10-11 and 12-13, followed by the tetrachord [0,1,2,6] (4-5) in mm. 14-15. The arrangement of pitch collections in “Bei einer Trauung” sheds light on how the melody of “Nimmersatte Liebe” should be segmented. In m. 30 of Example 1, the D^b that accompanies the beginning of the second

¹⁰In order to facilitate reading, I have removed the arpeggiation and rhythmic figuration of the piano accompaniment from all examples labeled “reduced,” and display the vertical sonorities in block form in note values equivalent to the harmonic rhythm.

Example 1. "Nimmersatte Liebe," mm. 28-39. Segmentation by alignment with text

28 *(sart)* *immer erregter*
 küss - ten. [Das Mäd - chen hielt in gu - ter Ruh'] | wie's Lämm - lein un - term
 [0, 1, 4] [0, 1, 2, 4]

pp *cresc.*
 Ab: $I_{4/4}^{6/4} \text{ vii}^{04}_2 \text{ V}$ $bVII$ $\leftarrow \text{V}^+$ $\#2$ $\#1$ *ritard.*

32 *op* *>*
 Mes - ser; | ihr Au - ge bat: nur im - mer zu, | je we - - her, desto
 [0, 1, 2, 4] $\#1$ *ritard.* *dim.* *f* *ritard.* bVI_6

$\#4$ $\#3$ $\#2$ $\#1$

Example 2. "Bei Einer Trauung," mm. 9-16, reduced

The musical score is presented in three systems, each with three staves. The first system (mm. 9-10) shows a treble clef staff with a melodic line and a bass clef staff with a chordal accompaniment. The second system (mm. 11-12) continues the melodic and harmonic development. The third system (mm. 13-16) includes a violin part (vii. o. 7/V) and a vocal part (V). The score includes various musical notations such as notes, rests, and dynamic markings. The key signature is B-flat major, and the time signature is 4/4. The score is annotated with Roman numerals (I, III, #1, #4, #3) and intervallic structures like [0,1,2,6]1 and [0,1,4].

Example 3. "Nimmersatte Liebe," mm. 28-37, reduced

The musical score is presented in two systems. The first system covers measures 28 through 34. The second system covers measures 35 through 37. The notation includes a treble clef and a bass clef. The key signature is B-flat major (two flats). The time signature is 3/4. The score includes several annotations:
 - Measure 28: Treble clef, bass clef, and a chord diagram for Ab: V.
 - Measure 29: Treble clef, bass clef, and a chord diagram for Gb: I?.
 - Measure 30: Treble clef, bass clef, and a chord diagram for #2.
 - Measure 31: Treble clef, bass clef, and a chord diagram for #1.
 - Measure 32: Treble clef, bass clef, and a chord diagram for Ab: VI.
 - Measure 33: Treble clef, bass clef, and a chord diagram for #2.
 - Measure 34: Treble clef, bass clef, and a chord diagram for #1.
 - Measure 35: Treble clef, bass clef, and a chord diagram for #2.
 - Measure 36: Treble clef, bass clef, and a chord diagram for #1.
 - Measure 37: Treble clef, bass clef, and a chord diagram for #4.
 - Measure 38: Treble clef, bass clef, and a chord diagram for #3.
 - Intervallic brackets labeled [0,1,4] are placed above the treble staff in measures 28-30, 31-33, and 34-36.
 - A dashed line labeled '8va' indicates an octave shift in the bass staff in measure 33.
 - The number '34' is written above the treble staff at the end of the first system.
 - The number '28' is written above the treble staff at the beginning of the second system.

phrase of the text does so for textual, not musical, reasons: in order to follow the scansion of the text, Wolf needed an anacrusis in the melodic setting. This overlapping of surface motives to accommodate text setting does not affect the underlying structure of the melody, which begins with three successive statements of trichord [0,1,4], as may be seen in Example 3. All five [0,1,4] trichords uncovered in Examples 2 and 3 appear in the same order: O1 in Figure 7.

The process of segmentation applied in Examples 2 and 3 reveals the identical pitch structures of the beginnings of these two passages and the importance of trichord groupings in each. The process of imbrication by trichord, or taking each possible three-note adjacency, allows deeper insight into the organization of each passage and into Wolf's placement of melodic motives. Obviously, the identical structure opening both melodies results in identical imbrication (see Example 4): the [0,1,4] trichords that operate as obvious melodic motives are linked together by an inverted [0,1,4] trichord (O3) followed by trichord [0,1,2] (which is formed by taking one pitch from three separate augmented triads). In both melodies this pattern appears twice, then each ends differently. In "Nimmersatte Liebe" (Example 4a), the [0,1,4] trichord in mm. 33-34 could mark the beginning of another repetition of the sequential pattern, yet the sequential nature of the melody ends when the augmented-triad series concludes in m. 35. The last trichord that is contained entirely within the series is [0,3,7] (O3) in mm. 34-35. This is the only appearance of [0,3,7] within the series, and it is manifested as an enharmonic D^b major chord that smoothly connects the motives of the augmented-triad series to those in the key of A^b major that follow by outlining the subdominant of A^b . Thus the most traditional of the three target trichords appears in a fairly traditional role.

In "Bei einer Trauung" (Example 4b) the melodic motives in the augmented-triad series end before traditional harmonic functions return in m. 16. The last statement of the series motive in mm. 14-15 differs from the previous ones, primarily because the harmonic rhythm of the augmented-triad series accelerates in m. 14. The alteration of this last motive results in two interlocking [0,1,2] trichords in mm. 13-15, followed by an interlocking inverted statement of [0,1,5] (O1). The

Example 4a. "Nimmersatte Liebe," mm. 28-35, imbrication of melody

Musical notation for Example 4a, showing a melody with imbrication brackets and chord symbols. The notation includes a treble clef, a key signature of two flats, and a 4/4 time signature. The melody starts at measure 28. Brackets above the staff indicate imbrication intervals: [0,1,4] and [0,1,2]. Brackets below the staff indicate intervals: [0,1,4]i, [0,1,4]i, and [0,3,7]i. Chord symbols below the staff are: Gb, #2, #1, #4, #3, #2, #1.

Example 4b. "Bei einer Trauung," mm. 10-17, imbrication of melody

Musical notation for Example 4b, showing a melody with imbrication brackets and chord symbols. The notation includes a treble clef, a key signature of two flats, and a 4/4 time signature. The melody starts at measure 10. Brackets above the staff indicate imbrication intervals: [0,1,4] and [0,1,2]. Brackets below the staff indicate intervals: [0,1,4]i, [0,1,4]i, and [0,1,4]i. Chord symbols below the staff are: f: III #1, #4, #3, #2, #1, #4, #3, #1, vii^o₇/V, V, V⁹/iv.

trichord formed by taking the B \flat and D ending the series in m. 15 and extending across the rest to the F that marks the return of traditional harmonic functions in m. 16 is [0,3,7] (O4). Like the concluding [0,3,7] trichord in "Nimmersatte Liebe," the [0,3,7] trichord in "Bei der Trauung" spells the subdominant triad (B \flat) of the key following the augmented triad series (F in this case). The acceleration of the series and the concomitant change in the motive of mm. 14-15 create this correspondence, and also allow Wolf to maintain a consistent two-bar phrase structure. Of further interest is the diminished seventh chord (B-D-F-A \flat) outlined by the continuous succession of ascending minor thirds in the bass line (Example 2): this linear implication becomes a vertical reality immediately after the augmented-triad series ends in m. 15, functioning as the leading-tone seventh of the dominant in m. 16.

The trichord [0,1,4] dominates the melodic structures of the augmented triad series in "Nimmersatte Liebe" and "Bei einer Trauung," appearing on the surface as the most prominent melodic motive, and in inverted form as an important linking component interlocking adjacent statements of the motive. This trichord is also an important constituent in the melodic structure of other augmented-triad series found in Wolf's songs, including the series appearing in mm. 56-59 of "Gutmann und Gutweib" (Example 5a). Segmentation of the melody by obvious melodic motives results in trichord [0,1,4] in mm. 56-57, tetrachord [0,1,3,4] in mm. 57-58, and tetrachord [0,2,3,7] in mm. 58-59, with this latter tetrachord occurring partially within the series and partially within the key of D that follows.

While the target trichords [0,1,4], [0,1,5], and [0,3,7] are all possible linear adjacencies within these pitch collections, once again the process of imbrication (shown in Example 5b) reveals an intervallic substructure in which trichord [0,1,4] prevails: of the seven trichord adjacencies contained entirely within the series, four are [0,1,4] (two in O1 and two in inversion, O3), two are [0,1,5] (O1 and O3), and one is [0,3,7] (O3). As in the two previous examples, the position of trichord [0,3,7] within the melody is again instructive. It is the last trichord adjacency contained entirely within the augmented triad series, and the triad outlined by its elements can again be understood in the key following the series: the E \flat major triad in m. 58 represents the

Example 5a. "Gutmann und Gutweib," mm. 56-59, reduced

56

[0,1,4]i [0,1,3,4] [0,2,3,7]

d: iv #3 #2 #1 #4 #3 i₄⁶ V₇ I

Example 5b. "Gutmann und Gutweib," mm. 56-59, imbrication of melody

56

[0,1,4]i [0,1,5] [0,1,4] [0,3,7]

[0,1,5]i [0,1,4]i

d: iv #3 #2 #1 #4 #3 i₄⁶ V₇ I

Neapolitan of the key of D.

The bass line of this example contains a series of ascending thirds that move in contrary motion to the descending chromaticism of the upper voices. Wolf arpeggiates through a major third within each augmented triad, outlining an apparent seventh chord in each measure, but of greater significance is the ascending series of perfect fifths that fall on strong beats beginning in m. 57: F-C-G-D-A (preceded by G-D in m. 56). These fifths lead to the dominant of the home key, and thus give a greater sense of tonal orientation to this passage than is typical for Wolf's augmented-triad series. While a series of descending fifths would generate even more tonal focus and drive, the descending perfect fifth is not a possible adjacency in a continuous chromatic descent of augmented triads.

In "Dank des Paria" Wolf uses staggered voice leading that creates vertical minor triads over the chromatic bass line within the augmented-triad series (see Example 6a), yet he does not take advantage of the expanded intervallic vocabulary this makes possible. The melody of the series falls into two phrases, each containing five distinct pitch classes: the first forms pentachord [0,1,3,4,7] (5-16), and the second forms pentachord [0,1,2,4,5] (5-3). Imbrication of the first pentachord yields three interlocking [0,1,4] trichords, with the second in inversion (O1-O3-O1, see Example 6b). Although this pentachord contains the trichord [0,3,7] as a subset in both prime and inverted forms, [0,3,7] does not appear as a linear adjacency in the melody. Wolf instead arranges the elements of the pentachord so that all trichord adjacencies form [0,1,4].

A similar construction governs the second statement of the motive in mm. 15-16, although the alteration of its final note changes the interval structure of both the pentachord and its final trichord adjacency. Had Wolf ended the motive with D rather than F#, he would have obtained an exact transposition of the motive in mm. 13-14, and the last trichord in m. 16 would have been invariant with the first trichord of mm. 13-14. As in the three songs previously discussed, however, Wolf chose to alter the last statement of the series motive and thus obtain a greater sense of melodic conclusion as the augmented-triad series completes its course.

Example 6a. "Dank des Paria," mm.13-16, reduced

The image displays two systems of musical notation, each consisting of a vocal line and a piano accompaniment line. The first system is labeled with the number 13 at the beginning of the vocal line. The second system is labeled with the number 15 at the beginning of the vocal line. Both systems include chord diagrams for the piano accompaniment and intervallic patterns for the vocal line.

System 1 (mm. 13-14):

- Chord Diagrams:**
 - Measure 13: e (pedal point), $\#4$, eb , $\#3$, $\#2$
 - Measure 14: $\#4$, $\#3$, $\#2$
- Intervallic Pattern:** $[0, 1, 3, 4, 7]$

System 2 (mm. 15-16):

- Chord Diagrams:**
 - Measure 15: f (pedal point), $\#1$, e , $\#4$, $\#3$
 - Measure 16: $\#4$, $\#3$
- Intervallic Pattern:** $[0, 1, 2, 4, 5] i$

Example 7a. "Mein Liebster ist so Klein," mm. 45-49

45 *heftig und etwas beschleunigend*

Ver-wünscht... sein al-le Flie-gen, Schna-ken, Brem-sen-

p *dim.* *p*

bb: i bII6 #3 #2 #1 #4 #3 i

Example 7b. "Mein Liebster ist so Klein," mm. 54-58

54 *heftig und etwas beschleunigend* *immer zurückhaltender*

Ver-wünscht... sein al-le Flie-gen, Schna-ken, Mü-cken- und wer sich,

ff *dim.* *p*

f: III6 #4 #3 #2 #1 #4 #3 bII (N)

In other songs the continuous nature of the melody within an augmented-triad series makes segmentation more subjective, as in the pair of brief series in mm. 46-49 and 54-57 of “Mein Liebster ist so klein” (Example 7). These two passages are alike in organization yet differ in content. Wolf begins each by drawing one note from each augmented triad, shifting to two notes per chord in mm. 48 and 56. The series of parallel intervals beginning in mm. 48 and 55 stand out as obvious organizing features within each passage, and Wolf uses these two-note motives to accompany the list of two-syllable names of troublesome insects contained in the poetic text: *Fliegen* [flies], *Schnaken* [gnats], and *Mücken* [midges]. In the first passage he uses perfect fourths, and in the second passage minor thirds. The perfect fourths and minor thirds fall across chord changes, with a series of descending major thirds falling within each chord in both series (notice the chord changes on the offbeats). These are the most simply organized of all of Wolf’s augmented-triad series, with the chromatic descent explicitly present in each voice of the texture.

While these melodic phrases clearly contain a series of two-note motives, the process of imbrication at the trichord level yields interesting results (Examples 8a and 8b). The first trichord in each phrase draws one note from each of the first three augmented triads, forming [0,1,2] in the first passage and [0,1,3] in the second. In Example 8a the second trichord also derives from three augmented triads, with [0,1,6] resulting. The next two adjacencies form [0,1,5] (O2 and O4), with the final adjacency carrying past the conclusion of the series and forming [0,2,7].

While the parallel interval succession in the first series emphasizes trichord [0,1,5], the corresponding succession in the second series contains primarily [0,1,4]: after the initial [0,1,3] trichord, the next four possible trichord adjacencies all form [0,1,4], with the second and fourth of these in inversion. The [0,1,4] trichords appear in O2 and O4 alternately, whereas all of the [0,1,4] trichords in the preceding examples appear in O1 and O3. The difference in order is created by the constant leaps in the parallel interval succession: the half-step necessary for O1 and O3 is not present in mm. 55-57. The last trichord is again drawn from three separate augmented triads, resulting in

Example 9a. "Grenzen der Menschheit," mm. 96-11, reduced

The image displays two systems of musical notation for Example 9a. The top system, labeled with measure numbers 96, 97, and 98, shows a piano part in 4/4 time with a treble clef and a bass part in 4/4 time with a bass clef. The piano part contains notes G4, A4, B4, and C5. The bass part contains notes D4, E4, F4, and G4. A bracket above the piano part is labeled [0,1,2,3,7]i. A bracket below the bass part is labeled [0,1,5,8]. The bottom system, labeled with measure numbers 100, 101, and 102, shows a piano part with a treble clef and a bass part with a bass clef. The piano part contains notes G4, A4, B4, and C5. The bass part contains notes D4, E4, F4, and G4. A bracket above the piano part is labeled [0,1,4,5]. A bracket below the bass part is labeled [0,1,5,8]. The key signature is D major (one sharp) and the mode is VII6. The tempo is marked #1, #4, and #3.

Example 9a continued

The image displays two systems of musical notation. The top system, starting at measure 104, features a guitar part on the right and a violin part on the left. The guitar part includes a bracketed section with the interval set $[0, 1, 4]$ and a b^{VII}_6 chord diagram. The violin part includes a bracketed section with the interval set $[0, 1, 2, 5]$ and a $\#^{\text{II}}_6$ chord diagram. The bottom system, starting at measure 109, continues the guitar part with a V/V chord diagram and the violin part with a VI^{II}_6 (N_6) chord diagram. A dashed line separates the two systems. The guitar part in the bottom system includes a V/V chord diagram and a VI^{II}_6 (N_6) chord diagram. The violin part in the bottom system includes a VI^{II}_6 (N_6) chord diagram.

Example 9b. "Grenzen der Menschheit," mm. 96-110, imbrication of melody

The musical score is presented in three systems, each in bass clef. The first system (mm. 96-100) features a melodic line with notes G4, A4, Bb4, C5, D5, E5, F5, G5. Intervallic annotations include [0,1,2] (G-A), [0,1,5]i (G-E), [0,1,5] (G-C), [0,1,5]i (G-F), [0,1,5] (G-D), [0,1,5]i (G-E), [0,1,5] (G-C), [0,1,5]i (G-F), and [0,1,5] (G-D). Accidentals #4, #3, #2, #1, and #4 are placed below the staff. The second system (mm. 101-105) features notes G4, Ab4, Bb4, C5, D5, E5, F5, G5. Annotations include [0,1,4] (G-Ab), [0,1,4]i (G-Bb), [0,1,5]i (G-C), [0,1,4]i (G-D), [0,1,4]i (G-E), [0,1,4] (G-F), [0,1,4]i (G-G), and [0,1,2] (G-Ab). Accidentals #3, #2, and #1 are placed below the staff. The third system (mm. 106-110) features notes G4, Ab4, Bb4, C5, D5, E5, F5, G5. Annotations include [0,1,4] (G-Ab) and [0,1,4] (G-Bb). An accidental #1 is placed below the staff.

[0,2,5]. In both series Wolf breaks off the strict sequence to allow the series to end with an interval that gives a sense of closure to the phrase: a perfect fifth (following perfect fourths) in the first passage and a perfect fourth (following minor thirds) in the second passage.

Another melody whose smaller segments are joined in continuous fashion occurs in the second series of “Grenzen der Menschheit” (the first series is discussed below). A possible segmentation is suggested by the manner in which Wolf uses rhythm to highlight sections of the text (see Example 9a). The first five-note segment, pentachord [0,1,2,3,7] (5-5), is clearly demarcated by the rest in m. 100 (accompanying a comma in the text). There are no further rests in the next ten measures, yet Wolf constructs a short-long rhythmic pattern that effectively divides the melody into four units of roughly the same size. Utilizing this segmentation yields tetrachord [0,1,5,8] (5-20) in mm. 100-102, tetrachord [0,1,4,5] (4-7) in mm. 103-104, trichord [0,1,4] in mm. 105-106, and tetrachord [0,1,2,5] (4-4) in mm. 107-110. This last tetrachord enters just after the augmented-triad series ends, yet it is clearly a continuation of the previous melodic statement. While none of these three tetrachords are precisely the same, trichord [0,1,5] is represented in all three, and trichord [0,1,4] in the second and third.

As in both series in “Mein Liebster ist so klein,” the second series in “Grenzen der Menschheit” contains a succession of major thirds, in this case beginning in m. 99 and continuing until the conclusion of the series in m. 106, but not in strict chromatic descent. Although trichord [0,3,7] is a possible linear adjacency, imbrication of the melody demonstrates that all trichord adjacencies involving tones from two augmented triads are either [0,1,5] (O1 and O3) or [0,1,4] (O1 and O3); trichord [0,3,7] does not appear (Example 9b). The series begins with two [0,1,2] trichord adjacencies formed by taking one tone from each chord. The first [0,1,2] trichord returns at the same pitch level in mm. 106-108, connecting the augmented-triad series to the traditional harmonic functions that follow. Through the chromatic nature of the chord succession in mm. 107-110 Wolf manages to maintain the same basic linear groupings used in the series, with the final [0,1,4] and [0,1,5] trichords in these measures appearing

completely outside the boundaries of the series. The requirements of functional harmonic progression affect the ordering of the final [0,1,5] trichord: of the eight [0,1,5] trichords in Example 9b, only the final one appears in O4; all others are the more common O1 and O3.

The bass line of this passage, like that of “Bei einer Trauung,” outlines the diminished seventh sonority: the leading-tone seventh (G# diminished seventh) of the dominant appears in the bass in mm. 97-100, is passed to the “tenor” in mm. 101-107, and functions vertically in m. 109. The bass shifts a major third within augmented triad #1 in mm. 100-101, and then outlines the leading-tone seventh (C# diminished seventh) of the tonic. The tenor earlier outlined a D# diminished seventh in mm. 97-100, thus all three possible diminished seventh chords are present at some point in the series. Although Wolf never does so, it is possible to have all three at the same time: a strict transposition of the augmented triad by ic 3 will outline the three unique diminished seventh chords simultaneously.

There are two further aspects of this passage that are of special interest. First is Wolf's attempt to capture poetic images in the overall shape of the series. The series 4-3-2-1-4-3-2-1 is a cyclical structure, and it accompanies a text containing several cyclical symbols: “A small ring circumscribes our life, and many generations link in the infinite chain of their existence.”¹¹ The second special aspect is the repetition in mm. 104-105 of pitch class A after an intervening F. This is the only instance within a series characterized by a continuous chromatic descent in which Wolf repeats a tone in a melody through arpeggiation of the augmented triad. Because only one pitch is repeated, the pitch content of the linear adjacencies intersecting this measure remains unaffected while the order of the elements of the adjacencies changes; i.e., A-F-G# (O4) becomes F-A-G# (O3).

This latter observation highlights an unusual characteristic of Wolf's melodic constructions within augmented-triad series shaped by a continuous chromatic descent: pitch classes are frequently repeated immediately after their introduction, but in only one instance is a pitch

¹¹“Ein kleiner Ring begrenzt unser Leben, und viele Geschlechter reihen sich dauernd an ihres Daseins unendliche Kette.”

repeated after arpeggiation within a single triad. The significance of this finding is that Wolf favors certain linear adjacencies not only by emphasizing them over other possible adjacencies, but also by not blurring their outlines through arpeggiation or repetition of their members. In this manner he retains certain sets of intervals as distinct motives while shifting them to different pitch levels.

Wolf here addresses the same problem that was faced by early “atonal” composers such as Schoenberg, Webern, and Berg, and arrives at a solution similar to theirs: when tonality is no longer the sole governing force behind melodic structure, when the twelve pitch classes are not placed in a hierarchy in relation to one referential tone, but are “related only with one another,”¹² then certain collections and successions of interval classes selected by the composer naturally come to the forefront as a means of creating a cogent musical structure.

The continuous chromatic descent and avoidance of non-chord tones that characterize Wolf’s organization of the augmented-triad series force him to introduce new pitch classes at each chord change, but they do not force him to introduce each possible pitch class within an augmented triad. In fact, trichord [0,4,8] never appears as a linear adjacency in the melody of any of Wolf’s augmented-triad series. While Wolf does not introduce all twelve pitch classes in succession, as did Liszt in the opening theme of his *Eine Faust-Symphonie*, he does adhere to a principle related to that adopted by early twelve-tone composers: once a pitch class is introduced, Wolf does not repeat it (except for immediate repetitions) until the augmented triad in which it appears returns.

Thus on the one hand Wolf places successive augmented triads in a continuous chromatic descent that causes a constant influx of new chromatic pitch classes, yet on the other hand he limits the total number of pitch classes introduced in the melody by not arpeggiating through each chord tone. In addition to the suggestion made above that Wolf wished to preserve the identity of certain interval collections, there is

¹²Arnold Schoenberg, “Composition with Twelve Tones (1)” (1934), in *Style and Idea: Selected Writings of Arnold Schoenberg*, ed. Leonard Stein (Berkeley: University of California Press, 1984), 218.

another, eminently more practical reason why he avoids introducing each possible pitch class and avoids repeating a pitch class after it has been introduced: the melodies in question were written for the human voice. Wolf's emphasis of certain interval collections (or "motives") and his reduction of the number of pitch classes introduced afford singers a better chance of successfully negotiating these difficult passages by limiting the total number of pitches they must find and by giving them a pattern by which to find these pitches.

The Repeated-Pair Series

The second category of basic shapes within Wolf's augmented-triad series encompasses two series that consist entirely of a single pair of alternating augmented triads. In addition to a different overall method of organization, the presence of non-chord tones distinguishes the repeated-pair series from those containing continuous chromatic descents. The first repeated-pair series occurs in "Die Spröde" and represents the only instance in which Wolf constructs a completely diatonic melodic line against the backdrop of the augmented-triad series (Example 10). When taken out of context the brief melodic statement in mm. 27-28 of this song makes perfect sense in the key of A minor, although the accompanying augmented triads do not. Wolf creates this traditional-sounding melodic structure by filling in the [0,3,7] trichord (or the A minor triad) in m. 28 with passing non-chord tones and by avoiding trichord [0,1,4] as a linear adjacency (see Example 10b). Both of these factors render this an unusual example in comparison to Wolf's other augmented-triad series considered thus far, in which he uses only chord tones in the melody and in which he emphasizes the [0,1,4] trichord. Non-chord tones also appear in the accompaniment of "Die Spröde," forming tetrachord [0,1,3,4] throughout the right-hand figure in mm. 27-30.

Not only are the augmented triads themselves repeated, but also the entire texture of the piano accompaniment, including a reiterated semitone in the bass. This is true of the second example of a repeated-pair series as well, which is found in mm. 32-39 of "Abschied"

Example 10a. "Die Spröde," mm.27-29

27 *pp*

schalk - haft blick - te sie ein Weil - chen;

pp

←Bb : I #2 #1 #2 #1 →c 6/4

Detailed description: This musical score shows three staves. The top staff is the vocal line, starting at measure 27 with a piano (*pp*) dynamic. The lyrics are "schalk - haft blick - te sie ein Weil - chen;". The middle staff is the right-hand piano accompaniment, also marked *pp*, featuring a complex rhythmic pattern with many sixteenth notes. The bottom staff is the left-hand piano accompaniment, showing a bass line with chords and some melodic movement. Below the bottom staff, there are harmonic annotations: "←Bb : I #2 #1 #2 #1 →c 6/4", indicating a sequence of chords and a key signature change to C major.

Example 10b. "Die Spröde," mm.27-29, imbrication of melody

27

[0,1,3]i

[0,1,5] [0,1,3]

[0,2,7] [0,2,4]

Detailed description: This score shows a single staff with a treble clef and a key signature of three sharps (F#, C#, G#). The melody starts at measure 27. Above the staff, there are four brackets representing intervals: [0,1,3]i, [0,1,5], [0,1,3], and [0,2,4]. Below the staff, there are two brackets representing intervals: [0,2,7] and [0,2,4]. The melody consists of eighth and sixteenth notes, with some rests.

McKinney, Wolf's Augmented-Triad Series

Example 11a. "Abschied," mm. 32-41

32

[0,1,4,7]i [0,1,3,4,7]i

Sie ge-ben zu, — dass das ein Aus-wuchs is."

[0,1,4,8]i [0,1,4,8]i

#3 #2 #3 #2 #3

37

— Das? Al - le Wet - ter — ge - wiss! El

V₇ I

Example 11b. "Abschied," mm. 32-41, imbrication of figuration

The image shows a musical score for two staves, measures 32 through 41. The notation includes various fingering brackets and labels. The labels are as follows:

- Measure 32: #3
- Measure 33: #2
- Measure 34: #3
- Measure 35: #2
- Measure 36: #3
- Measure 37: #3
- Measure 38: #2
- Measure 39: #3
- Measure 40: #3
- Measure 41: #3

The score also features several fingering brackets with numbers in brackets, such as [0, 1, 3]i, [0, 3, 7]i, [0, 1, 5]i, [0, 1, 6]i, and [0, 3, 7]i. The notation is in a 2/4 time signature with a key signature of two flats (B-flat and E-flat).

(Example 11a) and which reads 3-2-3-2-3. Wolf usually provides the singer with an independent part in his songs in general, and in the augmented-triad series in particular, yet in “Abschied” the voice merely doubles a portion of the figuration in the piano. A non-chord tone appears within both chords (A in m. 32, G# in m. 33), forming tetrachord [0,1,4,8] in each instance. The segments of the vocal melody (delineated by rests) cut across chord changes, however, with tetrachord [0,1,4,7] occurring in mm. 33-34 and pentachord [0,1,3,4,7] in mm. 35-36 (created by adding F# to the preceding tetrachord), followed by the octave Ds in mm. 37-38.

The vocal melody retains a fairly traditional outline, with a D major/minor triad serving as its structural framework. Although the relationship of this triad to a tonal center of E \flat is not readily apparent, D clearly functions as a leading tone to E \flat in m. 39 when the final augmented triad is transformed into the dominant of E \flat .

The arrangement of trichord adjacencies also differs from that found in the continuous chromatic-descent series, primarily because of the non-chord tones (Example 11b). Due to the repetitive nature of the passage, only the first seven interlocking trichord adjacencies need be listed (the rest are repetitions of these): [0,1,5], [0,1,3], [0,3,7], [0,1,5], [0,3,7], [0,1,4], and [0,1,6] (an additional [0,3,7] trichord occurs in the voice in mm. 35-36). No single trichord is emphasized over the others, and more different trichords appear (five altogether) than is typical for Wolf's augmented-triad series.

In both repeated-pair series the use of non-chord tones allows Wolf to introduce a pitch class in addition to the six contained in the two augmented triads. In both examples the added tones are a half-step away from the chord tones to which they move. The fact that non-chord tones do not appear in the melodies of continuous chromatic-descent series, and the fact that the non-chord tones in the repeated-pair series act as leading tones to chord tones, suggest the hypothesis that Wolf uses non-chord tones in this manner to enhance the sense of motion within the series and to offset the prevailing stasis of its repeated chordal pairs and figuration.

The Hybrid Series

The third category of basic shapes for the augmented-triad series includes those that contain a mixture of chromatic descents and repeated pairs. The first series comes from “Lied vom Winde,” and crops up within the song’s prevailing tonality of F# minor (see Example 12a). Tonic chords appear in mm. 15 and 25, with the succession of vague harmonies in mm. 16-17 dissolving into an augmented-triad series in mm. 18-24. The first two augmented triads are not immediately recognizable because Wolf supplies each with an added tone: he adds E to G-B-D# in m. 18 and F to Gb-Bb-D in m. 19. As in “Abschied,” both verticals thus formed are tetrachord [0,1,4,8], with the second in inversion (in “Abschied” both were inverted). The remaining triads appear without added tones, and the overall series reads 4-3-2-3-2-3-2. The final augmented triad becomes the dominant of F# minor when A is lowered to G# in m. 24.

The melody occurring in the augmented-triad series in mm. 18-24 is a direct continuation of the melodic statement beginning in m. 15, the first measure of the given excerpt. After interlocking [0,1,3] and [0,1,2] trichords in mm. 15-17, the series begins with a [0,1,4] trichord that is identical in order (O1) to those opening the chromatic-descent series in “Nimmersatte Liebe,” “Bei einer Trauung,” and “Dank des Paria” (see Example 12b). The next trichord adjacency is [0,3,7] (O3), followed by [0,1,4]; because of the repetitive nature of the remainder of the melodic line all further trichord adjacencies contain F, Gb, and Bb, forming trichord [0,1,5].¹³ All three tones belong to the diatonic set of F# major, and the leading-tone function of the reiterated F in this example is analogous to that of the D in “Abschied.”

Although the series in “Lied vom Winde” begins with a melodic structure similar to those found in chromatic-descent series, when the

¹³The ordering of the [0,1,4] and [0,1,5] trichords that are drawn from three chords of a repeated-pair series may not fall into the four orders given in Figure 7 because the major third no longer has to be an adjacency. The other possible orders are 1-3 (O5) and 3-1 (O6) for [0,1,4], and 1-5 (O5) and 5-1 (O6) for [0,1,5]. Examples include the O6 arrangement of trichord [0,1,4] in mm. 19-21 of Example 12b, and the O6 arrangement of trichord [0,1,5] in mm. 21-23 of Example 12a.

Example 12a. "Lied vom Winde," mm. 15-24

15 *pp* *flüsternd*

„Kind-lein, wir fah-ren seit viel vie-len Jah-ren durch die weit wei-te

[0,1,4,8] [0,1,4,8] i

ppp

f#: i #4 #3

[0,1,5]

20 Welt, und möch-ten's er-fra-gen, die Ant-wort er-ja-gen,

cresc.

mf

#2 #3 #2 #3 #2 v⁷₆₋₅

The image shows a musical score for 'Lied vom Winde' by McKinney, spanning measures 15 to 24. It features a vocal line and a piano accompaniment. The key signature is D major (two sharps). The vocal line starts at measure 15 with the lyrics '„Kind-lein, wir fah-ren seit viel vie-len Jah-ren durch die weit wei-te'. The piano accompaniment is marked *ppp* and includes chord diagrams for f#: i, #4, and #3. A bracketed interval [0,1,5] is shown above the piano part. The score continues to measure 20 with the lyrics 'Welt, und möch-ten's er-fra-gen, die Ant-wort er-ja-gen,'. The piano accompaniment includes a *cresc.* marking and chord diagrams for #2, #3, #2, #3, #2, and v⁷₆₋₅. The piece concludes in measure 24.

Example 12b. "Lied vom Winde," mm. 15-24

16

[0,1,3]i

[0,1,2]

#4

#3

[0,1,4]

[0,3,7]i

#2

#3

[0,1,4]i

[0,1,5]

#2

repeated pair of augmented triads ensues in m. 19 the pitch-class and interval-class structures become as repetitive as the chords they accompany. As in the chromatic-descent series, however, trichords [0,1,4] and [0,1,5] remain the primary linear adjacencies.

The same limitations imposed on the series in “Lied vom Winde” are also operative in the first series of “Grenzen der Menschheit” (Example 13a), which reads 1-4-1-4-3-2-3-2. The melody falls into two phrases; the first contains tetrachord [0,1,4,5] and the second only a pair of alternating pitch classes (B \flat and A). Wolf uses a non-chord tone in both phrases: C in m. 47 and B \flat in m. 51. Both non-chord tones act as half-step neighbors to chord tones, and both belong respectively to the preceding augmented triad that lies a half-step higher, so that neither non-chord tone introduces a new pitch class.

Imbrication of the first phrase once again reveals an emphasis on trichords [0,1,4] and [0,1,5] as linear adjacencies, all in O1, as shown in Example 13b. These trichords result from the juxtaposition of major thirds drawn from each augmented triad, as was the case in “Gutmann und Gutweib” (Example 5), “Mein Liebster ist so klein” (Example 7), and the second series of “Grenzen der Menschheit” (Example 9). The bass line is essentially chromatic: although the augmented triads appear in broken form, the pitch on each successive downbeat is a half-step away from that on the preceding downbeat (Example 13a).

Unlike the repeated-pair series, these first two examples of mixed series do not differ substantially from the chromatic-descent series. This is not true of the final example of a mixed series, which is the most well known of all of Wolf’s augmented-triad series, occurring in “Das verlassene Mägdlein.” This is also the series most clearly governed by traditional harmonic relationships (see Example 14a).¹⁴ The first

¹⁴An analysis of “Das verlassene Mägdlein” appears in Wallace Berry, *Structural Functions in Music* (Englewood Cliffs, New Jersey: Prentice-Hall, 1976), 138-142. Other discussions of this song are found in Stein, *Hugo Wolf's “Lieder,”* 9-10; Jean Haywood, *The Musical Language of Hugo Wolf* (Elms Court, Ilfracombe, Devon: Arthur H. Stockwell, 1986), 35-41; Leon Plantinga, *Romantic Music: A History of Musical Style in Nineteenth-Century Europe* (New York: W. W. Norton, 1984), 457; Boylan, 46-47, 55-56, and 316-322; and McKinney, 515-518.

Example 13a. "Grenzen der Menschheit," mm. 44-51, reduced

The image displays two systems of musical notation, each consisting of three staves. The top staff of each system is in treble clef, and the bottom two are in bass clef. The first system is labeled with measure numbers #3, #2, #3, and #2 from left to right. The second system is labeled with measure numbers #1, #4, #1, and #4 from left to right. A large bracket on the right side of the second system spans measures #1, #4, #1, and #4, with the label $[0, 1, 4, 5]$ written vertically next to it. The notation includes various notes, rests, and accidentals (sharps, flats, and naturals). The first system also includes a '48' annotation above the first staff and a 'b' below the first staff of the second measure.

Example 14a continued

The musical score consists of three staves. The top staff is a treble clef with a 32-measure bracket. The middle staff is a treble clef. The bottom staff is a bass clef. The score is divided into six measures, each with a label below it: #4, #1, #4, e, E, and A: V₅. A bracket labeled [0, 1, 5, 8] spans the first four measures. The notes in the staves are as follows:

| Measure | Label | Staff 1 (Treble) | Staff 2 (Treble) | Staff 3 (Bass) |
|---------|-------------------|------------------|------------------|----------------|
| 1 | #4 | G4, A4, B4 | G4, A4, B4 | G4, A4, B4 |
| 2 | #1 | G4, A4, B4 | G4, A4, B4 | G4, A4, B4 |
| 3 | #4 | G4, A4, B4 | G4, A4, B4 | G4, A4, B4 |
| 4 | e | G4, A4, B4 | G4, A4, B4 | G4, A4, B4 |
| 5 | E | G4, A4, B4 | G4, A4, B4 | G4, A4, B4 |
| 6 | A: V ₅ | G4, A4, B4 | G4, A4, B4 | G4, A4, B4 |

Example 14b. "Das verlassene Mägdlein," mm. 19-34, emphasis of minor triads

Musical score for Example 14b, showing two staves of music. The first staff (measures 19-29) includes chord symbols: $Ab: I$, $V+^6_4$, I , $V+^6_4$, $\#3-2-3-2$, $Bb: V+ I$, $V+^6$, and I . Interval brackets above the staff include $[0,3,7]$ and $(\#4)$. The second staff (measures 30-34) includes chord symbols: $\#2$, $\#1$, $\#4$, $\#1$, $\#4$, and $\rightarrow e$. Interval brackets above the staff include $[0,3,7]$ and $V+^6$.

Example 14c. "Das verlassene Mädchen," mm. 19-34, imbrication of melody

Musical score for Example 14c, showing two staves of music. The first staff (measures 19-29) includes interval brackets: $[0,1,4]$, $[0,1,5]i$, $[0,3,7]$, and $[0,1,4]$. The second staff (measures 30-34) includes interval brackets: $[0,1,5]i$, $[0,1,4]i$, $[0,3,7]$, $[0,1,3]i$, and $[0,1,5]$.

augmented triad functions as the augmented dominant of $A\flat$, a progression that is reinforced by its repetition in m. 19-22. It is only after this relationship has been established that the augmented-triad series begins in earnest: the augmented dominant of $A\flat$ (augmented triad #4) in m. 22 is followed by augmented triads #3 and #2 in mm. 23 and 24, which are then repeated in mm. 25-26. The augmented triad ending this group in m. 26 proves to be the augmented dominant of $B\flat$ in m. 27. The tonal center briefly stabilizes on $B\flat$ in mm. 27-30, succeeded by a resumption of the series in mm. 31-34. The last triad in the series is gradually transformed into the dominant of A minor, the home key, in mm. 34-37.

The vocal melody of this passage falls into three phrases, each containing four distinct pitch classes. The first and second phrases contain tetrachord [0,1,4,8] while the third phrase contains [0,1,5,8] and is the only phrase accompanied entirely by augmented triads. The fact that these tetrachords are placed over longer spans than is usual for the augmented-triad series, and that their elements often appear more than once within a motive, distinguish the melodic structure of "Das verlassene Mägdlein" from the other examples previously discussed. It seems that in this song Wolf manipulates pitch collections in a more traditional fashion, just as he organized the augmented-triad series in such a way that traditional harmonic functions are more in evidence.

There are also two distinct differences in the arrangement of trichord adjacencies in this series: (1) Wolf repeats pitch classes freely, thus not preserving strict order relations within the trichords as he does in the continuous chromatic-descent series, and (2) more emphasis is placed on trichord [0,3,7] (see Example 14b). It is stated overtly in mm. 27-28 and 32-33 (indicated by brackets), and in loosely disguised form in mm. 21-22, 29-30, and 33-34 (indicated by heavy beams). Imbrication at the trichord level demonstrates that trichords [0,1,4] and [0,1,5] remain important linear adjacencies within the largely triadic contours of the melody (see Example 14c). Trichords [0,1,4] and [0,1,5] also appear as prominent motives in the upper line of the piano accompaniment in mm. 23-34 (Example 14a), although they are not strictly ordered either.

Beyond the Frontiers

Again it must be stressed that the more-or-less traditional melodic structures appearing in “Die Spröde,” “Abschied,” and “Das verlassene Mägdlein” represent exceptions to Wolf’s normal method of organizing melodic material within the augmented-triad series. Wolf is usually more concerned with manipulating three- and four-note pitch collections than with forming traditional melodies, a concern that is well evidenced in the series found in mm. 32-44 of “Mignon II” (“Nur wer die Sehnsucht kennt,” Example 15a). While this is a chromatic-descent series, it has been reserved for this point because its intricate mosaic of pitch structures sets it apart from the preceding examples.

The melody in the voice opens with a clear statement of trichord [0,1,4] (O1), as was the case in “Nimmersatte Liebe,” “Bei einer Trauung,” “Gutmann und Gutweib,” “Lied vom Winde,” and “Das verlassene Mägdlein” (in fact, the ordering of the elements of the first five-note pitch collection is identical to that of “Nimmersatte Liebe” and “Bei einer Trauung”). Trichord [0,1,3] appears in mm. 34-35, a segmentation supported by the agogic accent of G in m. 35 and the return of the opening [0,1,4] trichord in mm. 35-36. Imbrication of the melodic figure in mm. 34-36 uncovers additional [0,1,2], [0,1,4] (O3 and O2), and [0,1,5] (O1) trichords (Example 15b).

This example is unusual in that the voice remains silent throughout much of the augmented-triad series, requiring the piano to assume a more active role in the melodic realm (please return to Example 15a). Trichord [0,1,6], derived by taking one tone from three successive augmented triads, is presented in the right hand of the piano part in mm. 32-33 and is transposed up a fifth in mm. 34-35 and again in mm. 36-37. The motive is repeated at the same level in mm. 38-39 as the augmented-triad series is briefly interrupted by G^b major and G^b minor triads. Up until this point the piano line exhibits a rising contour, an ascent that reaches its zenith in m. 38. In mm. 40-45 the line turns around and begins a chromatic descent, thus imposing a type of arch form on the series in mm. 32-45.

Wolf alters the piano motive in mm. 40-45 in order to

Example 15a. "Mignon II" ("Nur wer die Sehnsucht kennt"), mm. 32-46, reduced

The image displays two systems of musical notation, each consisting of three staves (treble, alto, and bass clefs) and a series of chord diagrams below. The first system is labeled with measure numbers 32, 33, 34, 35, 36, 37, and 38. The second system is labeled with measure numbers 39, 40, 41, 42, 43, 44, 45, and 46. The chord diagrams use numbers 0-6 to represent notes on a piano keyboard, with brackets indicating the chord structure. Intervallic labels in square brackets, such as [0,1,4] and [0,1,6], are placed between the staves to indicate the intervals between notes. Some notes are marked with '8va' (octave) and 'i' (first inversion). The notation includes various accidentals (sharps, flats, naturals) and dynamic markings like 'p' (piano) and 'f' (forte).

System 1 (Measures 32-38):

- Measure 32: Chord diagrams: ab_6 , eb_6 , $\#3$. Intervallic labels: $[0,1,4]$, $[0,1,6]$.
- Measure 33: Chord diagrams: $\#2$, $\#1$, $\#4$. Intervallic labels: $[0,1,3]$, $[0,1,6]$.
- Measure 34: Chord diagrams: $\#3$, $\#2$, $\#1$. Intervallic labels: $[0,1,4]$, $[0,1,4]$.
- Measure 35: Chord diagrams: $\#3$, $\#2$, $\#1$. Intervallic labels: $[0,1,4]$, $[0,1,4]$.
- Measure 36: Chord diagrams: $\#3$, $\#2$, $\#1$. Intervallic labels: $[0,1,4]$, $[0,1,4]$.
- Measure 37: Chord diagrams: $\#3$, $\#2$, $\#1$. Intervallic labels: $[0,1,4]$, $[0,1,4]$.
- Measure 38: Chord diagrams: $\#3$, $\#2$, $\#1$. Intervallic labels: $[0,1,4]$, $[0,1,4]$.

System 2 (Measures 39-46):

- Measure 39: Chord diagrams: Gb_6 , gb_6 , $\#1$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.
- Measure 40: Chord diagrams: $\#4$, $\#4$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.
- Measure 41: Chord diagrams: $\#3$, $\#3$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.
- Measure 42: Chord diagrams: $\#3$, $\#3$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.
- Measure 43: Chord diagrams: $\#3$, $\#3$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.
- Measure 44: Chord diagrams: $\#3$, $\#3$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.
- Measure 45: Chord diagrams: $\#3$, $\#3$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.
- Measure 46: Chord diagrams: $\#3$, $\#3$. Intervallic labels: $[0,1,2]$, $[0,1,2]$.

Example 15a continued

The image shows a musical score for three staves. The top staff is in treble clef and contains a sequence of notes: G4, A4, Bb4, C5, D5, E5, F5, G5. The middle staff is in bass clef and contains notes: G3, A3, Bb3, C4, D4, E4, F4, G4. The bottom staff is in bass clef and contains notes: G2, A2, Bb2, C3, D3, E3, F3, G3. A bracket on the left side of the staves is labeled 'Db 5'. A bracket on the right side of the staves is labeled '4 5'. The notes are written with stems and flags, and accidentals (flats) are present on B and F in all staves.

Example 15b. "Mignon II," mm. 32-36, imbrication of melody

32

[0,1,2] [0,1,5]

[0,1,4] [0,1,3] [0,1,4]

[0,1,4]i [0,1,4]

#3 #2 #1 #4 #3

Example 15c. "Mignon II," mm. 32-45, imbrication of piano melody

32

[0,1,6]i [0,1,6]i

[0,1,6] [0,1,6] [0,1,6]

[0,1,2] [0,1,2]

ab eb #3 #2 #1 #4 #3 #2 #1 Gb gb

39

[0,1,4]i [0,1,4]i [0,1,4]i

[0,1,4] [0,1,5]i [0,1,5]i

#1 #4 #3 Db 6/5

accommodate the change in contour and a slowing of the harmonic rhythm, exchanging trichord [0,1,6] for [0,1,4]. The three successive [0,1,4] trichords in mm. 40-45 appear in inverted form (O3) compared to those in the voice in mm. 32-36, a fact that supports the contention that Wolf is manipulating abstract pitch collections outside of traditional melodic considerations. Imbrication of the melody in the piano reveals a consistent arrangement of linear adjacencies, again created by the structure of the motive and its particular transposition level (see Example 15c): the first seven bars contain only [0,1,6] and [0,1,2], while the remaining seven bars contain only [0,1,4] and [0,1,5] (O1).

The series in “Mignon II” is also the only one in which Wolf clearly uses distinct motives in the bass line to counterpoint those in the melody (again refer to Example 15a). The initial [0,1,6] trichords in the piano melody are accompanied by trichords [0,1,5] and [0,1,3] (they could not all be [0,1,3] because this trichord is not a possible linear adjacency in the first three chords). Wolf arranges the order of each trichord to maintain contrary motion with the piano melody throughout mm. 32-37. The bass switches to trichord [0,1,2] in m. 38 as the contour of the passage reaches its high point, and begins a chromatic descent more typical of the augmented-triad series. The melody and bass share primarily similar or oblique motion in mm. 38-43; contrary motion returns as the series ends in m. 44 when the final [0,1,2] trichord ascends. This “counterpoint” consists entirely of major thirds and minor sixths (ic 4), except for the octaves on the downbeats of mm. 34 and 36, the major sixths within the two initial minor triads, and the tritone and perfect fourth in the final two measures. The “strictest rule of the theory of harmony,” as it was known in Wolf’s day, obviously has little bearing on the construction of this passage.¹⁵

¹⁵We cannot determine precisely what “the strictest rule of the theory of harmony” meant to Wolf. He studied harmony and composition with Franz Krenn and Robert Fuchs during his brief and unsuccessful stay at the Vienna Conservatory, and he is known to have read theoretical works by Simon Sechter and A. B. Marx. An examination of harmonic theory as it was understood in Vienna during Wolf’s lifetime appears in Robert Wason, *Viennese Harmonic Theory from Albrechtsberger to Schenker and Schoenberg* (Ann Arbor and London: UMI Research Press, 1985).

Conclusion

Hugo Wolf does not place augmented triads into streams in a random fashion, but rather is very consistent in his sequential structuring of the augmented-triad series. A chromatic descent (or repetition thereof) always governs these series, although the actual registral placement of each triad may result in an ascending contour overall. Repeated melodic and rhythmic motives usually accompany the augmented-triad series, with the bass line usually being organized sequentially as well. The bass tones of adjacent augmented triads will be separated by either ic 1, ic 3, or ic 5, and Wolf's sequential treatment of the bass line usually results in one of three basic patterns: a continuous chromatic movement, a series of minor thirds outlining a diminished seventh chord, or alternating half-steps and minor thirds.

The melodies that Wolf constructs within the confines of the augmented-triad series tend to be made up of a succession of three- or four-note motives that extend across a chord change and that consist entirely of chord tones. Because of the structure of the augmented triad and the sequential treatment of the series, the number of potential melodic motives is quite limited. Of the trichords formed from the tones of two adjacent augmented triads, [0,1,4] is the most prevalent and prominent within the melodies of Wolf's augmented-triad series, followed by [0,1,5], and with [0,3,7] as a distant third. Of the trichords formed from the tones of three adjacent augmented triads, only [0,1,2], [0,1,3], and [0,1,6] appear with significant frequency.

Wolf is less consistent in his choice of tetrachords for use as prominent melodic motives. Three of the four tetrachords that may be formed from the tones of two half-step related augmented triads (or hexachord 6-20) are found, each appearing more than once. Tetrachord [0,1,4,5] occurs once in both series of "Grenzen der Menschheit" (Example 9a and 13a), tetrachord [0,1,5,8] occurs once in the second series of "Grenzen der Menschheit" and once in "Das verlassene Mägdlein" (Example 14a), while tetrachord [0,1,4,8] appears six times: twice in "Das verlassene Mägdlein," twice in "Abschied" (with several repetitions, Example 11a), and twice as a vertical structure in "Lied vom Winde" (Example 12a). Of the fourteen

tetrachords that may be extracted from three half-step related augmented triads, Wolf uses six as melodic motives, each (except the first) only once: [0,1,2,4] (twice), [0,1,2,5], [0,1,2,6], [0,1,3,4], [0,1,4,7], and [0,2,3,7].

Pentachord groupings were found to be less significant in general. Wolf did not use the pentachord ([0,1,4,5,8]) that is the sole five-note subset of 6-20; its use would have required arpeggiating through all three tones of one of the augmented triads, which Wolf never does within the melody of an augmented-triad series. Wolf uses two of the pentachords that may be formed from three augmented triads, each twice: [0,1,2,4,5] in “Nimmersatte Liebe” (Example 1) and “Dank des Paria” (Example 6a) and [0,1,3,4,7] in “Dank des Paria” and “Abschied” (Example 11a), with only those in “Dank des Paria” occurring entirely within the series.

The examples presented in this study demonstrate the importance of trichord groupings within the melodic structures of Wolf’s augmented-triad series. Wolf places a marked emphasis on trichord [0,1,4], and to a lesser extent on [0,1,5]. Even more significantly, he favors the orderings of these trichords that share common interval-class successions: orderings O1 and O3 of both of these trichords contain ics 1-4 and 4-1, respectively. O1 and O3 are used exclusively when these trichords occur as prominent melodic motives, and they remain the most frequent orderings when the trichords appear as linear adjacencies between melodic motives; the latter are usually found by imbrication of a pair of major thirds (one from each augmented triad).

The O2 and O4 orderings of [0,1,4] and [0,1,5] (3-4 and 4-3, and 5-4 and 4-5, respectively) occasionally appear as secondary adjacencies in one of four ways: (1) in a strictly parallel series of broken major thirds (Example 7); (2) through the use of non-chord tones (Example 11b); (3) when drawn from three triads in a repeated-pair succession (the [0,1,4] in mm. 19-21 of Example 12b); or (4) when they are formed partially or completely of tones extracted from chord structures appearing outside of the augmented-triad series (Example 9b).

Trichords [0,1,4] and [0,1,5] are roughly equivalent as linear adjacencies when used in O1 or O3 because both contain ic 1 and ic 4, with only the direction of these intervals distinguishing the two sets by

determining their total span as either ic 4 or ic 5. Wolf's utilization of these particular interval successions and his preservation of their ordered identity are far too consistent to be the products of chance. They reveal the careful thought he gave to the selection and use of his materials, whether to guide the singer through the tonal chaos of the series or for purely structural reasons. While a trichord extracted from a pair of half-step related augmented triads necessarily includes ic 4 as one of its adjacent intervals, the other adjacency does not have to be ic 1; it could just as well be ic 3 or ic 5. In other words, the rigid structure of the augmented-triad series did not force Wolf to use certain orderings of pitch collections, nor did it force him to avoid trichord [0,3,7]; rather, he chose to do so.

Wolf therefore emphasizes those pitch collections that are least likely to form traditional melodic structures, with the obvious exceptions of "Das verlassene Mägdlein" and "Die Spröde." In these latter songs Wolf constructs more or less traditional melodies by placing emphasis on trichord [0,3,7], representing the major and minor triads. Considering all of the songs that contain augmented-triad series, however, trichord [0,1,4] dominates both as an obvious melodic motive and as a linear adjacency within and between melodic motives. Although this trichord has only limited applications in traditional melodic writing (it is not represented in the major scale), it is a staple component of much twentieth-century "atonal" music, a familiar example of which is cited in Example 16. Within the melodic structures of his augmented-triad series, Hugo Wolf transcends nineteenth-century tonal methods of motivic construction by manipulating abstract pitch collections in inversion as well as transposition, and thus anticipates twentieth-century compositional techniques.

Example 16. Anton Webern, *Quartet for Violin, Clarinet, Tenor Saxophone, and Piano*, Opus 22 (Boxes indicate [0,1,4] trichords)

Sehr mäßig J. ca 36
 mit Dämpfer
 pizz.
 arco
 p
 pp
 sp
 pp
 pp
 p
 pp

Geige
 Klarinette
 Tenor-Saxophon
 Klavier

*) Klingt wie notiert.