A COMPARATIVE ANALYSIS OF THEMATIC MATERIAL FOUND TO BE RELATED IN GUSTAV MAHLER'S VOCAL AND INSTRUMENTAL COMPOSITIONS

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We hereby recommend that the thesis prepared und	er
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CHAPTER I

Introduction

The problem of the thesis was to compare the thematic material of Gustav Mahler in his vocal and instrumental compositions. The importance of the selection of Mahler was illustrated in the following quotation from Barford:

"After half a century during which composers everywhere have reacted against the romantic spirit, Mahler enjoys something like a triumph; his visions of a lyrical and symphonic synthesis of human aspirations appeals to an ever wider audience."

The analysis and comparison idea was chosen when it was discovered, through listening to recordings of Gustav Mahler symphonies, that renowned vocal melodies from song cycles or groups of songs were incorporated in several of his symphonies. In order to appreciate this "appealing" quality of Mahler's music, a comparison seemed to be most beneficial.

To determine which vocal themes were used in his symphonies, all Mahler vocal themes were catalogued in C major or C minor as listed by Barlow and Morgenstern. Secondly, the symphonic themes, catalogued in the same manner, were compared with the vocal themes.

By the above procedure, three vocal themes were identified in

¹Phillip Barford, <u>Mahler Symphonies and Songs</u> (Seattle; University of Washington Press, 1971), p. 7.

Harold Barlow and Sam Morgenstern, A Dictionary of Vocal Themes (New York: Crown Publishers, Inc., 1950), pp. 214-216.

³Harold Barlow and Sam Morgenstern, A Dictionary of Musical Themes (New York: Crown Publishers, Inc., 1948), pp. 292-294.

Mahler's songs and song cycles which he later used as main themes in his first two symphonies. The vocal themes and the symphonic themes which were found to be related were the second song in the song cycle Lieder eines fahrenden Gesellen and the first theme of the first movement of Symphony No. 1, Ich atmet' einen linden Duft and the first theme of the second movement of Symphony No. 2, and the Wunderhorn and the second theme in the third movement of Symphony No. 2.

After investigating the possibility of analyzing and comparing all three vocal themes with their corresponding symphonies, the field of analysis was narrowed to a melodic and harmonic comparison between the vocal and instrumental developments in the second song in the song cycle <u>Lieder eines fahrenden Gesellen</u> and the themes of the first movement of <u>Symphony No. 1</u>.

To facilitate the melodic analysis, the song cycle was used as the point of reference and the symphony was the object of comparison. In the harmonic analysis, first the symphonic harmonies were analyzed and then references were made to the song harmonizations.

Possible methods of Mahler treatment considered in vocal and instrumental developments were modality (change of mode to minor or major keys), use of pentatonic or whole tone scales, displaced octaves, diminution, augmentation, retrograde, inversion, embellishments, rhythmic changes, changing meters, and extended and delayed cadences.

Such a comparison of the structures and development of Mahler's themes can lead to a better understanding and thus, a better performance of the works of this German composer.

The reader of this thesis, if in a teaching situation, may find its contents useful from an historical viewpoint in guiding his student

to a more sensitive and knowledgeable performance.

Chapter One of this thesis has presented the problems of selecting the subject of the thesis, possible methods of analyzation and comparison which resulted, the process of analyzation and comparison, and the advantages of applying knowledge, resulting from reading and understanding the thesis in the fields of teaching and performance. Chapter Two of this thesis discussed the life of Gustav Mahler. Techniques of musical style incorporated by Mahler were also analyzed. Chapter Three presented, first, a melodic comparison of "Ging heut morgen" (second song in the song cycle <u>Lieder eines fahrenden Gesellen</u>) and the first theme of the first movement, Poco adagio, of <u>Symphony No. 1</u>. Secondly, a harmonic comparison of the same literature was discussed. Chapter Four summarized the vocal and instrumental thematic material found to be related and presented general conclusions. A bibliography concluded the thesis.

CHAPTER II

Biography

Chapter Two of this thesis discussed the life of Gustav Mahler and presented an analyzation of the techniques of musical style which Mahler incorporated.

Gustav Mahler, the renown Austrian conductor-composer, was born on July 7, 1860, in Kalischt, Bohemia. His parentage consisted of an ambitious and brutal father who was the proprietor of a distillery, and a gentle, patient mother, the daughter of a soap manufacturer. Although there was little love lost between the two, Gustav Mahler was one of twelve children, most of whom died in early years. The remaining siblings profoundly influenced the shaping of his personality; unfortunately, they were eccentric. Morbid brother Otto, whom Mahler had high hopes for musically, eventually committed suicide. Justine, a sister, became the object of Mahler's Oedipus complex. In later years, he admitted this mother fixation to Sigmund Freud while he was his patient. 1

Despite the chaos in his familial surroundings, Mahler's father recognized a vein of musical prodigy in Gustav. After losing his son on several occasions to the piano in Gustav's grandmother's attic, he sent him to the Iglau Gymnasium and then on to the Vienna Conservatory where he studied with Julius Epstein (piano), Robert Fuchs (harmony), and Franz Krenn (composition). Here, Mahler gained a reputation as an

¹Phillip Barford, <u>Mahler Symphonies and Songs</u> ("BBC Music Guides"; Seattle: University of Washington Press, 1971), p.2.

erratic prodigy who seldom attended class but always seemed to know everything.

Mahler continued at the Vienna Conservatory until 1878. In 1880, he accepted his first engagement as conductor of the summer theater in Hall, located in upper Austria. From this beginning, Mahler built his reputation as the finest conductor of the late romantic period of music. The following years found him conducting at Laibach, Olmutz, Cassil, Prague and Leipzig, each opera house having a reputation better than the previous one.

If one witnessed Mahler as a conductor, very possibly an insight would have been gained into his extraordinary and hypersensitive temperament. He was born into a Jewish family but his restless search for a relation to the Supreme Being finally ended in a "Catholicism for Convenience"; he was not necessarily a believer but was carried by the emotional excitement. The vascillating contradiction between the two religions was typical of his erratic personality.

Everyone who knew Mahler was accustomed to his sudden changes of personality from cheerfulness to gloom. Although he always strove for perfection and the ideal which would cast his personality as cold, he responded warmly to the things of nature and to people of genuine talent. He was driven by his psyche to search for the ultimate meaning of life and his aspirations were of the "other" world in which Mahler sometimes seemed to exist. He rarely found even temporary contentment in human

Dika Newlin, <u>Bruckner, Mahler, Schoenberg</u> (Morningside Heights, New York: King's Crown Press, 1947), p. 10.

³Bruno Walter, <u>Gustav Mahler</u> (New York: Alfred A. Knopf, 1958), p. 25.

life. Constantly he was distracted by an unquenchable thirst for knowledge and understanding.

Often Mahler was his own worst enemy; he would torture himself into a mental state wherein he actually had visions of his body lying dead on a bier in the room before his living self. Again he would be literally paralyzed with migraine headaches; but then his impulsiveness would turn into an asset and the warmth of his spirit would banish the deadly depression.

Fortunately, Mahler had a fanciful sense of humor and a sharp wit which made him congenial when he was among his closest associates. Although he found the banalities of life intolerable, his talent for humor (often used as a felling blow in an argument) seemed to rescue an uncomfortable situation which his obvious lack of savoir-faire could not do. 5

It is interesting to note that other influences on Mahler's life were quite eccentric in their own fields of work: Hugo Wolf, Anton Krisper, and Hans Rott. As Redlich wrote "that exultation bordering on hysteria and insanity were rampant in Mahler's youthful circles is born out by the fact that not only Hugo Wolf and Hans Rott died insane, but that the third companion of Mahler's early days, Anton Krisper, was also threatened by a similar fate."

Among all this chaos of life, however, Mahler found one situation which remained beautiful and stable--his wife, Alma Schindler, the young

^{4&}lt;u>Tbid.</u>, 3.

⁵Ibid. 6.

⁶H. F. Redlich, <u>Bruckner and Mahler</u> (London: J. M. Dent and Son Ltd., 1955), p. 114.

Schindler. There is no doubt that Alma completely transformed Mahler's whole life. This woman, of rare physical beauty and talent, was an understanding and sympathetic critic of his music besides being his most accurate copyist. She became the balance in life for this dualistic and self-centered conductor after less than five months of passionate courtship, terminating in marriage March 9, 1902.

Alma Mahler gave her husband two beautiful daughters. The first was Maria Anna, "Putzi", who died of diptheria and scarlet fever in 1907 at the age of five. The second daughter was Anna Justina, born in 1904, who became a gifted sculptor in her own right and was first married to Ernst Krenek.

It is true that the tragedy that haunted Mahler's life was exemplified in his elder child's death, therefore, it seemed to be merely consistent that his beloved Alma collapsed very gravely ill two days following the child's funeral. Ten days later, Gustav Mahler was diagnosed as having a grave heart condition from which he never recovered.

However, before his death, Gustav Mahler brought the musical world its most dramatic conductor. Beginning with a conducting contract at Hall at the age of twenty, until he finally secured the coveted directorship of Vienna's Imperial Opera House in 1897, Mahler stunned his audiences with his musical interpretations. As in his life-style, he strove for the ultimate in performance—the ultimate in ensemble and

^{7&}lt;sub>Ibid., 134.</sub>

the interpenetration by music of the mood of the dramatic scenes. There was nothing routine in his performances; if he were performing the work for the fiftieth time, he would still strive for his one goal in the art of conducting—the ideal performance. Such a performance called for not only perfect interaction between the music and the dramatic action but also the perfection of staging, costumes, and lighting. From those who worked with him, he demanded equal faithfulness to the score, its notation, tempos, agogic marks and dynamics. If change in a work was allowed, it was surely to enliven the interpretation rather than emphasize the "dead work". 10

After attaining the conducting pinnacle with the directorship at the Imperial Opera House (1897) in Vienna, Mahler completed his career at the Metropolitan Opera House in New York City. Here, he performed all that he enjoyed—knowing his life was not to be much longer. He returned to his beloved home of Vienna where he lived only a short time. Gustav Mahler was buried on May 18, 1911.

Despite his predictable successes in the conducting theater,
Mahler inwardly dreaded the promotions, seeing each one as an added
demand upon his leisure time which he longed to devote to his primary
love--composing. 11 According to historians, Mahler justified his bulk
of works, which were only of the large variety, by stating he had only

⁸Bruno Walter, Gustav Mahler (New York: Alfred A. Knopf, 1958), p. 114.

⁹⁰scar Thompson (ed.), <u>International Cyclopedia of Music and Musicians</u> (New York: Dodd, Mead and Co., 1964), p. 1265.

¹⁰ Walter, 10.

¹¹ Thompson (ed.), 1264.

a short time to compose and, therefore, should compose on the symphonic level if he were going to be remembered. As a result, he composed nine symphonies and several vocal solo collections for which he is most renowned.

Mahler wrote sketches of songs during his school years and made three unsuccessful attempts at opera. His first published work was a piano arrangement of Bruckner's Third Symphony, published in 1878. Following in 1884, Mahler composed his first major song cycle, Lieder eines fahrenden Gesellen (roughly translated Songs of a Wayfarer). This cycle (inspired by an ill-fated love affair with Frau von Weber) was to appear in fragments in his Symphony No. 1 composed in 1888.

The first stage of Mahler's career, according to Bruno Walter, 12 began with the writing of Symphony No. 1. He was a young man who was searching to find his element in the world of nature and folklore. This search was thought to be best expressed in his Des Knaben Wunderhorn, a group of songs taken from the poetry of Arnium and Bretano of the same title. 13 The period took him through Symphony No. 2 in C minor, ("Resurrection" symphony written in 1894), Symphony No. 3 in D minor (1896), Symphony No. 4 in G major ("Ode to Heavenly Joy", 1900), and his only cantata, "Das Klagende Lied", (1898). In his recreative field, it covered the first tumultuous years of his directorship of the Vienna Opera. Walter stated all his music of this period is dominated by a central theme--'the longing for God of a man tormented by the sorrows of the world' ".14

^{12&}lt;sub>Walter, 30.</sub>

¹³Redlich, 142.

¹⁴Walter, 30.

The years between 1900 and 1907, referred to as the second stage of Gustav Mahler's career, brought four more symphonies and two song groups. At this time he was at the height of his powers, battling the world to prove his artistic aims could be reached both in his conducting and composing. Although these years were the most adjusted of his career, Mahler existed on a limited compromise with society. Tokens of such limitations were exemplified in Kindertotenlieder (1902--Children's Death Songs which he later rued as a temptation of fate upon his eldest daughter's death) and Five Songs from Ruekert (1902). Symphony No. 5 in C# minor (1902), Symphony No. 6 in A minor (1904--sometimes known as the "Tragic" Symphony), Symphony No. 7 in E minor (1905--"Song of the Night") and Symphony No. 8 in E major (1907--"The Symphony of a Thousand") were composed in this period--each exhibiting Mahler's inevitable dualism of cheerfulness and gloom.

In the third period, Mahler projected forebodings of death in his <u>Das Lied von der Erde</u> ("Song of the Earth"--a symphony with solo voices--1908) and in his <u>Symphony No. 9</u>, which he preferred to refer to as <u>Symphony No. 10</u>, a superstitious idea brought about by a precedent of previous composers' deaths while writing "Symphony Nine."

A final symphonic effort was <u>Symphony No. 10</u> begun in 1909. It was completed by Deryck Cook and performed in Prague on June 6, 1924.

These works of Mahler encompassed musical techniques from practically every era of music from contrapuntalism to a philosophy resembling that of the systematic serial composers. However, he wrote in the classical-

¹⁵Tbid., 31.

romantic style. Neville Cardus explained by stating "he was a belated classic. Coming in the train of Beethoven and Schubert he was palpably a 'romantic'; he was also, towards the end of his life, pointing the future path for Alban Berg and Schoenberg." Warren Story Smith rexpressed his view on the eras of styles which Mahler incorporated by maintaining that Mahler adhered to the classical procedure, modifying it to suit his own needs. Bruno Walter stated that Mahler was a romantic at heart, merely using his classical element to lend form to his music. Regardless of these opposing viewpoints, the chief interest in Mahler to the modern composer was his contrapuntal technique. His use of polyphony with its linear quality is in style today. Ernst Krenek wrote:

"Mahler's is a new kind of genuine polyphony; all commentators on Mahler, even skeptical ones, agree that therein lies his unique and all-important contribution to the evolution of our contemporary music." 19

As a result of his contrapuntal technique, Mahler's harmony became a combination of melodic parts, contrary to the style of German and Austrian music where the melody was often an extension of the basic, underlying chords. Even at a moment of climatic excitement, Mahler continued

Neville Cardus, <u>Gustav Mahler</u>, Vol. I (London: Victor Gallancz Ltd., 1965), p. 10.

¹⁷Warren Story Smith, "Bruckner vs. Brahms and Mahler vs. Strauss," Chord and Discord, Vol. 2, No. 8, ed. Clark L. Elbe (published by The Bruckner Society of America, Inc., Iowa City, Iowa: Athens Press, 1954), p. 64.

¹⁸ Bruno Walter, Gustav Mahler, (New York: Alfred A. Knopf, 1958), p. 12.

¹⁹Ibid., 63.

to write in freely-moving parts. Such an example was found in Symphony No. 4, third movement, Poco adagio (fig. 2.1). 21



fig. 2.1

Mahler's adaptation of counterpoint for a romantic purpose was one not like nontributions the the exampleate them. The purpose was one and religious feeling, so commonly found in the romantic era, exemplified themselves in his symphonies. 22 Through the use of counterpoint, Mahler expanded the symphony (all of his symphonies were of unusual length except Symphony No. 1 and No. 4).

From the <u>Second Symphony</u> on, his works were characterized by the steady expanding and evolving of form. Symphonies and other works were written on the largest scale and the technical means he employed to accomplish his elaborate ideas were complicated in themselves.²³ Themes bred themes; the length of a Mahler symphonic movement was dictated by the

²⁰ Cardus, 28.

²¹Cardus, 28.

²² Walter, 12.

Baker's Biographical Dictionary (5th ed. rev.; New York: G. Schirmer., 1958), p. 1008.

extent of the basic material. A single statement might have run into a group of themes, each calling for treatment or partial treatment in the development section.

Such massive organization sometimes caused charges of excessive length and looseness of form to be leveled at Mahler. These accusations were discussed by David Rivier in "A Note on Form in Mahler's Symphonies." He proposed the existence of excessive length but denied lack of a tight and integrated form. As Rivier noted, "it is precisely his expansive concept of the symphony that Mahler's genius asserts itself so clearly. He posed his own problems of design and balance, and each of his symphonies is a solution." He concluded that in regard to form, in all that was written by Mahler, the classic sonata skeleton was apparent and his high degree of integration was achieved through a relating of motives from one movement to another.

One prevalent figure or motive which served as an example was one of short notes, often pizzicato, occurring after a climax or as a transition passage to a relaxed or even melancholy mood. It was heard in the early <u>Lieder eines fahrenden Gesellen</u> cycle, before the section beginning "By the wayside. . . " (fig. 2.2). 26

The <u>First Symphony</u> offered the simplest example. In each movement the basic interval of the falling fourth was important. It appeared in the statement of the main theme of the first movement and in the funeral

David Rivier, "A Note on Form in Mahler's Symphonies," Chord and Discord, Vol. 2, No. 7, ed. Clark L. Elbe (published by The Bruckner Society of America, Inc., Iowa City, Iowa: Athens Press, 1954), p. 29.

²⁵<u>Ibid.</u>, p. 30.

²⁶ Cardus, 29.

drum march at the close of the finale. It first appeared at the very beginning of the scherzo, while the celli and basses marked the rhythm; next the violin pizzicati echoed the fourth and then it was heard in the obse counterpoint of the funeral canon (fig. 2.3).²⁷

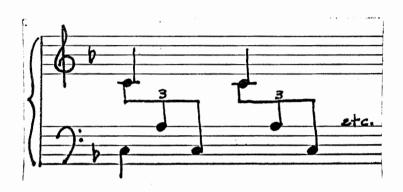


fig. 2.2



fig. 2.3

The same descending fourth was equally important in all the pivotal works of Mahler's career as a symphonist, ²⁸ as illustrated in the <u>Fifth</u>

^{27&}lt;sub>Rivier, 30.</sub>

^{28&}lt;sub>Tbid</sub>

Symphony (fig. 2.4)²⁹, in the <u>Eighth Symphony</u> and in the <u>Das Lied von</u> der <u>Erde</u> in the opening "Drinking Song of the Earth's Sorrow."



fig. 2.4

Mahler was considered to be one of the greatest masters of orchestration and timbre. It was said of him that he acquired, by practical experience, an intimate knowledge of every timbre and combination of timbres of which a large orchestra was capable. 30 His instrumentation was transparent and subject to sudden changes, representing conflicts of mood. These dramatic changes were effected by the treatment of the horn of which Mahler was considered one of the greatest masters. However, there existed some authorities who insisted that no matter how carefully Mahler planned his orchestral effects, they fell flat because they were "laid on to a too thinly woven fabric." According to Oxford History of Music 32, they called for a high degree of manipulative skill on the part of the conductor and the players but they failed to arrest the attention of the listeners without a score.

^{29&}lt;sub>Ibid</sub>.

³⁰H. C. Colles, Symphony and Drama 1850-1900, Vol, VII; Oxford History of Music (London: Oxford University Press, 1906), p. 149.

^{31 &}lt;u>Ibid.</u>, 164.

^{32&}lt;sub>Ibid.</sub>

By those who knew Mahler well, such as Bruno Walter, Mahler's orchestral effects reached a "lofty height" in his songs without being works of mere "emotional declamation." In <u>Gustav Mahler</u>, by Walter, there were calculated six types of songs. 33 They were identified as follows:

- soldier's songs (examples are "Aus! Aus!," "Trost im Unglueck," "Zu Strassburg auf der Schanz")
- 2. nocturnal ("Der Schildwache Nacht lied," "Wo die schoenen Trompeten Blasen," "Revelge")
- 3. pious ("Urlicht," "Himmelisches Leben," "Es sangen drei Engel")
- 4. humorous ("Selbstgefuehl," "Ablosung im Sommer," "Des
 Antonius von Padua Fischpredight," the thematic material for
 the scherzo in Symphony No. 2)
- 5. folk ("Scheiden und Meiden," "Lieder eines fahrenden Gesellen," the theme of the second movement, Poco adagio, in Symphony No.1)
- 6. cheerful ("Verlorene Muh," "Rheinligendehen," "Wer hat dies Liedlein erdacht?")

On his own admission, Mahler primarily wanted to be known as a symphonist. Often there would be just enough time between conducting engagements to jot down short vocal passages which later were scored with orchestral accompaniment. Eventually, a few of these found their way into his symphonies—a clear case of "Mahler quotes Mahler."

^{33&}lt;sub>Walter, 14.</sub>

CHAPTER III

A Melodic and Harmonic Comparison of Thematic Material used by Mahler in "Ging heut morgen" and Symphony No. 1. First Movement

Chapter Three presented a melodic and harmonic analysis of the second song in his song cycle <u>Lieder eines fahrenden Gesellen</u>, "Ging heut morgen" and the second movement, Poco adagio, of Mahler's <u>Symphony No. 1</u>. This was accomplished by a measure by measure analysis and comparison of the two presentations of the same theme found in the song and the symphony.

Melodic Analysis

Gustav Mahler incorporated several of his vocal solos almost in their entirety in some of his orchestral works. One example that was particularly outstanding was the second song, "Ging heut morgen" from his song cycle <u>Lieder eines fahrenden Gesellen</u>, which Mahler directly quoted in the first movement, Poco adagio, of <u>Symphony No. 1</u>.

This melody appeared in fragments throughout the first movement of the symphony, using several methods of fragmentation. Some of these methods were diminution, augmentation, retrograde, and inversion.

First, the melody was examined in its entirety as in fig. 3.1.





fig. 3.1 continued



fig. 3.1 concluded

The introductory melodic interval of a descending fourth was heard so many times throughout the first movement, it would be redundant to list all its occurrences. This fourth was heard horizontally and vertically in melodic and chord structure, both in doubling of the same instruments and in different instruments. Hardly five measures occurred that the descending fourth was not obvious.

After the introduction to the exposition (composed almost entirely of fourths in a variety of rhythmic patterns), the exposition began in measure 63 with measures 2-9 of the melody played by the cellos. Four beats later, the bassoons echoed only the first seven notes. The cellos continued with the first nine measures of the melody by repeating the last four beats of a pattern ascending the D major scale three steps as shown in fig. 3.2. In measures 74 and 75, the trumpets also presented the first seven notes of the melody followed in stretto by the identical notes played by the first clarinet. Simultaneously with the trumpet, the violas presented these first seven notes in inverted retrograde as in fig. 3.3. Here, measures 4 and 5 of the melody were continued by the first violins four beats later. The second violins repeated measures 4 and 5 of the melody. Over this repetition was heard the entrance of the melody again by the first trumpets.

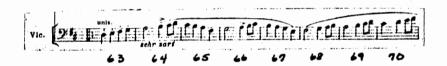


fig. 3.2



fig. 3.3

In measures 84 through 88, the first violins introduced a new section of the original vocal melody; that which was found in measures 76-80 as shown in fig. 3.1. Measure 89 of the symphony, played by the first violin, was reminiscent of measure 77 of the melody, but, measures 90-92, instead of continuing the previous segment, were exactly like measures 82-84 found in the melody, as shown in fig. 3.4.



fig. 3.4

After a short interval of descending fourths in half notes by the harp, the first flute picked up another segment of the original melody (measures 86-89), found in measures 94-96. Measures 98-99 of the symphony (as played by the violins) were taken from measures 32 and 33 of the vocal melody. The following five notes from measures 92 and 93 of the melody occurred with great frequency during the entire first movement. Concurrent with the five notes was the frequency of the descending fourth, found in exact repetition in measure 100, shown in fig. 3.5a, or with augmented intervals in measure 104 as shown in fig. 3.5b.



In measure 108, the first seven notes of the melody were reintroduced by the first trumpets. followed in stretto by the cellos. A continuation of the melody, measure 59, was heard in the first oboes, doubled by the first clarinets.

Measure 117 brought in the second violins at which time measures 11-14 of the melody were heard in exact duplication.

The flutes and the second violins played, in measures 127-128, the vocal line of the original measures 49 and 50. From this point, the first and second flutes and both violins played the same notes as in measures 51 and 52 of the melody, but the pattern was shortened by the diminution of the value of the first note and then this three-note pattern was repeated several times as shown in fig. 3.6.



fig. 3.6

For a final time, the horns introduced the seven beginning notes of the melody (measures 135-137) and in measure 147 of the symphony, measures 4 and 5 were fragmented by the first violins.

In the introduction of the development section, Mahler seemed to avoid the melody completely except for the everpresent descending fourth heard in practically every instrument. As the "B" section approached (measure 207), more rhythmic activity was noted.

Segments of the melody "mentioned" only once previously appeared in the first violins beginning in measure 225. Here existed a combination of segments found in measures 76-78 and measures 82-84 of the original



fig. 3.7

melody as shown in fig. 3.7. The melody was fragmented further by the flutes: the first flutes played, twice, the five-note motive found in measures 36 and 37 of the melody; the second flutes were heard two measures later playing measures 4 and 5 of the original vocal line, with the first violins echoing three measures later.

Measure 92 of the melody was heard quite alone in the bass clarinets in symphony measure 239.

In the ensuing measures (measures 243-253), an interplay of several melodic fragments took place among the clarinets, flutes, oboes, bass clarinets, violins, and string bass. Contrary to the previous method of stretto, in these measures Mahler allowed each instrument to "speak" its segment before the next instrument entered, as shown in fig. 3.8. Variations of the five-note motive so well established by now, were incorporated.



fig. 3.8

Measure 268 of the symphony contained a fragment of the melody (measure 49) heard only once before. Before the fragment had expanded itself, however, the flutes, oboes, and violins quoted measures 51-54 of the melody simultaneously.

The prominent seventh leap in measure 53 of the melody found itself in a different guise in measures 271 and 272 of the symphony. Here the violins diminished the rhythmic value of these two notes to eighths and reversed the order to make the pattern ascending. As this pattern was repeated, the interval was gradually diminished from a diminished seventh to a perfect fifth, as shown in fig. 3.9.



fig. 3.9

The horns doubled in measures 279, 280 and 281 to play measures 51 through 53 of the vocal melody. After this was sounded, the first flutes and clarinets played the first seven notes of the melody again, with the first violins continuing through measure 6 of the melody and the flutes and clarinets inverting the rhythmic figure from measure 92.

For a final time in the development section, the first seven notes of the melody were heard, played by the clarinets in octaves (measures 294-295).

In the recapitulation, the five-note pattern from measures 86 and 87 of the melody was treated in several ways by the flutes, oboes, and violins.

Intervals were diminished, augmented and inverted, but the basic "sound" remained the same as shown in fig. 3.10.



fig. 3.10

In stretto form, the melody began again with the trumpets leading, followed four beats later by the bassoons, cellos, and string bass (measures 383-385). Although the trumpet statement ended after the first seven notes, the cellos, string bass, and oboes continued with the ensuing five measures. Against this continuation of the melody, flutes, clarinets, violins, and violas began their statements with measure 4 of the melody (measures 385-389 of the symphony) as shown in fig. 3.11.



Fragmentation of the melody was allowed to disappear for approximately twenty measures, at which point measure 51 of the melody was heard repeatedly in measures 412 and 413 by the flutes, oboes, clarinets, and horns. Beneath this three-note pattern extracted from the melody, appeared measure 82 of the original melody in the violins.

Measures 416-418 brought in the first seven notes of the melody played by the trombones, and, as before, measures 4 and 5 followed via oboes, violins, and violas. This last fragment, however, was changed by inverting the last interval of a second, as shown in fig. 3.12.



fig. 3.12

This same sequence of fragments concluded the first movement with the first seven notes played by the trumpets, followed three measures later (measures 4 and 5 of the melody) by the flutes, oboes, and bass clarinets. In this instance, the rhythmic notation of quarter notes was allowed to continue in a descending pattern until the tonic of D major was heard.

Harmonic Analysis

Harmonic comparison of melodic fragments in the first movement of the symphony was best achieved by comparison from the original vocal melody to the melodic fragments in the symphony.

Measures 2-9 of the original melody in the key of D major were harmonized with the harp playing the same notes for the first seven beats. The flutes and piccolos played in octaves the dominant (A) tone while a D major chord was struck in the strings for one beat. Measure 4 of the melody brought in a "countermelody" in the bass clarinets beginning on the dominant. The "countermelody" continued in half and quarter notes in contrary motion through the remaining five measures of the vocal line (through measure 9). The first violins began following the vocal line in measure 4 and repeating this eight-note motive twice. Underneath this repeated motive, a tonic chord was played by the second violins, violas, and cellos every two measures. In measure 8, the oboes played the first four notes of this motive, as shown in fig. 3.13.



fig. 3.13

The first time this melodic fragment was found in the symphony (measures 62-69) the harmonization was almost identical to the song. The bass clarinets began their "countermelody" with very few actual pitch deviations from the original melody and with the (exact) same rhythmic movement. The harp played one D major chord (tonic) while the horns sustained the dominant chord. In this harmonization, however, the bassoons played the first seven notes of the melody in stretto form as shown in fig. 3.14.



T1g. 3.14

The accord time this beginning motive of the molody appeared was in measures 109-116 of the symphony in the cellos as shown in fig. 3.15. One measure prior, the trumpets sounded the beginning notes with the complete fragment following in stretto. The harp, again, was heard playing the dominant (still in the key of D major), appearing every two measures. The oboes and clarinets anticipated measures 4, 5 and 6 of the original melody by appearing in measure 110 of the symphony (two beats ahead of its appearance in measure 111 of the cellos) and repeated this fragment twice.

The horns and trumpets sustained the tonic of D major. The second violins played a sequence of several intervals beginning with an octave

and gradually diminishing this interval to a perfect fifth. The flutes and bassoons sustained the fifth of the dominant while the violas played the same in octaves on the third beat of every other measure.



fig. 3.15

The beginning motive appeared for the third time (all but the last measure) in measures 384-390 in the recapitulation, as shown in fig. 3.16, played again by the strings (cellos and string bass).



fig. 3.16

As previously, it was heard in stretto form with the trumpets leading in the first seven notes of the melody, then sustaining the last pitch which was the mediant. The bassoons played the melody at the same time as the strings but did not include measures 8 or 9 of the original melody. The flutes, oboes, first and second bass clarinets, violins, and violas anticipated measures 4-9 of the melody by playing in unison octaves four beats ahead of its complete presentation in the cellos and string bass. The horns sustained the mediant in octaves, adding a second in measure 387.

Measures 2, 3 and 4 seemed to be popular in Mahler's first movement. These measures contained the first seven notes that appeared many times throughout the movement. The first time they were heard is illustrated in fig. 3.14. Here, they appeared in stretto form (being led by the entire beginning motive of the melody in the cellos) harmonized by the "countermelody" in the bass clarinets and sustained perfect fifth of the tonic in the third and fourth horns.

Measures 74-76 illustrated another use of this seven-note motive, as shown in fig. 3.17, by harmonizing it against its own retrograde in the violas and repeating it four beats later in measures 75-77. This occurrence revealed a harmonization of the dominant chord in the harp, pizzicato dominant octaves in the cellos, measures 4, 5 and 6 of the original melody in the first violins and a simultaneous statement of the seven-note motive in the violas.



The fourth appearance of this seven-note motive was found in measures 80-82 in the trumpets as shown in fig. 3.18. The first violins were found to be harmonizing this motive by a descending pattern of alternating seconds and minor thirds beginning in the key of D major ' and modulating to A major in measure 81. The second violins were completing measures 4 and 5 of the original melody. The cellos were heard playing a member of the dominant chord in the key of D major and tonic chord in the key of A major on each beat.



fig. 3.18

Little harmonic activity was occurring at the next appearance of measures 2-4 of the melody in measures 108-110. The key was still A major; the flutes, bassoons, and first violins were sustaining the dominant of A major while the third horns played a descending pattern of C#, B, A#, and C# in half note values. Two beats into measure 109, the cellos resumed the original first seven measures of the melody (stretto form) as illustrated in fig. 3.19.

The final occurrence of this motive was found in measures 135-137 with the horns playing fortissimo. It was harmonized by a five-note motive (found to be thoroughly exploited in the entire first movement)

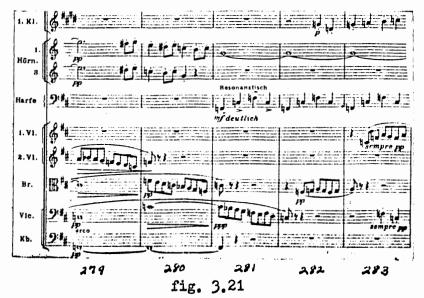
in the flutes, first and second oboes and first and fourth bass clarinets. The third oboes, second bass clarinets, second violins, and violas were found to be sustaining, in three beat values, the dominant of the key of A major. The bassoons, kettledrums, first violins, cellos, and string bass played the tonic chord, minus the third, as shown in fig. 3.20.



Mr. 4.10



The "B" section of the development brought in the seven-note motive again in measures 282-284. The temporary key was F major with the melody heard in the first flutes and clarinets. The first horns were sustaining the mediant while the harps outlined the F major chord, minus the third. The bassoons and first violins outlined the tonic chord underneath the melody through a series of eighth notes and passing tones. In the cellos was the prevalent descending perfect fourth, as shown in fig. 3.21.



Measures 294-296 brought in this motive again still in the key of F major (heard by the first and second clarinets in octaves). The first oboes and first cellos were sustaining the fourth of the key while the harp and cellos outlined the tonic chord, again omitting the third. The first violins descended the F major scale in a series of eighth notes, as shown in fig. 3.22.

The first entrance of this seven-note motive in the coda, shown in fig. 3.23, was in the original key of D major. The trombones played the melody, harmonized by the familiar five-note pattern in the flutes, first and second oboes, fourth clarinets, and violins. The third oboes, first and second bass clarinets, bassoons, contrabassoons, horns, kettledrums, violas, cellos, and string bass outlined the D major chord in half notes.



The last time this motive was heard in the first movement was in measures 424-426. In the temporary key of A major, the first and second trumpets had the actual melody while the horns and third trumpets approximated the melody by omitting the interval of a fourth and ascending

the diatonic scale stepwise in thirds. The oboes, tubas, and strings (except for the violins) sustained the D major chord while the flutes, clarinets, and violins played the familiar five-note motive twice as shown in fig. 3.24.





The measures 4, 5 and 6 (and segments of this fragment) of the original melody occurred frequently in the first movement. Here, in measures 76-79, it occurred three times in the strings. The first two, in stretto form, were harmonized sparsely with the harmony being an occasional dominant octave in the key of A major while the third appearance

was harmonized by descending diatonic seconds and fourths in the flutes and octave intervals of E in the first cellos as shown in fig. 3.25.

These same measures of the melody next occurred in measures 147-148 of the symphony. The first violins, oboes, and bass clarinets played the melody while the bassoons sustained the A major diad. Generally, the horns presented a contrary motion effect by the ascending A major diatonic scale, stepwise. The second violins, violas, and cellos also used the ascending diatonic scale in repeated tetrachords (four notes, moving conjunctly up a full step between each degree), as shown in fig. 3.26.





fig. 3.26

The next example of this melodic fragment used contrary motion also. Measures 233-234, as shown in fig. 3.27, showed the flutes playing the melody against an ascending harmony of A major diatonic scale in the horns (harmonized in thirds) and first cellos. and second cellos played the broken tonic chord of A major, again omitting the third.



fig. 3.27

Three bars later the fragment was heard again in the first violins. The key of A major was solidified by broken tonic chords in the cellos and harp as shown in fig. 3.28.



fig. 3.28

The next appearance of measures 4, 5 and 6 of the original melody (see fig. 3.13) was measures 249-251 in the flutes in the temporary key of Ab major, as shown in fig. 3.29. Harmonizing this statement in thirds were the first and second horns. Simultaneously, the first violins were sustaining an Ab major diatonic scale in an eighth-note pattern of seconds and minor thirds. The cellos were outlining the subdominant chord in quarter notes, omitting the third.



The next occurrence differed harmonically from previous harmonizations. Measures 292-294 showed the use of seconds and sevenths against the melody heard in the first oboes. While the flutes and clarinets sustained a C natural (indicative of the forthcoming key of F major), the first horns alternated pitches between E and F natural and the harp played the B octave with a second of C in the treble clef and broken tonic chords in F major in the bass clef. The violas seemed to follow suit with the same harmonizations as the harp. C natural was sustained in the upper cellos with the tonic chord of F major heard in the lower cellos, as shown in fig. 3.30.

The third measure of the coda (measure 418) brought this melodic fragment in again, this time in the oboes, first and second bass clarinets, second violins, and violas. A descending diatonic D major pattern was obvious in all instruments except the bassoons, horns, trombones, and lower strings. The descending eighth-note pattern of alternating intervals of second and thirds was in contrary motion as shown in fig. 3.31.



fig. 3.30



fig. 3.31

The last time this motive was heard in the coda was in measures 428-429 as shown in fig. 3.32. The flutes, oboes, and first and second bass clarinets played the melodic fragment in unison against a sustained harmony of the tonic chord (key of D major) in the bassoons and horns. The strings played a diatonic, ascending eighth-note pattern of seconds.



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Another segment of the original melody which was incorporated in the first movement was lifted from measures 11-14. In the vocal score, as shown in fig. 3.33, the voice was accompanied in unison by the second violins while the harp and string bass struck the D major chord, omitting the third. The only other harmonization was found in the cellos with their pattern of descending intervals, first a third, then a second, and then outlining the tonic chord. In measure 13, the violas emphasized, by accents, an ascending pattern which began with an interval of a fourth. In measure 14, the first violins had joined the vocal line in unison.



fig. 3.33

The only time these measures appeared in the symphony was in measures 117-120, as shown in fig. 3.34. The violins were found to be



playing this fragment in the key of A major against sparse harmonization. The clarinets, bassoons, kettledrums, harp, cellos, and string bass outlined the dominant chord in quarter note values with an occasional ornamentation of grace notes.

Gustav Mahler skipped a rather large section in the vocal arrangement and quoted next from measures 51-54. In the vocal score, harmonization tended to be in thirds (first and second violins). When a descending interval of a seventh occurred at the end of this phrase in the vocal line, the second violins inverted the interval to form an ascending seventh. The cellos played in contrary motion to the vocal line and violins formed intervals of fourths and seconds with the voice, as shown in fig. 3.35.



fig. 3.35

Measures 51-54 of the melody appeared in measures 269-271 of the symphony, as shown in fig. 3.36. This melodic fragment was heard in the flutes, oboes, and second violins, harmonized in thirds in the key of Eb minor, inverting to sixths. The remaining harmonies consisted of

subdominant chords in the clarinets, horns, harp, and strings with the first bassoons and violas simultaneously playing an ascending diatonic pattern.



fig. 3.36

This fragment in measures 245-247 is further segmented, as shown in fig. 3.37.

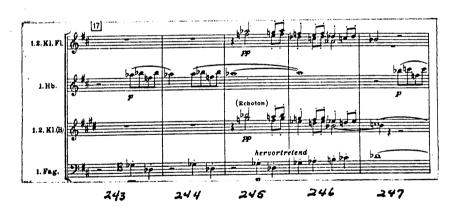


fig. 3.37

Here, in the key of F minor, this melodic figure was played in minor thirds by the clarinet, flutes, and bass clarinets. Underneath this motive was heard the entrance of the melody from measures 2, 3 and 4 with a descending diatonic eighth-note pattern in the first violins

(similar to the prominent five-note motive) and the dominant chord outlined in the violas.

The fragment of measures 51 and 52 appeared in measures 129 and 130 of the symphony. Most of the instruments played the fragment in unison of sixths, as shown in fig. 3.38, sparsely harmonized by an obtrusive ascending pattern of quarter notes ascending the diatonic scale of F minor.



fig. 3.38

Measures 51 and 52 of the original vocal melody were played by the flutes, oboes, and bass clarinets, and first through fourth horns (harmonized in seconds, thirds, and sixths). In this key of B minor (measures 412-413), the bassoons accompanied with chordal accompaniment based on the dominant of the key as the fifth through the seventh horns sustained the tonic tone. Beneath these harmonizations, the strings played an eighthnote pattern of descending minor second, as shown in fig. 3.39.

This particular melodic fragment was heard once more in measures 279 and 280 of the movement, as shown in fig. 3.40. This appearance was the most sparsely harmonized, with the horns playing the melodic fragment and eighth notes descending step-wise over intervals of sevenths. These

eighth-note passages, alternating between stringed instruments, were in the same key as the melody--F major.





The prominant interval of a descending seventh (measures 53 and 54 of the original melody, as shown in fig. 3.41) was inverted in measures 271 ans 272 of the symphony. This interval was passed between the violins, gradually reducing it to a major sixth, as shown in fig. 3.42. The accompanying harmonies in the key of E major were found to be in the

bassoons (ascending line in whole steps), horns (tonic chords), cellos, and string bass.



fig. 3.41



fig. 3.42

A major key change took place when the next fragment of the original melody was incorporated, as shown in fig. 3.43. In the key of B major, measures 75-77 of the vocal arrangement showed yet still more sparse harmonization. An occasional dominant of the diatonic scale was heard in the flutes and harp. The second and first violins alternated, following the vocal line in unison while the cellos played first a descending diatonic scale and then ascending; both of these scale patterns were in

contrary motion to the vocal line.

This section was first located in measures 84-88 of the first movement, as shown in fig. 3.44. This fragment occurred first in the key of A major with the melody heard in the first violins. Against this melody was heard descending sevenths in the cellos followed by a descending diatonic eighth-note pattern of quarter notes in the violas and the tonic chords outlined by the cellos, four beats later. The last note of the melodic fragment was followed by descending sevenths in the second violins and a repetitious motive in the violas.





fig. 3.44

A segment of this melodic fragment was found in measures 225-226, as shown in fig. 3.45. The key of D major was reinforced with the melody beginning on the dominant and the cellos outlining the bottom interval of tonic chord employing passing tones within the key. A feeling of syncopation was achieved by the second violins playing the seventh of D major on the first and third beats of measure 228, followed by the accented dominant of D major. The ascending pattern of the melody in measure 226 was in contrary motion with the second violins and the falling fourths in the cellos.



fig. 3.45

The next segment Mahler quoted in this <u>Symphony No. 1</u> was still in the key of B major, as shown in fig. 3.46. The vocal line was accompanied in unison by the first violins while the second violins sustained the dominant tone of the scale. The violas, in measures 81 and 82, played a descending line which gradually was pitched a third lower than the vocal line. The cellos played in contrary motion to the violas. After six beats of rests in the vocal line, the melody began again in measure 85. Here, the vocal line revolved around the seventh of the B major scale, which was also sustained by the first and second violins. The oboes were

heard playing variations of the familiar five-note motive (also revolving around C#) while the cornets and violas played descending intervals of perfect fourths from C# to C# and F# to C#. The harp outlined the dominant chord of B major in quarter note values.



Measures 81-88 of the vocal melody were found in measures 90-96 of the symphony, as shown in fig. 3.47. The key was E major as outlined by the tonic chord in the cellos. The second violins played half notes revolving around the dominant of the key. The violas sustained the tonic and dominant of the key in chord form.



fig. 3.47

A segment of this motive was found in measures 227-229, fig. 3.48.



fig. 3.48

The harmonies supporting this melody are those first of D major in measure 227 and then A major in measure 228. Simple rhythmic movement was found in all instruments with the second violins moving first in a descending fourth and then ascending step-wise in the key of A major. The violas descended first in a major third followed by the rhythmic progression as the second violas—only in contrary motion. The upper cellos maintained a descending pattern in perfect fifths and fourths while the lower cellos and string bass moved in contrary motion, step-wise.

The final appearance of this segment of the melody occurred in measures 80-82 in repetitious form in the first violins against the first seven notes of the vocal melody. The cellos outlined the dominant tone of the key in octave intervals, as shown in fig. 3.49.

Measures 86 and 87 of the melody appeared in measures 231 and 232 of the symphony, as in fig. 3.50. These melodic fragments were heard against a harmony of ascending diatonic (key of A major) thirds in the upper cellos and horns. The harp and lower cellos outlined the tonic chord, and, as previously, omitted the third.





fig. 3.50

The very last presentation of the vocal line was taken from measure 95 and 96, as shown in fig. 3.51. Here, the clarinets were playing in unison with the vocal exclamation (key of B major) while the harp outlined the dominant chord. The only other harmonic or rhythmic activity was a descending eighth-note pattern in the second violins with the dominant and mediant tones falling on the accented beats.

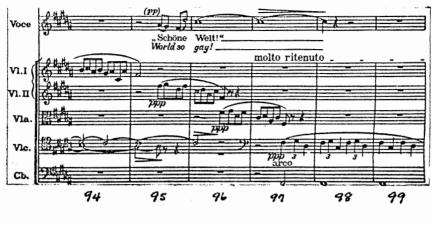


fig. 3.51

Measures 95 and 96 of the original vocal melody appeared in "Solitaire" in measures 239 and 240, as in fig. 3.52. This line announcement of this melodic fragment was heard against an ascending quarter note pattern (in thirds in the horns) and the A major chord outlined in the harp and cellos.



This chapter has presented a melodic and harmonic analysis and comparison of the same theme found in "Ging heut morgen" and Mahler's Symphony No. 1. Summary and general conclusions were discussed in Chapter Four.

CHAPTER IV

Conclusions and Summary

Chapter Four presented a summary and general conclusions which resulted from an analysis and comparison of the melodic and harmonic techniques Gustav Mahler used in the two settings of the same melody, one found in his song "Ging heut morgen" and the second found in his Symphony No. 1.

General Conclusions

The melodic and harmonic analysis and comparison brought to focus several techniques Gustav Mahler incorporated in his writing of the first movement, Poco adagio, of Symphony No. 1.

The most frequently used interval in the melodic line was that of a perfect fourth. As stated previously, it would be redundant to mention all appearances of this interval; it is sufficient to cite one example where the fourth was presented in nearly all the participating instruments, as shown in fig. 4.1.

Often the perfect fourth was found, not only as an interval, but also as the beginning or focal point of a melodic motive, as shown in fig.



-54-



Another interval found to be almost as prevalent as the perfect fourth was the interval of a seventh found in measure 53 of the original vocal melody. One example, as shown in fig. 4.3, of Mahler's treatment of this interval was found in measures 271-273 where the interval of a seventh was gradually diminished to smaller intervals.



fig. 4.3

Measures 2-9 of the original melody were found in their entirety, twice. The first and best example of the incorporation of these measures into the symphony occurred in measures 62-68 as in fig. 4.4. The occurrence of these first seven measures of the original vocal line was similar to their presentation in the vocal score in that the key was the same and harmonization was sparse. Also, both occurrences were heard against "countermelodies" similar in rhythmic activity and pitch.



fig. 4.4

Another fragment of the vocal line which occurred in the first movement was measures 75-79 of the original melody. Mahler used these five measures several times. The best example occurred in measures 84-88, as shown in fig. 4.5 of the symphony. In this instance, the key was A major, while in the vocal arrangement, the key was B major. As in the vocal melody, contrary motion in the accompaniment was present as was the descending inteval of a seventh.



fig. 4.5

Measures 51-54 of the vocal score also appeared in several places. In the original arrangement, the melody was harmonized in thirds, whereas in the symphony, several harmonizations were used (sixths, unison, and thirds). Measures 269-271 of the symphony best illustrated the harmonization, as shown in fig. 4.6.



A descending pattern of eighth notes in the key of B major (measures 82-84 of the vocal arrangement) were found twice in the symphony. Both occurrences, as in the original melody, were harmonized by an ascending pattern of half notes; however, the first example, as shown in fig. 4.7, was written in A major and the second, in D major.



The repetitious five-note motive which occurred in measures 86-89 of the second song of the cycle was also used twice in the symphony. As in the vocal arrangement, the first example was harmonized by descending fourths and an outlining of the tonic chord. The melody of the second example, measures 231-232, as shown in fig. 4.8, was harmonized by an ascending diatonic scale of major and minor thirds and an outlined tonic chord in the strings.



Moanuron 91-93 of the vocal arrangement appeared frequently in the That movement. In the song cycle, it was harmonized (in the key of B major) broken by dominant chords and unison accompaniment in the oboes. Its appearances in the symphony were those sometimes of exact repetition, as shown in fig. 4.9, and similar five-note motives as in fig. 4.10. The harmonizations generally consisted of tonic or dominant chord outlines against sustained sixth and dominant tones.



fig. 4.9

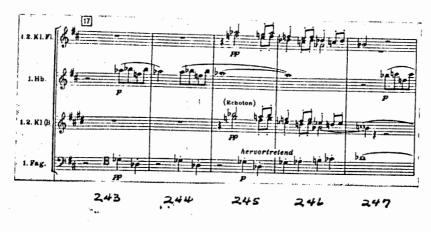


fig. 4.10

Summary

Through research into Gustav Mahler's biography, it was brought to light that Mahler had a dual personality, one of cheerfulness and hope, and one of gloom. This eccentricity projected itself into much of his music; sometimes, neither state of mind would prevail and the contrasting moods were heard simultaneously. More often, however, Mahler's harmony would vascillate between the major and minor modes, not only between the sections of the symphonies and songs, but also within the harmonic progressions themselves.

Besides Mahler harmonizations consisting of alternating major and minor thirds, other frequently used harmonic intervals were fourths (which occurred melodically also), fifths, sixths, and octaves. His harmonizations were sparse and frequently in contrary motion (consistent with his dualism) with the quoted melodic fragments. Mahler made

much use of passing tones within the diatonic scale passages he incorporated.

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