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UNIVERSITY OF ALBERTA

TOWARD ATONALITY: PITCH STRUCTURE IN WEBERN'S *DEHMEL SONGS*

BY

JOHN F. DOERKSEN

A THESIS

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John F. Doerksen

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in Webern's *Dehmel Songs*

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1990

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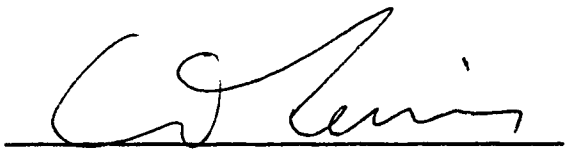
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "Toward Atonality: Pitch Structure in Webern's *Dehmel Songs*," submitted by John F. Doerksen in partial fulfilment of the requirements for the degree of Master of Music in Music Theory.



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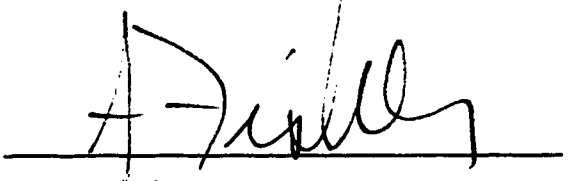

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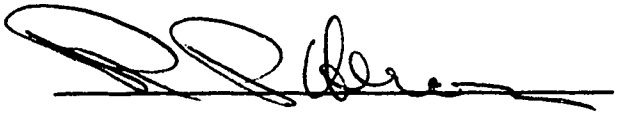

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ABSTRACT

The first decade of the twentieth century witnessed the dissolution of common-practice tonality, particularly at the hands of the three composers of the Second Viennese School, Arnold Schoenberg, Alban Berg, and Anton Webern. While numerous scholars have traced the early compositional development of Schoenberg and Berg, few have studied this transitional phase in Webern's oeuvre.

The *Five Songs after Poems by Richard Dehmel*, composed from 1906 to 1908, document this critical juncture in Webern's evolution to the ensuing atonal idiom, and it is the purpose of this study to demonstrate the progressive nature of the principles of pitch coherence evident in these songs. Two analytic systems are employed in the analysis of each of the five songs; tonal--Schenkerian--analysis, and set-theoretic analysis. Used concurrently, the two analytic approaches manifest both the decreasing influence of traditional tonality and the growing significance of novel pitch relationships in effecting structural coherence.

The first two songs, "Ideale Landschaft" (1906) and "Nächtliche Sheu" (1907), exhibit principles of coherence not far removed from conventional tonality. The three songs of 1908, however, progressively extend the boundaries of tonality until, in "Helle Nacht," the last song of the cycle, tonal boundaries are virtually overrun.

ACKNOWLEDGEMENTS

It is with heartfelt gratitude that I acknowledge the incisive contribution of my supervisor and friend, Dr. Catherine Nolan. Her consummate grasp of analytic procedure, her meticulous attention to detail, and her ability to inspire pursuit of excellence are truly exemplary. Her unmitigated commitment to this project, both while a member of the music faculty at the University of Alberta and thereafter, is without peer, and for that I offer my warmest thanks.

I am deeply grateful as well to Dr. Christopher Lewis, who assumed formal supervision of this study in its later stages and who gave freely of his own personal time on numerous occasions. His superb teaching acumen and his unparalleled insights into the music of the early twentieth century have had considerable influence, not only on this paper, but on my scholarly efforts generally.

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CHAPTER I

INTRODUCTION

Historical Context

The importance and influence of the Second Viennese School, Schoenberg, Berg, and Webern, on the music of this century are certainly unquestioned, if not unparalleled. The innovations of these three composers effected the ultimate dissolution of traditional tonality, replacing it finally with the novel syntactical and structural principles of twelve-tone composition. Several published studies have traced the creative evolution of Schoenberg and Berg from their roots in the late romantic tradition to a style of atonality, but there has been little analysis of this transition in the work of Webern.

Indeed, it was only in 1962, at the First International Webern Festival held at the University of Washington, that many previously unpublished works of the composer were made public, some of which serve as documents of Webern's transition from tonality to atonality.[1] The *Five Songs after Poems by Richard Dehmel* of 1906 - 1908 (hereafter referred to as the *Dehmel Songs*) were among the compositions

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[1] Demar Irvine provides a brief review of the conference in the preface to Hans Moldenhauer's *Anton von Webern: Perspectives* (Seattle: University of Washington Press, 1966).

brought to light, and this study intends to substantiate their transitional role.

It is important to recognize that these songs were not published during Webern's lifetime and, consequently, one cannot assume that they were fully endorsed by the composer. Webern's own comments in lectures given some twenty-five years after the completion of the *Dehmel Songs* leave the impression that any works prior to twelve-tone works are of negligible significance. He states in a lecture given in January, 1932:

> "If we want to find historically how tonality suddenly vanished, and what started it, until finally, one day, Schoenberg saw by pure intuition how to restore order, then it was about 1908 when Schoenberg's piano pieces Op. 11 appeared. Those were the first 'atonal' pieces; the first of Schoenberg's twelve-note works appeared in 1922. From 1908 to 1922 was the interregnum: 14 years, nearly a decade and half, this stage lasted."[2]

Later in the same series of lectures he notes:

> "All the works created between the disappearance of tonality and the formulation of the new twelve-note law were short, strikingly short. The longer works written at the time were linked with a text which 'carried' them (Schoenberg's 'Erwartung' and 'Die Glückliche Hand,' Berg's 'Wozzeck'), that's to say, with something extra-musical."[3]

The implications of these words seem quite clear; in Webern's view the "atonal" works of the Second Viennese School are the product of a transitional period, a time when

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[2] Anton Webern, *The Path to the New Music*, editor, Willi Reich. Translator, Leo Black (Bryn Mawr, Penn: Theodore Presser Company, 1963), p. 44.

[3] Ibid., pp. 53-54.

few conventional laws of syntax and structure obtained and few new laws had been established. There was no unifying force comparable to the common-practice tonal language that allowed for the construction of extended works, and composers had to rely on extra-musical elements for structural support.

In spite of the fact that the *Dehmel Songs* were not published by Webern himself, and in spite of the composer's comments on work of this era, these songs do provide an important key to understanding the evolution of Webern's style. Leonard Stein writes that the last of the *Dehmel Songs* brings us "to the threshold of the 'true' Webern style, and to his mature manner of expression and use of musical means."[4] The primary focus of this study is not to establish the *Dehmel Songs* as newly discovered masterworks of Webern, but simply to glean from them insights into the development of the composer's style during these historically crucial years.

Anyone familiar with the account of Webern's musical activities as a youth is not surprised to find he was intimately aware of tonal tradition. He grew up playing literature from Bach through Mahler on the 'cello and piano in addition to composing pieces in the romantic idiom. His interest in music took him to Vienna University in 1902,

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[4] Leonard Stein, "Webern's *Dehmel Lieder* of 1906 - 1908: Threshold of a New Expression." In *Anton Von Webern: Perspectives*, p. 61.

from which he graduated in 1906 with a doctoral degree in musicology. (Webern was the only member of the Second Viennese School to hold an advanced academic degree.) His dissertation was an edition of the second volume of the *Choralis Constantinus* by Heinrich Isaac (ca. 1450 - 1517). Webern's choice of Isaac demonstrates his early interest in contrapuntal techniques, a predilection made manifest in the *Dehmel Songs* and throughout his career.

A brief review of the more important compositions leading up to and directly following the *Dehmel Songs* is useful in understanding the relative position of the songs in Webern's oeuvre. The last piece Webern composed before becoming a pupil of Schoenberg was the orchestral tone-poem *Im Sommerwind*, completed in the spring of 1904. Moldenhauer writes, "*Im Sommerwind* impresses one as a fully original musical creation already containing characteristic features of Webern's emerging artistic profile."[5] Webern became a student of Schoenberg in the autumn of 1904, and his subsequent work gives clear evidence of the influence of his mentor.

Webern's first major work after this important meeting was a string quartet entitled *Langsamer Satz*, dated June, 1905. The composition demonstrates tonal ambiguity to some extent; both c minor and E♭ major are set up as tonal

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[5] Hans Moldenhauer, *Anton Webern: Chronicles of his Life and Works* (New York: Knopf, 1978), p. 70.

centers.[6] A second string quartet of this same period, simply entitled *String Quartet (1905)*, extends the bounds of tonality even further through the augmented triads and whole-tone sonorities that pervade the work. Moldenhauer writes, "Harmonically, strong chromaticism effects in places the loosening of traditional tonal concepts. For this reason, the work has been heralded as the actual beginning of 'atonality'."[7] One other piece, the *Piano Quintet* of 1907, was written before the completion of the *Dehmel Songs*, but it employs more traditional tonal means than the *String Quartet (1905)*.

While working on the *Dehmel Songs*, Webern was also working on the *Passacaglia*, op. 1, and *Entflieht auf leichten Kähnen*, op. 2, both completed in 1908. It is noteworthy that 1908 was also the year in which Webern completed the Stefan George songs of op. 3, songs that have been generally recognized as his first wholly "atonal" works. It is in this context that the five *Dehmel Songs* were written, one in 1906, one in 1907, and three in 1908. Webern describes the progression of his work (and that of his colleagues) of this period in these terms:

> "The fact that cadences were shaped even more richly, that instead of chords of the sub-dominant, dominant and tonic, one increasingly used substitutes for them, and then altered even those - it led to the break-up of

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[6] Edward T. Cone, "Webern's Apprenticeship." *Musical Quarterly* 53/1 (1967): 46.

[7] Moldenhauer, *Life and Works*, p. 86.

> tonality. The substitutes got steadily more independent. It was possible to go into another tonality here and there. (When one moved from the white to the black keys, one wondered, "Do I really have to come down again?") The substitutes became so predominant that the need to return to the main key disappeared. All the works that Schoenberg, Berg and I wrote before 1908 belong to this stage of tonality."[8]

From these comments it is apparent that Webern was not alone in his quest. The 1905 songs of Schoenberg's op. 6, for instance, have been shown to be transitional in much the same manner as the *Dehmel Songs*.[9] The progressive use of tonality by Berg in his *Sieben frühe Lieder*, composed from 1905 to 1908, has also been studied.[10] The innovations of the *Dehmel Songs* are, therefore, a reflection of the broader, fundamental changes occurring in music shortly after the turn of this century.

A brief introduction to the poet Richard Dehmel will conclude our account of the historical setting of the *Dehmel Songs*. Richard Dehmel (1863 - 1920) was strongly influenced by Friedrich Nietzsche, and, indeed, was one of the first to realize the significance of the great philosopher. He followed wholeheartedly the Nietzschean injunction, "be yourself." That Dehmel is remembered almost as much for his personality as for his work is perhaps the consequence of

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[8] Webern, *New Music*, p. 44.

[9] Allen Forte, "Schoenberg's Creative Evolution: The Path to Atonality," *Musical Quarterly* 64/2 (1978): 133-176.

[10] Lori Burns, "Tonal Language in Alban Berg's *Sieben frühe Lieder*," M.Mus. Thesis, University of Alberta, 1986.

his shameless portrayal of his innermost feelings and ideas in his work. His preoccupation with sexuality, the mystical relation of the divine nature of love and the physical act of love, is the driving force of his work. In fact, he was so passionate in his writing on the subject, and his images were so provocative, that he was once prosecuted in a German court for the indecency of some of his poems. The charges were dismissed, however, on the grounds that the poems were unintelligible.[11]

Many of the poems in the two collections *Aber die Liebe* (1893) and *Weib und Welt* (1896), from which Webern selected the texts for his songs, were inspired by the poet's love for two women. *Aber die Liebe* was inspired by the poetess Hedwig Lachmann who, though single at the time and apparently kindly disposed to the poet, eventually married someone else. Ida Colbetz, a married woman, became the motivation for much of Dehmel's work in *Weib und Welt*. When Ida's husband died, Dehmel, himself married, exploited opportunity and arranged for Ida to move into a nearby apartment. For a time the poet was engaged in a *mariage à trois*, but the arrangement was short-lived. He was soon compelled to choose between the two women, and he

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[11] Jethro Bithell, *Modern German Literature: 1880 - 1938* (London: Methuen & Co., 1939), p. 133.

subsequently divorced his first wife and married Ida Colbetz.[12]

Literary critics have sought to assess the significance of Dehmel's work and describe his style variously as neo-romantic, impressionistic, and even expressionistic. Perhaps the fundamental paradoxes which abounded in the man made his work difficult to categorize. Kunitz and Colby write:

> "[he was] a rationalist as well as a theophist and philosopher, realist as well as idealist, sensualist as well as spiritualist, empiricist as well as metaphysician, and naturalist as well as symbolist."[13]

According to some present day critics, Dehmel was highly overrated during his lifetime. One critic writes of his contribution, "his ideas are as uninteresting as his oversexed brand of vitalism . . . leading to a transparently spurious programme for 'spiritualizing' sex."[14] Regardless of what today's critics say of Dehmel, Webern shared a certain affinity with the poet and showed a deep

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[12] Bithell, in his *Modern German Literature* (pp. 122-142), provides a concise biographical sketch of Dehmel and his work. In the third revision of the monograph (1959), the discussion of Dehmel is abbreviated.

[13] Stanley J. Kunitz and Vineta Colby, *European Authors, 1000 - 1900: A Biographical Dictionary of European Literature* (New York: H. W. Wilson, 1967), p. 217.

[14] Martin Seymour-Smith, *Guide to Modern World Literature* (London: MacMillan Press, 1985), pp. 542-43.

interest in his work.[15] And the composer did not shy away from setting poems that are characteristic of Dehmel's passion and eroticism; consider, for instance, "Himmelfahrt" and "Nächtliche Sheu", the third and fourth songs of our cycle (see Appendix for a translation of the text). Webern set other Dehmel poems in addition to the ones discussed in this study, including *Tief von fern* (1901), *Nachtgebet der Braut* (1903), and *Aufblick* (1903).

Webern was not alone in his affinity to Dehmel; Schoenberg, too, was strongly influenced by the poet. Dehmel's epic, *Zwei Menschen*, provided the extra-musical program of Schoenberg's *Verklärte Nacht*. Schoenberg also set a number of Dehmel's poems, some of them published in opp. 2, 3, and 6. Of the three composers of the Second Viennese School, only Berg did not set any of Dehmel's poetry. (He did, however, set poetry by Liliencron, Dehmel's closest associate.)

There can be little doubt that this poet had considerable influence on the Second Viennese School at this critical juncture in the history of music. Perhaps Schoenberg himself expressed most eloquently Dehmel's contribution in a letter to the poet:

> "Your poems . . . were what first made me try to find a new tone in the lyrical mood. Or rather, I found it

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[15] Moldenhauer writes that Webern listed no less than ten of Dehmel's works as part of his personal library. (Moldenhauer, *Life and Works*, p. 92.)

even without looking, simply by reflecting in the music what your poems stirred up in me."[16]

Survey of related literature

Although the *Dehmel Songs* have been recognized in the literature as a significant stepping stone in the evolution of Webern's compositional style and in the development of twentieth-century music generally, few articles proffer more than broad descriptions. The only published detailed analysis of the songs is by Reinhart Gerlach.[17] Another extensive analysis is the work of Garth Preston in his Masters of Arts thesis recently completed at the University of British Columbia.[18] These two works will be discussed shortly.

Hans Moldenhauer's seminal biography of Webern contains a few cursory comments on the *Dehmel Songs*. His chief contribution lies in having provided the historical setting of the songs. He notes that they "occupy a crucial position on the threshold of a fundamental change in harmonic

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[16] Paul Griffiths, "Dehmel, Richard," in *The New Grove Dictionary of Music and Musicians*, 20 vols., Edited by Stanley Sadie (London: MacMillan, 1980), V, p. 326.

[17] Reinhart Gerlach, "Die Dehmel-Lieder von Anton Webern. Musik und Sprache im Übergang zur Atonalität." *Jahrbuch des Staatlichen Instituts für Musikforschung Preussischer Kulturbesitz 1970*, edited by Dagmar Droysen (Berlin: Merseburger, 1971), pp. 45-100.

[18] Garth Preston, "Tonal and Extratonal Functions of the Augmented Triad in the Harmonic Structure of Webern's 'Dehmel Songs'." M.A. Thesis, University of British Columbia, 1989.

concepts."[19] The author also indicates that the songs "form a distinct contribution to the literature, heralding Webern as a foremost exponent of the genre of the German *Lied*."[20]

Leonard Stein devotes to the *Dehmel Songs* a short article in which he, too, characterizes the songs as being of considerable significance in the evolution of Webern's style. He places his discussion in the context of similar developments in the works of both Schoenberg and Berg. Stein's comments on Webern's songs do little more than point out a few surface features of the music such as the occurrence of augmented triads, added-note chords, and chromatic voice-leading. He gives a slightly more detailed account of the use of counterpoint in the songs. Though the article does not provide a thorough analysis of the songs, Stein's insights are certainly noteworthy. He is, of course, the editor of the only published edition of the *Dehmel Songs*, and he also accompanied singer Grace-Lynne Martin at the world première of the songs at the First International Webern Festival.[21]

Edward T. Cone has also contributed to the literature on the early work of Webern in an article that reviews several of the compositions from before the *Passacaglia*,

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[19] Moldenhauer, *Life and Works*, p. 93.

[20] Ibid., p. 93.

[21] Stein, "Webern's *Dehmel Lieder*," pp. 53-61.

op. 1, culminating with his insights into the *Dehmel Songs*. Again, the treatment of the songs is cursory at best, given to general descriptions of the chromaticism, chord construction, form, and counterpoint. The author is quick to offer his opinion of the aesthetic worth of the early works of Webern and treats them essentially as student works. The *Dehmel Songs* fare a little better than the others. He writes that they are, "of all the scores . . . probably the only ones that are interesting purely on their merits."[22] In any event, the article does contribute to our knowledge of the historical context of the songs.

Herbert Buchanan includes a relatively thorough analysis of the last of the *Dehmel Songs*, "Helle Nacht," in his doctoral dissertation.[23] The analysis deals with three aspects of the song: motive and motivic variation; contrapuntal procedures; and non-traditional pitch association. The author demonstrates motivic unity in the song by labelling motivic elements and tracing them through repetitions, noting the subsequent permutations and fragmentations. His review of the extensive use of counterpoint in the song shows in particular the influence of Webern's training and study of the contrapuntal

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[22] Cone, "Apprenticeship," p. 50.

[23] Herbert H. Buchanan, "An Investigation of Mutual Influences among Schoenberg, Webern, and Berg (with an emphasis on Schoenberg and Webern, ca. 1904 - 08)." Ph.D. Dissertation, Rutgers University, 1974.

techniques of the Netherland composers of the high Renaissance. In his comments on pitch association in "Helle Nacht," Buchanan points out that the function of the pitches is no longer defined by traditional tonal means. Important intervals such as the tritone are associated by successive vertical and linear statements, associative procedures common in the atonal style. The author, employing comparative analysis, seeks to demonstrate that Webern, in his *Dehmel Songs* (as well as other works of this period), has advanced beyond the contemporary work of his mentor Schoenberg on the road to atonality and the twelve-tone system; in his view, Webern's advanced use of contrapuntal operations foreshadows principles of twelve-tone unity.

In the literature just reviewed, the *Dehmel Songs* have, for the most part, received rather cursory treatment. In the final two papers discussed below, the writers have offered much more detailed and extensive analyses. Although my comments on their thoughts are of limited scope at this juncture, reference to the work of these analysts will be made in subsequent chapters of this study.

Reinhard Gerlach, in his "Die Dehmel-Lieder von Anton Webern: Musik und Sprache im Übergang zur Atonalität," provides a thorough analysis of both the poetry and music which comprise the cycle. He reviews briefly the influence of poetry on music at the turn of this century before focusing on the five poems by Dehmel, demonstrating their

role in defining the form of the song cycle. He produces a useful table which details the progression of various poetic ideas which pervade the cycle, a part of which is reproduced in Example 1 [translation mine].[24]

Example 1: Progression of poetic ideas in the *Dehmel Songs*.

(Song) I	II	III	IV	V
Light (sunny warmth)	→	Gleam	→	Pallid (evening chill)
Day (evening)	→	Cloudy	→	Night (moonlight)
-	Sea, high-tide	Waves →	River →	Glittering pond, moist veil
Rationality	→			Irrationality (dreams)

Gerlach then deals with the musical structure of each of the five songs in turn. He finds in the two earlier songs of 1906 and 1907 structural principles not far removed from conventional tonality. The three songs of 1908, however, progress rapidly to the very limits of tonality in his view. Gerlach finds in the pitch structure of the last song no functional harmony; indeed, he interprets the suspended tonal procedures of "Helle Nacht" to be on the very border of atonality. He produces a chart demonstrating the progression of tonal and compositional procedures

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[24] Gerlach, "*Dehmel-Lieder*: Music und Sprache," p. 53.

throughout the cycle, reproduced here in Example 2 [translation mine].[25]

Example 2: Progression of tonal procedures in the *Dehmel Songs*.

(Song) I	II	III	IV	V
Consonance →				Dissonance
Minimum density →				Maximum density
Polyphony based on harmonic principles →				Triple counterpoint Canons
Accented rhythm Rhythmically one-dimensional →				Prosodic meter Rhythmically multi-dimensional
Fluctuating tonality →				Suspended tonality, atonality
Linearly constituted time →				Refractive time
Complex structure projected in one dimension →				Complex, three-dimensional structure

Gerlach's insights into the tonal structure and formal design of the *Dehmel Songs* constitute a valuable contribution to the literature. This article, together with his critical review of the published edition of the five songs (discussed below), must be taken into account in any study of this song cycle.

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[25] Ibid., p. 92.

The most recent extensive analysis of the *Dehmel Songs* is the unpublished thesis by Garth Preston.[26] In the first part of the thesis Preston develops a sophisticated system through which he categorizes all conceivable types of augmented triads, basing the distinction between the triads primarily on the basis of their spelling. Each type of augmented triad has a specific role in the tonal hierarchy and each has a particular voice-leading function. Preston uses the *Dehmel Songs* to concretize his postulates about the augmented triad, tracing the occurrences of the various augmented triads and giving a detailed account of their tonal and voice-leading functions.

In the second part of the thesis, having built up a vocabulary of discrete occurrences of various types of augmented triads, Preston synthesizes the information to make analytic decisions about large-scale structural features of the songs. He asserts that there is a common tonal structure which relates all the five songs of the cycle and posits F# minor to be the "invisible" tonic of the cycle. Consequently, he believes the cycle to be an example of what Schoenberg called "suspended" tonality.

Fundamental to Preston's view of the songs is his conviction that the songs are entirely tonal. He writes,

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[26] Preston, "Tonal and Extratonal Functions of the Augmented Triad in the Harmonic Structure of Webern's 'Dehmel Songs'."

> "I have approached the harmonic structure of the 'Dehmel Songs' with the premise that it is a tonal-harmonic structure, by which I mean that I have regarded every pitch in the structure as having a tonal meaning within a root progression and, by implication, as having a specific hierarchic function with respect, most immediately, to the referential root of the harmony of which it is a part at a particular moment."[27]

To Preston, the structure of any "extratonal" effects in the songs is strictly constrained by the structure imposed by tonality. He further suggests that this analytic approach will demonstrate tonal-hierarchic relationships in Webern's later atonal and even twelve-tone works.

Introduction to the *Dehmel Songs*

Reinhart Gerlach makes a very valuable contribution to any study of these songs in an article comparing the published edition with the holograph.[28] The published edition, edited by Leonard Stein, includes some errors and omissions for which Gerlach provides the appropriate corrections or alternate readings. Each of the two of the songs, "Am Ufer" and "Himmelfahrt," exists in two manuscripts, and Gerlach gives a detailed account of each source. Many of the differences between the holographs and the published edition have minimal implications for this study (different placement of dynamic indications, slurs,

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[27] Ibid., p. 12.

[28] Reinhart Gerlach, "Die Handschriften der Dehmel-Lieder von Anton Webern," *Archiv für Musikwissenschaft* 29/2 (1979): 93-114.

etc.), but there are some instances where there is a discrepancy in the pitch content. Where the changes influence analytic decisions, particularly with regard to pitch structure, I will use the holograph version.

Webern wrote the five songs over a period of two years: "Ideale Landschaft" at Easter time, 1906; "Nächtliche Sheu" in 1907; "Am Ufer," "Himmelfahrt," and "Helle Nacht" in 1908. The manuscripts of these last three songs are simply dated "1908" and consequently no definitive order of composition has been established. The order of the songs within the cycle, however, was determined and recorded by Webern; Moldenhauer indicates the composer listed the order of the songs on a separate manuscript page.[29]

Webern's ordered list of the songs also implies that he thought of the songs as comprising a cycle, though their composition spans a considerable period of time. It is quite possible, of course, that the composer did not determine the structure of the cycle at a pre-compositional stage. Perhaps he chose this format only after completing some or all of the songs. It is certain that Webern's treatment of pitch structures underwent considerable development over the course of two years. In this study I wish to demonstrate the nature of this evolution by using two analytic systems--tonal (Schenkerian) analysis and set-theoretic analysis--in concurrence.

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[29] Moldenhauer, *Life and Works*, p. 92.

CHAPTER II

ANALYTIC METHOD

Because the composition of the five *Dehmel Songs* falls into a highly transitional phase of Webern's creative evolution, a thorough analysis is best achieved by applying two analytic systems in tandem: tonal analysis and set-theoretic analysis. It is apparent that some sort of "extended" tonal procedures inform the structure of the songs; indeed, all of the songs bear key signatures. On the other hand, non-traditional pitch structures also play a significant role, and tonal analysis alone does not define the manner in which these sonorities contribute to coherence in the songs. In my tonal analysis I make use of analytic concepts posited by Heinrich Schenker, while my set-theoretic analysis follows the procedures outlined by Allen Forte in his seminal publication, *The Structure of Atonal Music*.[30] Following is a brief review of the two analytic systems with an emphasis on those elements which pertain particularly to this study.

Heinrich Schenker (1868 - 1935), a prominent pianist, pedagogue, and theorist, makes a remarkably original contribution to the analysis of tonal music by defining large-scale structural principles of musical coherence and

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[30] Allen Forte, *The Structure of Atonal Music* (New Haven: Yale University Press, 1973).

tonal hierarchy. His view of structure and musical coherence is predicated on his understanding and unique application of Fuxian (species) counterpoint, an art largely disregarded by his contemporaries. In his *Free Composition (Der freie Satz)*, the culminating statement of his ideas, he writes:

> "Instruction at least in the *linear progressions*, the *primary means of coherence*, is indispensable. Because these progressions are anchored in polyphony, we must first learn to think *contrapuntally*."[31]

In conformity with his emphasis on the linear--voice-leading--aspect of music, Schenker makes a fundamental distinction between the structure and function of a chord.[32] Whereas most other contemporary theorists were content to label chords, describing in isolation the vertical structure of sonorities, Schenker sought to define in addition the voice-leading function of a chord in a given context and to determine its role in the tonal hierarchy.

An essential concept in Schenker's theory is his notion of structural levels, the idea that tonal music has as its fundamental structure (*Ursatz*) a descending melodic line (*Urlinie*) supported by the progression I - (III) - V - I (*Bassbrechung*). This fundamental structure is elaborated

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[31] Heinrich Schenker, *Free Composition (Der freie Satz)*, Translated and edited by Ernst Oster, 2 vol. (New York: Longman, 1979), p. 9.

[32] Felix Salzer discusses this aspect of Schenker's theory in Chapter 2 of his *Structural Hearing*, Vol. 1, 1952 (New York: Dover Publications, reprint, 1962).

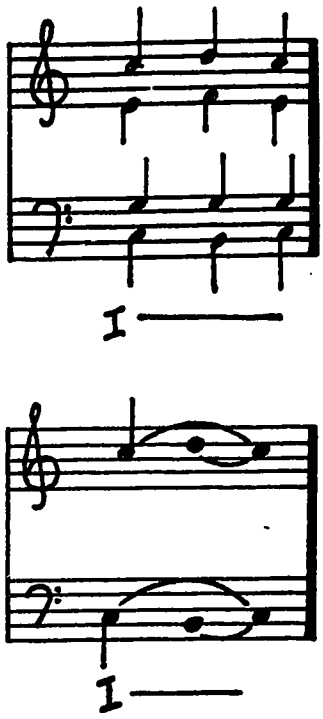
and embellished--through a process he calls "composing-out"--to form the middleground and foreground (more surface) levels of the music. The melodic component of the background, the fundamental line (*Urlinie*), descends from the primary tone (*Kopfton*) $\hat{8}$, $\hat{5}$, or $\hat{3}$. The bass arpeggiation of the tonic triad (*Bassbrechung*), I - (III) - V - I, provides the essential harmonic support. (The tonic triad may be incomplete; i.e., III may not be represented.)

Basic to this theory of structural levels is the concept of prolongation, the notion that the effect of a given tone or chord can be maintained by melodic or harmonic motion, even though the tone or chord is not continually present. For instance, a chord could be prolonged by neighbor motion (Example 3a) or a tone might be prolonged by scalar motion (Example 3b). The prolonged chord or tone is more important structurally than the harmonic or melodic motion embellishing it. By applying this principle to successive structural levels, one arrives (theoretically, at least) at the background level or the *Ursatz* of the work.

Underlying these Schenkerian concepts is the basic tenet that all traditionally tonal music has an inherently unified tonal structure. Music in a given key, at the background level, prolongs a single pitch (the tonic) and its attendant triad through the entire work, and all pitch structures in the work stand in hierarchic relation to this point of reference. This view is fundamentally opposed to

Example 3: Models of prolongation.

a)



b)

contemporary theories.[33] Schenker writes:

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[33] Schoenberg, for instance, in his *Theory of Harmony* (Berkeley: The University of California Press, 1978) writes with respect to "suspended" tonality: "Every major or minor triad could be interpreted as a key, even if only in passing" (p. 384).

> "But the most baleful error of conventional theory is its recourse to *'keys'* when, in its lack of acquaintance with foreground and middleground, it finds no other means of explanation. Often its helplessness is so great that it abandons even this most comfortable means of avoiding difficulties. Nothing is as indicative of the state of theory and analysis as this absurd abundance of 'keys.' The concept of the 'key' as a higher unity in the foreground is completely foreign to theory: it is even capable of designating a single unprolonged chord as a key."[34]

It is Schenker's concept of tonal hierarchy and principles of musical coherence that seems to me to be the essence of his contribution to tonal analysis.

The most orthodox of Schenker's followers hold that his analytic theory applies only to music of the "common practice" period. Indeed, Schenker himself believed that the last of the German masters was Johannes Brahms and that no composer since then truly understood the inherent principles of musical coherence.

There is no doubt that the structure of Webern's *Dehmel Songs* does not comply precisely with any of the structural models Schenker proposes, and some Schenkerian scholars would criticize any application of his theory to music that manifests either extended tonal and primitive atonal procedures. The songs do exhibit principles of large-scale tonal coherence, however, and the application of Schenker's analytic techniques, particularly those which reflect directly his concept of structural levels and prolongation,

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[34] Schenker, *Free Composition*, p. 8.

to the *Dehmel Songs* is useful in defining these relationships.

Numerous theorists have led the way in expanding the applicability of Schenker's notions to both pre- and post-tonal repertory.[35] One of the basic problems they face, however, is defining goals of tonal motion in the absence of a clear statement of the tonally axiomatic dominant-tonic relationship. Concerning this problem Salzer writes, ". . . contrapuntal progressions in regard to larger organisms can be key defining and capable of assuming structural significance,"[36] thereby implying that tonal focus can be achieved without reference to the dominant-tonic relationship. Salzer, in this statement, reflects the notion Schoenberg asserts in his *Theory of Harmony*:

> "Obviously, there are other [than harmonic] means for effecting a close, and, obviously, they were and are used together with the harmonic means. Rhythm and melody, quite unaided, can also bring about a cadence. Otherwise a one-line, unharmonized melody would have to run on through all eternity, and a drummer could never stop. Quite certainly there are harmonic means, which at present have just not been theoretically determined, whose capacity for forming cadences, or, far more, for

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[35] Felix Salzer, in his *Structural Hearing* (1952), was one of the first theorists to apply Schenkerian principles to pre- and post-tonal music. Roy Travis was also among the first to expand the applicability of Schenker's ideas. (See, for instance, his article "Toward a New Concept of Tonality" (1959).) James Baker, in his "Schenkerian Analysis and Post-Tonal Music" (in *Aspects of Schenkerian Theory*, edited by David Beach (New Haven: Yale University Press, 1983), pp. 153-185), provides a thorough review of developments in the field.

[36] Salzer, *Structural Hearing*, Vol. 1, p. 204.

> admitting them, is just as great as that of IV, II, V and I. It is, however, certainly possible to bring about a close without having to use all these means simultaneously. Sometimes one is enough, sometimes several are necessary. Yet *harmony is least capable* of doing it alone, without help of the others, by all means not contrary to them, whereas melody will do it all by itself [italics mine]."[37]

While one finds at most middleground junctures of the *Dehmel Songs* at least the implication of the dominant-tonic relationship, there are passages at more surface levels of the songs where harmony is not preeminent in delineating goals of motion. Consequently, Schenkerian analytic principles must be modified in order to demonstrate how the goal of motion is effected in these cases.

As the ensuing analyses elucidate, the tonic-dominant-tonic relationship (*Bassbrechung*) is generally represented at the background of the songs, but it is not always accompanied by a structural descent in the melody (*Urlinie*). As a result, one of the basic tenets of Schenkerian theory, the concept of the *Ursatz*, does not always obtain in the songs. This is the case particularly in the three songs of 1908.

In recent years some theorists have expanded Schenkerian concepts even further to include analysis of music which no longer prolongs traditionally consonant, or

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[37] Schoenberg, *Harmony*, p. 133.

even triadic, sonorities.[38] The use of Schenkerian analysis in demonstrating the prolongation of a dissonant sonority has been the topic of considerable debate[39] and requires an extensive knowledge and facility in the use of the analytic techniques. My application of Schenkerian techniques in the tonal analysis of the *Dehmel Songs* is less ambitious. Since four of the five songs are structured around a traditionally triadic tonal center, I use Schenkerian analytic techniques to demonstrate how this triadic tonal center informs the structure of the songs. In the one remaining song, "Helle Nacht," no consonant major or minor triad is actually present, and the "tonic" is in fact an augmented triad. In the tonal analysis of the song, consequently, this traditionally dissonant sonority is imputed the function of a traditional tonal referent.

Allen Forte, in his *The Structure of Atonal Music*, provides an alternative method of defining order in music no longer governed by principles of traditional tonality, a system described as pitch-class set analysis. He

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[38] Robert P. Morgan, for instance, in his article, "Dissonant Prolongation: Theoretical and Compositional Precedents" (*Journal of Music Theory* 20 (1976): 49-91), discusses the prolongation of non-triadic sonorities.

[39] Joseph Straus, in an article entitled "The Problem of Prolongation in Post-tonal Music" (*Journal of Music Theory* 31/1 (1987):1-21), argues that it is not feasible to show prolongation in the analysis of post-tonal music because the necessary conditions of prolongation (e.g., a clear distinction between consonance and dissonance) are not present.

systematically codifies the elemental principles, operations, and analytic procedures of pitch-class set theory, and the set-theoretic analysis in this study is patterned after his model.

Pitch-class set theory is based on the following assumptions: 1) all pitches are reducible, by virtue of octave equivalence, to twelve pitch-classes (named by integers 0 through 11); 2) pitch-classes comprising a set are unordered; 3) there is no hierarchical relationship among the pitch-classes of a set--all pitch-classes are equal; 4) pitches lose any functional implications their notation may imply--i.e., they are enharmonically equivalent (e.g., both A♯ and B♭ are denoted by integer 10). All possible combinations of pitch-classes are reducible to a finite number of *prime forms*.[40]

Pitch-class sets may be related in one of three essentially differing ways: 1) equivalence relations, 2) similarity relations, and 3) K or Kh relations--used in the formation of a set-complex table. Two sets are said to be equivalent if one can be *mapped* onto the other either by transposition (T_n) or by inversion (T_nI) (implying inversion

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[40] There are 224 possible prime forms including the null set and sets of cardinality 1, 2, 10, 11, and 12. In this study I shall use the set nomenclature proposed by Allen Forte. The first of the two hyphenated numbers indicates the *cardinality* of the set (i.e., the number of elements), the second the ordinal position of the set. Forte lists the prime forms of sets having cardinality three through nine in Appendix 1, *Atonal Music*, pp. 179-181.

followed by transposition).[41] As shown in Example 4, transposition of a pitch-class set can be represented as the addition of a constant integer (transposition factor) to each integer of the set.[42] Inversion requires a compound operation--pitch-class complementation and transposition.

Example 4: Pitch-class set operations.

a) Transposition. Set A (0 4 8) is mapped onto set B (3 7 11) under operation T_3:

Set A:	(0 4 8)
(Transposition factor:)	3 3 3
Set B:	(3 7 11)

b) Inversion. Set A (0 2 3 7) is mapped onto set B (10 2 3 5) under operation T_5I:

Set A:	(0 2 3 7)
(Pitch-class complementation:)	(0 10 9 5)
(Transposition factor:)	5 5 5 5 (modulo 12)
Set B:	(5 3 2 10) or, in normal order, (10 2 3 5).

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[41] The multiplicative operator has been proposed as an additional equivalence operator, but it has not been widely accepted. It is more effective when applied to analysis of post-World War II literature. (See John Rahn, *Basic Atonal Theory* (New York: Longman, 1980.)) Applying the multiplicative operator to a given set will not necessarily generate a set of the same cardinality (e.g., M6 will yield a set of only two unique elements, regardless of the number of elements comprising the initial set). This is undoubtedly one of the primary reasons this operator has not been widely recognized as of analytic significance in the pre-serial music of the Second Viennese School.

[42] All operations are, of course, reckoned arithmetic modulo 12.

Two pitch-class sets are most closely related when they are related by either of the two equivalence operators.

Similarity relations fall into two categories; 1) similarity relations with regard to pitch, and 2) similarity relations with regard to interval content. Similarity relations provide a means of determining the degree to which non-equivalent sets of the same cardinality are related. Regarding pitch relations, two sets of cardinality n are said to be in Rp relation if both sets contain one common subset of cardinality n - 1.[43] The two sets (0 1 2 4) and (0 1 2 7), for instance, have in common the subset (0 1 2) and are thus said to be in Rp relation.

The other similarity relations defined by Forte pertain to the interval content of pitch-class sets.[44] Two sets of the same cardinality are said to be in R_1 relation if four of the entries in the two vectors correspond and the

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[43] The Rp relation may actually be either strongly represented or weakly represented. Where two sets share a common subset of cardinality - 1, the Rp relation is said to be strongly represented. Where the *prime forms* of two given sets are in Rp relation but the actual number of pitches the two *representative sets* share is less than cardinality n - 1, the Rp relation is said to be weakly represented.

[44] Forte lists each prime form with an accompanying interval vector, a six-digit vector describing the interval content of a given set.

e.g., 1 0 1 3 1 0

- 0 intervals of 6 semitones
- 1 interval of 5/7 "
- 3 intervals of 4/8 "
- 1 interval of 3/9 "
- 0 intervals of 2/10 "
- 1 interval of 1/11 "

positions of the other two entries are interchanged (Example 5a). Two sets of the same cardinality are said to be in R_2 relation if four of the six entries in the vectors correspond (Example 5b). Two sets are said to be in R_0

Example 5: Similarity relations.

a) R_1 relation:

(6-Z25:) [2 3 3 2 4 1]

(6-Z26:) [2 3 2 3 4 1]

b) R_2 relation:

(4-17:) [1 0 2 2 1 0]

(4-19:) [1 0 1 3 1 0]

relation if none of the entries in the two vectors correspond. With regard to similarity relations, two sets are most closely related if they are related both by pitch and interval.

The analytic significance of the set-complex table has been the subject of some debate, but it does provide a means of relating sets of differing cardinality. Relationships are established on the basis of set inclusion and complementation. A given set A is said to be in K-relation[45] to a given set B iff (meaning "if and only if") set A contains or is contained in set B or the complement of

[45] "K" and "Kh" are simply symbols arbitrarily chosen by Forte to designate the relationship here defined.

set B. A given set A is said to be in Kh-relation to a given set B iff set A contains or is contained in set B and the complement of set B.[46] Sets in Kh-relation are thus more closely related than sets in K-relation. A set-complex table simply lists these relations between sets; the sets are either unrelated, in K-relation, or in Kh-relation.

In general, then, two sets are most closely related if they are equivalent, that is, if one can be mapped on to the other by either of the equivalence operators, transposition and inversion. Non-equivalent sets of the same cardinality are most closely related if they share similarity relations of both pitch and interval content. Sets of differing cardinality are most closely related if they are in Kh relation (i.e., the highest possible degree of inclusion relates the sets).

Pitch-class set theory provides a precise nomenclature for describing the unconventional (in relation to common-practice tonality) pitch structures that occur in Webern's *Dehmel Songs*. It also defines and categorizes the operations that relate these novel pitch structures to one another and to the large-scale structure of the work. The application of pitch-class set theory (hereafter simply referred to as set theory) to these songs provides an alternate interpretation of musical coherence.

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[46] See Forte, *Atonal Music*, pp. 94-97.

The application of the two analytic systems in tandem allows us to determine in what ways and to what extent innovative pitch structures and tonal coherence inform the structure of the songs. While each of the analytic systems has a specific role, one to demonstrate the tonal structure, and the other the atonal elements of the songs, there is some overlap in their use. Each offers a unique interpretation of musical events. Used together, they act as a kind of barometer determining the degree to which atonal procedures inform the structure and, thus, the position the songs occupy on the road to the atonal style.

Many of the fundamental assumptions that underlie the two approaches are diametrically opposed, and one dichotomy in particular should be mentioned here. Essential to Schenkerian analysis is the concept of pitch hierarchy--in set theory, as stated earlier, all pitches are considered equal. This basic dichotomy is borne out in analysis, providing two distinct interpretations of a pitch structure. A case in point is the vertical sonority that functions as the goal of the first vocal phrase of "Ideale Landschaft" (Example 6). From the Schenkerian perspective, the C5[47] (and its octave) functions as a neighbor to the fifth of the cadence chord, E♮ - G♯ - B♮. In a set-theoretic segmentation, C becomes an equal partner, comprising set

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[47] I am designating middle C "C4," following the pitch designations of the Acoustical Society of America.

(4 8 11 0) to form set 4-19, an important pitch structure in this song.

I am, of course, not the first to use the two analytic approaches in concurrence. Allen Forte uses the two systems in this fashion in an article dealing with works by

Example 6: "Ideale Landschaft," m. 10.

Set 4-19: (4 8 11 0)

Schoenberg from the same period as the composition of the *Dehmel Songs*, songs of that composer which lie on the border between tonality and atonality.[48] In a recent analysis of excerpts from Berg's opera *Wozzeck*, Forte again uses the two systems in combination to determine tonal hierarchy and structural levels in portions of that work.[49] Christopher Lewis, in his analysis of the third of Berg's *Vier Stücke für Klarinette und Klavier*, op. 5, also uses the two systems

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[48] Forte, "Schoenberg's Creative Evolution."

[49] Allen Forte, "Tonality, Symbol, and Structural Levels in Berg's *Wozzeck*," *Musical Quarterly* 71 (1985): 474-499.

in combination to demonstrate vestiges of tonality in the piece. He writes:

> ". . . if the beginning of the piece establishes directed motions, or tonal focus, the implications of which are developed as the music unfolds, and if at the same time significant set relations articulate and unify the structure, then the interaction of tonal and atonal elements can be accepted as a legitimate compositional procedure . . ."[50]

It is my view that the *Dehmel Songs* manifest, at least in part, the dual principles of organization that Lewis addresses, and the approaches of these theorists serve as models for the analytic methodology of this study.

Garth Preston, in his study of the *Dehmel Songs*, proposes a different view of the structure and coherence of the songs, and a brief review of the basic assumption that underlies his approach provides an appropriate forum for me to delineate the principal *a priori* assumption of my analysis.[51] As mentioned in Chapter 1, Preston finds the songs wholly tonal and views all pitches as having a specific role in the tonal hierarchy (see p. 17). He bases this conviction on his perception of the augmented triad, a prominent harmonic entity of the songs to which he accords important structural status, and to which he attributes specific tonal implications and voice-leading functions.

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[50] Christopher Lewis, "Tonal Focus in Atonal Music: Berg's op. 5/3," *Music Theory Spectrum* 3 (1981): 84-91.

[51] Preston, "Tonal and Extra-tonal Functions of the Augmented Triad."

That the augmented triad has an implied harmonic root is fundamental to his analysis of the songs.

I, too, consider the augmented triad an important harmonic entity in the *Dehmel Songs*, but my view of the function of the sonority is fundamentally different. While the triad is capable of evincing tonally functional implications, I hold the more traditional position that the sonority is tonally ambiguous. The view that an augmented triad has a specific and necessary resolution places, in my opinion, too much emphasis on its spelling. My hesitation in this regard is based partly on Schoenberg's comments on notation, directives which undoubtedly influenced Webern:

> "One should be guided by the key which the passage that is momentarily in question most resembles rather than by that indicated by the key signature of the piece, and should try to relate the connections for the moment, through the notation, to that assumed key. But one must not be all too pedantic; I prefer that manner of writing that avoids such complicated visual images as double sharps and double flats. To me, the right notation is that which needs the fewest accidentals."[52]

I concur with Schoenberg's assessment of "vagrant" chords, a group of chords of which the augmented triad is a member, when he writes that it is precisely these chords that brought about the dissolution of tonality.[53]

I see in the use of the augmented triad and other tonally ambiguous sonorities, then, the seeds of the atonal

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[52] Schoenberg, *Harmony*, p. 260.

[53] Ibid., p. 196.

idiom. Harmonic entities even less closely related to conventional tonality are also well represented in the *Dehmel Songs*, and they must also be taken into account. In my analysis I will seek to show that, although the structure of the songs is influenced by traditional tonality, fundamentally new principles of pitch organization also effect coherence.

CHAPTER III

ANALYSIS OF "IDEALE LANDSCHAFT" AND "NÄCHTLICHE SHEU"

In the ensuing analyses of the five *Dehmel Songs* I disrupt their sequence in the cycle in order to demonstrate best the evolution of Webern's compositional style. As the order of composition of the three 1908 songs is not known, I deal with them in the order in which they appear in the cycle.[54] The earlier two songs are dealt with in the order in which they were composed. The order in which the songs are discussed in this study, then, is as follows:

"Ideale Landschaft"	(No. 1)	(1906)
"Nächtliche Sheu"	(No. 4)	(1907)
"Am Ufer"	(No. 2)	(1908)
"Himmelfahrt"	(No. 3)	(1908)
"Helle Nacht"	(No. 5)	(1908)

Space prohibits an exhaustive analysis of each of the songs. Consequently, only salient features of selected passages are represented here. I begin the analysis of each song with a brief discussion of formal design before proceeding to the tonal and set-theoretic analysis.

My interpretation of tonal coherence in "Ideale Landschaft" and "Nächtliche Sheu" sets the analysis of these

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[54] I suggest that the order in which they appear in the cycle could well be the order in which they were written: "Am Ufer;" "Himmelfahrt;" and "Helle Nacht." There is little doubt in my mind that "Helle Nacht," in any event, was composed last.

two songs apart from that of the remaining three. In each of these two earlier songs there seems to be an *Ursatz* of sorts, comprising, as it must, both a *Bassbrechung* and *Urlinie*. In the three songs of 1908, on the other hand, it is virtually impossible to decipher an *Urlinie*. As a result, the graphs which demonstrate pitch structure in those three songs are simply reductive graphs of harmony as opposed to the more conventional Schenkerian middleground and background graphs used for the two earlier songs.

"Ideale Landschaft" (No. 1)

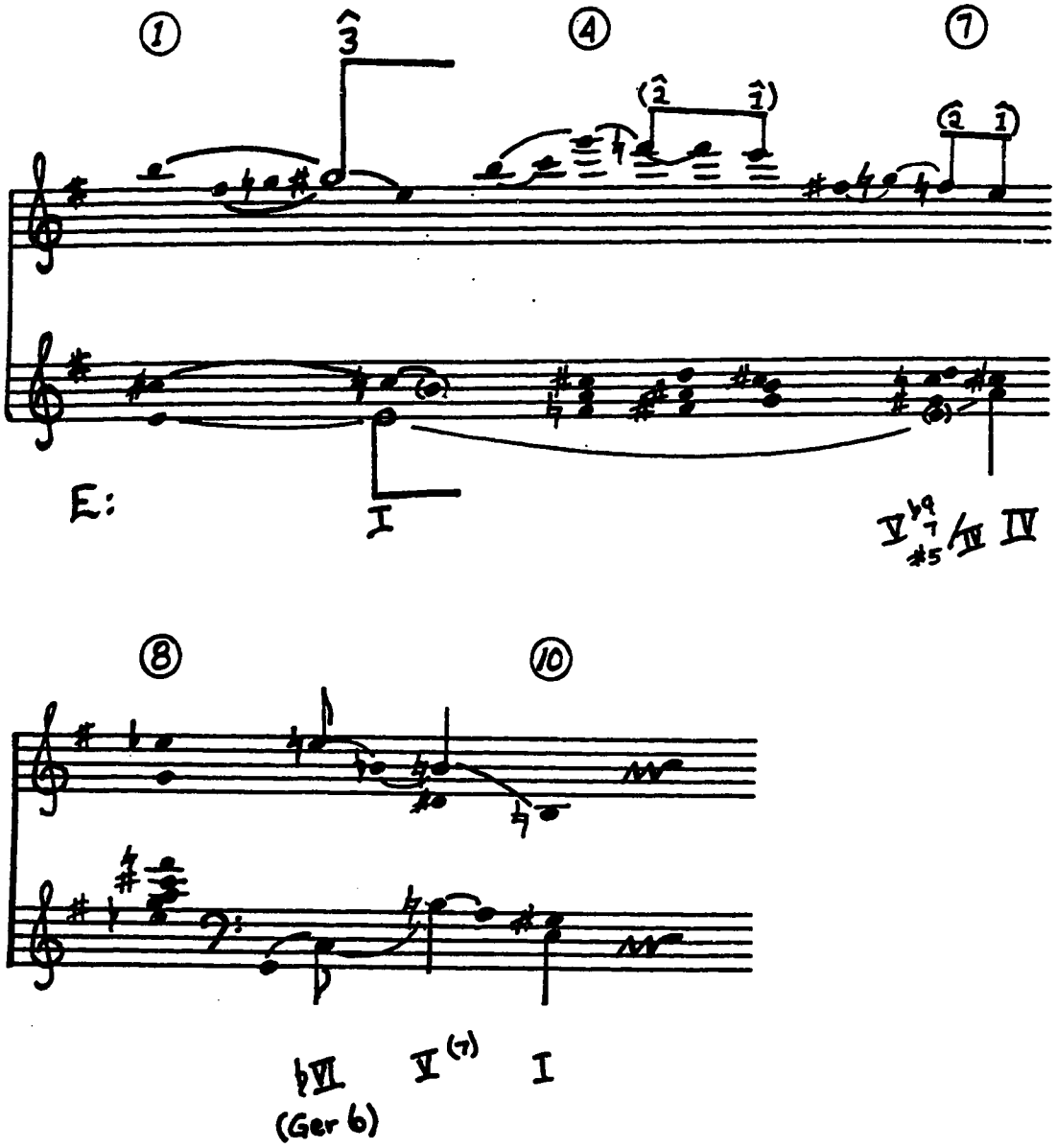
The primary formal divisions of the song are delineated by surface features including texture, motive, dynamics, and other performance directions. The form is tripartite, with the first division occurring in m. 10, articulated by a perfect cadence in the tonic, E. Part 2 begins in m. 11 and continues to m. 23, distinguished at the surface by increased rhythmic activity, elongated phrasing, and the highest dynamic marking of the song (*forte*). The opening of Part 3 (a near repetition of Part 1) overlaps the end of Part 2 in m. 23, signalled by the recurrence of the opening melodic motive (stated here in the "dominant" and marked *sehr ausdrucksvoll*). The song ends with a perfect cadence in the tonic, E.

Large-scale tonal motion reinforces the divisions articulated by surface features and, of the five songs, the

tonal syntax of "Ideale Landschaft" is most closely associated with conventional tonality. The chromatic foreground of Part 1 prolongs the tonic, although the tonic triad is not expressly stated before m. 10. As demonstrated in the foreground graph of the first section (Example 7), the tonic triad is first implied in mm. 1-2 by both the melodic and harmonic gestures. The metrically stressed pitches of the melody in mm. 1-2, B5 - G♯5 - E5, outline the tonic triad. The triad is given the most stable harmonic support in m. 2--notice that C♮5 is interpreted as an incomplete neighbor to an implied B4, the fifth of the chord. The chromatically ascending bass line leads to a chord that functions as of V/IV (specifically, $V^{\flat 9}_{\sharp 5}$/IV - m. 6) and in m. 7 resolves, as one would expect, to IV, the chord which serves as the goal of harmonic motion in the first phrase.

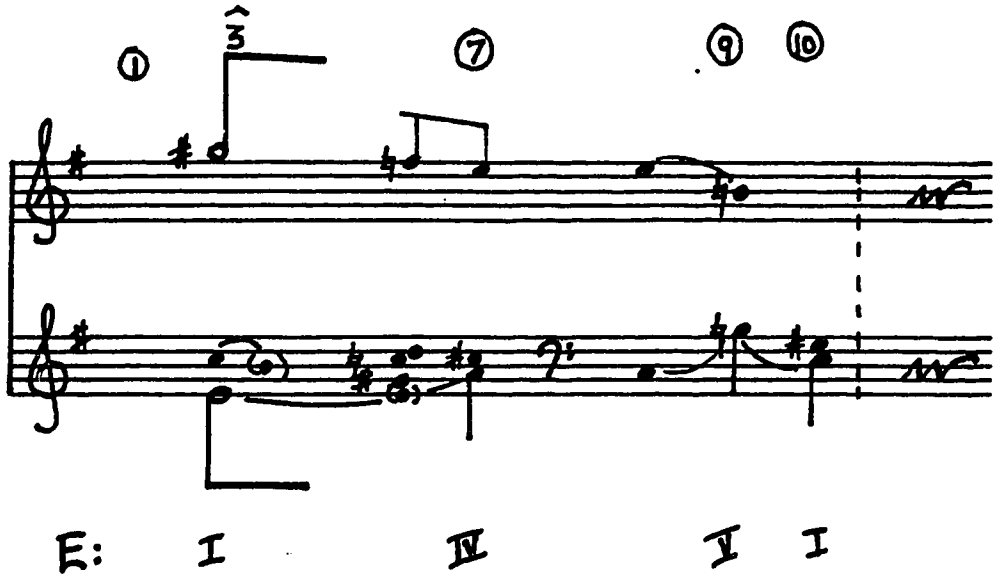
The second phrase of Part 1 (mm. 8-10) begins with a whole-tone structure that prepares the conventional progression, ♭VI (German sixth) - V7 - I. Again, C5 (and its octave) is considered a neighbor to the fifth of the chord, here represented by both the B♮3 in the voice and the B♮2/B♮1 of the accompaniment. At the middleground of this section, then, the rather conventional harmonic progression, I - V/IV - IV - ♭VI - V - I, underlies the highly chromatic texture of the foreground (Example 8).

Example 7: Foreground, "Ideale Landschaft," mm. 1-10.[55]



[55] Notice that, because the *Kopfton*, $\hat{3}$, is raised when it first appears, and $\hat{2}$ is lowered, the melodic descent includes an augmented second. This constitutes, of course, a considerable deviation from Schenkerian concepts. However, in the context of this "extended" tonal syntax, it is not unusual for a scale degree to be implied by a chromatic alteration. In the case at hand, $\hat{3}$ reappears in close proximity to the final descent (m. 22), represented, as the key signature would imply, by G♮, thus evading the augmented second.

Example 8: Middleground, "Ideale Landschaft," mm. 1-10.



Although the foreground of Part 2 (mm. 11-23) is more chromatic than that of Part 1, the implied large-scale tonal motion is virtually as conventional as that of the opening section. ♭II is established as a point of departure in m. 11 and prolonged through m. 14 by highly chromatic and harmonically complex neighbor motion. Scale degree (♭)$\hat{2}$, in addition to its role as the root of ♭II, becomes an important common tone throughout the cadential progression which closes the second vocal phrase (mm. 15-17). The cadential goal of the phrase, C♯, is approached by a root progression of ascending minor thirds, G - B♭ - (D♭); the chordal role of (♭)$\hat{2}$ evolves from the seventh of G through the fifth of B♭ to the third of C♯ (E♯) (Example 9).

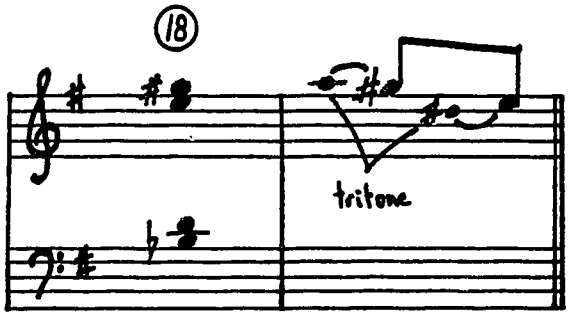
Example 9: Chordal role of $\hat{2}$, "Ideale Landschaft."

As a consequence of the non-triadic harmonies, the foreground pitch structure of the third phrase (mm. 18-23) is further removed from conventional tonality than that of any other passage in the song. The unconventional pitch structure of the running sixteenth notes (mm. 18, 20-23), however, has been prepared earlier in the whole-tone sonority of m. 8 (Part 1) and is further developed here. In m. 8 we find five pitches of the whole-tone scale present; the melodic displacement of four of the pitches, E♭5 - G5 - A5 - C♯6 (Piano: left-hand), resembles the distribution of pitches in running sixteenth-note figurations of Part 2 (Example 10a). In the reduction of each figuration (with

the exception of m. 22) I consider the first and third notes embellishing pitches; they comprise the tritone which

Example 10: Whole tone structure, "Ideale Landschaft."

a) b)

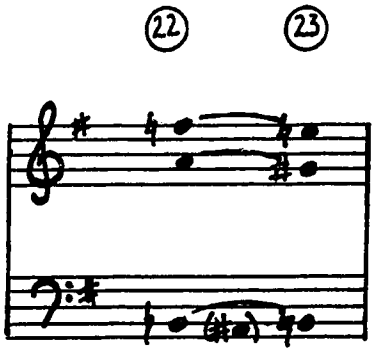


"resolves", in each case, to a major third (though not always spelled as such) on the second and fourth sixteenth notes (Example 10b). The two major thirds which result in m. 18 and the ensuing measures, the roots of which are a tritone apart, reflect the two major thirds which are effected by the aforementioned melodic motion in m. 8, the roots of which are also a tritone apart.

This highly chromatic passage leads to a cadence in m. 23 which strongly implies the structural close of the song. Although this is perhaps an unusual interpretation of the structural design, it finds support in various musical and textual features. The goal of the linear motion is clearly the tonic triad in m. 23, and each member of the tonic chord is approached by semitone (Example 11).

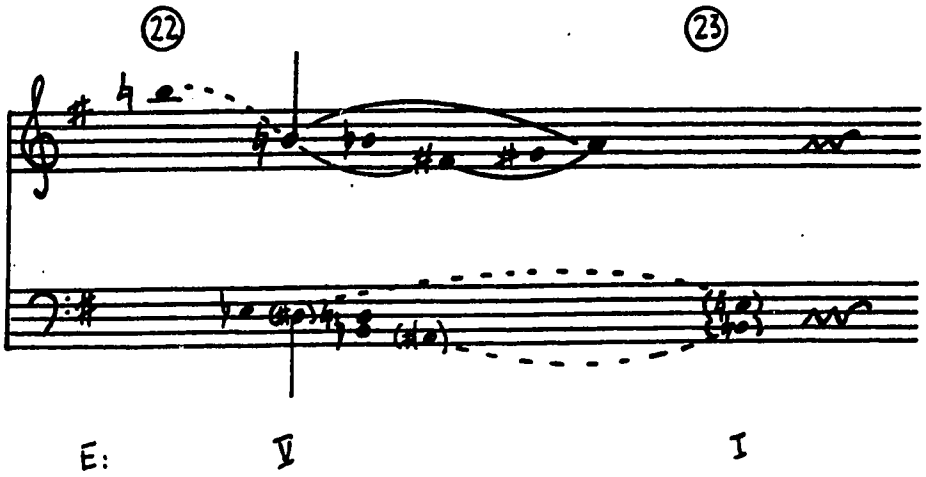
The harmonic structure of the contrapuntal fabric of m. 22 also implies the dominant in a number of ways. The

Example 11: Approach to tonic, "Ideale Landschaft," mm. 22-23.



pitches on the downbeat of the accompaniment, B♮ and E♭ (D♯), can be heard as the resolution of the tritone created by the outer voices at the end of m. 21 (E♮3 and A♯4/5). The right-hand of the accompaniment clearly outlines members of the dominant triad (Example 12). The pitch structure of the material in the left-hand is more ambiguous but does support the implied dominant harmony. The D♮ continues to function as the third of the dominant chord (the common role of interchanged major/minor thirds is within the realm of plausibility in the context of this extended tonal

Example 12: Implied dominant harmony, "Ideale Landschaft," m. 22.



language)[56] while the B♭2 functions as chromatic neighbor to the fifth of the tonic chord (See Example 12).

We have, then, at the middleground of Part 2, the conventional large-scale tonal motion, ♭II - V - I (Example 13). Although the tonic harmony reached in m. 23 can hardly be perceived as the structural harmonic close of the song (by virtue of its displacement - second inversion), I believe the *Urlinie* descent from the *Kopfton* ($\hat{3}$) is completed at this point. Therefore, the end of Part 2 can be understood to provide a measure of (at least melodic) structural closure. The admittedly weak harmonic support of

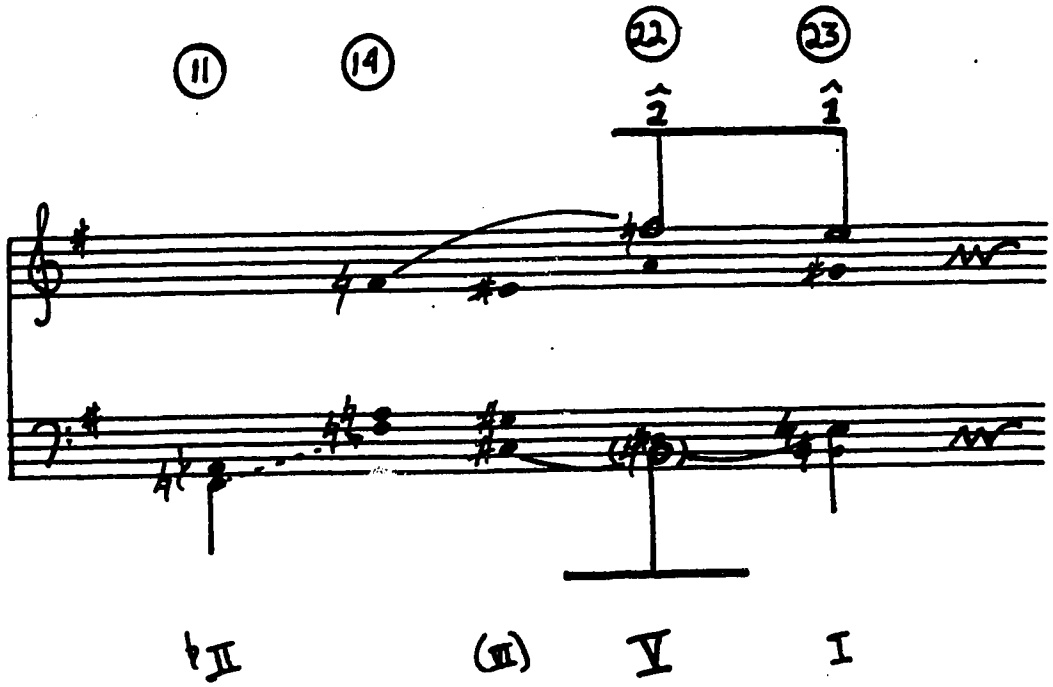
---

[56] In an analysis of his own song "Lockung," Op. 6, No. 7, Schoenberg indicates that one chord contains both ♭5 and ♯5 (*Structural Functions of Harmony* (New York: W.W. Norton, 1969), p. 113, Example 122c). Altered thirds, too, can represent the third scale degree.

$\hat{1}$ requires further resolution, and this is the role of the reference to Part 1 (Example 14). The consonant support required by scale degree $\hat{1}$ is simply delayed.

This interpretation of the large-scale design of the song is substantiated by the last line of the text: ". . . *und fern verscholl das Echo meines Aufschreis.*"

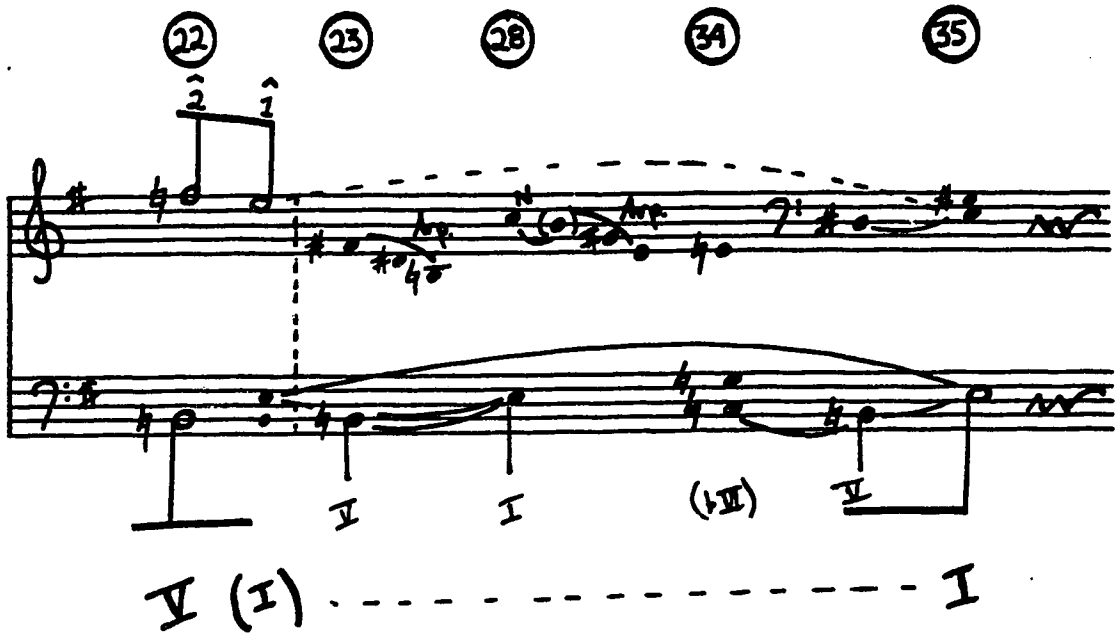
Example 13: Middleground, "Ideale Landschaft," mm. 11-23.



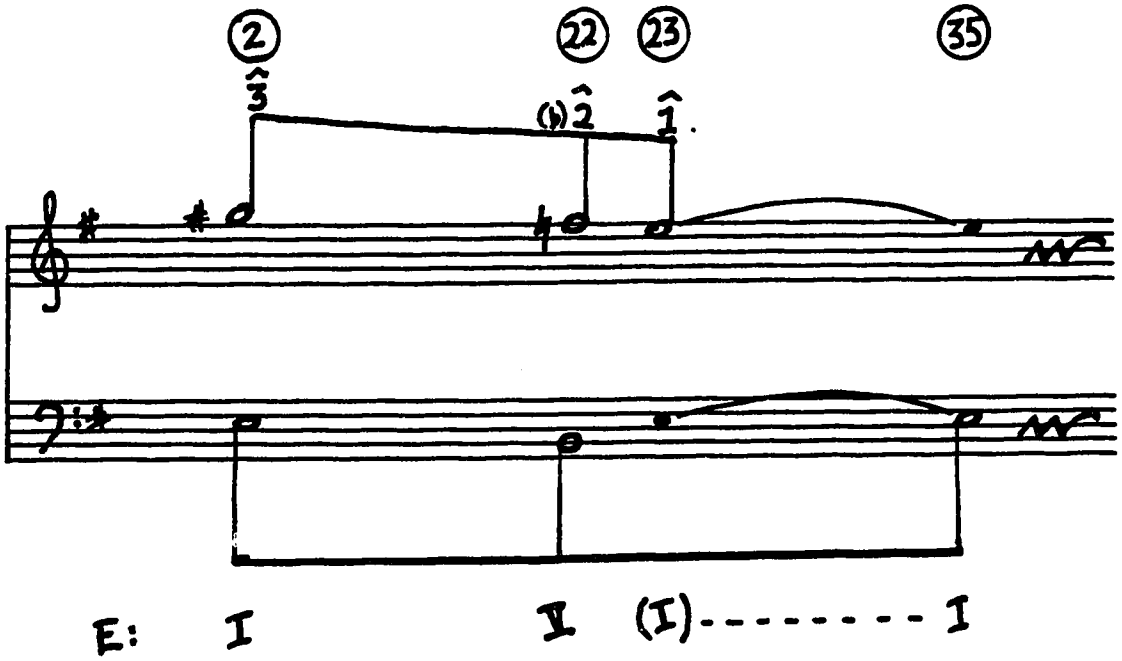
(Translation: And in the distance there died away the echo of my cry.) In a literal musical sense, the allusion to Part 1 in the final section is merely an "echo," a distant reminder of the object of poetic utterance.

We have in "Ideale Landschaft", then, a rather conventional tonal design at the background (Example 15)

Example 14: Middleground, "Ideale Landschaft," mm. 22-38.



Example 15: Background, "Ideale Landschaft."



and deep middleground. The tonic triad, E, definitely functions as the referent, serving as both point of departure and goal of tonal motion. The *Ursatz* of the song bears a close resemblance to Schenkerian models, differing substantially only in the manner in which closure is achieved. The pitch structure is susceptible, however, to another interpretation; set-theoretic analysis provides evidence of the growing structural importance of new pitch combinations.

At the time "Ideale Landschaft" was composed, Webern's mentor, Schoenberg, was beginning to consider the possibility of sonorities other than triads forming the point of reference in a composition. In his account of Schoenberg's creative development,[57] Allen Forte proposes that the composer's five 1905 songs of Op. 6 mark the transition to the atonal style; he bases his argument in part on the appearance of Schoenberg's musical signature (the pitch representation of musical letters in the composer's name: Example 16). This set of pitches has

Example 16: Schoenberg's musical signature.

S c h ö n b e r g

(3 0 11 10 4 7) (Set 6-Z44)

---

[57] Forte, "Schoenberg's Creative Evolution."

important structural implications in Schoenberg's songs of 1905. The appearance and function of the set prompts Forte to write:

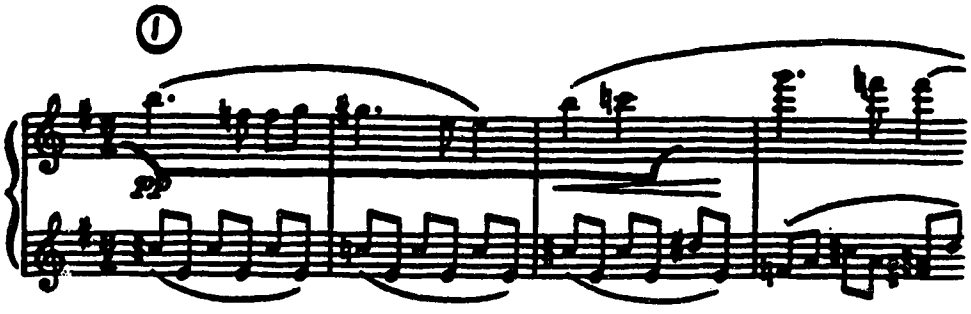
> ". . .its occurrences demonstrate that Schoenberg was thinking in terms of unordered pitch-class sets, that is, musical units which can arise independant of the syntax of traditional tonality and which ultimately would do so over the span of a complete work."[58]

Webern may well have been aware of his mentor's innovations; indeed, "Ideale Landschaft" supports that assumption. Of the sets that influence the structure of the song, set 6-Z19 (complement of the Schoenberg signature set) plays a significant role.

Set 6-Z19 occurs as the first six pitches of the melody (Example 17a), comprising a motive which informs the large-scale design of the song; it signals both the beginning and end of Parts 1 and 3 (its occurrence at the beginning of the final section is related to the opening of

Example 17: Set 6-Z19, "Ideale Landschaft."

a)



(4 5 7 8 11 0)

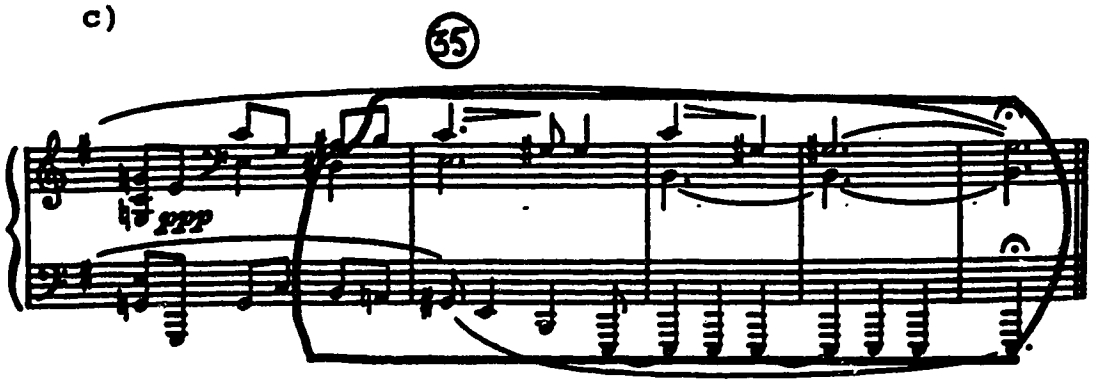
[58] Ibid., p. 138.

Example 17 (continued)

b)

(8 9 11 0 3 4) (4 5 8 9 11 0)

c)

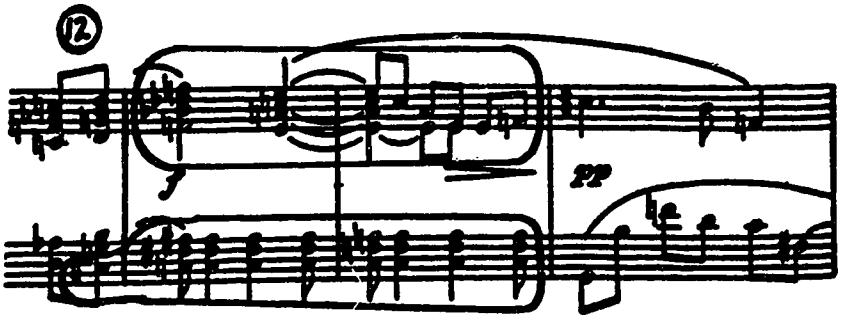


(8 9 11 0 3 4)

the song by T_7). Two overlapping representations of the set lie just beneath the surface, so to speak, at the end of Part 1 (Example 17b); the segmentation is supported, however, by the contiguity of the pitches. The counterpart of these two representations (the end of Part 3) is not ambiguous, comprising the last six pitches of the song (Example 17c).

That set 6-Z19 occurs in distributions other than as the melodic motive further substantiates its role as a significant collection of pitches in this song. In addition to appearing in the harmonic structures that close the outer sections, two 6-Z19 sets occur concurrently in mm. 12-15, lending unity to the tonally unconventional surface of the passage (Example 18).

Example 18: Set 6-Z19, "Ideale Landschaft," mm. 12-15.

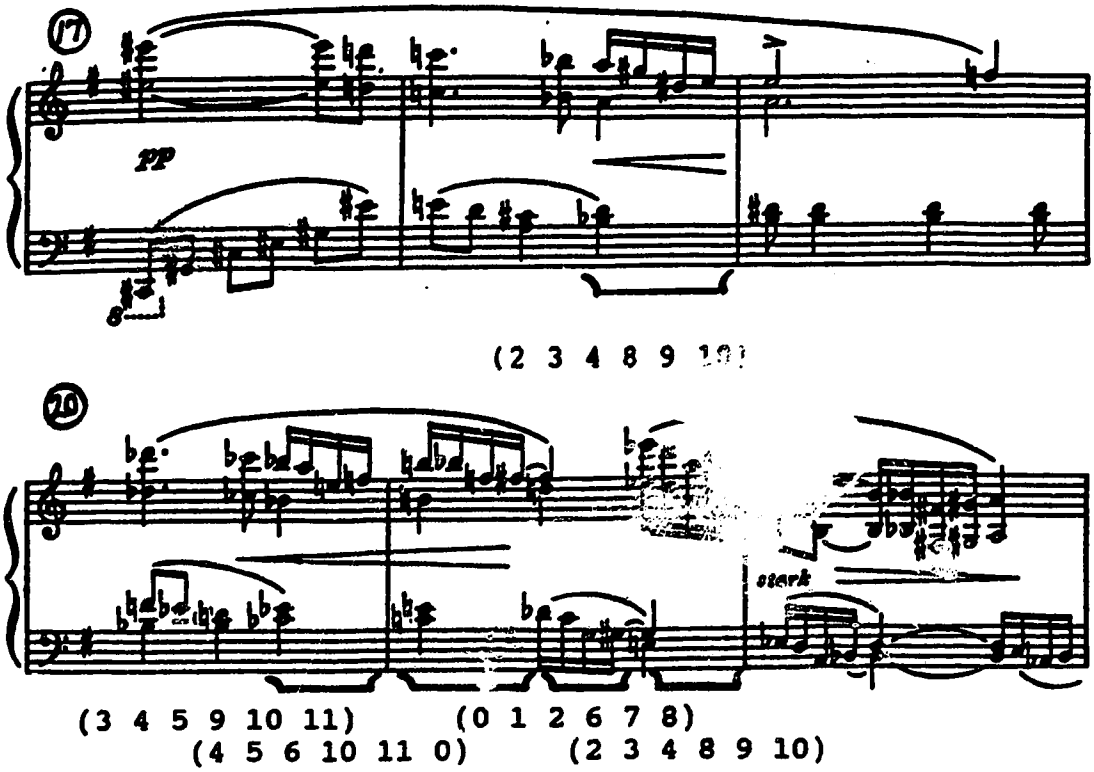


(9 10 0 1 4 5)
(5 6 9 10 0 1)

Set 6-7 is another collection of pitches that provides middleground structural coherence to a passage that is highly chromatic at the surface, permeating the running sixteenth-note figurations of Part 2 (Example 19). It appears five times in the setting of the third line of text, initially comprised (m. 18) of pitch-classes (2 3 4 8 9 10).[59] The set then undergoes the following

[59] Notice that set 6-7 is both inversionally and transpositionally symmetrical; there are only six possible discrete permutations of the set.

Example 19: Set 6-7, "Ideale Landschaft."

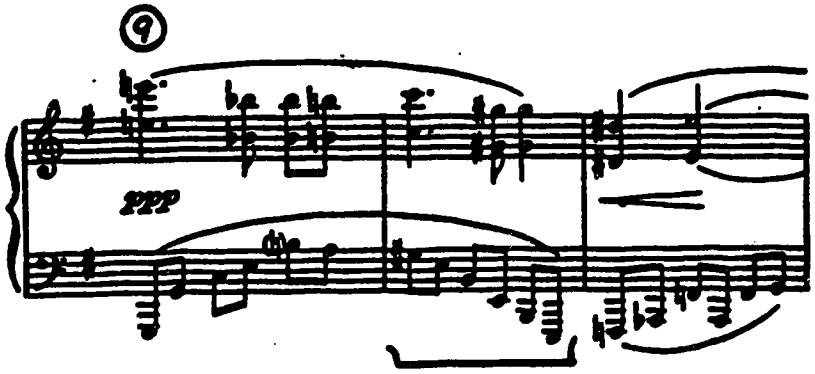


permutations: T_1 (m. 20); T_2 (m. 21); T_{10} (m. 21); T_0 (m. 21). It is very interesting to note that the final occurrence of the set (m. 21) is comprised, again, of precisely the same pitch-classes which comprised its initial appearance, though the surface distribution differs significantly.

A number of smaller sets of pitch-classes also contribute significantly to the structure and coherence of the song. Perhaps the most important of these is set 4-19, a pitch formation that can be constructed by adding to an augmented triad a pitch-class that is one semitone removed

from any of the chord tones.[60] The first structurally significant appearance of set 4-19 occurs at the close of Part 1 (Example 20), and comprises the E major triad combined with the C♮5 and its octave. In the tonal interpretation, this C was considered a neighbor to the fifth of the chord, resolved either in another register or by an implied note. That its resolution in the tonal sense is somewhat ambiguous gives its role in the pitch structure

Example 20: Set 4-19, "Ideale Landschaft," m. 10.



(4 8 11 0)

(when interpreted as an atonal set) greater import. As a subset of set 6-Z19, 4-19 also appears at the end of the song (mm. 35-38: [4 8 11 0]).

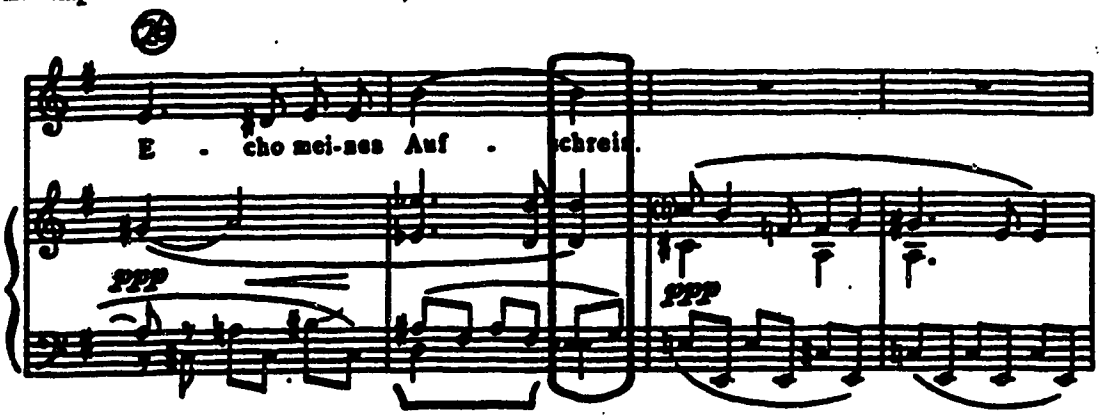
Set 4-19 occurs several times in Part 3, lending coherence, in particular, to the first phrase of the

---

[60] Set 4-19 is a significant, multiply represented subset of the Schoenberg signature set (and its complement). Its structural affinity to the augmented triad substantiates the role of that chord in the transition from tonality to atonality.

section. It appears as a contiguous subset of the melodic motive (set 6-Z19) that signals the return of material from the opening section, and serves as a goal of the phrase. The cadential goal, interpreted in tonal terms as the dominant of E, comprises two distinct 4-19 sets (Example 21). The tonal implications are veiled, however, by the highly chromatic foreground, and it is significant that the pitches of the foreground comprise this particular set.

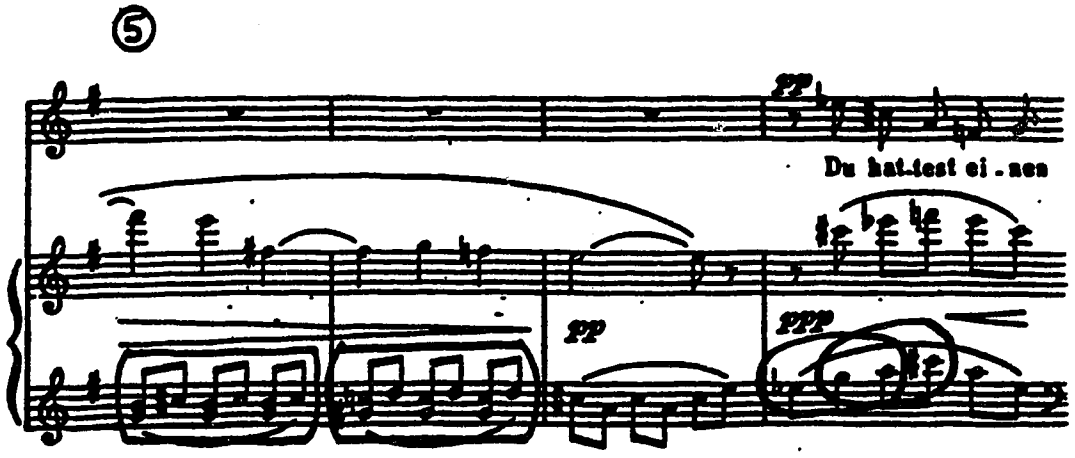
Example 21: Set 4-19, "Ideale Landschaft," m. 27.



(2 3 6 10) (2 3 7 11)

Set 3-8 also contributes to surface unity in the opening of Part 1; it relates the pitch structure of mm. 5 and 6 to the whole-tone structure of m. 8 (set 3-8 is, of course, a "whole-tone" set) (Example 22). Consequently, the whole-tone structure of m. 8, a rather anomalous

Example 22: Set 3-8, "Ideale Landschaft."



(7 11 1) (8 0 2) (3 7 9) (7 9 1)

sonority in tonal terms, is both prepared and developed, as set-theoretic analysis reveals.[61]

Although tonal principles inform the large-scale structure of "Ideale Landschaft," as demonstrated earlier, there are certain unconventional pitch structures which begin to contribute to coherence in the song, both at the surface and at a deeper level. The C which features prominently in two cadential tonics (mm. 10, 35), for instance, while having the function of an upper neighbor in tonal terms, comprises set 4-19 which, in set-theoretic terms, is of consequence structurally. It is significant, also, that the complement of the Schoenberg signature set, set 6-Z19, appears several times and that it occurs in

---

[61] Set 3-8 is a multiply represented subset of set 6-7, the aforementioned set which permeates the end of Part 2.

distributions other than the opening melodic motive. While Webern is obviously following a tonal design in "Ideale Landschaft," the appearance and function of the aforementioned pitch-class sets at important structural junctures of the song imply that he is experimenting with innovative means of achieving structural coherence.

"Nächliche Sheu" (No. 4)

In 1911, Schoenberg published the first edition of his theory of harmony, *Harmonielehre*, in which he describes models of tonal organization which he calls "fluctuating" and "suspended" tonality. A brief review of Schoenberg's comments with respect to this new model will assist our understanding of the large-scale tonal design of "Nächtliche Scheu," in which we find an example of this kind of structure.

In his first reference to "suspended" tonality, Schoenberg writes:

> "From the outset the tonic does not appear unequivocally, it is not definitive: rather it admits the rivalry of other tonics alongside it. The tonality is kept, so to speak, suspended, and the victory can then go to one of the rivals, although not necessarily.
>
> The harmony is nowhere disposed to allow a tonic to assert its authority. Structures are created whose laws do not seem to issue from a central source (*Zentrum*); at least this central source is not a *single* fundamental tone.[62]

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[62] Schoenberg, *Harmony*, p. 153.

Later he writes:

> "If the key is to fluctuate, it will have to be established somewhere. But not too firmly; it should be loose enough to yield. Therefore, it is advantageous to select two keys that have some chords in common, for example, the Neapolitan sixth or the augmented six-five chord. [. . .] It is evident that vagrant chords will play a leading role here: diminished and augmented seventh chords, Neapolitan sixth, augmented triad."[63]

For examples of this kind of structure, Schoenberg offers an analysis of his own song, "Lockung," Op. 6, No. 7,[64] in which he provides a harmonic analysis of the song in both E♭ major and C minor.

"Nächtliche Scheu" manifests this tonal ambiguity (or, perhaps more precisely, tonal duality[65]), with the tonic, D, being established unequivocally only in the final measures. However, although the rival tonic, F, is alluded to at the middleground throughout the song, the background prolongs D.

The form of the song is tripartite: Part 1, mm. 1-7; Part 2, mm. 8-17; Part 3, mm. 17-27. The formal design is articulated by texture, register, phrase structure of the text--each of the three stanzas of poetry comprises a section--and, as demonstrated below, the tonal design of the

---

[63] Ibid., p. 384.

[64] Arnold Schoenberg, *Structural Functions*, pp. 111-113.

[65] Robert Bailey, in his analysis of Wagner's *Tristan*, refers to the pairing of two tonalities as a "double-tonic complex" (*Prelude and Transfiguration from Tristan und Isolde* (New York: W.W. Norton, 1985), p. 121).

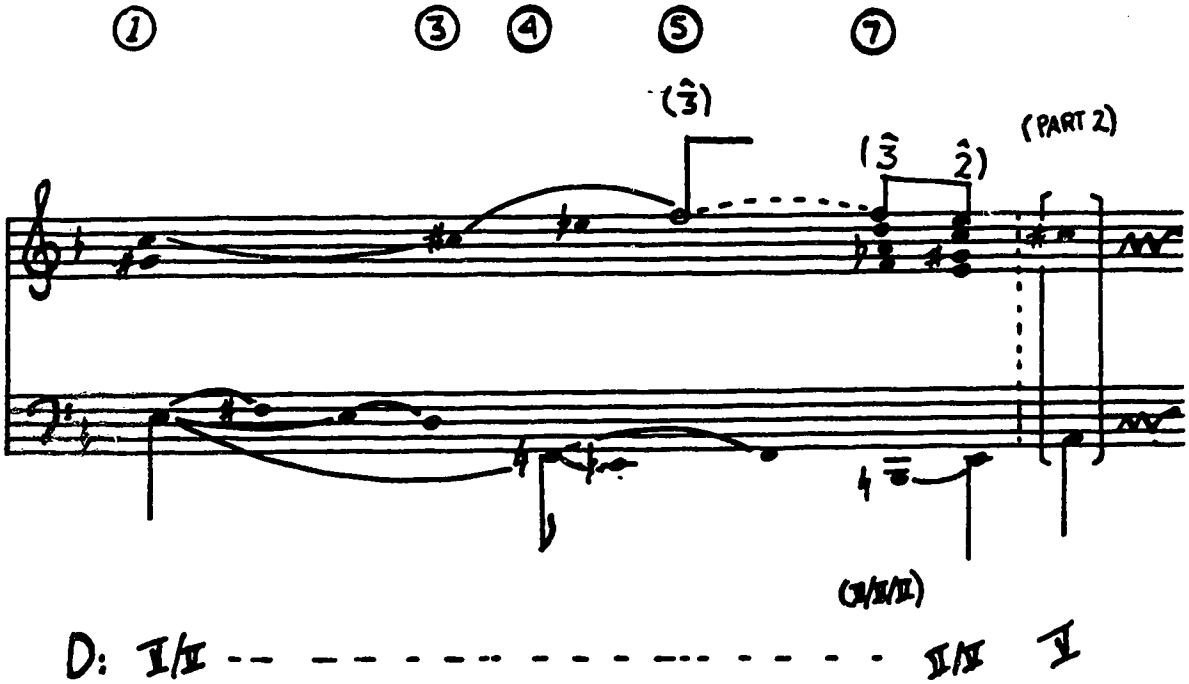
song. Parts 1 and 3 are related by fragmented motivic gestures and by a distinctive texture in which the voice and left-hand piano material proceed in stretto while the piano (R.H.) provides a chordal accompaniment (Example 23).

As the graph in Example 24 demonstrates, an augmented triad on E is prolonged at the middleground of Part 1. Its tonal function is not defined until m. 8, where it functions

Example 23: Contrapuntal texture relating Parts 1 and 3, "Nächtliche Scheu."

as V/V/D and resolves conventionally to V/D (which is, incidentally, the first appearance of either a major or minor triad in the song). The augmented triad on E could resolve to F equally well and in precisely the same manner in which it resolves to V/D (Example 25). As we shall see shortly, the sonority to which the E augmented triad resolves so axiomatically is itself soon transformed to imply the rival tonic.

Example 24: Middleground, "Nächtliche Scheu," mm. 1-8.

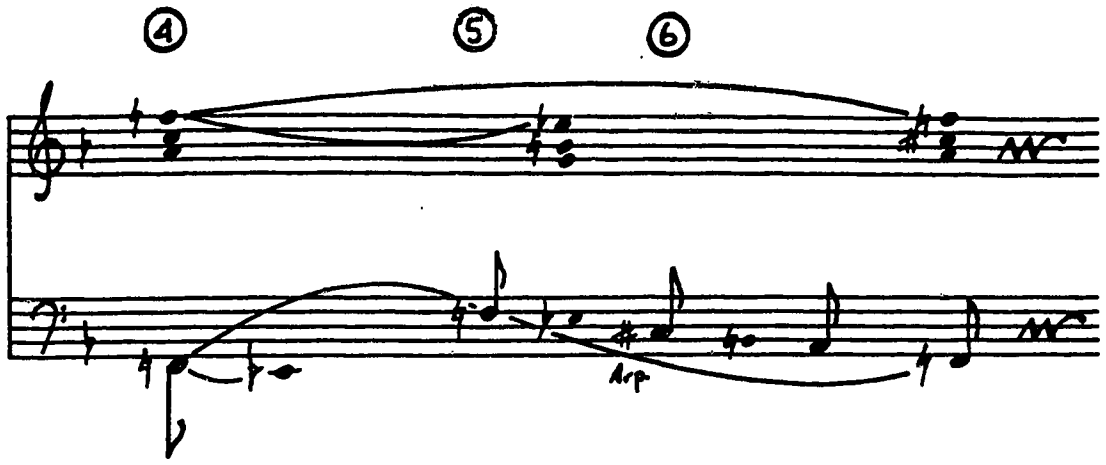


Although it has less structural weight than its resolution in Part 2, the V/V/D in m. 7 does achieve limited closure for Part 1. It is approached by a diminished-

Example 25: Resolution of the E augmented triad.

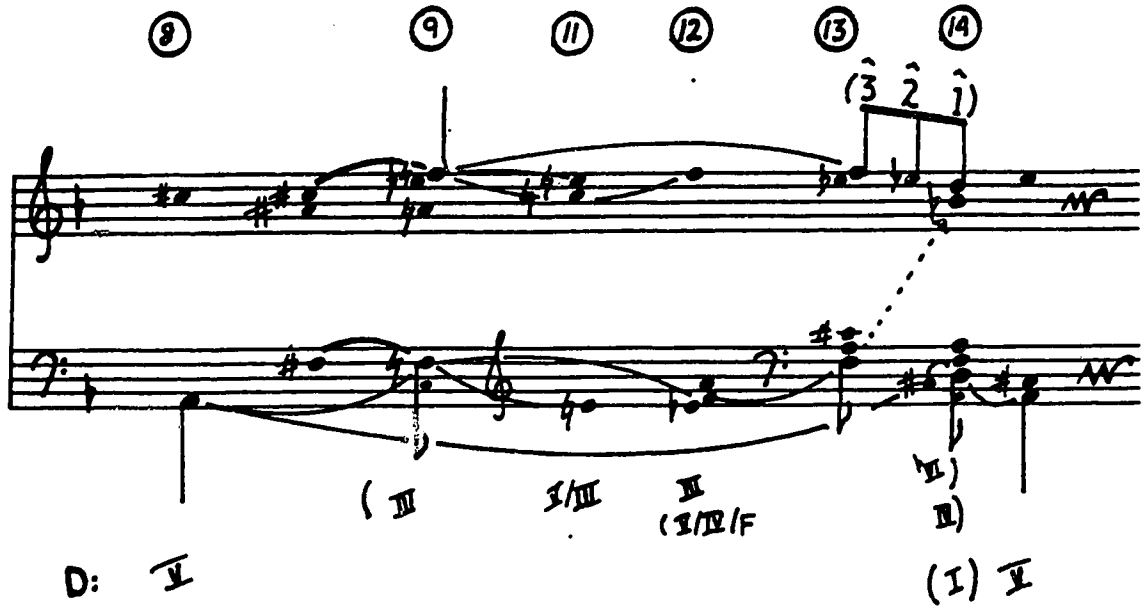
seventh sonority, the root of which is related to E by the conventional descending fifth root-progression. (One chord-tone--A♭-G♯--is held common in its resolution. See again Example 24.) The tonal rivalry between D and F is alluded to in the first measures of the song, with the statement of both $\hat{1}$ and (♯)$\hat{3}$ as neighbors to E (mm. 1-3: Piano - L.H.). Scale degree $\hat{3}$ is preeminent both harmonically and melodically in Part 1, however; it is emphasized as a local neighbor in the accompanimental figures of the section and becomes the *Kopfton* of the piece (m. 5). Furthermore, as shown in Example 24, E is prolonged at the middleground by the rival tonic acting as a neighbor harmony. That F is itself prolonged by large-scale neighbor motion to the E♭ augmented triad attests to its structural significance (Example 26).

Example 26: Prolongation of rival tonic, F, "Nächtliche Scheu," Part 1.

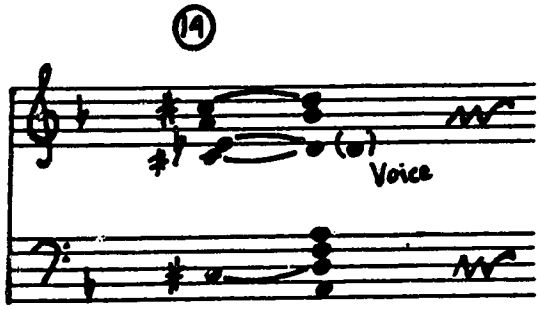


The sense of V/D at the beginning of Part 2 (m. 8) is soon lost; within the same measure it is transformed, first by altering the fifth and then the root, to an F♯ major triad which functions, in turn, as a neighbor to F (mm. 8-9: see also Example 27). The rival tonic, F, is then prolonged through a highly chromatic passage, the goal of the prolongation being attained in m. 12, where F is tonicized. The F reached in m. 12 is altered to become V/IV and resolves, in m. 14, to a sonority which functions, on the one hand, as IV of F. The distribution of pitches in this sonority (m. 14, beat 3) also strongly implies D (Example 28). The pitches immediately preceding the sonority are A - C♯ - E♭, comprising an altered dominant of D; the tonic is thus approached by upper and lower leading tones. Furthermore, D is most strongly represented in the chord of resolution, appearing four times in addition to being

Example 27: Middleground, "Nächtliche Scheu," mm. 8-17.



Example 28: "Nächtliche Scheu," m. 14.

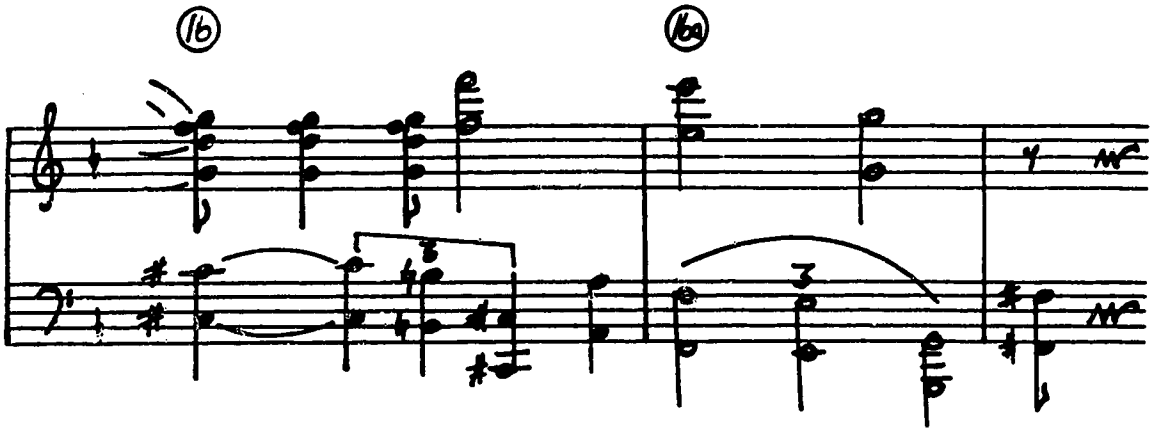


accented by the octave leap in the right-hand of the piano. The presence of B♭ in the chord reminds us of the V/IV/F, but its ultimate resolution reinforces V/D (it can be heard

to function as either ♭VI/D or I/D; in either case, it embellishes V/D).

Missing from the printed edition of "Nächtliche Scheu" is one measure which should appear between mm. 16 and 17 (Example 29)[66]. The pitches added by this insertion contribute to the sense of V/D at the end of Part 2. Together the pitches comprise a dominant-seventh of D, the F

Example 29: "Nächtliche Scheu," m. 16a.



serving as ♯5. This sonority takes us to the first allusion of a structural tonic in the piece.

The sonority to which V/D resolves at the outset of Part 3, while rather ambiguous in its structure--it comprises triads on both F and D--can be heard to function as the tonic, D (Example 30). Within the measure, however,

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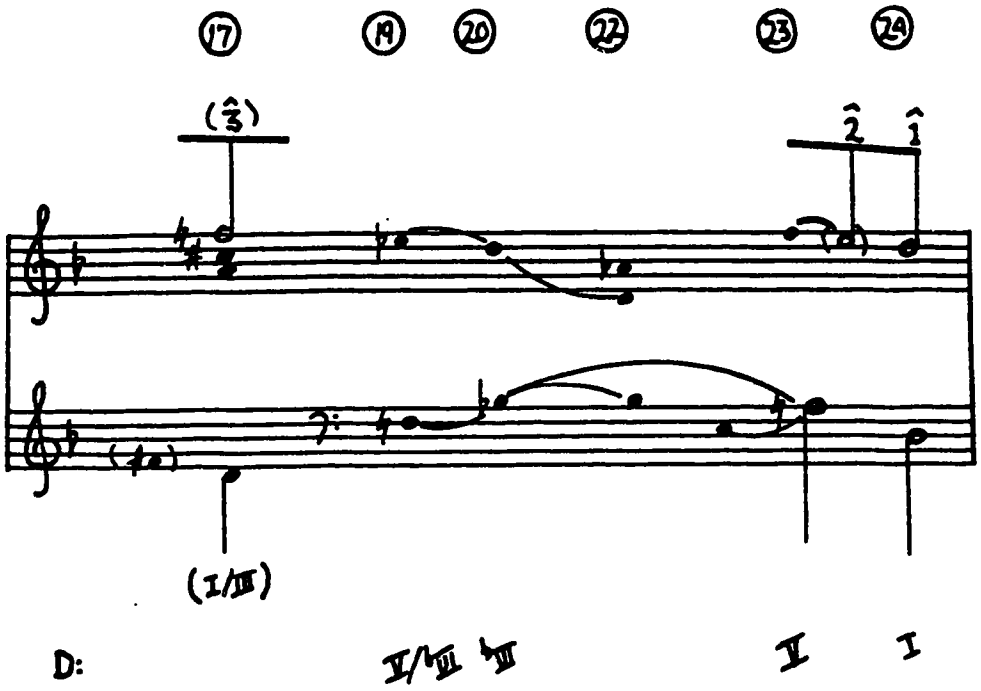
[66] Gerlach discusses this deletion in his "Handschriften," p. 103.

Example 30: F/D triad, "Nächtliche Sheu," m. 18.

F returns and is established as V/IV/F (m. 19) which resolves conventionally to IV/F (m. 20). IV/F is then reinterpreted as ♭VI/D and prolonged until, in m. 23, it resolves to V/D. The structural tonic is achieved in the final measure of the song, with each chord-tone being approached by semitone (Example 31).

It is worth noting that, whereas novel pitch combinations (such as sets 6-Z19 and 4-19) appear at important structural junctures in "Ideale Landschaft," the structure of chords articulating the large-scale design of "Nächtliche Scheu" (such as V/D, m. 8) is rather conventional. In "Nächtliche Scheu," however, the pitch structures which connect these points of formal articulation stretch the bounds of traditional tonal syntax. The texture is permeated with augmented triads; these triads are often subsets of larger "whole-tone" sets such as set 4-24, the most prominently featured tetrachord in the song. In the set-thecretic analysis of "Ideale Landschaft" I sought to demonstrate the budding structural significance of a few

Example 31: Middleground, "Nächtliche Scheu," mm. 17-27.



prominently featured sets; in the set-theoretic analysis of "Nächtliche Scheu" I wish to focus on Part 3 in order to demonstrate, in greater detail, the nature of set relations which pervade the entire song.

One of the striking features of set relations in Part 3 is the startling number of complement relations. There is no way of ascertaining whether Webern was entirely cognizant of this relationship. Nonetheless, the numerous appearances of complement relations in this song suggest they may be more than mere coincidence. Set 8-19 and its embedded complement, set 4-19, comprise the first two measures of the accompaniment in Part 3 (Example 32), and mark the beginning

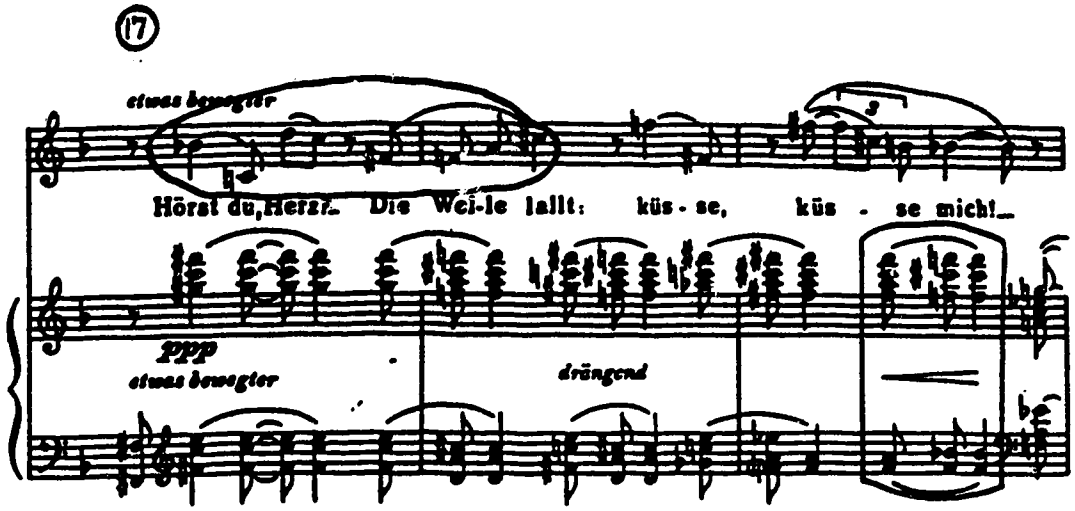
Example 32: Sets 4-19/8-19; embedded complements.

8-19: (0 1 2 4 5 6 8 9) 4-19: (1 2 5 9)

of the first vocal phrase of the section. Set 7-21 (a superset of both 6-Z19 and 6-Z44) is made up of the first seven pitches of the vocal line; it is referenced at the end of the vocal phrase by its complement, set 5-21, which appears in the accompaniment (Example 33).

As in the first vocal phrase, set 8-19 and its embedded complement delineate the outset of the second phrase (Example 34); it is related to the first 8-19 set by inversion, transposed up four half-tones. The intersection of the two 8-19 sets comprises the aggregate; only five of the twelve possible inversional levels produce this

Example 33: Sets 7-21/5-21: complements.



7-21: (5 6 9 10 0 1 2) 5-21: (5 6 9 10 1)

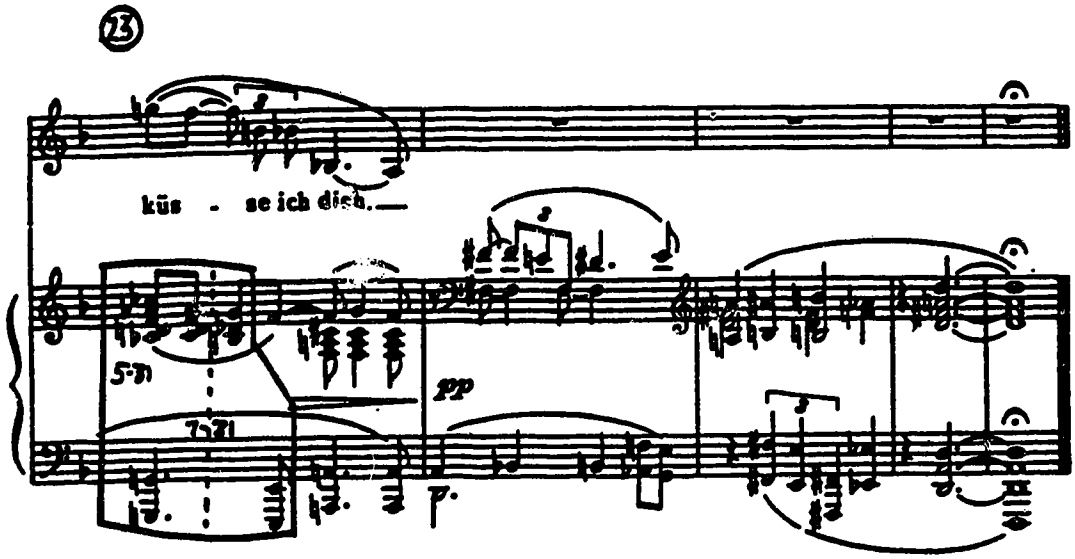
Example 34: Sets 8-19/4-19: embedded complements.

8-19: (10 11 0 2 3 4 7 8) 4-19: (3 4 7 11)

result.[67] The last embedded complement relation occurs toward the end of the second vocal phrase (m. 23); 7-31/5-31 (Example 35).

Each of the complement relations in Part 3 contributes to the coherence of the pitch combinations that articulate the structure of the music. Set 8-19 and its complement, in particular, appear at structurally important junctures and

Example 35: Sets 7-31/5-31: embedded complements.



7-31: (11 1 2 4 5 7 8) 5-31: (11 2 5 7 8)

contribute to the articulation of phrase structure in the song. In much atonal music, in the words of Forte, "the complement relation plays a fundamental structural role,"[68]

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[67] Inversional invariance vector of set 8-19 (0 1 2 4 5 6 8 9):

0	1	2	3	4	5	6	7	8	9	10	11
4	6	7	4	4	6	7	4	5	6	7	4

[68] Forte, *Atonal Music*, p. 74.

and, whether or not Webern knowingly exploited the structural functions of complement relations, they are certainly a conspicuously prominent feature of "Nächtliche Scheu."

Another indicator of the degree to which innovative principles of coherence inform the structure of the song is the manifold set relations that connect set 8-19 with other prominent sets in Part 3 (set 8-19, repeated verbatim and clearly delineated by contour of the accompaniment at the outset of the section, serves as an important referent). The set is in Rp and R_2 relation to set 8-17, the octachord that appears next in the accompaniment (mm. 18-19). They share subset 7-21, which is significant in an abstract sense because it is the superset of both 6-Z19 and 6-Z44, and significant with respect to the structure of this song because it is represented in the first seven pitch-classes of the melody (Part 3) (See again Example 33).

Set 8-19 is also a superset of sets 4-24 and 4-19, two sets which are multiply represented in Part 3 and, indeed, throughout the song.[69] Set 4-24 is, of course, a whole-tone set; that it occurs so frequently attests to the importance of whole-tone structures generally throughout the

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[69] The two sets share a close structural affinity: set 4-19 is comprised of an augmented triad with an added pitch-class one semitone removed from any chord tone; set 4-24 is comprised of an augmented triad with an added pitch-class one whole-tone removed from any chord tone. In other words, any addition of one pitch-class to an augmented triad will result in either set 4-19 or 4-24.

song. Of its at least eight occurrences in Part 3 (Example 36), seven of the sets are comprised of pitch-classes (0, 2, 4, 6, 8, 10), the whole-tone collection from which the prominent whole-tone structures of that section are drawn. The counterpart 4-24 sets in Part 1, on the other hand, are primarily taken from the other whole-tone collection (1, 3, 5, 7, 9, 11).

This distinction between the whole-tone collections from which the 4-24 sets are drawn reflects microcosmically the duality of whole-tone structures in the outer sections of the song. Each of the distinctive contrapuntal textures which relate the outer sections (see Example 23, above) is based on a whole-tone scale, and together the scales comprise the aggregate. Of the occurrences of set 4-24 in Part 1, the first two are comprised of even-numbered pitch-classes and thus cross-reference the 4-24 sets in Part 3. The single odd-numbered 4-24 set at the end of Part 3 references, in a similar manner, the whole-tone structures of Part 1.

The set-complex table below demonstrates the high degree of homogeneity in the prominent pitch-class sets of Part 3 (Table I).[70] It is remarkable that set 9-5 stands

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[70] Set 6-Z19 is included even though it appears only twice and is of little consequence in "Nächtliche Scheu;" it is closely related to the majority of prominent sets in Part 3. Set 6-35 is the "whole-tone" hexachord; it is related, therefore, only to other "whole-tone" sets.

Example 36: Set 4-24, "Nächtliche Scheu."

1: (10 0 2 6)
2: (4 6 8 0)
3: (4 6 8 0)
4: (4 6 8 0)
5: (0 2 4 8)
6: (8 10 0 4)
7: (5 7 9 1)
8: (2 4 6 10)

Table I: Set-complex table, "Nächtliche Scheu."

	9-5	3-12	4-17	4-19	4-24	4-26	4-27	5-20	5-21	5-26	5-30	5-31
4-17/8-17	K	K										
4-19/8-19	K	Kh										
4-24	K	Kh										
4-26	K	K										
4-27	K	K										
7-20	Kh	K	K	K	K	K	K					
5-21/7-21	K	Kh	[illegible]	Kh	K	K	K					
5-26	K	Kh	K	Kh	Kh	K	Kh					
5-30	Kh	Kh	K	Kh	Kh	K	K					
5-31/7-31	Kh	K				K	Kh	5-20	5-21	5-26	5-30	5-31
6-Z19	Kh	Kh	Kh	Kh		K	K	K	Kh			
6-35	Kh				Kh							

in either K or Kh relation to all other prominent sets in Part 3 except the "whole-tone" hexachord, set 6-35. The set occurs just once, comprised of all the pitch-classes in the penultimate measure. It is indeed significant that this highly chromatic and tonally enigmatic prolongation of the structural tonic is so closely related to the prominent pitch-class sets of Part 3 in set-theoretic terms.

CHAPTER IV

ANALYSIS OF "AM UFER," "HIMMELFAHRT," AND "HELLE NACHT."

In the following analyses of the three songs of 1908, there is no attempt to delineate an *Urlinie* descent, because the tonally enigmatic harmonic structure of these songs does not provide corresponding consonant support. Consequently, the concomitant analytic graphs serve only as harmonic reductions and not as more traditional Schenkerian graphs of structural levels. That is not to say, however, that there is no reference to structural levels in the ensuing prose, but only that the absence of an *Urlinie* descent prohibits the characterization of the reductive graphs as "foreground" or "middleground" in the traditional Schenkerian sense.

"Am Ufer" (No. 2)

Of the songs dealt with so far, the syntax of "Am Ufer" is furthest removed from traditional tonality; indeed, the tonic triad (D) does not appear even once. The tonic is established contrapuntally at the end of the song (the key signature delineates the possible tonics, F and D, and F can be heard as a rival tonic in the first section). It is only with reference to this rather weakly established tonic that one may attribute any tonal function to the tonally ambiguous sonorities which permeate the piece.

The formal structure of "Am Ufer" is tripartite: Part 1, mm. 1-9; Part 2, mm. 10-14; Part 3, mm. 15-20. The vocal line of Part 3 is a repetition of the opening melodic phrase of the song, while the harmony of Part 3, too, is virtually identical to that of Part 1. Part 2 is distinguished at the surface melodic sequence, dense counterpoint, and simple division of the beat as opposed to the triplet rhythmic figure which pervades Parts 1 and 3.

The goal of harmonic motion in Part 1 is the last sonority of the section, F - A - C♯, an augmented triad which can be construed as I of F or V of D.[71] Indeed, as will be demonstrated shortly, there is evidence to support either interpretation. With the large-scale design of the song in mind--that is to say, remembering that D is the ultimate tonic--one might interpret the prevailing augmented triads as reproduced in the reductive graph of Part 1 (Example 37).[72] (The respelling of the chords is not particularly problematic; Schoenberg writes about the spelling of augmented triads: "To avoid complicated notation

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[71] To reiterate a concept introduced in Chapter 2: while the tonal function of an augmented triad in itself is ambiguous (regardless of spelling), the context in which it appears can delimit its tonal function. The local context of this particular augmented triad supports at least two possible interpretations.

[72] This view of the tonal function of the augmented triads of Part 1 is similar to that of Preston in his "Tonal and Extra-tonal Functions of the Augmented Triad in the Harmonic Structure of Webern's 'Dehmel Songs'," pp. 174-175.

Example 37: Reduction, "Am Ufer," mm. 1-9.

one will ofte[illegible]armonic change."[73]) The interpretation [illegible] opening augmented triad as V/V makes logical tonal sense; it is prolonged by local tonicization and resolves, after all, to the dominant at the end of the section.[74] It is also one of only two sonorities occurring

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[73] Schoenberg, *Harmony*, pp. 243-44.

[74] This chord is, of course, an augmented triad and is, furthermore, not in root position. Regarding the relative strength of inversions of the augmented triad, however, Schoenberg writes in his *Harmony*:

> "With the augmented triad it is not necessary to make a distinction between root position and inversions. It is indeed almost always reinterpreted, and, that being the case, the feeling of six-four can hardly ever arise" (p. 243).

in Part 1 which come close to resembling a consonant (major/minor) triad (m. 5: E - G♯ - B♮).[75]

It is, however, just as logical to interpret the opening section of the song as demonstrated in the reductive graph in Example 38. Here, too, the dominant is prolonged

Example 38: Reduction, "Am Ufer," mm. 1-9. (F)

by local tonicization, and it too resolves by descending fifth. And the only other "consonant" sonority of Part 1 clearly implies the rival tonic, ♭VI of F (m. 8: D♭ - F - A♭). As the reduction shows (Example 38), the augmented triad which serves as V/V/D can also function as V/F. We

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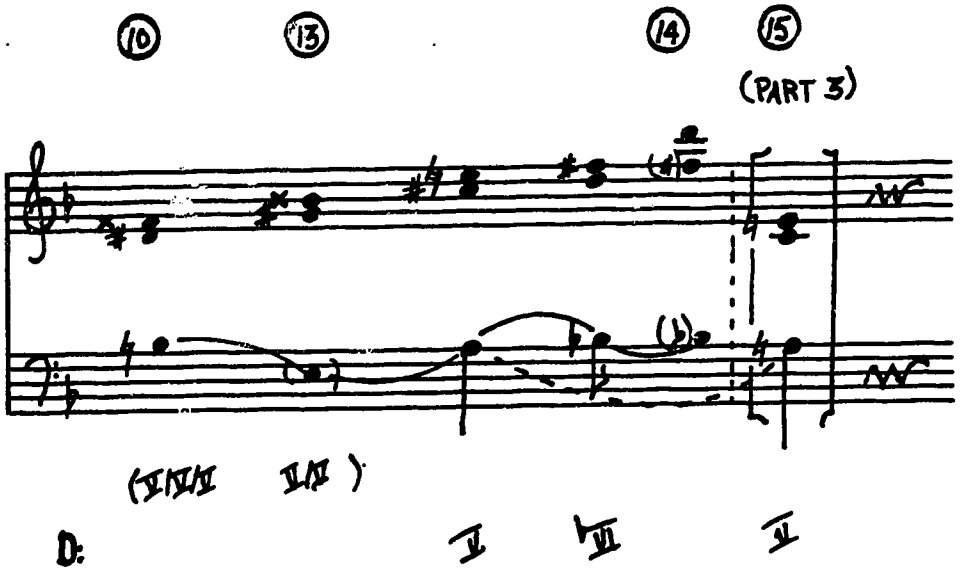
[75] This opening sonority, labelled V/V/D in mm. 1-3, could also be interpreted simply as V/D (A♮ [A♭] - C♮ - E♮). However, this view makes it more difficult to explain the local neighbor motion in m. 3 (E♭ - G♮ - A♮ - B♮) (interpreted as V/V/V/D in Example 37) in conventional tonal terms. (Indeed, this is the very issue that clouds the tonal interpretation of the final section--see discussion of Part 3 below.)

have in Part 1, then, the establishment of two possible tonics, neither of which predominates.

The contrapuntal texture of Part 2 (mm. 10-14) obscures tonal motion to an even greater degree. D, however, gains priority as the primary tonal referent (Example 39). The tonal role of F is diminished by the arrival of V/D in m. 13, the first "consonant" sonority of Part 2. The tonal motion of the section has as its goal the sonority that

Example 39: Reduction, "Am Ufer," mm. 10-14.



occurs at the end of m. 14, B♭ - D - F♯. Its function as ♭VI of D is confirmed by its subsequent resolution to V of D.

The tonal preeminence of D is confirmed by the resolution of ♭VI/D to V/D at the outset of Part 3. The interpretation of the harmonic structure of Part 3 (which

recalls Part 1) becomes problematic, however. The sonority which I interpreted as V/V/V/D in Part 1 (m. 6; see Example 35) immediately precedes the penultimate "chord" of the piece, ♭VI (m. 17). To call the same sonority V/V/V/D at this juncture does not reflect its function in any respect. The only solution, if one wishes to impute any tonal function to this sonority, is to reinterpret it as ♭II/D. It can then be seen to progress to ♭VI which, in turn, resolves to I (Example 40).[76]

This interpretation admittedly forces the pitch structure of the song into a tonal "procrustean bed." While the preceding description of the motion in this song as it regards tonality seems to me the most reasonable, it is indisputable that the tonal analysis is necessarily somewhat arbitrary. The tonally ambiguous pitch structure of this song reflects the degree to which Webern has discarded conventional tonal syntax as a means of achieving structural coherence. He is beginning to relate pitch structures and maintain structural unity in a novel manner.

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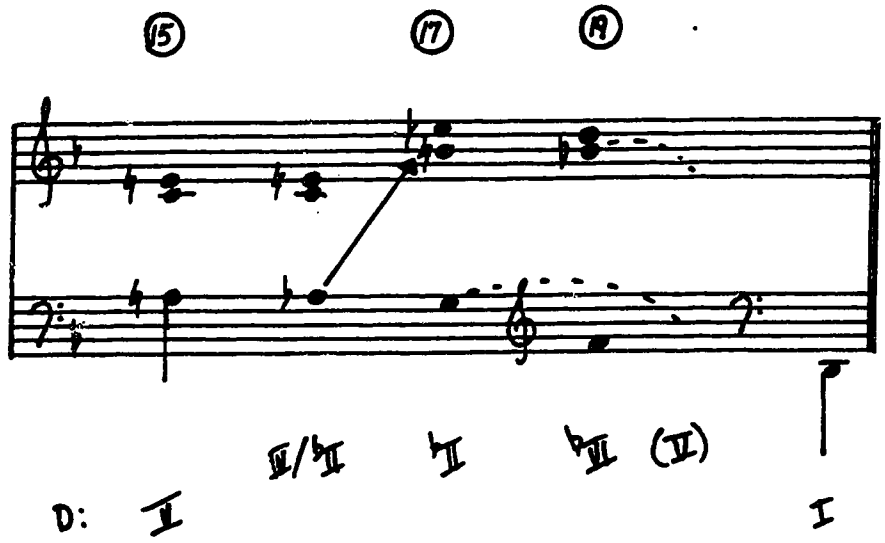
[76] The implied dominant sonority in the reductive graph (marked in parentheses) reflects a phenomenon described by Schoenberg in his *Harmony*. He writes about abbreviated progressions:

> "A stereotyped usage does not have to be written out in full. Everyone knows that *i.e.* means 'that is.' Everyone knows that the IInd degree as dominant of the dominant will at some place or other with some means or other, produce I. Consequently, we can omit the intervening chords and put the effect immediately after the cause" (p. 118).

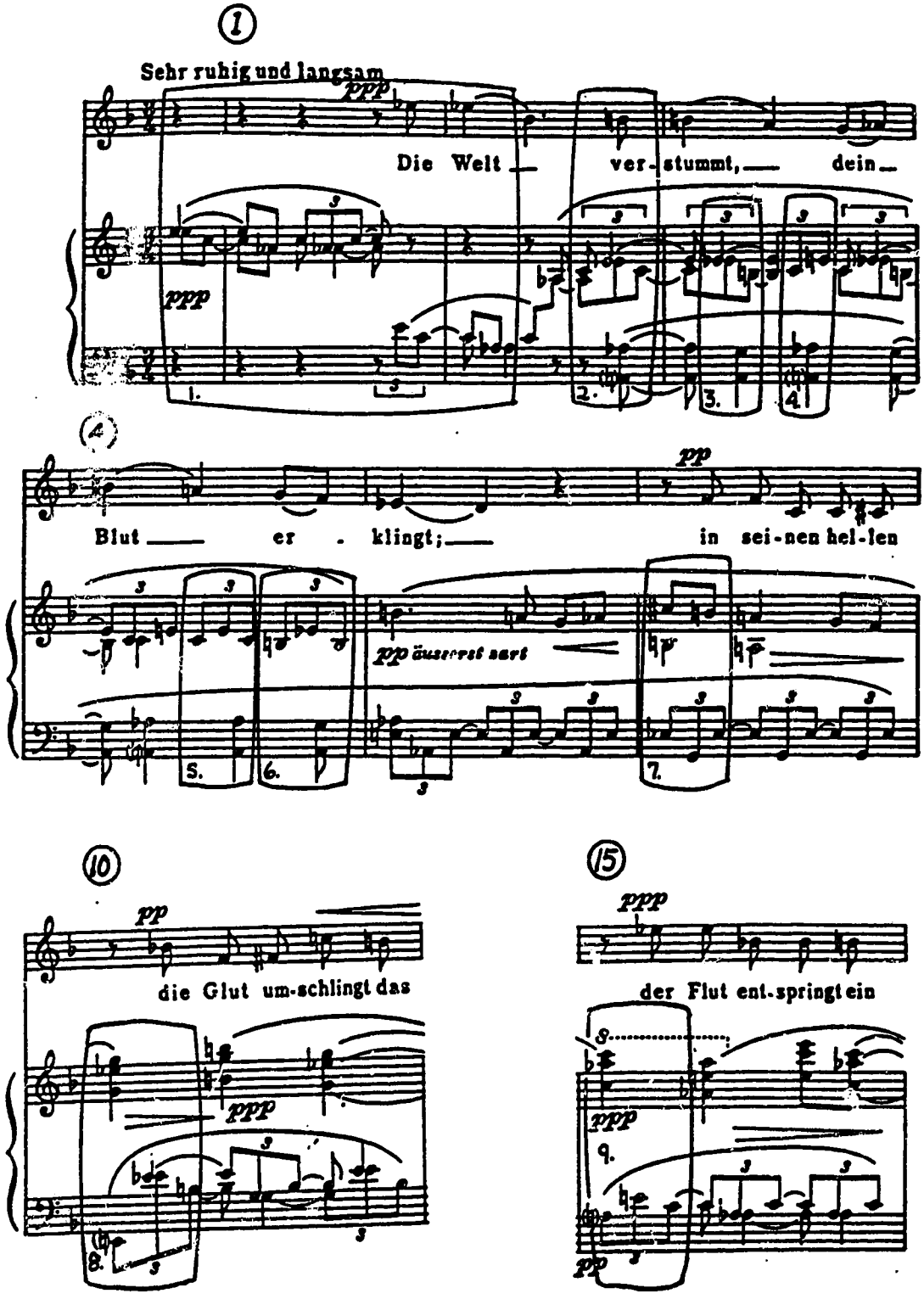
It is plausible that Webern might have used this principle to achieve closure for the song.

Example 40: Reduction, "Am Ufer," mm. 15-20.



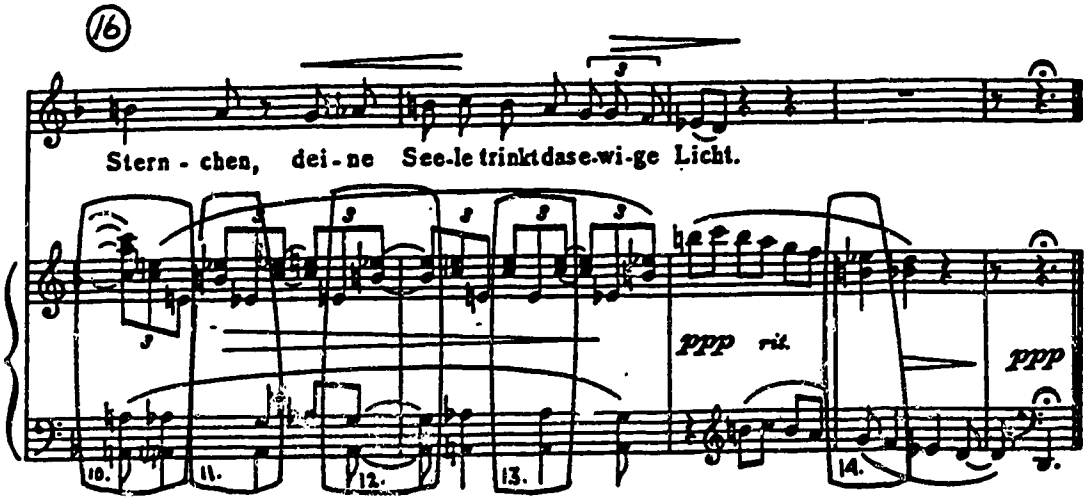
A brief look at the most prominent sets of "Am Ufer" reveals a feature of set relations which is unique in the five songs; an unusually high number of recurring sets are comprised of identical pitch-classes. (This is partly the function of repeated accompaniment figurations, of course.) Set 4-24 is a case in point; of its at least six occurrences throughout the song, four sets are comprised of pitch-classes 7, 9, 11, 3. One of the remaining two 4-24 sets comprises pitch-classes 7, 11, 1, 3 (related by $T_{10}I$) and the other pitch-classes 11, 3, 5, 7 (related by T_2I) (Example 41). The intersection of the remaining two sets, both with each other and with the initial set (7 9 11 3), yields three invariant pitches (7 11 3). This is significant because only two of the

Example 41: Sets 4-24 and 4-19, "Am Ufer."



continued . . .

Example 41 continued . . .



1. 4-19: (8 0 3 4)
2. 4-19: (8 9 0 4)
3. 4-24: (7 9 11 3)
4. 4-19: (8 9 0 4)
5. 4-19: (8 9 0 4)
6. 4-24: (7 9 11 3)
7. 4-24: (7 11 1 3)
8. 4-19: (7 11 3 4)
9. 4-19: (8 9 0 4)
10. 4-19: (8 9 0 4)
11. 4-24: (7 9 11 3)
12. 4-24: (7 9 11 3)
13. 4-19: (8 9 0 4)
14. 4-24: (3 5 7 11)

twelve possible inversional levels, $T_{10}I$ and T_2I--the ones Webern used--produce this result (i.e., three invariant pitches)."[77] The implication is, of course, that Webern did not think of these novel sonorities as "added-note" chords such as we find in the jazz idiom but as structurally

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[77] The inversional invariance vector of set 4-24 (7 9 11 3) is:

0	1	2	3	4	5	6	7	8	9	10	11
2	0	3	0	2	0	4	0	2	0	3	0

significant collections of pitches which are related in very specific ways.[78]

Set 4-19 is the other prominent tetrachord in "Am Ufer," and, like set 4-24, its multiple occurrences are generally comprised of the same pitch-classes. Six of its eight occurrences comprise pitch-classes 8, 9, 0, 4. The two tetrachords, 4-24 and 4-19, permeate the accompaniment of Parts 1 and 3 and lend surface coherence to the sections (See Example 41). With the exception of one appearance of set 4-19 (m. 10), the two tetrachords are not represented in Part 2. Both are referenced in the middle section, however, by their complements. Set 8-19 (the complement of set 4-19) appears at the midpoint of the section, delineating the start of the second vocal phrase of Part 2; set 8-24 (the complement of set 4-24) occurs at the end of the second vocal phrase of the section (Example 42).

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[78] In set theory in general (extrapolating from Forte, *The Structure of Atonal Music*, p. 46ff), the operation which effects a lesser number of replications has a greater potential for structural significance. For instance, if the inversional invariance vector of a (fictitious) set were

v	1	2	3	4	5	6	7	8	9	10	11
3	3	3	3	3	3	3	3	3	3	3	3

, the effect of the operation of inversion at any transposition level would not be particularly interesting (although the properties of the set with respect to inversion would be very interesting)! In the case at hand, Webern employs operations which effect a highly distinctive result (i.e., the only two levels of T_nI which effect three invariant pitches). It is within the realm of plausibility that the unique result is the consequence of an intentional choice and not merely coincidence.

The multiple appearances of set 7-21 are not dissimilar to the treatment of set 4-24 with respect to recurrence of

Example 42: Complement relations; sets 8-24 and 8-19.

8-19: (0 1 3 4 5 7 8 9) 8-24: (8 9 10 0 1 2 4 6)

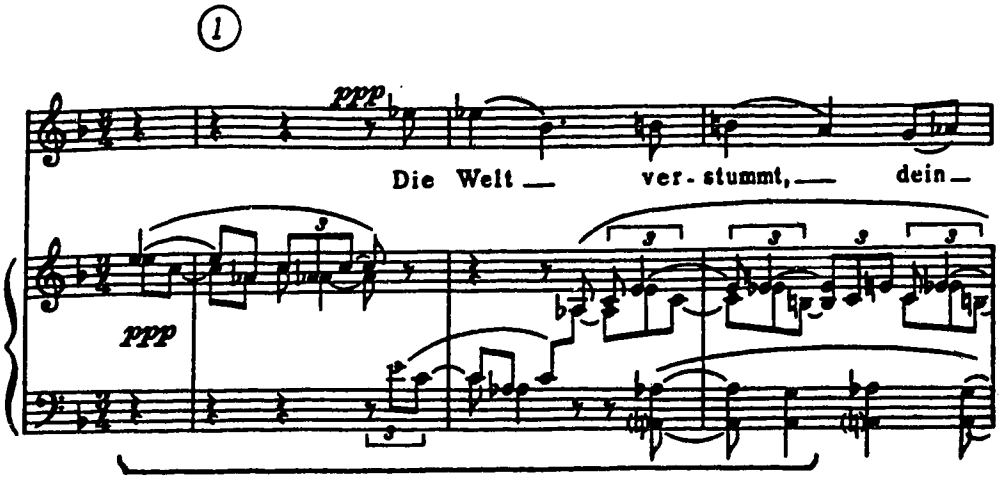
identical pitch-classes. Of its six occurrences, four are comprised of pitch-classes 7, 8, 9, 11, 0, 3, 4; two are comprised of pitch-classes 4, 5, 6, 8, 9, 0, 1 (related by T_9).[79] As shown in Example 43, identical 7-21 sets frame the song, appearing both near the beginning and end. Like set 4-24, set 7-21 appears only in the outer sections of the song. It is referenced, however, by its complement, set 5-21, in Part 2. Set 5-21 appears, interestingly, as a

[79] Note that the invariant pitch-classes shared by the two 7-21 sets form set 4-19 (8 9 0 4).

subset of set 8-19, one of the sets which connect the two prominent tetrachords to Part 2 (Example 44).

One further complement relation requires a brief comment with regard to its structural significance; sets 3-4/9-4. The first nine pitch-classes comprise set 9-4, a set which later recurs twice in an interesting, overlapping

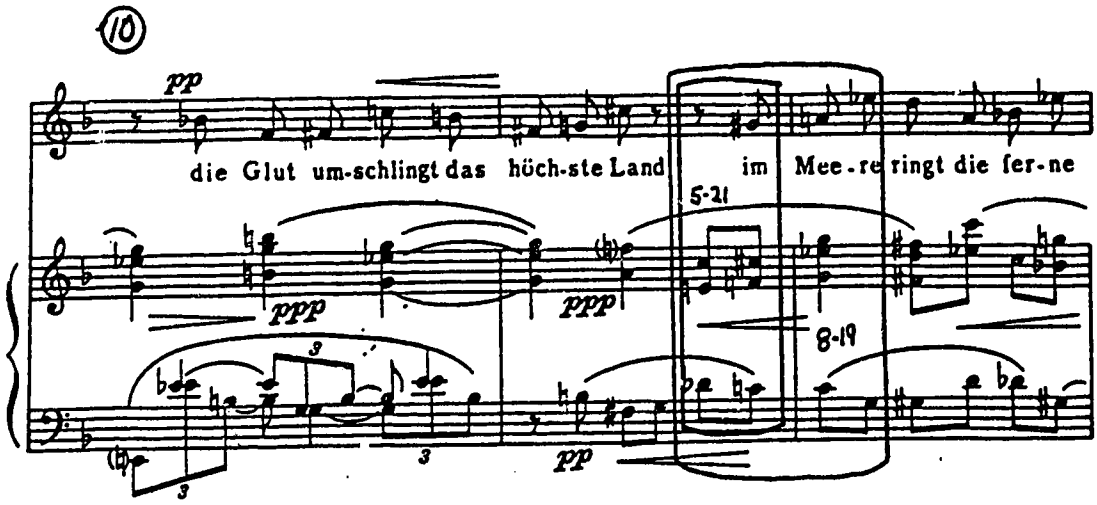
Example 43: Set 7-21, "Am Ufer."



7-21: (7 8 9 11 0 3 4)

7-21: (7 8 9 11 0 3 4)

Example 44: Set 5-21, "Am Ufer."



5-21: (0 1 4 5 8) [8-19: (0 1 3 4 5 7 8 9)]

distribution in m. 8 where it marks the end of the first stanza of the poem (Example 45). Its complement, set 3-4, occurs many times throughout all three sections of the song,[80] more than twice as often as any other trichord (with the exception of set 3-12, the "augmented triad," which occurs eight times). It is significant that the last three pitch-classes of the song comprise set 3-4, the complement of set 9-4 (Example 46). This complement relation which connects the outer extremes of the song corroborates the sense of large-scale closure.

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[80] Some examples include: m. 2 (10 11 3); m. 5 (4 8 9); m. 6 (0 1 5); m. 7 (6 10 11); m. 9 (7 8 0); m. 9 (6 7 11); m. 11 (0 1 5); m. 13 (1 2 6); m. 19 (10 2 3).

Example 45: Set 9-4, "Am Ufer."

9-4: (4 5 6 7 8 9 11 0 1) 9-4: (4 5 6 7 8 9 11 0 1)

Example 46: Set 3-4, "Am Ufer."

3-4: (10 2 3)

The set-complex table reproduced in Table II demonstrates the high degree of homogeneity which characterizes K and Kh relations among prominent[81] sets of "Am Ufer." Notice that the whole-tone-based sets 7-33 and 4-24 are the two sets which effect empty spaces in the table. It is remarkable that set 9-4 is in Kh relation to no fewer than six of the other ten sets; only set 6-Z19 exceeds this number, standing in Kh relation to seven other sets. (This attests, again, to the significance of the Schoenberg signature set in the music of this transitional period.)

One final set relation which merits some attention because of its structural significance is the role of the Z-related[82] pair of sets 8-Z15/8-Z29. Set 8-Z15 comprises the first eight pitches of the melody in Part 1 (7 8 9 10 11 2 3 5) as well as in Part 3. It returns, transposed up six semitones, to connect Part 1 and Part 2 in mm. 9-10 (1 2 3 4 5 7 9 10) (Example 47). It is very interesting to find, in the segmentation of mm. 9-10, overlapping occurrences of the Z-related pair, sets 8-Z15/8-Z29 (See Example 47). Together these two

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[81] By "prominent," I mean those sets which occur either multiply or at significant structural junctures.

[82] Two sets are said to be Z-related if they share the same interval vector, but cannot be reduced to the same prime form. (See Forte, *Atonal Music*, pp. 21-22.)

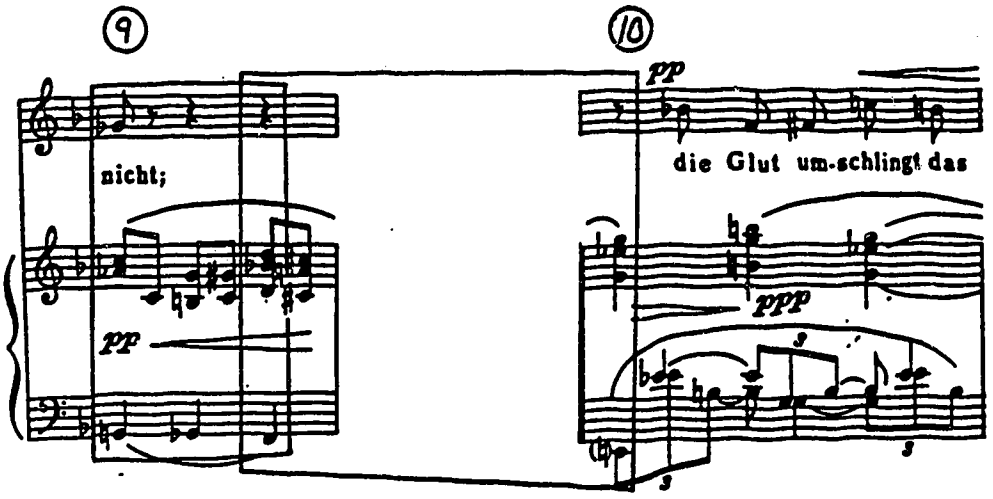
Table II: Set-Complex Table, "Am Ufer."

	3-4	3-5	3-12
8-7/4-7	Kh	K	K
4-8	Kh	Kh	K
8-Z15	K	Kh	K
8-19/4-19	Kh	K	Kh
4-24	K	K	Kh
8-Z29	K	Kh	K

	4-7	4-8	8-Z15	4-19	4-24	8-Z29
7-6/5-6	Kh	Kh	K	K	K	K
7-21/5-21	Kh	K	Kh	K	K	K
7-33	K	K	Kh		K	K
6-Z19	Kh	Kh	Kh	Kh		K

	5-6	5-21	7-33
	K	K	K

Example 47: Sets 8-Z15 and 8-Z29, "Am Ufer."



8-Z29: (5 6 7 8 10 11 0 2) 8-Z15: (1 2 3 4 5 7 9 10)

octachords contribute to the structural coherence of the song at a juncture that is tonally anomalous.

The preceding comments on set relations in "Am Ufer" address only some of the significant relationships evident in the song. That the pitch structure of the song does not yield readily to tonal analysis, and that set-theoretic analysis does demonstrate significant structural principles implies, again, that Webern is seeking new methods of achieving coherence. He is becoming increasingly "set-conscious."

"Himmelfahrt" (No. 3)

The lucidity of the opening E♭ triad of "Himmelfahrt" belies the tonal ambiguity of the densely chromatic, highly contrapuntal texture which follows. That the E♭ tonic triad is again affirmed at the end of the song substantiates its preeminent position in the tonal hierarchy, but the way in which it is prolonged at the foreground virtually defies traditional tonal syntax. The fulcrum of tonal syntax, the dominant-tonic relationship, can be seen to obtain at the deep middleground of this song, but the foreground disposition of the individual chords generally obscures their tonal function. Nonetheless, in order to determine the degree to which traditional tonality still obtains, it is instructive to elucidate the implicit tonal motion of the highly chromatic surface.

The formal design of "Himmelfahrt" is tripartite: Part 1, mm. 1-14; Part 2, mm. 14-32; Part 3 (reprise), mm. 32-47. The sections are delineated at the surface by changes in register, motive, dynamics, and, in particular, by rhythm. The triplet rhythmic figure which signals the entrance of Part 2 (m. 14) soon pervades the accompaniment of the middle section. An allusion to the opening melodic line (treated contrapuntally in Part 1[83]) marks the entrance of Part 3. In the interest of space, the tonal analysis will focus on the outer sections.

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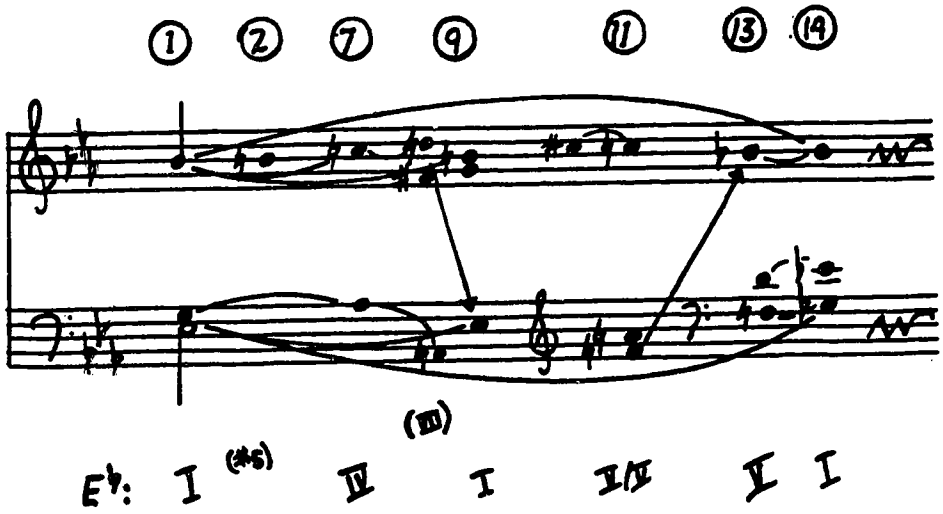
[83] Compare piano, R.H. (mm. 1-5) with voice (mm. 5-9).

As the reductive graph in Example 49 demonstrates, the tonic, E♭, functions as the point of departure and goal

Example 49: Reduction, "Himmelfahrt," mm. 1-14.



of motion in the opening section. As mentioned above, the dense, highly chromatic counterpoint of the section all but obliterates tonal syntax at the surface (Example 49). However, occasional lapses in the use of strict counterpoint punctuate the texture, and they provide clues as to which sonority is being prolonged. These clues corroborate the interpretation of tonal motion given in Example 49.

The first lapse in the strict imitation between the R.H. and L.H. of the accompaniment occurs in m. 6, where an E♭ and B♮ are inserted in the L.H. (marked in parentheses,

Example 49: Contrapuntal relationships, "Himmelfahrt," mm. 1-14.

Example 49). Together with the R.H. and the voice, they comprise an augmented triad on E♭, confirming that it is the tonic triad of E♭ being prolonged to this point.[84] This is immediately followed by neighbor motion to IV and (altered) VII (mm. 7-9) before returning to I (altered) in m. 9. The tonic is emphasized in m. 9 as it was in m. 6, by a lapse in the strict counterpoint.[85] The tonic, which is reached in m. 9 (beat 2, E♭4 - G4), is reinforced by an expanded contrapuntal reference in m. 10 (Example 50).[86]

The sonority which I have marked V/V (See Example 49, m. 11) owes its label in part to the clear outline of the triad in the vocal line. It resolves to V (m. 13) which, in turn, resolves to the tonic to end the section. The V marks the final point of imitation between the L.H. and R.H. of

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[84] That the E♭ augmented triad can be construed as tonic is not entirely without precedent. We have in "Ideale Landschaft," for instance, an augmented triad--the product of a melodically altered $\hat{5}$--functioning as tonic in local contexts. In the case at hand, the raised fifth of the tonic (m. 9) is "resolved" at the end of the section (m. 14) (See Example 49).

[85] It is interesting to note that the "inserted" sonorities of mm. 9-10 (R.H.) reflect microcosmically the large-scale motion of the section to that point, I - IV - I. (See the parentheses at mm. 9-10 in Example 48.)

[86] Notice how the harmonically stated dyads of m. 9 (R.H.), F♯4 - D5, D4 - B♮4, and E♭4 - G4, are stated melodically in m. 10 (L.H.). This type of pitch manipulation relates to the issue of counterpoint in the twentieth century, of which twelve-tone techniques are an example. Although it is beyond the scope of this study to conjecture about its significance, it is an interesting detail to ponder.

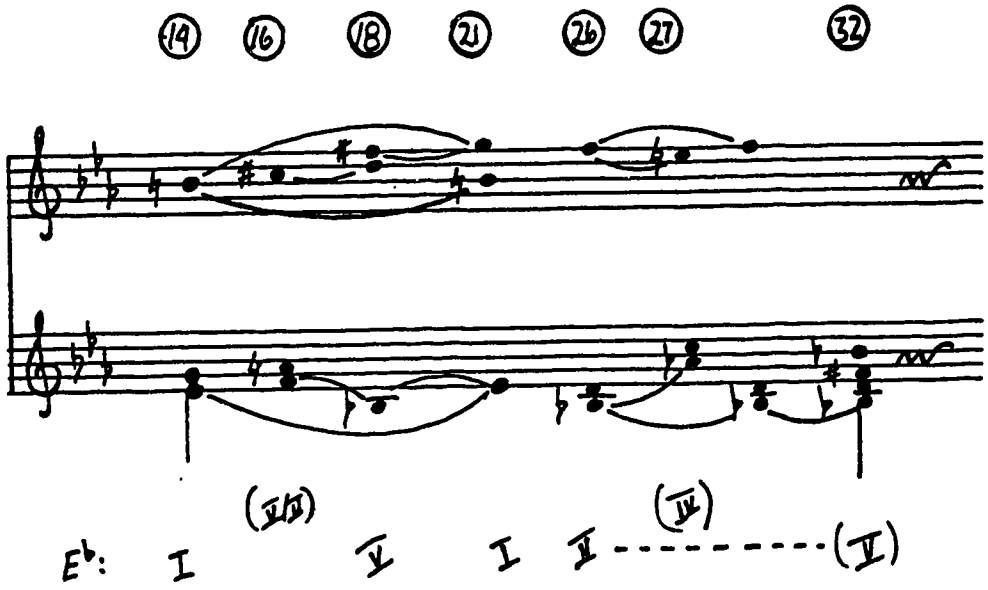
Example 50: Tonic triad, "Himmelfahrt," mm. 9-10.

the accompaniment in Part 1. The parallel major sixths of the L.H. (m. 13) reach the goal of motion with the arrival of G♭3 - E♭4 in m. 14, moving beyond the imitation between the R.H. and L.H. to close the section.

Example 51 shows the large-scale motion from tonic to dominant that underlies the middle section. Part 2 is also permeated with contrapuntal textures and fraught with tonal ambiguity. There can be no question about the tonal function of the sonority which serves as goal of the section in mm. 31-32, however. The dominant of E♭ is stated definitively in repeated chords that stand in sharp contrast to the contrapuntal texture which has pervaded the section. It resolves, in m. 32, to the tonic, marking the beginning of the reprise.

Unlike Part 1, counterpoint is not prominent in Part 3; when it does appear, it is camouflaged in the sonorities of the accompaniment (Example 52). The large-scale tonal

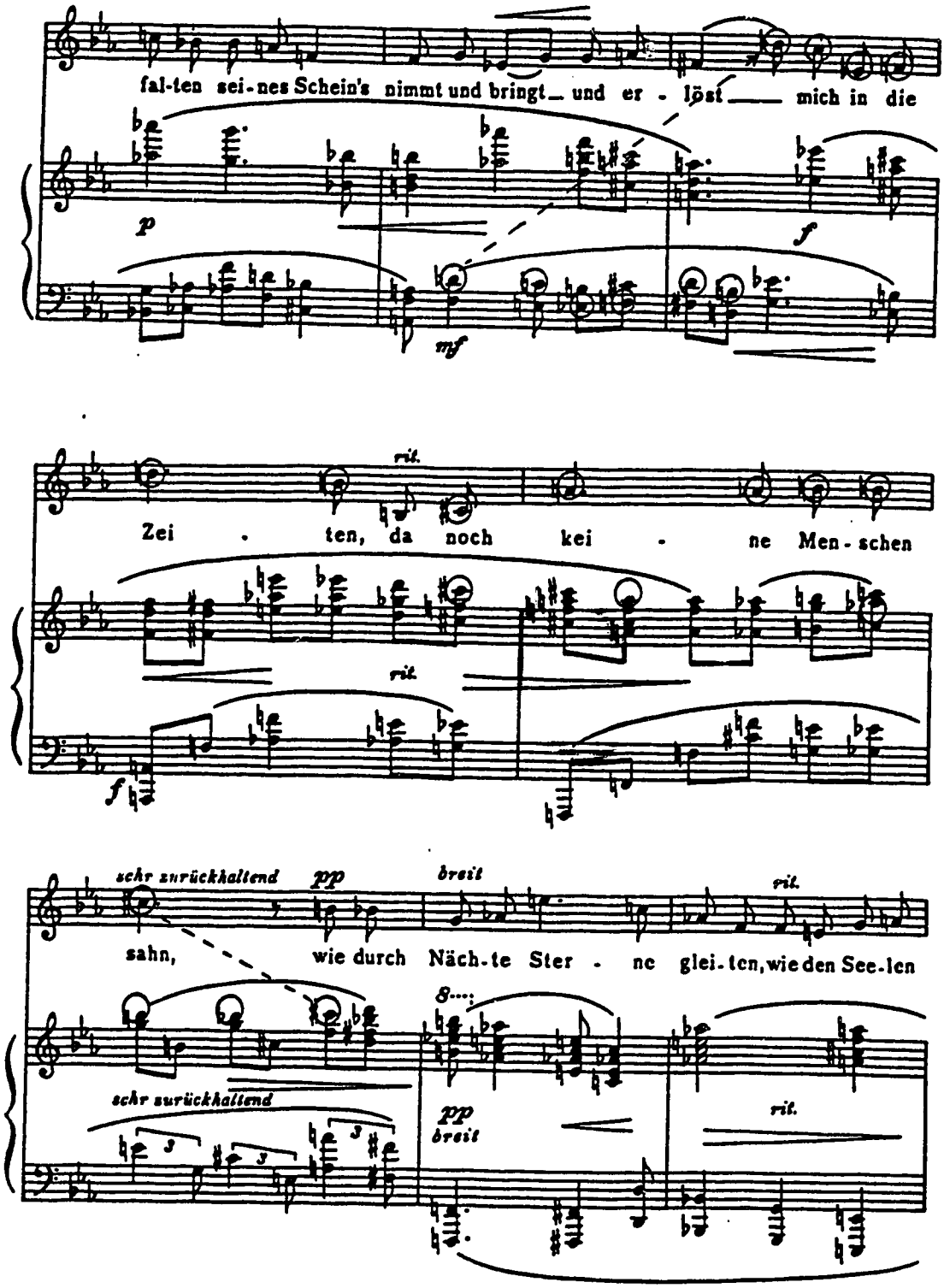
Example 51: Reduction, "Himmelfahrt," mm. 14-32.



motion, however, is similar to that of Part 1 (Example 53). The (major) tonic triad is established in m. 32 (beat 2) and then the fifth is raised to comprise an augmented triad (beat 3). As in Part 1, I then moves to IV (m. 34) and VII (m. 36). Instead of moving to I, however, as in Part 1, VII is followed by V/V (m. 38) which resolves conventionally to V in m. 39.

The chord which follows V in m. 40 has a rather peculiar structure; because of the close-position E♭ (augmented) triad on beat 1, it can be heard as I, but the F♮ of the accompaniment (L.H.) and the subsequent pitches of the right-hand (A♭ - C - E♮) imply V/V. As V/V its

Example 52: Contrapuntal texture, "Himmelfahrt," mm. 36-39.

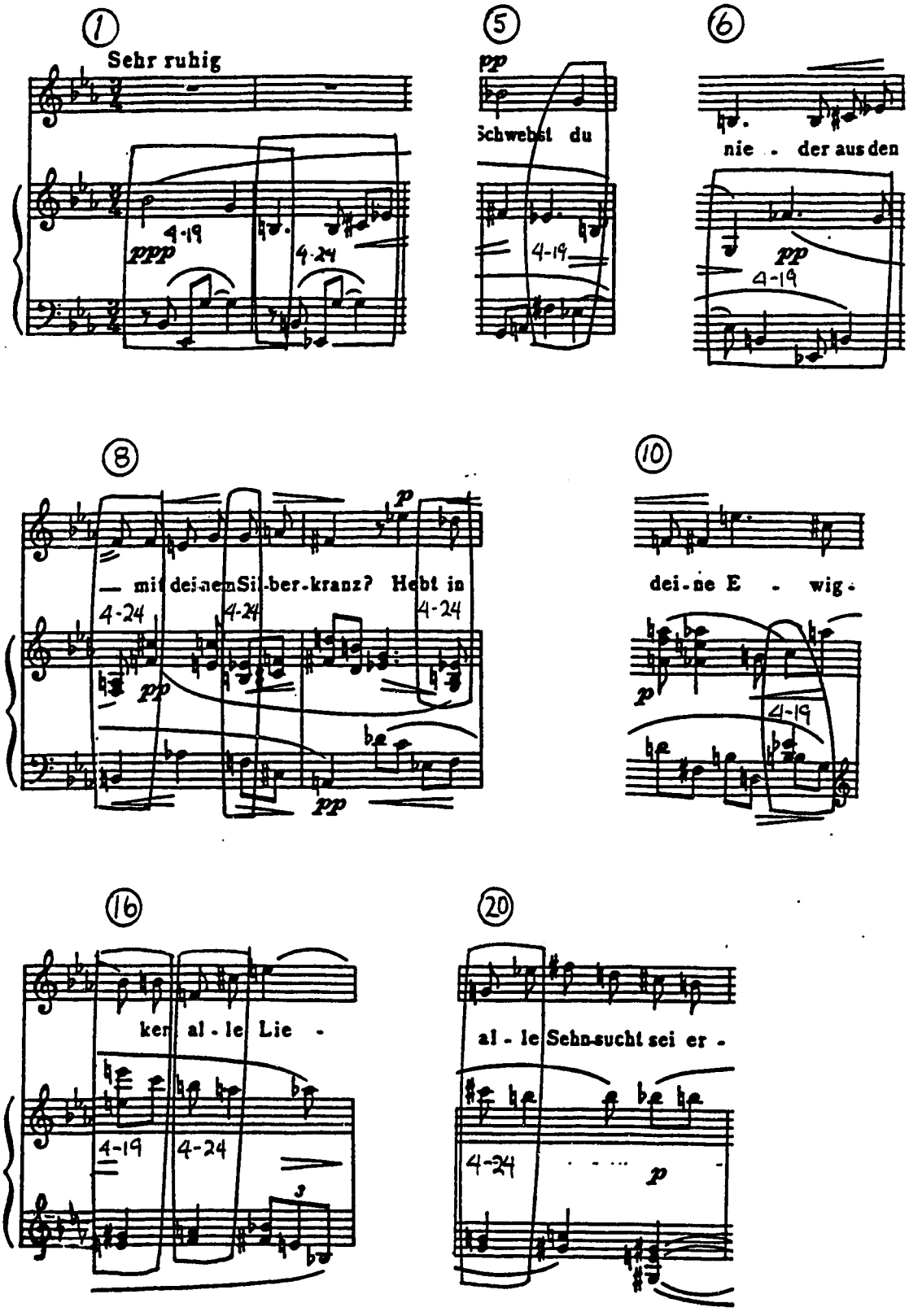


resolution to the dominant is not entirely indubitable. It is possible to hear the sonority at the beginning of m. 42 as implying a dominant (B♭2 - F♯5/6), but the fact that the chord has no third weakens it significantly. In any event, the final tonic is preceded by a sonority which can be construed either as a variant of ♭II (spelled E♮ - G♮ - B♮) or simply as upper neighbors to $\hat{1}$ and $\hat{5}$. As in "Ideale Landschaft," the tonic is embellished by a raised fifth in the final measures.

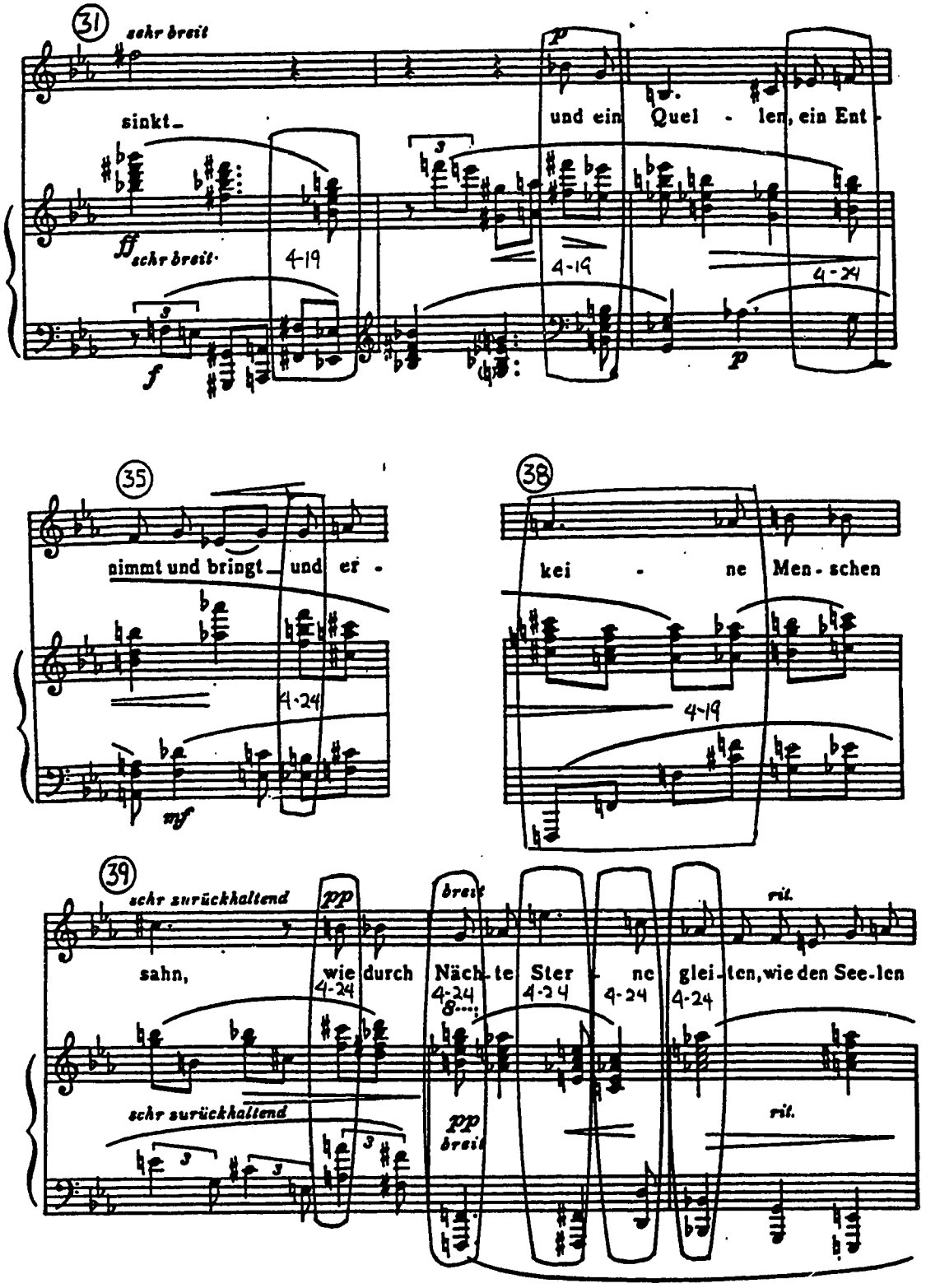
Again, the tonal ambiguity of this song defies a definitive tonal analysis. Although the tonic is stated with such clarity at the outset and reaffirmed at the end,

Example 53: Reduction, "Himmelfahrt," mm. 32-47.

Example 54: Sets 4-19 and 4-24, "Himmelfahrt."



Example 54 (continued)



*Sets are given in normal order in Examples 54 and 55.

the relationship of the intervening material to that referent is obscure in tonal terms. The principles which provide coherence to the pitch structure of "Himmelfahrt" cannot be understood by tonal analysis alone.

A number of set relations shed further light on principles of coherence in the song. As in each of the other four songs, sets 4-24 and 4-19 feature prominently in "Himmelfahrt." In this song, however, the multiple realizations of the two tetrachordal types are connected in a unique manner. The pitch-classes comprising the segmentations shown in Example 55 appear very diverse at first glance, but further comparison reveals that each of the 4-19 sets shares three invariant pitch-classes with at least one other 4-19 set (Example 55). The invariant pitches form three of the four possible different representations of the "augmented triad," set 3-12: (3 7 11), (0 4 8), and (1 5 9).

Example 55: Invariant pitch-classes, set 4-19.

Mm.	4-19 sets	Invariants
1	(3 7 10 11)	(3 7 11)
5	(11 3 6 7)	(3 7 11)
6	(7 8 11 3)	(3 7 11)
10	(11 0 3 7)	(3 7 11)
16	(4 8 11 0)	(0 4 8)
31	(11 3 6 7)	(3 7 11)
32	(11 3 6 7)	(3 7 11)
38	(1 5 8 9)	(1 5 9)
41	(0 4 7 8)	(0 4 8)
41	(9 1 4 5)	(1 5 9)
44	(3 7 10 11)	(3 7 11)

In a similar way, each of the 4-24 sets shares three invariant pitch-classes with at least one other 4-24 set (Example 55). The invariant pitches also form three different representations of set 3-12. A brief review of the invariant trichords of sets 4-19 and 4-24 listed in Examples 55 and 56 reveals that the two tetrachords share the same three representations of set 3-12, (3 7 11) (0 4 8)

Example 56: Invariant pitch-classes, set 4-24.

Mm.	4-24 sets	Invariants
2	(11 1 3 7)	(3 7 11)
8	(9 11 1 5)	(1 5 9)
8	(3 5 7 11)	(3 7 11)
9	(11 1 3 7)	(3 7 11)
16	(9 11 1 5)	(1 5 9)
20	(11 1 3 7)	(3 7 11)
33	(3 5 7 11)	(3 7 11)
35	(3 5 7 11)	(3 7 11)
39	(9 11 1 5)	(1 5 9)
40	(3 5 7 11)	(3 7 11)
40	(4 6 8 0)	(0 4 8)
40	(0 2 4 8)	(0 4 8)
42	(8 10 0 4)	(0 4 8)

and (1 5 9). Furthermore, the proportion of occurrences of like trichords is similar in both tetrachords. That is to say, trichord (3 7 11) occurs seven times as a subset of 4-19 while trichords (0 4 8) and (1 5 9) occur only twice each. Trichord (3 7 11) occurs seven times as a subset of 4-24 while the other two trichords occur only three times each.

Obviously, the two tetrachords, 4-19 and 4-24, are in Rp relation. The actual dispositions of the two tetrachords throughout the song, however, ensure that the Rp relation is strongly represented, lending further weight to the relationship (i.e., each 4-19 set literally has three pitches in common with at least one 4-24 set). It is rather unusual that the two most prominent tetrachords in the song (together they appear at least twenty-four times, compared to the next most prominent tetrachord, set 4-Z29, which appears only three times) are so closely connected. Their multiple appearances and their structural affinity accord the two tetrachords a significant role in the achievement of pitch structure coherence in the song.[87]

The two sets, 4-19 and 4-24, appear primarily in the outer sections of the song. Each tetrachord occurs only twice in Part 2. Set 4-19, however, is connected to Part 2 by its complement, set 8-19, which appears three times throughout the song and twice in Part 2 (Example 57). Set 4-24 is also closely related to set 8-19, being a multiply represented subset of that octachord. The complement relation strengthens the unity that pervades the pitch structure of the song.

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[87] It should also be mentioned that set 4-19 appears at particularly significant junctures; it comprises the first four as well as the last four pitch-classes of the song (both comprised of pitch-classes 3, 7, 10, 11).

One other set which plays a significant role in "Himmelfahrt" is the heptachord, set 7-21. As mentioned earlier, this set is interesting in a theoretical sense because it is a superset of both the Schoenberg signature set and its complement. It first appears in m. 3, comprising all the pitch-classes in the measure: 9, 10, 11, 1, 2, 5, 6. The identical pitch-classes comprise

Example 57: Set 8-19, "Himmelfahrt."

8-19: (7 8 10 11 0 2 3 4) 8-19: (6 7 8 10 11 0 2 3)

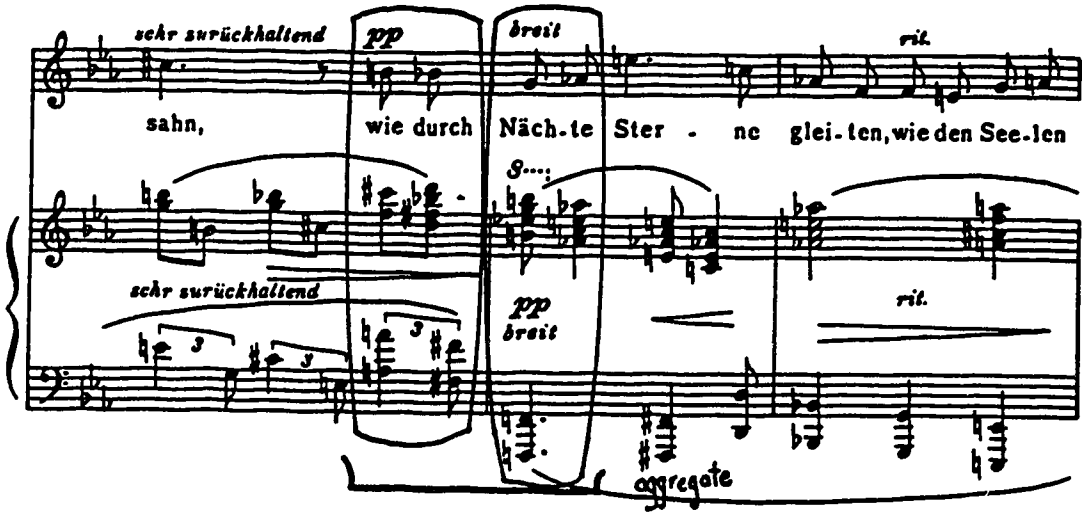
the set in m. 39 where it signals the beginning of the final phrase of the song.

Two of the three other occurrences of set 7-21 are particularly interesting; the first of these appears in m. 30 (11 0 1 3 4 7 8) (related by T_2), close to the end of Part 2, and the other in m. 40 (3 4 5 7 8 11 0) (related by

T_6). The intersection of the original set (9 10 11 1 2 5 6) and either of the sets related by T_2 or T_6 produces the aggregate, an effect achievable at only three transposition levels, T_2, T_6, and T_{10}.[88] This effect is especially interesting in mm. 39-40, where the two heptachords appear one right after the other (Example 58). At no other juncture does the aggregate appear within such a short time-span (two beats) as it does here at the outset of the final phrase of the song.

The complement of set 7-21, set 5-21, appears just three times. It occurs once in m. 12, near the end of Part

Example 58: Intersection of two 7-21 sets, "Himmelfahrt," mm. 39-40.



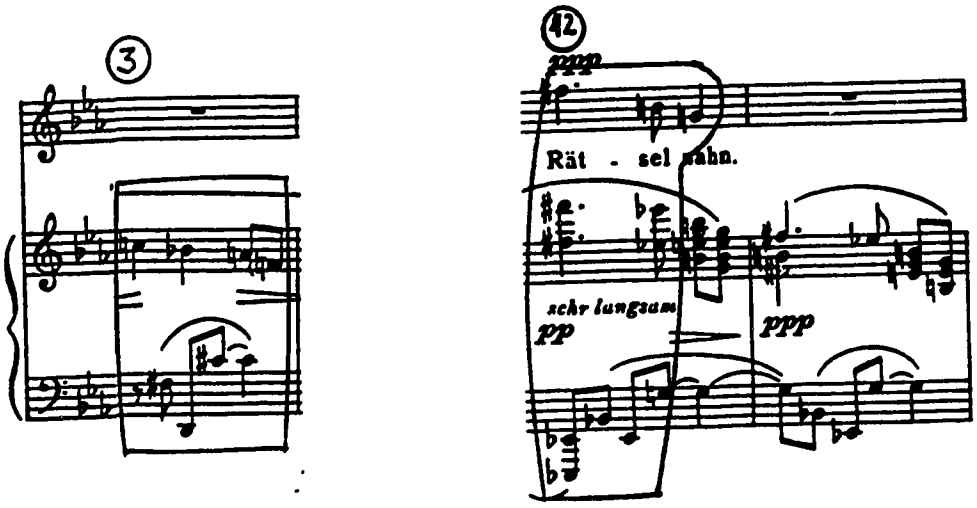
7-21: (9 10 11 1 2 5 6) 7-21: (3 4 5 7 8 11 0)

[88] The interval vector of set 7-21 is [424641]. (The interval vector shows pitch-class invariance under transposition--see Forte, *Atonal Music*, pp. 30-31.)

1, and twice in mm. 42-43, near the end of Part 3, where it appears as a subset of set 6-Z19.[••] Thus the 7-21 set that appears near the beginning of the song is referenced by its complement near the end (Example 59).

We have in "Himmelfahrt" a pitch structure which no longer yields readily to tonal analysis. The foreground chromaticism renders ambiguous the structural significance and tonal function of virtually all sonorities which one might perceive to function as tonic and dominant triads. Set-theoretic analysis, on the other hand, elucidates many

Example 59: Complement relation, sets 5-21/7-21.



7-21: (5 6 9 10 0 1 2) 5-21: (3 6 7 10 11)

[••] It is interesting that set 6-Z19, the complement of the Schoenberg signature set, appears again at a structurally important point, i.e., as the penultimate "chord." There can be little doubt that this collection of pitches was accorded special significance by Webern.

relationships which connect innovative pitch structures in the song. The effects of operations that relate a number of these novel pitch structures are so distintive that it is analytically questionable to relegate them to the status of mere coincidence.

"Helle Nacht" (No. 5)

In the densely chromatic, highly contrapuntal surface of "Helle Nacht," few principles of conventional tonal syntax seem to obtain. If the key signature carries any weight (as I assume it does), it implies two possible tonics, F and D; neither functions as a tonic in a traditional manner. Of the two, only F is a viable option, and it appears only as an augmented triad which is generally further obscured by non-chord tones.[90] That the tonic never appears as a consonant major or minor triad is evidence of the degree to which Webern has traversed the road to atonality. Despite the fact that the tonic is stated only as a sonority which has traditionally been deemed dissonant, however, one can find implicit references

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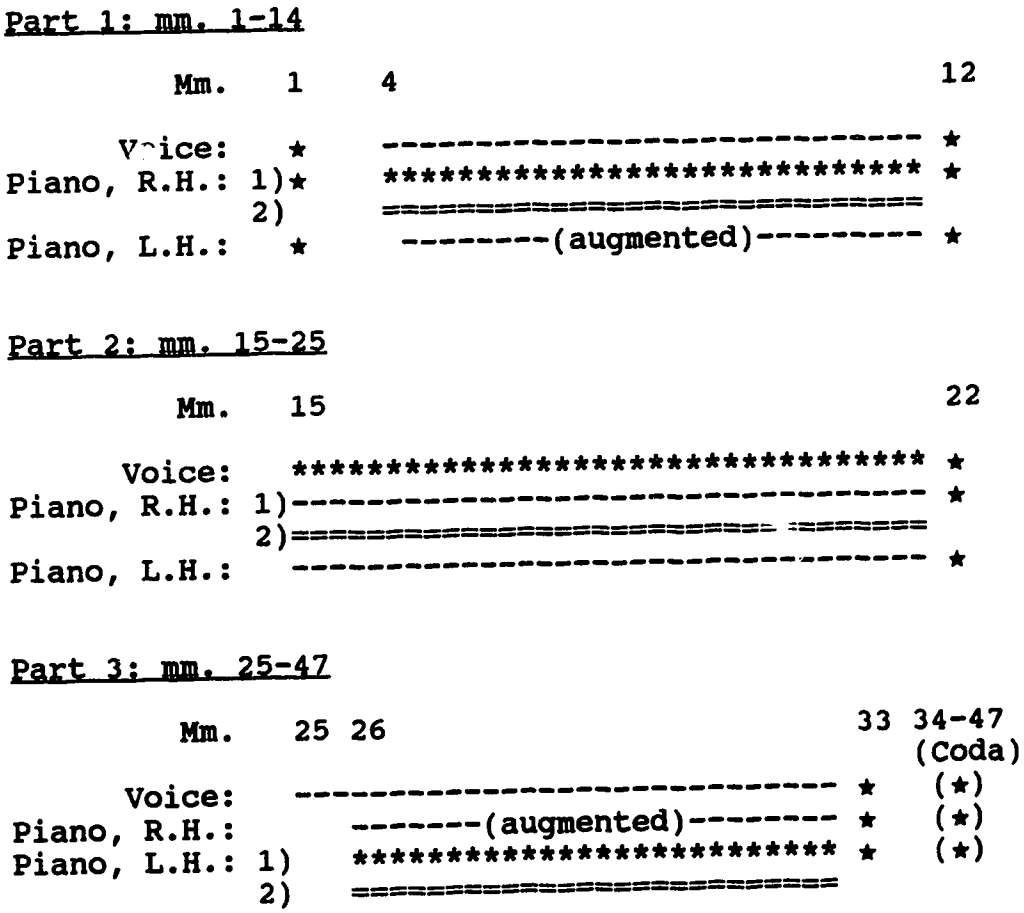
[90] Since the augmented triad very often functions as an altered dominant, it is tempting to try to interpret the F augmented triad as the dominant of an unstated tonic, B♭. However, B♭ is not implied in any way by the pitch structure of the song. One other common use of the augmented triad is as III in a minor key; if this were the case in "Helle Nacht," the F augmented triad would function as III of D. There is, however, no sense of D being given priority in the tonal hierarchy. One must conclude that F functions as the tonic, albeit a dissonant tonic in traditional terms.

to conventional tonal syntax at the deep middleground. In the following discussion I will seek to enumerate some of these tonal implications.

"Helle Nacht" is a contrapuntal *tour de force*, with triple counterpoint being featured throughout the song. The graph in Example 60 shows the contrapuntal relationships which permeate the piece. There are in essence three

Example 60: Contrapuntal relationships and formal design of "Helle Nacht."



contrapuntal voices which are interchanged among the piano (L.H.), piano (R.H.), and vocal line, plus a fourth voice derived from one of the three. For the purpose of this discussion, the three contrapuntal voices are designated A [--], B [**], and C [==]. The vocal line of Part 1 (A) appears in augmentation in the L.H. of Part 1 while the R.H. comprises two contrapuntal voices, B and C. Line B becomes the vocal melody of Part 2 while C provides a constant, rhythmically unique counterpoint throughout the song.

The L.H. of Part 1 (A) is essentially maintained in the L.H. of part 2. The R.H. of Part 2 continues line C but exchanges one contrapuntal line with the voice, combining lines A and C. Part 3 is like Part 1 except that the piano voices are interchanged; the L.H. comprises lines B and C while the R.H. imitates the vocal line, A (in augmentation).

As the graph indicates, the formal design of the song comprises three sections: Part 1, mm. 1-14; Part 2, mm. 15-25; Part 3, mm. -7 (coda, mm. 34-47). The pitch materials of each of the three sections are virtually identical, a product of the strict counterpoint (recurrent contrapuntal lines vary primarily in rhythmic disposition). Consequently, the form cannot be said to emulate the traditional ternary model in which the middle section generally comprises contrasting material.[91] In "Helle

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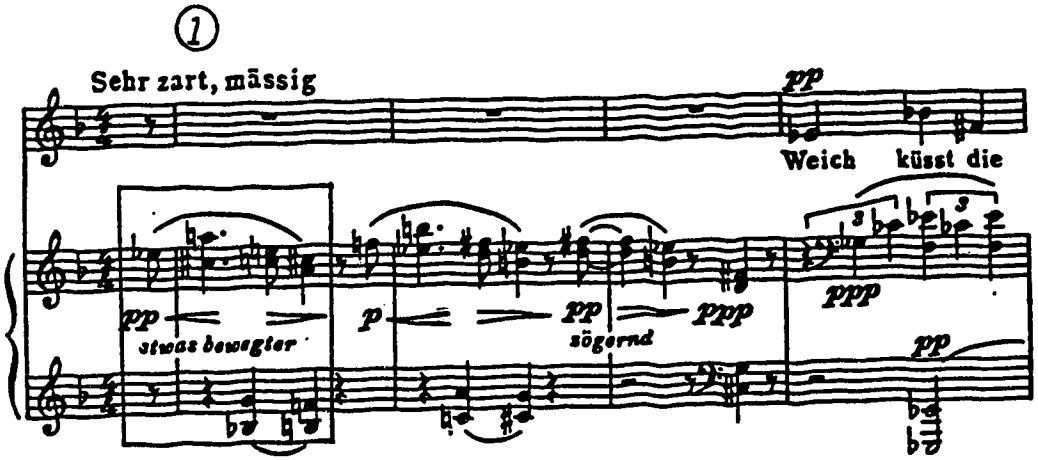
[91] only the large-scale design of the vocal line implies the traditional ternary form; the melody of the (continued...)

Nacht" we have one section repeated three times with each occurrence delineated by a recurrent figure which has the function of a ritornello.[92]

This recurrent figure comprises the opening motive in its various appearances (Example 61). It not only marks

Example 61: Recurrent motive, "Helle Nacht."



the end of each of the three contrapuntal sections (marked * in Example 60) but also frames the song as a whole. Varied repetitions of the motive comprise the last fourteen measures of the song, effecting a coda. Because each of the

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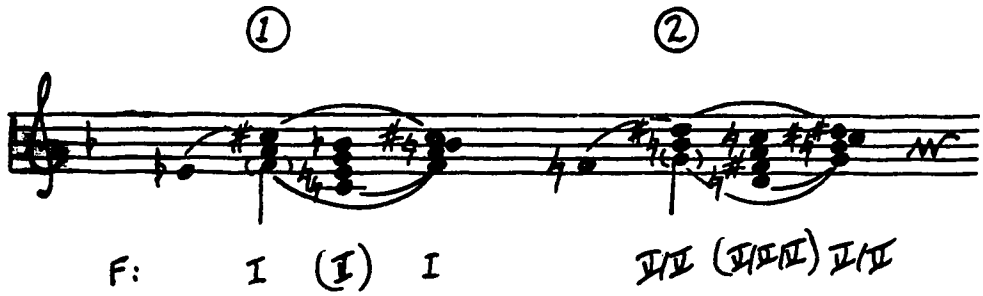
[91](...continued)
first section returns as the melody of the last section while the vocal line of the middle section is distinct (the vocal line of the three sections comprises contrapuntal lines A B A).

[92] Gerlach, in his *Dehmel-Lieder: Musik und Sprache*, calls the opening motive and its transposed restatement a ritornello (p. 79).

three sections is comprised primarily of the same pitch structures, the large-scale harmonic design of all of the sections is virtually identical. Consequently, the discussion of tonal implications in the song will focus on the first section.

The tonally ambiguous pitch structure of the opening motive is as clear (or unclear) as any statement of the tonic in the song (Example 62). The motive is immediately

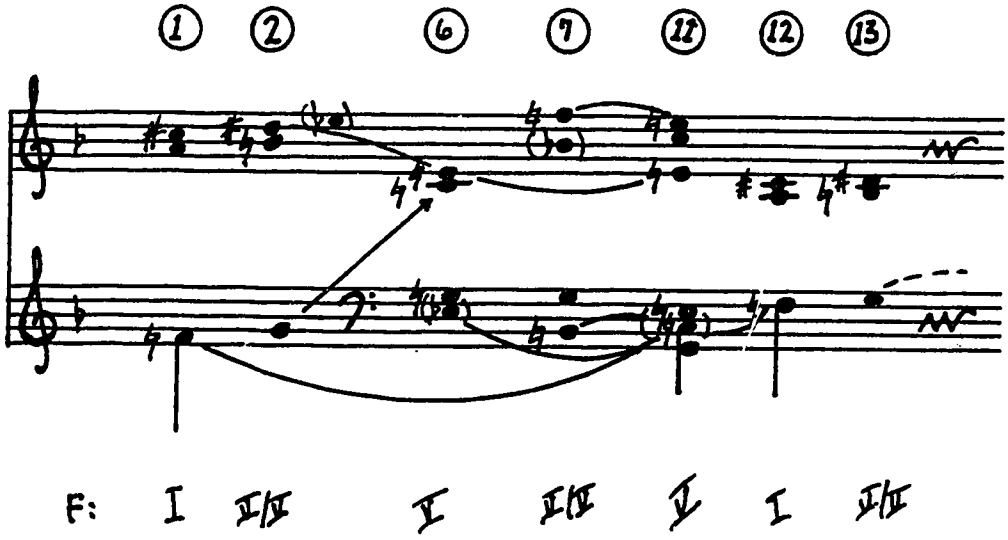
Example 62: Tonal functions in recurrent motive, "Helle Nacht," mm. 1-2.



repeated, transposed up one whole-tone to become V/V/F (notice the E♭5 of m. 2 has been respelled D♯5 in the reductive graph of Part 1, Example 62). The first implication of a dominant occurs in m. 6, where the pitches of the piano (R.H.) outline the chord. The lowered third (E♭) which appears in the bass and the apparent non-chord tone, F♯3, obscure the tonal function of the sonority. The

same "non-chord tone," F♯, attends all the structurally most significant dominant chords (mm. 11, 22, 33) and is no doubt

Example 63: Reduction, "Helle Nacht," mm. 1-14.



best interpreted as a lowered fifth of the chord.[93] The concurrent appearance of F♯3 and G♭4 in the dominant chord of m. 22 substantiates this interpretation.

The dominant, C, so extensively tonicized by its dominant in Part 1, finally resolves to the tonic, F, in m. 12, which is represented at the foreground by the opening motive. Part 1 does not end on the tonic, however; the recurrent motive is, as at the opening, transposed up one

[93] Schoenberg, in his *Structural Functions*, gives an example of a dominant chord which contains both a ♯5 and ♭5 (Example 122c, p. 113); this chord structure is similar.

whole tone to end the first section with a V/V/F. The V/V is prolonged through to the beginning of Part 2, where it functions much as it did in the first section (Example 64).

Example 64: Reduction, "Helle Nacht," mm. 15-25.

Full harmonic closure is achieved only at the end of the final section when the opening motive implying F is stated, in rhythmically augmented form, for the last time (mm. 43-47) (Example 65). The dominant-tonic relationship, a "built-in" component of the opening motive (See Example 61), is accented by the rhythmically augmented statement of the motive at the end of the song. Thus the recurrent motive, structurally important throughout the song, ultimately effects harmonic closure.

Principles of conventional tonal syntax are less evident in "Helle Nacht" than in any of the other four

Example 65: Reduction, "Helle Nacht," mm. 25-47.[94]

songs. Not only is the tonal function of structurally significant harmonies obscured by chromaticism; the tonic itself is not once stated in a definitive manner. While it is possible to attribute tonal functions to some of the novel pitch structures, other means of achieving coherence now dominate.

Gerlach points out one difference between the manuscript and published edition of "Helle Nacht" that is

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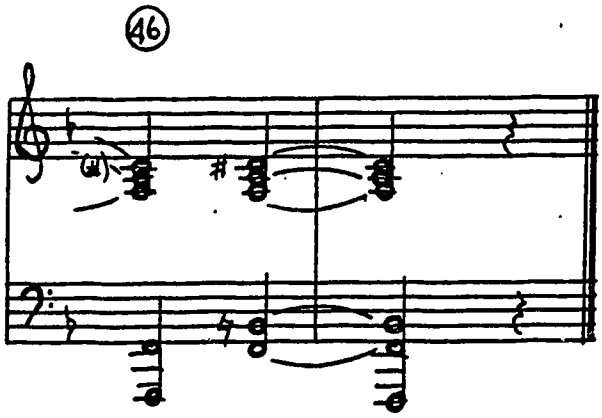
[94] The E♮4 in m. 27 of the published edition should in fact be an E♭ as marked in the reductive graph (See Gerlach, "Handschriften," p. 104).

particularly significant in our discussion of pitch-class set relations, and that regards the notation of the final chord in the song.[95] The editor, Leonard Stein, has notated it F1 - F3 - A3 - C♯4 while in the manuscript the F2 and B♮2 of the penultimate measure are tied over to the last measure (Example 66). This change accords B♮ greater significance

Example 66: Notation of final sonority, "Helle Nacht."



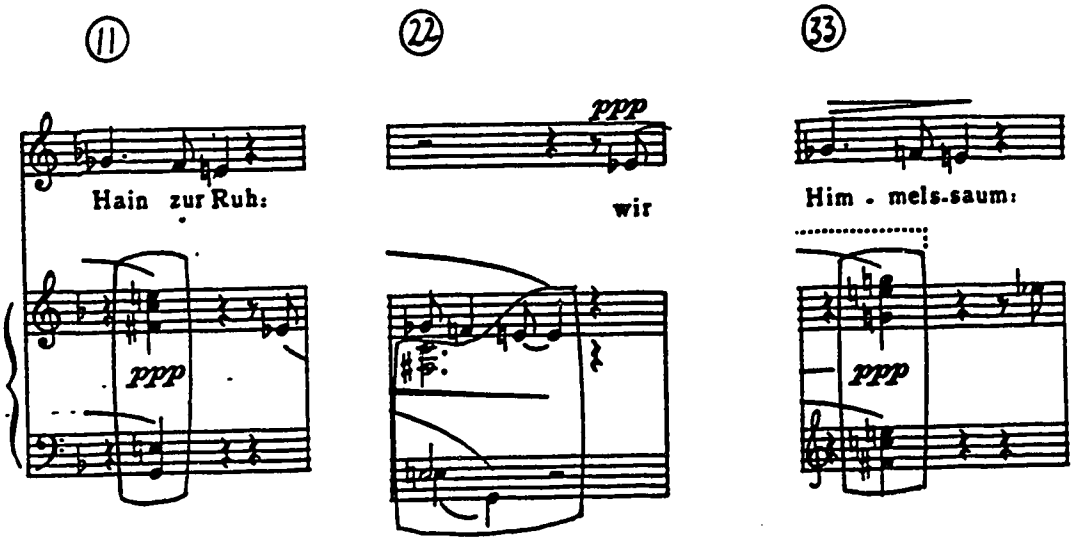
in the closing sonority and, consequently, each sonority in the song which represents the tonic triad in tonal terms comprises set 4-24 in set-theoretic terms. The implication is, of course, that the notion of "tonic" in "Helle Nacht" must be expanded to include a collection of pitches--set 4-24--which could not function as the principal referent in traditional tonality. Instead of being an anomaly as it is

[95] Gerlach, "Handschriften," p. 105.

in tonal terms,[96] the B♮ is deemed, in set-theoretic terms, an integral component of the sonority which clearly functions as the point of departure and goal of motion.

One other set has an important role in delineating structurally important junctures--set 4-Z29. It marks the end of the first five lines of each poetic stanza and separates them from the last (Example 67). (The sixth line of each stanza is set, in each case, to the

Example 67: Set 4-Z29, "Helle Nacht."



4-Z29 sets: (0 4 6 7)

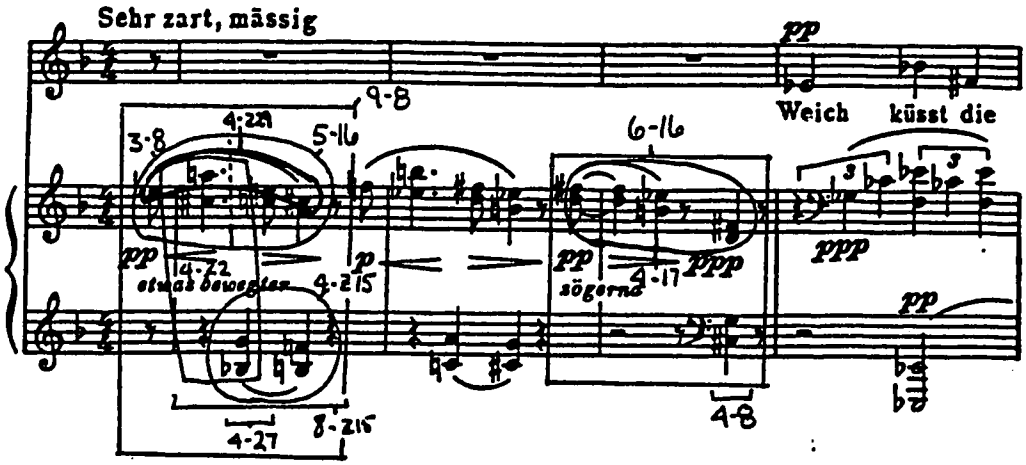
"ritornello.") The homogeneity of pitch structures in the three sections ensures that the set appears at the same

[96] The function of B♮ was not defined in the preceding tonal analysis; indeed, its role in the structure appears tonally enigmatic.

juncture in each passage. It is varied rhythmically, however, and these rhythmic variations emphasize the pitch-classes which comprise set 4-Z29 (See Example 67, m. 22).

The segmentations in Example 68 indicate the sets which comprise the recurrent motive.[97] It is particularly

Example 68: Segmentations comprising recurrent motive, "Helle Nacht."



3-8: (9 1 3)	4-27:(4 7 10 0)
4-8: (1 2 6 7)	4-Z29: (9 1 3 4)
4-Z15: (5 7 10 11)	5-16: (9 0 1 3 4)
4-17: (9 0 1 4)	6-16: (11 1 2 3 6 7)
4-22: (4 7 10 0)	8-Z15: (4 5 7 9 10 11 0 1)
4-24: (9 11 1 5)	9-8: (3 4 5 7 9 10 11 0 1)

[97] The brief "addendum" to the motive (mm. 2-3) is also included in the segmentation. It is obviously a restatement of various components of the motive as it appears in m. 2. In subsequent occurrences, the C♯3 and G♮3 of the bass (m. 3) appear with either B♮ and E♭ as in m. 2 (comprising set 4-24), or with D and F♯ as in m. 3 (comprising set 4-8). The intersection of the two tetrachords produces set 6-16. That components of the motive are interchanged to produce new pitch combinations elsewhere in the song lends a degree of credibility to the segmentations of the motive itself (Example 67).

interesting to find set 4-Z15 embedded in its complement, set 8-Z15[98] (set 4-Z15 is especially interesting in its own right, being one of the two all-interval tetrachords). Set 4-Z15, together with its complement, is one of the primary features of the pitch structure of the motive that connects it to the contrapuntal passages which follow (discussed below). One other set prominently featured tetrachord that appears in the recurrent motive is set 4-Z29 (the other all-interval tetrachord). It is referenced numerous times the subsequent contrapuntal material (See Example 69).

The set-complex table shown in Table III demonstrates the degree of homogeneity in the sets that comprise the recurrent motive. It is no surprise, of course, that set 9-8 is in K or Kh relation to all the other sets as it is the product of the intersection of all the other sets. It is remarkable, however, that set 6-16 is in Kh relation to all but two of the nine other sets.

While the contrapuntal passages may appear unrelated to the recurrent motive at the surface, at least three critical links connect the antithetical textures. The first, as mentioned above, is the cross-referencing of 4-Z29 sets. The second, as alluded to earlier, is set 4-Z15. It is related to the contrapuntal sections both by its complement

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[98] The "embedded" complement relation is accorded special structural significance by Forte (see *Atonal Music*, p. 83).

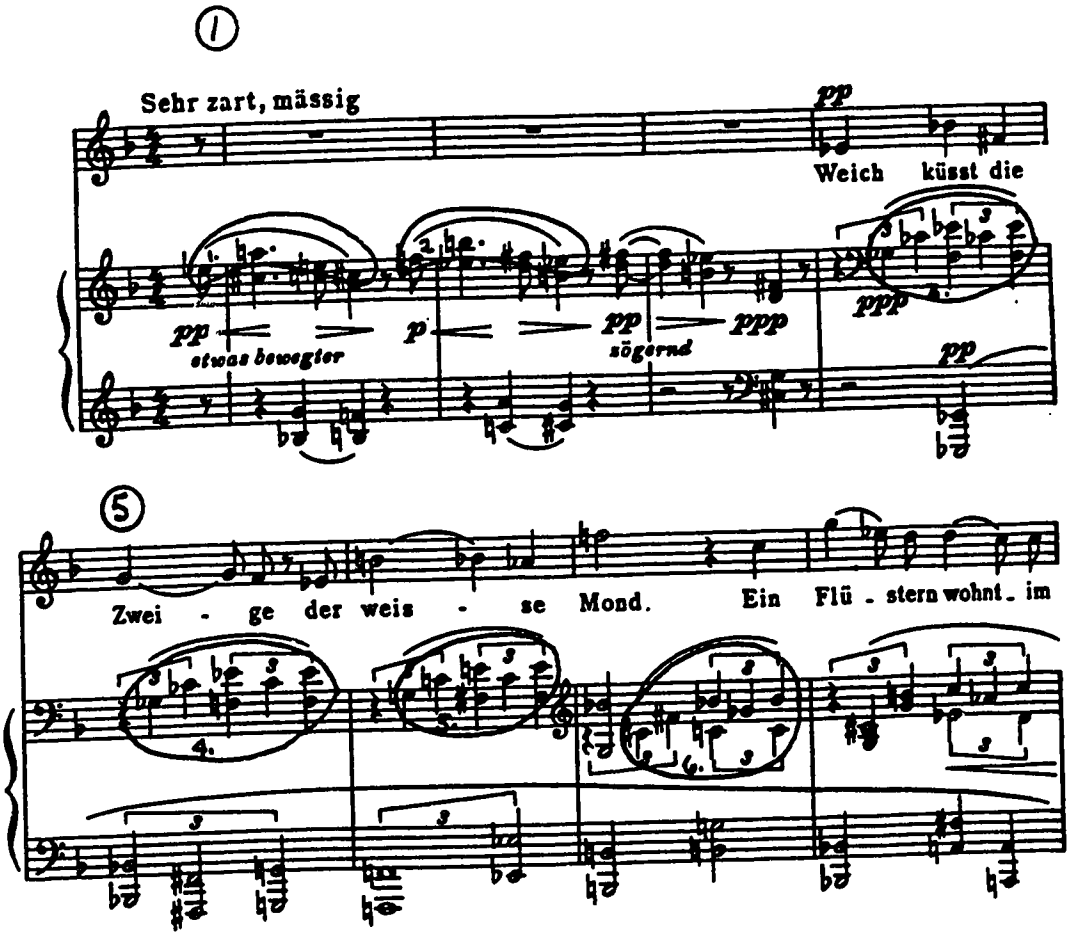
Table III: Set-complex table, recurrent motive, "Helle Nacht."

	3-8/9-8								
4-8	K								
4-Z15	Kh								
4-17	K								
4-22	K								
4-24	Kh								
4-27	Kh								
4-Z29	Kh	4-8	4-Z15	4-17	4-22	4-24	4-27	4-Z29	
5-16	Kh	K	K	Kh		K	K	Kh	5-16
6-16	Kh	Kh	Kh	Kh	Kh	Kh		Kh	

and its Z-related counterpart, set 4-Z29. By far the most common tetrachord of the song is set 4-Z29 (the other all-interval tetrachord). Not only does it delineate the end of each contrapuntal passage, as discussed above, but it recurs multiply throughout the contrapuntal texture. Example 69 shows its occurrences in Part 1. That set 4-Z15 does not appear even once in the contrapuntal texture and that it is referenced by its Z-related set (the only other tetrachord to have as unique an interval vector and which does not appear in the free texture) is of consequence structurally. The unique intervallic relationship between the two tetrachords lends coherence to the pitch structures which comprise them, and the frequency of their occurrence adds to their import.

Set 4-Z15 is also connected to the contrapuntal passages by the appearance of its complement, set 8-Z15. This connection is twofold, of course, as set 4-Z15 occurs embedded in its complement in the opening motive.

Example 69: Set 4-Z29, "Helle Nacht," Part 1.



1. (9 1 3 4) 2. (11 3 5 6)
3. (11 3 5 6) 4. (0 4 6 7)
5. (11 3 5 6) 6. (6 10 0 1)

That is to say, 8-Z15 sets in contrapuntal passages reference both their complement, set 4-Z15, and the 8-Z15 sets of the opening motive. In the segmentation shown in Example 70, set 8-Z15 delineates the end of the fifth line of the poem. It is related to the first 8-Z15 set (m. 1) by T_1I.

One other occurrence of this octachord in a contrapuntal passage is particularly interesting. It

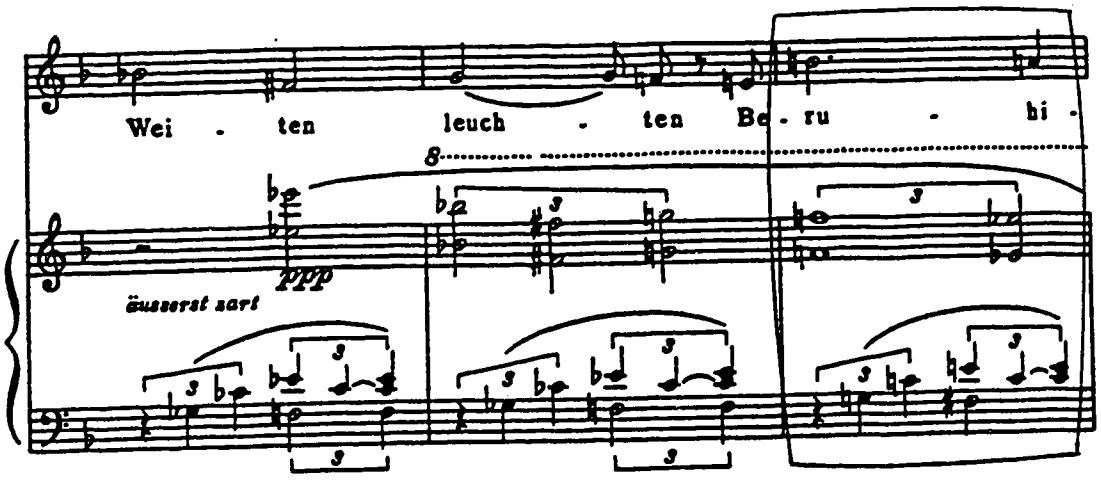
Example 70: Set 8-Z15, "Helle Nacht," mm. 10-11.

8-Z15: (0 1 2 3 4 6 8 9)

appears in m. 28, effected by a lapse in the strict counterpoint (Example 71). The A♮4 of the vocal line "should" be a B♭, as it was in m. 6. It is notable that this rare deviation from strict counterpoint should effect this result.

It was noted above that set 6-16 stands in Kh relation to almost all the other sets which comprise the opening motive. It is no less interesting that this set, which is so closely connected to other sets in the recurrent motive, also plays a role in relating the free and contrapuntal sections. Set 6-16 appears comprised not only of the pitches which ensue in m. 5 but also of the first six pitch-classes of the vocal line (Example 72). That the hexachord

Example 71: Set 8-Z15, "Helle Nacht," m. 28.



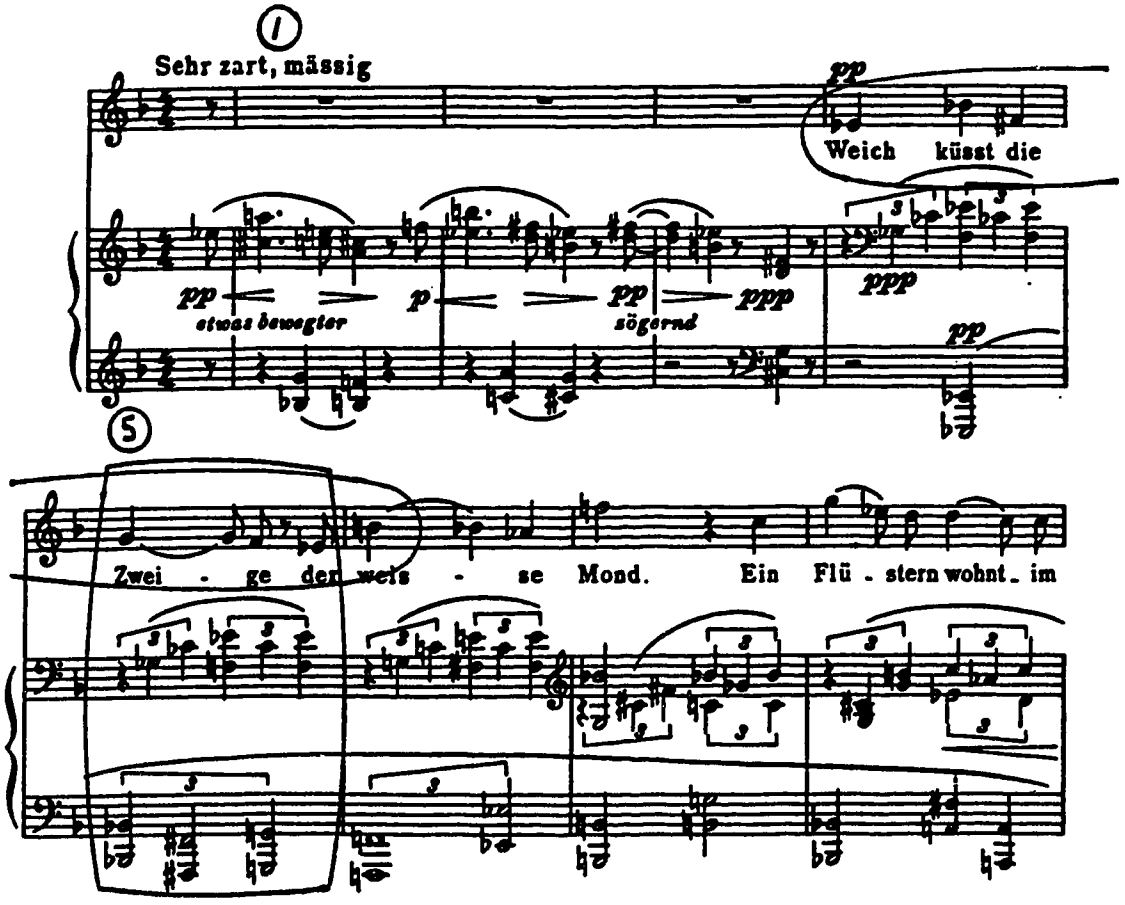
8-Z15: (3 4 5 6 7 9 11 0)

appears at the outset of the contrapuntal passage in such close proximity to the motive lends further weight to the connection.

The set-complex chart of Table IV shows in detail the relations which connect prominent sets of both the opening

motive and the contrapuntal passages. Notice that set 9-8, the set which comprises all the pitch-classes of the opening motive, is in K or Kh relation to all other sets. The other nonachord, set 9-3, is also in K or Kh relation to all other sets, but it stands in the weaker K relation to more sets than does set 9-8. It is also interesting that the all-interval tetrachords, so prominent in the song, are in K or

Example 72: Set 6-16, "Helle Nacht."



6-16 sets: (3 5 6 7 10 11)

Table IV: Set-complex table, "Helle Nacht."

	9-3	3-8*	4-4	4-8	4-Z15	4-17	8-19	4-22	4-24	4-27	4-Z29	5-6	7-7	5-16	5-20	5-29
4-4	Kh	K														
4-8	K	K														
4-Z15*	Kh	Kh														
4-17	Kh	K														
8-19	Kh	K														
4-22*	K	K														
4-24	K	Kh														
4-27	K	Kh														
4-29*	K	K	4-4	4-8	4-Z15	4-17	8-19	4-22	4-24	4-27	4-Z29					
5-6*	Kh	Kh	Kh	Kh	Kh	K	K	K	K		K					
7-7*	K	Kh	K	Kh	K					K	K					
5-16*	Kh	Kh	K	K	K	Kh	K		K	K	Kh					
5-20	K	Kh	K	Kh	K	K	K	K	K	K	Kh					
5-29	K	Kh	K	K	K	K		K		Kh	K	5-6	7-7	5-16	5-20	5-29
6-Z4	Kh	Kh	K	K	K		K		K		K	K				
6-16	Kh	Kh	Kh	Kh	Kh	Kh	Kh	Kh	Kh		Kh	Kh			Kh	
6-Z19	Kh	Kh	K	Kh		Kh	Kh			K	K	K		K	K	

* indicates that the complement of the set also appears in the song.

Kh relation to all but one other set (set 4-Z15 is not related to set 6-Z19). The other notable set is the hexachord, 6-16, the set which relates the opening motive tothe contrapuntal passages. It stands in Kh relation to all but four of sixteen other sets.

In the tonally enigmatic pitch structure of "Helle Nacht" one finds numerous relationships between innovative collections of pitches that evince a novel means of achieving musical coherence. The relationships of collections of pitches as unique as the all-interval tetrachords bespeak Webern's growing awareness of entirely new principles of relating pitches. Set-theoretic analysis elucidates a host of relationships which find no place in conventional tonality and provides highly convincing evidence of the radical departure from tradition evident in this song.

CHAPTER V

CONCLUSION

Although the preceding analysis of the *Dehmel Songs* has focused on features unique in each of the five songs in order to demonstrate the evolution of Webern's compositional style, and has put in disarray the order in which the songs actually appear, the five songs do indeed constitute a cycle, and various musical and extra-musical elements contribute to its unity and coherence as a multi-faceted entity. It is not without import that all five poems were written by a single poet and that, as Reinhard Gerlach has shown in his "Dehmel-Lieder: Musik und Sprache," a logical progression of ideas and a sense of direction are effected by the poetry. Particularly apropros in the context of this study, however, are the numerous syntactical, structural, and surface features of the music which relate the five songs.

Various compositional techniques connect the songs, not the least of which is the extensive use of imitation and counterpoint, a technique which reaches its zenith in the last song. The songs are also related by rhythmic features; for example, triplets pervade all the songs but the first, generating, in most instances, a distinctive two-against-three pattern. That the tritone is featured, both melodically and harmonically throughout the songs, also

lends coherence at the surface. It is remarkable that the first two melodic pitches of the cycle, B♮ and F♮, are represented not only in the final harmonic structure of the cycle but also comprise the final two pitches of the vocal line of the last song (F♮ - B♮, "Helle Nacht," mm. 36-37).

Perhaps even more readily apparent is the trenchant harmonic ambience effected by the augmented triads which permeate each of the five songs. That augmented triads comprise so much of the pitch structure of the cycle bespeaks the significance of their role in creating unity and coherence. The structural significance of this sonority ever increases as the cycle progresses. At the outset of the cycle, in "Ideale Landschaft," the raised fifth of the major triad, though resolved at the end of that song, anticipates the ensuing establishment of the augmented triad as an essential structural entity. Indeed, in "Helle Nacht," it becomes a crucial component of the harmonic goal of the song.

Unlike Preston, I do not hear F♯ minor as the suspended, unstated tonic around which the *Dehmel Songs* are structured.[99] I believe the tonal ambiguity of the songs, particularly of those written in 1908, lessens the need for an abstract principle of organization such as a tonal superstructure to provide coherence to the cycle. If there

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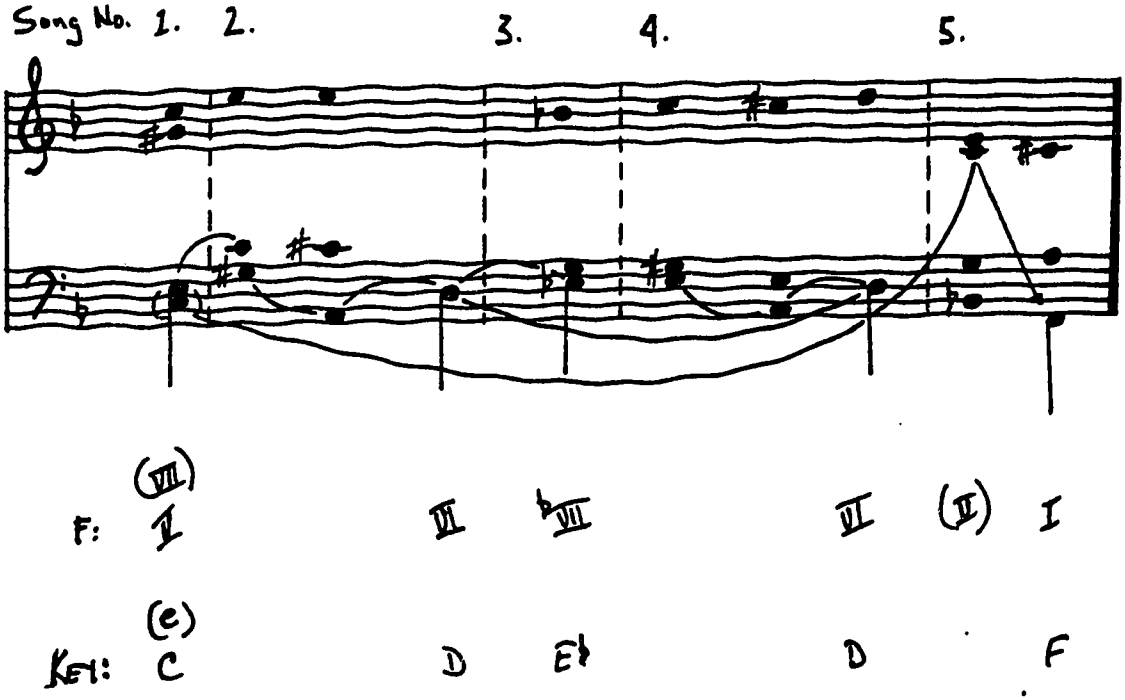
[99] Preston, "Tonal and Extratonal Functions of the Augmented Triad," p. 150.

is a tonal superstructure which lends coherence to the songs, however, the model in Example 73 reflects the principles of correlation implied by the foregoing analyses.

Example 73: Tonal superstructure of the *Dehmel Songs*.



The E augmented triad which pervades the opening of the first song can also be reinterpreted as a C augmented triad. Although this augmented triad is resolved to an E major triad in "Ideale Landschaft," perhaps its very ambiguity provides grounds for attributing to it a larger function within the cycle as a whole that is different from its immediate role in the song. The cycle as a whole is then framed by the tonally axiomatic dominant-tonic relationship,

a progression "prolonged," so to speak, by nested neighbor motion to VI (D) and VII (E♭) as shown in the graph.

Whether or not there is in fact an abstract tonal superstructure which provides global coherence to the cycle, various novel collections of pitches can be seen to perform that function at a more local level. Principal among these are the two tetrachords, sets 4-24 and 4-19. Both sets have structurally significant roles in four of the five songs, and one of the sets--set 4-24--plays an important role in the one remaining song, "Helle Nacht." (In "Helle Nacht," of course, the role of the all-interval tetrachords, 4-Z15 and 4-Z29, is paramount to that of set 4-24.) The frequent appearances of these two tetrachords attests, again, the importance of the augmented triad which is a component of both sets and affirms the structural significance of these innovative pitch collections.

The foregoing having been said about the coherence of the cycle, however, it is indisputable that Webern's understanding of structural coherence and means of achieving it was not inert over this crucial two-year period, but developed along with his explorations in harmonic language. Even a rather cursory review of the first and last songs of the cycle confirms this declaration. In "Ideale Landschaft," important structural junctures are delineated by triads whose function in the tonal hierarchy is perspicuous. In "Helle Nacht," on the other hand,

structural junctures are marked by pitch collections that are tonally enigmatic, whose tonal role is obscure. The progressive deterioration of principles of tonality and the increasing influence of novel means of achieving structural coherence are self-evident in the *Dehmel Songs*.

The progression toward the atonal idiom in the *Dehmel Songs* is, I believe, more a fluid one than a series of discrete steps, but a brief review of the kinds of pitch structures which inform the large-scale design of the each of the five songs affirms the progression nonetheless. We found at the outset, at the background of "Ideale Landschaft," a fairly conventional tonal design which varies from Schenkerian models only in that structural harmonic closure is achieved after the *Urlinie* descent is completed. Unconventional pitch structures such as set 6-Z19 and set 4-19 appear at structurally significant junctures, but, as mentioned above, the tonal function of those sonorities which delineate structure is never in real doubt.

As in "Ideale Landschaft," the tonal design evident at the background of "Nächtliche Scheu" is essentially conventional. D is prolonged, although not entirely without challenge from F, to be irrefutably established as tonic in the final measures of the song. Again, important structural junctures are delineated by sonorities whose tonal function is clear. Whole-tone sonorities, especially 4-24 sets, however, increasingly inform the structure of the song.

In the three songs of 1908, an even more decisive break with tradition is effected. It is no longer feasible to delineate an *Urlinie* descent in the melodic content of the songs, and, consequently, the traditional Schenkerian model is no longer as applicable as it was in the earlier two songs. Nevertheless, principles of conventional tonality can still be seen to obtain, although new principles of coherence are gaining in influence.

The tonal duality of "Am Ufer" renders ambiguous the harmonic motion of most of the song. Both F and D lay claim to tonal preeminence at the outset, and D is not confirmed as the tonic until the end. The prominent tetrachords which permeate the song, sets 4-19 and 4-24, are related by operations which effect particularly unique results, implying that the relations between the tetrachords are not merely coincidental. Complement relations, structurally significant pitch-class set connections in set-theoretic terms, pervade the song.

The deceptive, tonally lucid opening and closing of "Himmelfahrt" belie the degree to which non-tonal pitch collections inform the large-scale design of that song. The chromaticism at the surface of the music virtually obscures the tonal function of sonorities at the middleground level. The principal tetrachords of the song (sets 4-19 and 4-24), however, are related in a particularly distinctive manner, and their contribution to coherence in the song is more

apparent. Of their twenty-four appearances, each of these two sets shares with the other at least one of three possible invariant 3-12 trichords which connect the tetrachords. A homogeneity of pitch content so unique throughout sets so wide-spread in the song can hardly be viewed as coincidental.

The pitch structure of "Helle Nacht" stands apart from the other songs in that no tonally explicit major or minor triad appears at any point in the song. The tonic itself, an F augmented triad, is furthermore always accompanied by B♮, thus comprising set 4-24. Virtually all pitch structures in the song are tonally enigmatic. On the other hand, various set relations can clearly be seen to inform the structure of the song. The all-interval tetrachords 4-Z15 and 4-Z29 are particularly prominent, and the manner in which these two sets relate the contrapuntal and free textures of the song can hardly be coincidental. Numerous other sets, as detailed in the preceding analysis, play an important structural role. The homogeneity and complex relations of these innovative pitch structures can only affirm that novel methods of achieving coherence obtain in this last song.[100]

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[100] It is beyond the scope of this essay, but I believe further study of the counterpoint in "Helle Nacht" as it relates to the twelve-tone method would be fruitful. Herbert Buchanan, in his "An Investigation of Mutual Influences among Schoenberg, Webern and Berg," has already considered various facets of the issue (see pp. 193-207).

There can be little doubt that the *Dehmel Songs* document not only a critical phase in Webern's evolution to atonality but also two of the most crucial years in the development of Western music. In them we find traditional principles of tonal syntax and structure waning, replaced by innovative methods of effecting pitch coherence which anticipate the atonal idiom of the next decade and perhaps even elements of the ensuing twelve-tone idiom. Not only do the *Dehmel Songs* document these pivotal years in the history of our music, however; they rise up as a monumental achievement of artistic expression in their own right. These songs manifest Webern's sensitivity to both the structural and expressive aspects of poetic utterance and, although they are generally deemed student works, they constitute a valuable contribution to the genre of the German *Lied*.

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APPENDIX

Leonard Stein's translation of texts of the five *Dehmel Songs*.

I. **Ideale Landschaft**

Du hattest einen Glanz auf deiner Stirn,
und eine hohe Abendklarheit war,
und sahst nur immer weg von mir,
ins Licht --
und fern verscholl das Echo meines Aufschreis.

I. **Imaginary Landscape**

You had a gleam upon your forehead,
And a noble evening brightness came into being,
And you always looked only away from me,
Into the light, into the light --
And in the distance there died away the echo of my cry.

II. **Am Ufer**

Die Welt verstummt, dein Blut erklingt;
in seinen hellen Abgrund sinkt
der ferne Tag,

er schaudert nicht; die Glut umschlingt
das höchste Land, im Meere ringt
die ferne Nacht,

sie zaudert nicht; der Flut entspringt
ein Sternchen, deine Seele trinkt
das ewige Licht.

II. **On the Shore**

The world grows silent, your blood resounds;
Into its luminous abyss sinks
The distant day,

Which does not tremble; the glow embraces
The highest land, in the sea struggles
The distant night,

Which does not linger; from the water there rises
A little star, your soul is drinking
The everlasting light.

III. **Himmelfahrt**

Schwebst du nieder aus den Weiten,
Nacht mit deinem Silberkranz?
Hebt in deine Ewigkeiten
mich des Dunkels milder Glanz?

Als ob Augen liebend winken:
alle Liebe sei enthüllt!
Als ob Arme sehnend sinken;
alle Sehnsucht sei erfüllt --

Strahlt ein Stern mir aus den Weiten,
alle Ängste fallen ab,
seligste Versunkenheiten,
strahlt und strahlt und will herab.

Und es treiben mich Gewalten
ihm entgegen, und er sinkt --
und ein Quellen, ein Entfalten
seines Scheines nimmt und bringt

und erlöst mich in die Zeiten,
da noch keine Menschen sahn,
wie durch Nächte Sterne gleiten,
wie den Seelen Rätsel nahn.

III. **Heavenly Journey**

Do you float down out of space,
Night, with your silver wreath?
Does the soft lustre of the dark
Lift me up toward your eternities?

It is as though eyes beckon in loving:
Let all love be revealed!
It is as though arms sink in longing:
Let all longing be fulfilled --

A star shines upon me from the distance,
All fears fall away --
Most blissful reveries! --
It shines and shines and aspires downward.

And there are forces
That urge me toward it, and it sinks --
And a flow, an unfolding
Of its brightness takes and transports

And releases me into those times
When there were no mean to perceive,
As stars glide through nights,
as mysteries draw near to souls.

IV. **Nächliche Sheu**

Zaghaft vom Gewölk ins Land
fliesst des Lichtes Flut
aus des Mondes bleicher Hand,
dämpft mir alle Glut.

Ein verirrter Schimmer schwebt
durch den Wald zum Fluss,
und das dunkle Wasser bebt
unter seinem Kuss.

Hörst du, Herz? Die Welle lallt:
küsse, küsse mich!
Und mit zaghafter Gewalt,
Mädchen, küss ich dich.

IV. **Timidity at Night**

Timorously from the cloud-bank into the countryside
Flows the stream of light
Out of the moon's pale hand,
Subduing all my fire.

A stray glimmer floats
Through the woods toward the river,
And the dark water quivers
Beneath its kiss.

Do you hear me, O heart? The billow lisps:
"Kiss, kiss me!"
And with timorous might,
O maiden, do I kiss you.

V. Helle Nacht

Weich küsst die Zweige
der weisse Mond.
Ein Flüstern wohnt
im Laub, als neige,
als schwiege sich der Hain zur Ruh:
Geliebte du --

Der Weiher ruht, und
die Weide schimmert.
Ihr Schatten flimmert
in seiner Flut, und
der Wind weint in der Bäumen:
wir träumen -- träumen --

Die Weiten leuchten
Beruhigung.
Die Niederung
hebt bleich den feuchten
Schleier hin zum Himmelssaum:
o hin -- o Traum -- --

V. Luminous Night

Softly the white moon
Kisses the branches.
A whisper lodges
In the leaves, as though the grove were nodding,
Were hushing itself, for rest:
You, beloved --

The pond rests, and
The willow glimmers.
Its shadow flickers
In its water, and
The wind weeps in the trees:
We dream -- dream --

The distances illumine
Peace.
The plain
Raises pallidly its moistened
Veil up toward the horizon:
Begone -- O dream --