THE TRIUMPH OF JOY OVER TRAGEDY: PITCH A
IN MAHLER’S FIFTH SYMPHONY

by

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ABSTRACT

One of the extraordinary innovations found in Mahler’s symphonies is the use of progressive tonality as a vehicle to express emotional transformation. Two of Mahler’s four “Wunderhorn” symphonies, the Second and Fourth, both progress away from the original tonic and end in a mediant or submediant key to express, respectively, the miracle of resurrection and a child’s vision of Heaven. This tonal shift by a third, though original, is considered still conventional by late-Romantic standards. The Fifth Symphony, however, decidedly departs from tradition as it boldly journeys from C# minor to D major to symbolize the triumph of joy over tragedy. The questions of why and how the tonal shift and mode change are connected to the material of the work are addressed in the present study that analyses the symphony’s most significant melodic and harmonic processes and focuses on the influence of a single pitch, A, in the unfolding of the music. In its comprehensive scope, the study systematically traces these processes as they develop through the entire work and examines questions not previously addressed in writings by major authors. How pitch A participates in conveying the transformation of tragedy into joy is discussed under the following topics: the melodic stabilization of pitch A; pitch A as a pivot in the assertion of D major; the submediant relationship; whole-tone elements; and a Schenkerian perspective of each movement and the entire symphony.
To Miguel Chuaqui, for his thoughtful advice in developing this fascinating subject; to
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CHAPTER I

INTRODUCTION

The expressive content in Gustav Mahler's Fifth Symphony's represents a journey from tragedy to joy, from adversity to triumph, similar to the trajectory found in Beethoven's Fifth Symphony. An important resource that Beethoven uses to convey his message is the change of mode from minor to major as the music transitions from the Scherzo to the Finale. Mahler's journey is more complex, but, as Beethoven's, it is extremely convincing. While the tonal progression in Beethoven's Fifth is from C minor to C major, in Mahler's it is from C# minor to D major. That is, Mahler not only shifts from minor to major; he also lifts up the tonal center.¹ This immediately brings about the obvious questions of why and how the tonal shift and mode change are connected to the material of the work. The present study addresses these questions by analyzing the most significant melodic and harmonic processes in the symphony. The analysis centers on the influence of a single pitch, A, as a unifying element in the unfolding of the music. The findings of this survey, both in terms of large-scale connections and surface details, will hopefully aid orchestral conductors and musicians when facing the multiple performance

¹ Works starting in one key and ending in another became increasingly common after mid 19th century. Mahler’s Fourth, Fifth, Seventh, and Ninth Symphonies fit this category, described by Dika Newlin as “progressive tonality.” William Kinderman, introduction to The Second Practice of Nineteenth-Century Tonality, ed. William Kinderman and Harald Krebs (Lincoln and London: University of Nebraska Press, 1996), 9.
challenges posed by such a grand work, and will perhaps provide composers and theorists with analytical views to elaborate upon in later studies.

Even though this analysis considers aspects such as form, rhythm, and orchestration, it focuses specifically on the melodic and harmonic relationships of the symphony. However, its scope is comprehensive in that it traces tonal processes as they develop through the entire work. In spite of the abundant literature that touches upon analytical aspects of Mahler’s Fifth Symphony, up until now there is no available analytical study by a major author with the same focus and scope. Existing studies address several of these processes but do not consistently interrelate them nor systematically trace how they may contribute to shape the work as a whole. Most literature describes the formal elements and thematic connections of the symphony but does not always link them to the overall melodic and harmonic direction of the music.

Among the most salient analytical writings is Donald Mitchell’s “Eternity or Nothingness: Mahler’s Fifth Symphony,” a fascinating essay that views the symphony under various topics dealing with style, character, form, and thematic connections within the symphony and other Mahler works.² La Grange addresses the symphony’s progressive tonal scheme and cyclic procedures and describes the main events of each movement.³ A similar approach is to be found in Floros’ analysis that in addition gives attention to thematic elements and extramusical literary references.⁴ Articles by Forte⁵

and Williamson\textsuperscript{6} focus on middleground motives and prolongations in the symphony. Shorter writings by Kennedy\textsuperscript{7} and Cooke\textsuperscript{8} provide a descriptive overview of the work. On a more conceptual level, Hefling’s philosophical discussion refers to Mahler’s reinterpretation in his Fifth Symphony of the Beethovenian archetypal struggle \textit{per ardua ad astra} (through struggle to the stars) and ties it to the Nietzschean idea of eternal recurrence.\textsuperscript{9} Adorno describes various unique stylistic traits in Mahler’s discourse and relates them to Mahler’s historical, social and philosophical background.\textsuperscript{10}

Among lesser-known writings dealing with large-scale tonal processes in Mahler’s music is an insightful 1983 thesis by Nadine Sine\textsuperscript{11} cited by La Grange\textsuperscript{12} that dedicates a chapter to the Fifth Symphony. Occasional references to her views will appear in the course of this study.

\textsuperscript{7} Michael Kennedy, \textit{Mahler} (New York: Schirmer Books, 1990), 133-139.
\textsuperscript{12} La Grange, \textit{Gustav Mahler}, 805-806.
CHAPTER 2

PITCH A IN THE SYMPHONY: AN OVERVIEW

A striking event towards the end of the Mahler’s Fifth draws one's attention towards pitch A. At the beginning of the Finale, the first horn plays an unaccompanied A, to which other instruments respond with A-related melodic fragments, leading to the presentation of the first theme of the Finale (Figure 2-1). The presence of "A" at the beginning of the Finale not only links the movement to the preceding Adagietto that concludes also with a prominent "A"; it also seems to suggest that the tone itself has been exerting over the entire symphony - and will continue to do so - a more far-reaching influence than may be apparent on the surface of the music. This moment in Mahler's Fifth is not unlike the tenuous transition connecting the two last movements of Beethoven's Fifth, where a timpani "C" pedal hinges the music away from Ab major, a chord arrived at through a deceptive cadence, into C-major as C-minor evaporates giving way to the triumphant Finale (Figure 2-2). In Beethoven's symphony, pitch "C" has become omnipresent in the work through the oscillations between C minor and C major in the first and third movements,13 and between Ab major and C major in the second movement, which is in Ab major (Figure 2-3).

13 In the first movement in C minor, the second theme of the recapitulation is in C major and the movement ends in C minor. In the Third movement, the Scherzo is in C minor and the Trio is in C major.
5. Rondo - Finale

French horn

Allegro

Oboe

Violin I

Bassoon

Figure 2-1: Mahler, Fifth Symphony, V

THIRD MOVEMENT

C minor evaporates

C major emerges

as C major emerges

FOURTH MOVEMENT

Full orchestra

Allegro

Figure 2-2: Beethoven, Fifth Symphony, III and IV
In this sense both symphonies rely on a single unifying pitch to create connections between movements.

This analysis of Mahler's Fifth Symphony centers on the reinterpretation of pitch "A" in the various stages of the symphony's journey from tragedy to triumph. The discussion contemplates "A" as a melodic tone and chord member in large-scale tonal and melodic processes that shape this journey, such as the liberation of "A" from a tendency to descend by half step to G#/Ab; the assertion of "A" as a key-defining chord member; the symphony's progress from minor keys to major keys through the use of submediant relations and minor and major thirds; the gradual appearance of whole-tone elements in connection with the emergence of the major mode; the thematic transformation of sorrowful motives into uplifting motives; and the establishment of D major as an overarching tonal goal through the surfacing in the finale of the Urlinie of the entire symphony.

In order to understand the role of pitch A in the musical processes that shape the expressive journey of the symphony, it is important to look at a synopsis of the work's
overall formal design. The symphony's five movements are grouped in three parts. Parts I and III contain the first two and last two movements respectively, while Part II consists exclusively of the third movement. Movements One and Four are self-contained but act as well as introductions to movements Two and Five, respectively. The expressive content of the symphony corresponds to the work's formal design. As will be discussed below, Part I establishes a conflict, Part II offers an unsuccessful solution to the conflict, and Part III finally arrives at a satisfying outcome. As the piece unfolds, pitch "A" acquires new melodic and harmonic functions and new expressive meanings as it guides the music towards its triumphant conclusion.

The two movements of Part I are a tragic "Trauermarsch" (Funeral March) in an ABACA rondo form and a troubled "Stürmisch bewegt, mit größter Vehemenz" (Moving stormily, with the greatest vehemence) in sonata-allegro form. By the nature of its organization as a rondo containing a refrain with contrasting episodes but no development, the music of the Funeral March presents and contrasts material but does not develop it. This supports the tone of the movement in its portrayal of a heartbreaking situation that is seemingly not bound to improve. By contrast, the sonata movement that follows, though extremely unsettled, offers through its developmental passages a sense of struggle that suggests the possibility of resolution. The appearance in the coda of a joyful hymn in D major (the goal key of the symphony) is a clear sign of hope.

The third movement is an increasingly delirious Scherzo. The only movement of Part II, it stands as a separate entity in the symphony as suggested by the inclusion of a French horn soloist and the indication “Lange pause folgt” (a long pause follows) at the

14 A formal chart of each movement is provided in the Appendix that can be used for reference when the discussion addresses formal elements (see Appendix Tables 1-5).
end of Part I. Its form can be ambiguously interpreted as [Scherzo - Trio I - Scherzo -
Trio II - Scherzo] or [Scherzo - Trio - Scherzo], with an interlude at rehearsal numbers 6-
7 taking the place of Trio I. In spite of being the first movement to be written in a major
key (and precisely D major, the goal key of the symphony), the movement does not
convey at all a sense of fulfillment. This is due to the music's complicated form, its
exaggerated melodic gestures (Figure 2-4 and Figure 2-5), its constantly shifting moods
and interruptions (Figure 2-6), and the frantic levels of agitation it reaches by the end.
The overall effect is one of an artificial joy that is constantly weakened by turbulent
undercurrents. Accounts from Mahler’s time point to the expressive complexity of the
Scherzo. Mahler compared this movement to a comet’s tail that “compresses only the
expression of unheard-of power. It is man in the full light of day, at the zenith of his
life.” On the other hand, Mengelberg wrote in his conductor score, probably from
conversations with Mahler, that the Scherzo had “Forced joyfulness … - cloudy ground
coating, here and there even a dance of death.” Evidence suggests that Mahler wrote the
Scherzo first and that he had previously drafted a Scherzo entitled “The world without
gravity” as the final movement of his Fourth Symphony in 1896. It is possible that
Mahler intended again to conclude his Fifth Symphony with a scherzo of “unheard-of
power” but changed his mind once he met Alma Schindler and perhaps felt that the
Scherzo’s “forced joyfulness” would keep him from fully conveying his newly found
optimism.

16 Ibid, 117.
Frequent violin leaps

French horn solo

Figure 2-4: Mahler, Fifth Symphony, III

Jagged string lines

Figure 2-5: Mahler, Fifth Symphony, III

Shifting mood and interruption

Figure 2-6: Mahler, Fifth Symphony, III
The fourth movement heads in the opposite expressive direction. It is a soothing, idyllic Adagietto in a simple ABA form that recaptures the sincerity of Part I and prepares the arrival of the joyous Finale. According to Mengelberg, the music was intended as a declaration of love from Mahler to Alma.18

The last movement is in sonata-allegro form with an inverted recapitulation (the second theme preceding the first). Its highly energetic but lightly-humored contrapuntal episodes, its optimistic second theme, and the glorious return of the climactic hymn first presented in the second movement resolve the tension created by the despair of Part I and the false joy of Part II.

As will be discussed below, themes and keys from certain movements reappear later in the symphony, bringing unity to the work and smoothening the connections as the music evolves in its transformational process from tragedy to triumph. The seed material from which the symphony grows is to be found in the beginning of the first movement. The influence that pitch A will have over the entire work starts to become apparent already from the outset.

CHAPTER 3

THE OPENING OF THE SYMPHONY

Much as in many of Beethoven's works, the first 20 measures of Mahler's symphony present motivic and harmonic elements that will be developed as the work unfolds. The opening trumpet call of the Trauermarsch (Funeral March) arpeggiates upward a C# minor triad, descends twice on a scale fragment starting on an A, and then surges toward a high A. Under this climactic A we hear the first tutti chord of the piece, a fortissimo A major triad (Figure 3-1).

I.
1. Trauermarsch

Figure 3-1: Mahler, Fifth Symphony, I
These melodic and harmonic elements involving pitch "A" introduce several essential features of the symphony. First, the melodic contour, initially upward by leap and then downward linearly represents hope followed by desolation. Here the descent is a C# minor scale that highlights the A - G# half step, conveying the subordinate role of A as an upper neighbor to G#, despite the brief harmonic support that A receives in this passage. In the rest of Part I these descending lines will often be poignantly chromatic and will often start on an A, but in Part II and III they will become diatonic and increasingly radiant as A gains independence and becomes a tonic triad member of major keys, F major and D major. Second, the major mode of the A chord (the first presentation of a vertical sonority in the piece - marked fortissimo) signifies a wished-for joy that will eventually permeate through the symphony as the major mode emerges, and the chord itself will play an increasingly crucial role as the dominant of D major. Finally, the submediant relation that connects C# minor to A major will become an important large-scale harmonic relationship of the tonal successions within the movements of the symphony.

The music that follows introduces three other important elements (Figure 3-2). First, the trumpet melody in mm. 15-17 outlines a D major triad and arrives on a D major chord, thus foreshadowing the triumphant goal key of the symphony. Here, the hinted-at D major is quickly wrenched back down towards the tragic C# minor home key by leaping into G# minor, the minor dominant triad. The leap is in parallel octaves between the melodic line and the bass and is part of a broader descent between root-position triads A major (m. 13) and G# minor (m. 19). The lack of independence between the outer voices on both ends of the phrase negates the smooth harmonization of the D major
Figure 3-2: Mahler, Fifth Symphony, I

arpeggio and deepens the disastrous atmosphere. After this striking collapse - a sort of tragic plunge - the process of reasserting D major as a satisfying goal in the symphony will be a gradual one. Second, the devastating melodic A-G# downward slide of mm. 13-19 - here intensified through octave displacement - will occur frequently in Part I both at a local and long-term level. This slide is already an expansion of the A-G# motion that initiates the descending line in m. 15. The unshackling of A from this distressing pull towards G# will occur in Part II and III as the tonality evolves from minor to major and the key of D major is finally established. And third, the roots of the triads in the opening chord progression outline two tritones, A-D# and D-G# (Figure 3-3). Locally, these tritones and the whole-tone scale fragment in the bass of mm. 14-15 dislocate the harmony and intensify the music's tragic meaning. On a large scale, they prepare the appearance of the luminous whole-tone relations in Part III of the work.
How the main large-scale musical processes of the symphony stem from its opening passage will be discussed below, under the following topics:

- The melodic stabilization of pitch A as a symbol of triumph over tragedy
- Pitch A as a pivot in the assertion of D major
- The submediant relationship
- Whole-tone elements
- Schenkerian perspective and closing remarks
CHAPTER 4

THE MELODIC STABILIZATION OF PITCH A AS
A SYMBOL OF TRIUMPH OVER TRAGEDY

As the symphony’s upheaval dominates Part I of the work and gradually subsides until finding its ultimate resolution in Part III, pitch A undergoes a similar transformation from functioning as an unstable melodic tone to becoming a stable one. From an emotional standpoint, the conflict is between a yearned-for happiness and a crushing despair. Melodically, the conflict is between A and the downward-pulling G#/Ab that undermines A’s potential as a key-defining pitch. As will be discussed, the A - Ab/G# conflict is presented at significant moments of the first movement, it is developed in the long-term melodic and harmonic connections of the second movement, and it begins to dwindle upon reaching D major in the second movement's coda. In Part II, G#/Ab ceases to exert a downward pull on A, and in Part III A reaffirms its independence from G# as the music becomes increasingly unburdened and joyful.

Pitch A and the downward pull of G#/Ab

The A - G# conflict is at first hinted-at in mm. 9-10 of the symphony's opening - where A is the upper neighbor of G# - and is then dramatically expressed in the striking A major - G# minor chord progression of mm. 13-20 that pulls pitch A down to G# (Figure 3-2). Such downward half step slides continue to occur in the Trauermarsch with
escalating intensity and culminate in the climax of the movement. In a gesture reminiscent of the tutti of mm. 13-20, an upward leaping melodic line peaks on a high A. The A slides down to G#, marking the beginning of a long chromatic descent (Figure 4-1). This arrival, marked by the composer as "Klagend" (bewailing), really is a desperate cry. Significantly, it occurs in the key of A minor (the key of section C of the movement) and not C# minor. Having A-minor act as the local tonal center is a definite attempt to give pitch A a stability it has lacked heretofore. However, the stability of A is not at all asserted by an upward resolution of its G# leading tone. On the contrary, G# pulls A down and the key of A minor dissolves. Thus, the pathos conveyed by the music is intrinsically associated with the frustrated attempt to free A from the tragic downward pull of G#.

Another example of such downward pull is at an earlier, secondary climax that occurs in Section B of the ABACA rondo form. Section B is in Bb minor. Here the role of pitch A is as the leading tone (Figure 4-2). As such, it is still an unstable tone, but its upward-resolving tendency gives it a somewhat more uplifting character than it had as A6 in C# minor at the beginning of the movement. However, at the climax of section B, A-natural loses its leading-tone power. The music here is temporarily in F minor and not in Bb minor. Local motions from A-natural to Ab in the first violins reinforce the leading-tone A’s surrender in an inner voice to Ab, the third scale degree of F minor, occurring at the climax (Figure 4-3). Incidentally, as will be discussed in Chapters 5 and 6, F minor and its melodic note at the climax, C, are prominent elements of the second movement, where they act respectively as the main secondary key and a common tone with the Adagietto.
CLIMAX OF THE MOVEMENT

long chromatic descent to an A3 in m. 391

Figure 4-1: Mahler, Fifth Symphony, I

BEGINNING OF SECTION B

Figure 4-2: Mahler, Fifth Symphony, I
Three other instances of A’s dependence on G# in the Trauermarsch are at passages similar to the one of mm. 7-19, each one of them happening respectively in the three A sections of the movement, all of them involving the A major triad, and all arriving at open-fifth chords (no third), a hollow sonority suggestive of death. The first one at mm. 67-80 delays the appearance of the high A by one measure as compared to the corresponding arrival at m. 13, as if hesitating to restate this pitch that before had been drastically pulled down to G#, but here again a downward crushing slide follows (Figure 4-4). The second one at 239-254 hovers on a middle-range A but, after the characteristic ascending arpeggio, avoids landing on a high A while a low bass A supporting an A
major triad eventually resolves downward to G# (Figure 4-5). The final instance occurs at mm. 389-415 (end of the movement). The first part of the passage (mm. 389-401) involves an A-G# and a D-C# descent in parallel fifths that has large-scale implications and will be discussed in the closing remarks of this paper. The ending measures of the Trauermarsch, featuring an A-G# downward slide, are examined here (Figure 4-6). In them, the last A of the movement, played by the trumpet, connects with the G# of the flute. The connection may seem indirect owing to the intervening C# and E, but the occurrence of A and G# in the same register and the piercing quality of the A played by a muted trumpet, clearly a reference to the trumpet A of m. 13, makes the half-step relation
Figure 4-5: Mahler, Fifth Symphony, I

Figure 4-6: Mahler, Fifth Symphony, I
an overriding factor. Even though the G# progresses by an upward, hopeful leap to a
tenuous C#, the drop of several octaves to a low C# and the *sforzando* marking make the
ending sound appalling and definitive, thus representing the tragedy of death, with the
high C# representing false hope and the low C# harsh reality. From a linear standpoint,
the leap is actually from G# down to C#. As such, it recalls the dramatic tragic plunge of
m. 19. Here its texture, dynamics, and orchestration give it an air of quiet resignation, but
the leap is abysmal by comparison due to its intervallic widening by several octaves. The
plunge and the trumpet A5 that precedes it form a final non-linear A6-A5-A1 descent, one
that has actually occurred before at the end of the first A section of the movement (Figure
4-7). Here the A6-A5-A1 motion is subordinate to a larger A5-A4-A3-A2-A1 descent. At the
end of the movement, however, there are no intermediate melodic steps filling the
descending motion G#-C# and this eliminates the possibility of process, therefore adding
hopelessness to the music. Thus the feared result, the arrival on C#, happens without
struggle, symbolizing the acceptance of fate. The fact that A so closely precedes the
tragic plunge reinforces the idea that the pitch is destabilized by the downward-pulling
G# and that no fortunate outcome will happen unless A frees itself from this pull. The A6-
A5-A1 plunge at the end of the Trauermarsch synthesizes the movement’s A - G#
downward slides, particularly the ones at mm. 13-19 and 369-371, both of which start
from an A5 and undergo an abysmal drop occurring either by leap (mm. 13-19) or by
successive half steps (mm. 369-390). The final appearance of A so close to the
movement’s end keeps the pitch alive as a "ringing tone" that will have an influence on
the movements to follow.
A's influence is clearly evident in the second movement, the troubled sonata-form "Stürmisch bewegt, mit größter Vehemenz" (Moving stormily, with the greatest vehemence), as the movement's key is in fact A minor. The tonal center, initially touched-upon in the C section of the Trauermarsch, is now established. However, this newly acquired stability is far from reassuring, owing to the constantly undermining pull of G# (or enharmonically, Ab) that occurs at first locally and then globally.

Locally, a long chromatic descent in the bass that involves the downward motion A - G# (Figure 4-8) prepares the prominent appearance of A-natural - Ab (Figure 4-9) right before the arrival of the second theme in F minor. On a more global level, the A-Ab motion that starts the second theme reaches through to the end of the development. Ab, the third degree of F minor, the key of this second theme, is a prominent melodic tone (Figure 4-10) that exerts a downward pull on the first theme's prominent A-natural (Figure 4-11).
(TRANSITION to second theme)
Second theme, exposition

![Musical notation](image)

Figure 4-10: Mahler, Fifth Symphony, II

First theme  Second theme

![Musical notation](image)

Figure 4-11: Mahler, Fifth Symphony, II

The development contains three episodes that are in the keys of Eb minor, B major (enharmonic of Cb major), and Ab major, respectively. These keys are quite removed from the movement’s A minor tonality and none contain A-natural in their diatonic scales. The roots of these three keys arpeggiate an Ab minor triad a minor second below the movement's tonic (Figure 4-12). The motion down a minor second from A minor, the opening key of the movement, to Ab minor, the arpeggiated key of the development, is a large-scale projection of the symphony's first chord progression (Figure 3-2) that goes from A major to G# minor (Figure 4-13). As in the first movement, the half-step drop destabilizes pitch "A". In addition, in the second movement it undermines the role of A minor as the tonal center.
Figure 4-12: Mahler, Fifth Symphony, II

**FIRST MOVEMENT**

First theme

A major

G♯ minor

local descent

**SECOND MOVEMENT**

Development keys (arpeggiated roots)

A minor

Ab minor

large scale descent

Figure 4-13: Mahler, Fifth Symphony, I and II
The tonal plan of the recapitulation resembles that of the exposition. In the recapitulation the first theme is in A minor, and the second theme starts in E minor but ends in F minor, thus still matching the key of its exposition counterpart. Therefore the melodic motion A-Ab from the exposition reoccurs in the recapitulation and continues to thwart A-natural's independence. However, in the coda of the movement, the process of unshackling A from G#/Ab will begin.

The unshackling of A from G#/Ab

A bold modulation in the coda of the second movement introduces a D major descending scale fragment starting on pitch A. The modulation supports the remarkable appearance of the symphony’s triumphant hymn that marks the beginning of the climactic passage of the movement. Significantly, the pitch below A is no longer a G# but a G-natural (Figure 4-14). The melodic gesture of an upward leap to an A followed by a linear downward motion closely resembles that of the first movement climax and the second movement transition (see Figures 4-1 and 4-9). The fact that the two preceding passages feature a downward pull from A to G#/Ab but this one does not clearly points at the intention of freeing A from this pull (Figure 4-15). Furthermore, because this occurs as the key changes to D major corroborates the importance of pitch A as a determining factor in the symphony's tonal shift from C# minor to D major as the music's expression turns from tragedy to joy.

Two subsequent passages in the movement reinforce to a greater extent the liberation of A and the key-area prominence of D. The first one contains a strong A-G# motion but immediately rectifies it by means of a return from G# to A (Figure 4-16). In the second one, the motion from G# to A no longer corrects an immediately preceding
Second movement, hymn

large leap

diatonic descent

A-G (not G#)

Figure 4-14: Mahler, Fifth Symphony, II

FIRST MOVEMENT
Climax

A — G#

SECOND MOVEMENT
Transition

A — Ab

SECOND MOVEMENT
Coda

A — G

(Not G#)

Figure 4-15: Mahler, Fifth Symphony, I and II

A to G#

G# to A

Violation

Figure 4-16: Mahler, Fifth Symphony, II
A-G# but rather reinforces the role of G# as a lower neighbor resolving to A. G#’s function here as the leading tone helps solidify A minor as the tonal center of the movement, a center whose stability has been heavily undermined throughout the movement by the downward pull of pitch G#/Ab and Ab-related keys (Figure 4-17). Significantly, the resolution of the G# leading tone does not occur on a tonic chord but on F major in a deceptive cadence. As will be discussed in Chapter 5, the F major sonority prevails until the end of the movement and plays an important role, connecting the second movement to the Adagietto. In the second movement, the F major chord itself is a long-term correction of F minor, the key of the exposition’s second theme (Figure 4-18). Similarities in register, rhythm, and orchestral color strengthen the long-term transformation of F minor to F major.

**Pitch A in Parts II and III**

Although pitch A continues to appear in association with G# in Part II, the A-G# downward slide hardly poses anymore a threat to the stability of A. As pitch A becomes more stable, the resolution of the conflict presented in Part I involves the gradual assertion of A as a key-defining pitch and D major as the goal key of the symphony. In the unsettled Scherzo, downward slides from A to G# still occur but are soon followed by motions back up to A. Figure 4-19 is representative of the movement’s characteristic recurrent key changes, mood shifts, and capricious violin lines. It shows a chromatic violin countermelody descending from A to G# and G# eventually returning to A as the harmony unexpectedly shifts to F major.
G♯ as leading tone

\[ \text{A: } ii^{o}6 \quad vii^{o}3 \quad \text{VI} \]

Introduction to second theme (Coda)

Large-scale chordal transformation

\[ \text{F minor} \quad \text{F major} \]

Figure 4-17: Mahler, Fifth Symphony, II

Figure 4-18: Mahler, Fifth Symphony, II
Figure 4-19: Mahler, Fifth Symphony, III
Appearing in the Scherzo more frequently than the downward A-G# slide, however, is the A-G-natural downward diatonic motion, whose whole step is free from the chromatic pull. An outstanding instance is the frenzied climax at the end of the movement (Figure 4-20). Here the diatonic A-G motion recalls the one at the appearance of the second-movement hymn that, as discussed above, occurs also near the climax of that movement (see Figure 4-14). In addition to A-G descending diatonic motions, ascending scales start to emerge in the Scherzo supporting the music’s atmosphere of frivolous celebration (Figure 4-21).

In Part III, A is completely free from chromatic downward tendencies. Here, important descending motions contain the whole step A-G-natural instead of A-G#/Ab, as in the climax first A section of the Adagietto. This music will return in the second A section as the climax of the movement (Figure 4-22). Like the climactic music of the previous movements, this passage recalls the striking opening of the symphony discussed in Chapter 3, where a high A is approached by ascending leap and followed by an expanded descending stepwise motion through octave displacement (see Figure 3-2). As in the second movement and the Scherzo, the descending motion of the Adagietto climax is no longer chromatic but diatonic, here in F major. As discussed above, the mood of the Adagietto is idyllic. The comforting feeling of the music is reinforced by a beautiful diatonic ascending line that appears in section B and later becomes an important theme of the Finale, a theme that increasingly counterbalances pitch A’s former tendency to move downward chromatically towards G#/Ab (Figure 4-23).

The music of the Finale in D major does not contain any passages featuring a significant A-G#/Ab downward slide. Given that the movement climaxes on the hymn
CLIMAX OF THE MOVEMENT

**Noch rascher** (even faster)

A to G♯

![Figure 4-20: Mahler, Fifth Symphony, III](image)

Figure 4-20: Mahler, Fifth Symphony, III

**FIRST CLIMAX OF THE MOVEMENT**

diatonic descent

![Figure 4-21: Mahler, Fifth Symphony, III](image)

Figure 4-21: Mahler, Fifth Symphony, III

**FIRST CLIMAX OF THE MOVEMENT**

diatonic descent

![Figure 4-22: Mahler, Fifth Symphony, IV](image)

Figure 4-22: Mahler, Fifth Symphony, IV
Fourth movement

pp subito

Fifth movement (second theme of the recapitulation)

Grazioso

ff − p subito pp

etc.

etc.

Figure 4-23: Mahler, Fifth Symphony, IV and V
music introduced in the second movement, the diatonic A - G-natural downward motion is prominent and, as will be discussed in Chapter 8, it will help shape the Urlinie of the entire symphony.

The melodic conflict between A and the downward-pulling G# that permeates Part I of the symphony is also a harmonic conflict. From a harmonic perspective, A is the pitch that functions as the fifth scale degree of D major in Parts II and III, whereas G# is the fifth scale degree of C# minor, which in Part I precludes pitch A from asserting any tonal centers related to D major. As will be discussed below, even though the A-G# melodic conflict starts to subside at the end of Part I, the symphony does not find its tonal stability (and ultimate joy) until Part III, once it completes its harmonic unfolding from C# minor to D major through A-related keys.
CHAPTER 5

PITCH A AS A PIVOT IN THE ASSERTION OF D MAJOR

Mahler’s Fifth is sometimes listed as being in C# minor since the first movement is in this key. Given that the symphony does not end in the same key, Mahler preferred to omit a key designation to avoid misunderstandings.19

At the most general level, the tonal plan of the symphony is C# minor - D major. In spite of the distant relation between the two keys, the journey from one to the other happens smoothly, owing to the role of pitch A as an overarching pivot tone. As discussed above, A appears early in the first movement as an unstable tone of C# minor. However, it quickly gains importance through its function as tonic of A minor, a secondary key of the first movement and the main key of the second movement. Subsequently, pitch A acts as a common tone between the keys of movements Two to Five, where it is a chord member of each movement's tonic triad (Figure 5-1). Its role as a pivot tone is significant, given the prominence that chord members of tonic triads have as key-defining pitches. The motion up a minor second from C# minor (first movement) to D major (last movement) is also a motion down a major seventh through keys that pivot on pitch A.20

19 Kubik, Preface.
20 According to La Grange, this general tonal plan generates a Neapolitan relationship spanning the entire symphony, a technique he feels Mahler probably borrowed from Beethoven’s C sharp minor string quartet with its second movement in D major. La Grange, Gustav Mahler, 805.
INITIAL AND FINAL KEY AREAS OF THE SYMPHONY

First movement

C# minor

Fifth movement

D major

Motion up a minor second

KEY AREAS OF THE SYMPHONY BY MOVEMENT

Part I

First movement: C# minor

Part II

Second movement: A minor

Third movement: D major

Fourth movement: F major

Fifth movement: D major

Motion down a major seventh

Figure 5-1: Mahler, Fifth Symphony, complete work

Tonal preparations appear in certain movements to introduce the keys of the movements that follow, reinforcing the already tight tonal relations enabled by the pivoting pitch "A". The first movement provides a tonal preparation for the second movement by featuring A minor as a secondary key. The second movement in turn previews the tonal areas of the rest of the symphony, namely D major and D minor of the third-movement scherzo and trio; F major of the Adagietto; and D major of the symphony's Finale. The tonal preparations from the second movement into the symphony's final three movements all happen in the second-movement coda. The first
instance is the triumphant yet unexpected arrival of a hymn in D major whose melody will become generating material of the Finale (Figure 5-2). The hymn's appearance at the second-movement coda not only helps introduce the Finale, but it also prepares the key of the third-movement that starts with an open-sounding melody in D major (Figure 5-3). The tonal preparation left by the second-movement hymn is soon followed by a preview of D minor, the key of the third-movement trio (Figure 5-4).

SECOND MOVEMENT (beginning of hymn)

![Trumpet 1 and 2]

\[ D \text{ major etc.} \]

and SECOND MOVEMENT (continuation of hymn)

![Trumpet 1 and 2]

\[ f \text{ molto fff etc.} \]

Figure 5-2: Mahler, Fifth Symphony, II

THIRD MOVEMENT, scherzo

![Horns]

\[ D \text{ major etc.} \]

D major

Figure 5-3: Mahler, Fifth Symphony, III
SECOND MOVEMENT, music following the hymn

D minor: Ger + 6 (with added b9)

prepares the key of

THIRD MOVEMENT, trio

D minor

Figure 5-4: Mahler, Fifth Symphony, II and III

The end of the second movement previews the symphony’s remaining key of F major, the key of the Adagietto. As will be discussed in detail, the second and fourth movements connect with each other in a relation that reaches over the intervening Scherzo. This relation is characterized by the appearance of a prominent A-C dyad and the use of tonal ambiguity involving A minor and F major, respectively, the keys of the second and fourth movements. The discussion will center first on the A-C dyad and will continue with the element of tonal ambiguity.

The A-C dyad is important to the tonal and expressive content of the entire piece, one that affects pitch A’s role as an overarching pivot between the five movements of the work. It first emerges as an element that supports the formal structure of the second
movement and it subsequently provides a tonal connection between movements Two and Four that is closely related to the emotional unfolding of the composition. A melodic preparation of the A-C dyad is to be found in the Trauermarsch, where A and C appear respectively as the principal melodic tones at the climax of the movement (see Figure 4-1, m. 369) and the secondary climax (Figure 4-3, m. 221). In addition, A and C outline a haunting melody in section C that will be discussed in Chapter 6.

As a structural element of the second movement, the A-C dyad introduces in turn the exposition, the development, the recapitulation, and the joyous hymn of the coda. In each instance it is the lower third of a pivoting A-C-D#-F# common-tone diminished-seventh chord. The first appearance of the chord, a ripping cry in the brass (measure 2), is also the first vertical sonority of the movement (Figure 5-5). Even though the movement's key is A minor, the A-C-D#-F# chord makes its beginning tonally ambiguous due to the fact that the previous movement is in C# minor and its leading-tone diminished-seventh chord, spelled as B#-D#-F#-A, is the same A-C-D#-F# chord (Figure 5-6).

The fact that the Trauermarsch has climaxed in A minor near the end of the movement but returned to C# minor soon after accentuates the ambiguity, given that the appearance of the chord at the beginning of the second movement raises the question of whether or not the music will return again to C# minor. In addition, the lack of an E - the fifth scale degree of A minor - contributes to further obscure the second movement opening. It is not until an F-natural and an E are introduced at the beginning of the first theme (m. 9) that the chord's function in A minor is clarified (Figure 5-7). In spite of the

---

BEGINNING OF EXPOSITION

Stürmisch bewegt. Mit größter Vehemenz

Figure 5-5: Mahler, Fifth Symphony, II

instability caused by the A-C-D#-F# chord at the opening of the second movement, the use of the chord actually enhances the unity of the work as a whole by enabling A minor, the key of the second movement, to become a tonal center of the symphony in stages rather than abruptly disconnecting itself from the key of the Funeral March. The following two appearances of the A-C-D#-F# chord, signaling the development and recapitulation, are at structural downbeats and occur again in the brass. In both cases, the chord is common to two keys (Figure 5-8). This creates the expectation that the chord will behave similarly in its next appearance. However, when the chord leads to the coda, it does not fall on a structural downbeat, and instead of ringing in the brass, it appears subdued in the woodwinds and strings. Nevertheless, the joyous hymn immediately follows in the brass and on a structural downbeat. The rhythmic and instrumental shift of emphasis from the pivot diminished-seventh chord to the D triad highlights the appearance of the hymn’s triumphant music (Figure 5-9).
Figure 5-6: Mahler, Fifth Symphony, I

First theme

Figure 5-7: Mahler, Fifth Symphony, II
BEGINNING OF DEVELOPMENT
structural downbeat

(Second theme in F minor)

BEGINNING OF RECAPITULATION
structural downbeat

(First theme in A minor)

Figure 5-8: Mahler, Fifth Symphony, II

Figure 5-9: Mahler, Fifth Symphony, II
Even though the A-C dyad influences the entire second movement, its sound is not distinctly apparent until it surfaces at the coda. Here for the first time it appears independently from the A-C-D#-F# chord. Its repetition in various registers in a characteristic harp color gives the dyad a unique ring that, as will be seen, carries over into the Adagietto (Figure 5-10).

The tonal connection between the second movement and the Adagietto involves a harmonic overlap between the two movements’ home keys. Just as in the passage from the first to the second movement, it entails too a degree of harmonic ambiguity. Even though the second movement's ending is in A minor, its harmony subtly leans towards F major, preparing the key of the fourth movement. The Adagietto in turn starts in F major but hints at A minor. The two movements thus overlap by referencing each other's key (both keys having the A-C dyad as a common denominator) in chord successions that, as will be illustrated, are tonally ambiguous. This happens first at the end of the second movement, where the A-C dyad is heard over the last statement of the first theme in A minor. Pitch F of the theme is lengthened enough that it sounds as the bass of an F major chord, but the chord really is A minor and the F is just an appoggiatura (Figure 5-11). This occurs enough times before the end of the movement that the sound of the F major triad does not go by unnoticed. In the Adagietto, the A-C dyad is the first sonority of the movement, where it appears arpeggiated by the harp, thus recalling the end of the second movement (Figure 5-12). The absence of an F gives the impression that the movement could be in A minor and as such would be prolonging the key of the second movement. However, a low F appears on the third downbeat and dissipates the ambiguity (Figure 5-13).
Figure 5-10: Mahler, Fifth Symphony, II

A-C dyad not in A-C-D♯-F♯ chord

Woodwinds and harp

(Trompet)

Cellos and basses

Figure 5-11: Mahler, Fifth Symphony, II

F major implied

A minor

Figure 5-11: Mahler, Fifth Symphony, II
III.
4. Adagietto

Sehr langsam   molto rit.

![A-C dyad](image)

A-C dyad

Figure 5-12: Mahler, Fifth Symphony, IV

A modulation to A minor in the second phrase of the Adagietto continues to link the movement tonally to the second movement (Figure 5-14). Similarly, an A minor chord appearing in the ascending progression that leads to the climax of both A sections of the movement recalls this connection. The uncertainty of whether the melodic F that follows is an escape tone of the A minor chord or the root of an F major triad contributes to the tonal ambiguity (Figure 5-15).
How the end of the second movement takes diverging tonal paths towards the third and fourth movements by emphasizing in its coda D major and F major - keys connected by the common-tone A - relates to the way the third and fourth movements take opposite expressive directions following the conflict expressed in the second movement. The third movement, a celebration evocative of the Viennese ballroom dances, increasingly turns boisterous and feverish. By contrast, the Adagietto is intimate and sincere. This emotional dichotomy finds reconciliation in the symphony's Finale that integrates the amusement of the Scherzo with the innocence of the Adagietto. From a tonal perspective, the choice of D major as the key of the third movement and later of the Finale supports the symphony's progression from a false happiness in the Scherzo to a
real one in the Finale. The Scherzo’s unrest owes as much to the movement’s exaggerated gestures and constant interruptions as it does to the early appearance of D major - the goal key of the symphony - as the main key of the movement.\(^{22}\) The use of D major here is premature for several reasons. First, symphonies whose overall tonal plan journeys from minor to major normally reach the final major key in the last movement. The later rather than earlier tonal arrival enhances their grandeur and sense of achievement.

Second, given that the second movement is in A minor but gives no emphasis to A major as a key area, it gives no dominant harmony preparation for D major, the key of the Scherzo. Third, D major emerges in the second-movement coda as a transformation of a secondary leading-tone seventh chord in Eb minor (Figure 5-16); its appearance is so unexpected that its continuation as the third-movement key is far from reassuring. And fourth, the trio (Trio II in some analyses), which is in D minor, frequently includes the descending melodic scale. C-natural takes the place of the C# leading tone and thus diminishes the power of pitch D as a tonal center (Figure 5-17). Both secondary keys of the trio, Ab major and A minor, also contain C-natural instead of C# and likewise play a part in weakening pitch D as a tonal center. Even though the A-C dyad does not appear in the trio, the frequent use of C-natural connects the music to that of the second and fourth movements, as does the plaintive character afforded by the descending lines of the trio.

For all the above reasons, D major in the second and third movements is not perceived as the ultimate tonal center of the symphony. In the second movement, it acts as the major subdominant; its subordinate role to A minor is confirmed as D major changes to D minor in m. 526 (see Figure 5-4). Given the Scherzo’s lack of a structural A

\(^{22}\) According to Sine, C# and A, are tenuously asserted as tonal centers at the end of movements One and Two, respectively, and together they create a dominant preparation to D major, the key of the Scherzo, but D major is only fully affirmed in the Finale. Sine, “Symphonic Worlds,” 244-245.
major dominant chord, its key of D major continues to be backward-referential to A minor of the previous movement. The stability of D major as the goal key of the symphony will not be established until the Finale.

Following the return of the forceful Scherzo and its frenetic conclusion, the Adagietto recalls the expressive thread initiated by the quiet A-C dyad and the ambiguous F major/A minor sonority at the end of the second movement. The feeling of vulnerability left by the second movement's bare ending of low brass, harp, low string pizzicati and timpani (Figure 5-18) becomes the sentiment of fragile intimacy of the Adagietto's opening (see Figure 5-13).
The tonal connection from the second movement into the Adagietto seems to be stronger than the one into the Scherzo, as evidenced by the second movement’s precarious emergence of D major, the key of the Scherzo, in contrast to the subtle yet far-reaching tonal overlap between A minor and F major that links the second and fourth movements. This supports the notion that, as grandiloquent as the Scherzo may sound, its music leaves unresolved the tragedy and conflict expressed in Part I, and that the intimate Adagietto seeks to provide a more convincing path into a meaningful solution.

Strengthening the tonal connection from the second movement into the Adagietto is the use of the A-C dyad, given that both dyad pitches are tonic-chord common tones between A minor and F major, that is, one more common tone than the A that links the second movement to the Scherzo (Figure 5-19). In addition, A minor is a diatonic triad in F major but not in D major.
The role of pitch C as a temporary common tone in movements Two and Four enhances pitch A's function as an overall pivoting pitch between the five movements of the symphony. At the same time, it helps establish a tonal link between Part I and Part III of the work that reaches over the intervening Scherzo and thus supports the emotional unfolding of the piece. The tonal connection between F major in the Adagietto into D major in the Finale would presumably be weaker than the one between movements Two and Four as it contains only one tonic-chord common tone, pitch A. However, as will be discussed in Chapters 6 and 7, tonal events from the Adagietto make the arrival of the Finale to sound at the same time refreshing and inevitable.

**TONAL CONNECTIONS**

<table>
<thead>
<tr>
<th>Second movement</th>
<th>Fourth movement (&quot;Adagietto&quot;)</th>
<th>Second movement</th>
<th>Third movement (&quot;Scherzo&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A minor</td>
<td>F major</td>
<td>A minor</td>
<td>D major</td>
</tr>
<tr>
<td>Common tones: A and C</td>
<td></td>
<td>Common tone: A</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5-19: Mahler, Fifth Symphony, II, III, IV
CHAPTER 6

THE SUBMEDIANT RELATIONSHIP

Subordinate to the overall tonal plan of the symphony, one that journeys from C# minor to D major through keys connected by the common tone A, is a set of tonal relationships by descending third that appears systematically throughout the work. These relationships not only link the movements of the work, but they also support the music’s overall transformation from the minor to the major mode. Within this transformation, the emergence of A major as the dominant chord ultimately stabilizes D major as the goal key.

Submediant connections

A unique characteristic of the symphony is that all five of its movements contain a principal section in a secondary key built on a chromatic submediant: in the Trauermarsch rondo, section C is in A minor, a chromatic submediant of C# minor (Figure 6-1); the exposition second theme of the second movement is in F minor, a chromatic submediant of A minor (Figure 6-2); the Scherzo interlude at rehearsal numbers 6-7 (regarded as Trio I) is in Bb major, a chromatic submediant of D major (Figure 6-3); the Adagietto contains an important passage in D major, a chromatic

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23 The passage (mm. 64-71) is the last portion of the B section of the Adagietto ABA form. It is in D major, a key strongly suggested through its dominant chord. Instead of resolving to I, the music evaporates into F major and returns to the A section theme.
submediant of F major (Figure 6-4); and the exposition second theme of the Finale is in B major, a chromatic submediant of D major (Figure 6-5).\textsuperscript{24}

The chromatic submediant relation is not only characteristic of the tonal organization of each of the movements: it also connects them. In all movements but the Scherzo, the section in the submediant helps prepare the key of an upcoming movement (Figure 6-6).

\textsuperscript{24} Sine too recognizes the major third below the tonic as the most important contrasting key within each movement. Furthermore, she regards A major, the key of the dominant of the symphony, as almost playing no role at all. Sine, “Symphonic Worlds,” 245-247.
Figure 6-4: Mahler, Fifth Symphony, IV

Grazioso  
\textit{zart, aber ausdrucksvoll}

Violin I  
\textit{p}  \textit{p}  etc.

B major

Figure 6-5: Mahler, Fifth Symphony, V

KEY AREAS OF THE SYMPHONY BY MOVEMENT

<table>
<thead>
<tr>
<th>Part I</th>
<th>Part II</th>
<th>Part III</th>
</tr>
</thead>
<tbody>
<tr>
<td>First movement</td>
<td>Second movement</td>
<td>Third movement</td>
</tr>
<tr>
<td>F minor as secondary key</td>
<td>F major at end of coda</td>
<td>B\textsuperscript{b} major as secondary key - not a submediant preparation</td>
</tr>
<tr>
<td>C# minor</td>
<td>A minor</td>
<td>F major</td>
</tr>
</tbody>
</table>

Keys prepared by a submediant relation in an earlier movement

Figure 6-6: Mahler, Fifth Symphony, complete work
As discussed in Chapter 4, the change of mode from F minor to F major at the end of the second-movement coda (see Figure 4-18) smoothens the connection between the second movement and the Adagietto, a connection that reaches over the intervening Scherzo. This is important given that the Scherzo, a movement not followed by a movement in its submediant nor prepared by the submediant of a previous movement, breaks the pattern of successive submediants initiated in the first two movements. This is not to say that the Scherzo lacks tonal preparation - as mentioned above, the triumphant hymn in D major of the second-movement coda sets a strong precedent. However, the use of D major in the middle of the symphony happens in parallel to a long-term chord progression that is generated by a systematic use of submediant relationships, a sequence in descending thirds: C# minor - A minor - F major - D major. Important as it is in signaling the proposed goal key of the symphony, the insertion D major in the middle of the symphony ultimately does not disrupt the sequence, as will be discussed below.

Figure 6-7 shows the tonal plan of the symphony.

Figure 6-7: Mahler, Fifth Symphony, complete work
In it, D major of Part II appears as a tonal preview of the goal key of the work, while C# minor, A minor, F major, and D major of Parts I and III relate to each other in a sequence of descending thirds.

The historical events cited above in connection with the creation of the symphony, namely Mahler’s composition of the Scherzo and his encounter with Alma before writing Part III, seem to align with this tonal plan in supporting the notion that the Scherzo proposes an artificial solution to the emotional conflict of Part I while Part III offers a real one. True bliss is reached in the Finale, after the disarming Adagietto has dissipated the somber vulnerability left by the second movement and has turned the anxious excitement of the Scherzo into unbridled jubilation. The Scherzo and its D major key represent attempted but not fulfilled joy as further emotional and tonal unfolding are still pending.

The groundwork for this tonal plan is to be found in the symphony’s opening chord progression, where a sequence in descending thirds leads towards D major, the Neapolitan chord of C# minor (Figure 6-8).

**OPENING OF THE SYMPHONY, summarized**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Trumpet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

C# minor | A major | F# minor | D major |

C#: i | VI | VI₆ | iv₆ | îII₆ |

Descending thirds

Figure 6-8: Mahler, Fifth Symphony, I
As discussed above (see Figure 3-2), the opening chord progression up to this point hints at the goal key of the symphony but immediately takes a devastating turn back down to C# minor. From this point on the music undertakes a long and involved journey towards fulfillment through the gradual stabilization of pitch A and the assertion of D major as the goal key of the symphony. Unlike in the work’s overall tonal plan, the descending thirds of the opening chord progression do not include a D major chord intervening between A major and F# minor to prepare the arrival of D major at the end of the sequence. However, a foreshadowing of D major does occur in the melodic arpeggio of mm. 15-17 (Figure 6-9). The subtle way in which the D major chord starts surfacing in m. 15 before actually being stated in m. 17 prepares the appearance in the Scherzo of the D major key as an important tonal area of the symphony and the key’s ultimate confirmation in the Finale as the tonal goal of the work.

\[\text{measure 1} \quad 13 \quad 15 \quad 16 \quad 17\]

| C# minor | A major | F# minor | D major |

D major arpeggio that previews the D major chord

Figure 6-9: Mahler, Fifth Symphony, I
**Major and minor thirds**

Concurrent with the symphony’s tonal unfolding in descending thirds is its progress from minor to major keys that supports the music’s journey from distress to happiness. The tonal plan of the work clearly shows a modal transformation from minor in Part I (Trauermarsch in C# minor, second movement in A minor) to major in Part III (Adagietto in F major, Finale in D major), with an intermediate stage in Part II that alternates D major in the Scherzo with D minor in the Trio.

Reinforcing the symphony’s overall tonal plan in descending thirds and its modal transformation from minor to major is an intervallic long-scale pattern that involves lower-third relationships between important tonic triads. In this pattern, the two minor keys of Part I are a major third away from each other, while the two major keys of Part III are a minor third away from each other (Figure 6-10). In other words, the lower interval of the tonic triads opens up from a minor third (C#-E and A-C) in Part I to a major third (F-A and D-F#) in Part III, while the distance between triads narrows down from a major third (C# minor - A minor) in Part I to a minor third (F major - D major) in Part III (Figure 6-11).
This double reversal of triad type and triad distance is of course in itself an element of contrast between Parts I and III. At the same time, it yields a set of intervallic properties that actually equates both parts, bringing unity to the work as a whole. In order to examine these properties, only the mode-defining lower third of the triads and the thirds that separate the triads will be examined. In Part I, C#-E, the lower third of C# minor, and A-C, the lower third of A minor together form a \([0, 3, 4, 7]\) tetrachord \(^{25}\) (Figure 6-12). In Part III, F-A, the lower third of F major, and D-F#, the lower third of D major also form a \([0, 3, 4, 7]\) tetrachord (Figure 6-13).

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\(^{25}\) Here the term “tetrachord” is used as in 20th-century music theory to refer to a collection of four pitch classes.
The properties of the $[0, 3, 4, 7]$ tetrachord, as they pertain to the makeup of the symphony, are:

- Both transpositional levels of the tetrachord, $A-C-C#-E$ and $D-F-F#-A$, share pitch $A$ as a common tone.
- Both transpositional levels of the tetrachord are rooted on $A$ and $D$, respectively: their roots are a perfect fifth away from each other.
- In vertical alignment, the tetrachord is a split-third (minor-major) triad.
- As they appear in Parts I and III, the thirds of $A-C-C#-E$ ($A-C$ and $C#-E$) are minor and are adjacent to each other; the thirds of $D-F-F#-A$ ($D-F#$ and $F-A$) are major and are interlocked (Figure 6-14).
These properties are relevant to the unfolding of the music in several ways. First, pitch A’s occurrence as a common tone between A-C-C#-E and D-F-F#-A points to its power as a long-term unifying and pivotal pitch. Second, the descending fifth that separates A-C-C#-E and D-F-F#-A suggests an overall V - I tonal progression leading towards D major as the goal key. Third, the minor-major quality of the tetrachord reflects the long-term transformation of the symphony from minor into major. Through its all-inclusive intervallic content, the tetrachord not only points to the modal difference between both Parts I and III, but it also reconciles it. Thus it adds an element of cohesiveness to the work, one that is needed given that the music’s journey involves not only a modal change but also a shift of the tonal center. And fourth, as will be discussed, the adjacent minor thirds of Part I make the music sound dislocated, while the interlocking major ones in Part III make it sound integrated and harmonious. In addition, the frequent appearance of major thirds in Part III aligns with the increasing emergence of whole-tone elements that brings to the music an aura of magic and joviality.

The [0, 3, 4, 7] tetrachord is present in the symphony not only by virtue of its shape derived from the tonic triad of the home key in each of the two movements of Part I and III, respectively. It appears in significant passages that highlight melodic connections and prolong such connections through large portions of the work. A-C-C#-E, the tetrachord of Part I, emerges in the Trauermarsch in a haunting modulation from C# minor to A minor that features the lower third of both keys’ tonic triads (Figure 6-15). Here the timpani outlines an A major triad, but the violin C-natural taints the major mode just as the triad root appears. Furthermore, a poignant cross relation between the low timpani C# and the high violin C-natural (Figure 6-16) adds to the eloquence of the
passage and prolongs the sound of the tetrachord through the rest of Part I. A product of this prolongation is a large-scale connection of the timpani C#-E at mm. 317-322 to a C- A third that appears in the same register, with a similar orchestration and mood at the end of the second movement (Figure 6-17). The arrival of both passages to an A2 ties them together in a long-term registral prolongation, as does a remarkable orchestration detail: while the timpani solo of the first movement ends with a bass pizzicato (no timpani), the cello/bass solo of the second movement ends with a timpani stroke (no cello/bass).
The unexpected way in which the bare timpani note ends Part I immediately references the first movement passage where the bass, also unexpectedly, finishes the timpani solo.

The connection between the two passages is in fact extensive to the whole of Part I, given that the timpani solo recalls the trumpet dirge that opens the symphony. The dirge starts in C#4 and, when the timpani transposes it down an octave, it provides a registral connection to the end of the movement. This connection yields the $[0, 3, 4, 7]$ tetrachord in close position and therefore makes its major-minor quality most evident. The minor third that lingers as the last sonority of Part I clouds the hopefulness of passages in Part I involving the A major chord.

One of these passages is the recapitulation of the second movement, which is in itself a self-defeating arrival that occurs in A major soon to be followed by A minor (Figure 6-18). Here the A-C-D#-F# diminished-seventh containing the A-C dyad opens to A major in m. 317; A major in turn closes back to A minor in m. 323 also through A-C-D#-F#. Both modes are expressed in the A $[0, 3, 4, 7]$ tetrachord but the minor mode is heard last, bringing emphasis to the A-C minor third of the tetrachord (Figure 6-19).
Later, in another hopeful-sounding passage, the A-C-D#-F# tetrachord opens to A major, here functioning as the dominant of D major. The passage eventually leads to the climax of the movement (Figure 6-20). However, the movement’s somber ending in A minor casts a shadow of pessimism. As will be discussed, after its surrender to A minor, the A major triad does not perform any significant dominant function through the Scherzo movement and only gradually recovers it in Part III of the symphony.
In Part III, the bright D \([0, 3, 4, 7]\) tetrachord (D-F-F#-A), segmented in the two interlocked major thirds D-F# and F-A, starts to surface in the transition from the Adagietto into the Finale. The Adagietto climaxes on a high melodic A that descends by step, in three different registers, to land on an F a major third below (Figure 6-21). Soon after, a solo oboe melody at the beginning of the Finale reaches down by step from F# to D (Figure 6-22). Because of their occurrence in close succession, the two melodic fragments seem to combine with each other to outline the sonority of the D-F-F#-A tetrachord (Figure 6-23). The oboe F#-E-D is prominent because of its placement on a downbeat and its previous occurrence - in the same register - in the hymn at the climax of the second movement (Figure 6-24). In the Finale opening, a clarinet melody repeats the oboe notes, pointing again to the contrast between F-A - F#-D, and completes the melody of the second-movement hymn, though in a playful character (Figure 6-25).
5. Rondo - Finale

Figure 6-22: Mahler, Fifth Symphony, V

FOURTH MOVEMENT

Figure 6-23: Mahler, Fifth Symphony, IV and V
After this opening, elements of the D-F-F#-A tetrachord continue to surface with increasing force at important junctures of the movement. The first occurrence is at the arrival of the first theme of the recapitulation.\textsuperscript{26} Here a prominent F major chord and an F-A third (inverted as a sixth) are quickly followed by F#s and Ds. However, the F#-D third does not emerge prominently at the recapitulation because, even though the F# is an important melodic tone, it only connects to D in an inner voice (Figure 6-26).

\textsuperscript{26} As mentioned in Chapter 2, the recapitulation of the Finale is reversed, with the second theme occurring before the first.
The second instance is the triumphant arrival of the D major hymn first presented in the second-movement coda. A bridge similar to the one above starts in F major, introduces the F-A third (here too inverted as a sixth), and soon follows it with an F# (Figure 6-27). However, instead of leading directly to D major as in the previous instance, the music returns to F major in m. 701, making the contrast with the upcoming D major in m. 711 even more pronounced (Figure 6-28). The F-A third appears in the violin figuration and in the bass line, where it is stated first and then outlined in an F Lydian scale. D and F# quickly follow at the arrival of the hymn and contrast with the
BRIDGE to hymn

A - F
(as 6th)
appearance
of F# 

Passage similar to mm. 465-474

Figure 6-27: Mahler, Fifth Symphony, V

Figure 6-28: Mahler, Fifth Symphony, V
F-A third of the previous eight measures. Nevertheless, similarly to the passage at the 
recapitulation described above, the F#-D third does not enjoy melodic prominence given 
that the melodic arrival of the hymn is on an A and not on an F#. By the time the melody 
outlines an F#-D third in mm. 713-714, it is in a metrically unaccented place of the 
phrase where the impact of the harmonic arrival of D major has been already somewhat 
dilated.

The final and definitive appearance of the D-F-F#-A tetrachord is at the climax of 
the symphony in m. 731 (Figure 6-29). The heretofore missing melodic D-F# finally 
emerges as the main melodic line and it does so at a structural downbeat.\(^{27}\) Given that the 
previous arrival to D major at m. 711 is preceded by an extended F major sonority and 
that the new arrival to D major at m. 731 is grander as suggested by the \textit{pesante} marking, 
the quarter-note triplet figuration, and the melodic prominence of the D major mode-
defining F#, it can be inferred that the arrival at the climax too connects with the F major 
chord of mm. 703-710. This connection brings to the foreground, at a culminating point 
of the symphony, the contrast between the F-A third of F major and the D-F# third of D 
major, thus giving full prominence to the D-F-F#-A collection.

The question remains as to how the music progresses harmonically from the first 
D major arrival in m. 711 to the second one at the climax in m. 731 and in what ways this 
progression may contribute to the consolidation of the D-F-F#-A tetrachord. The main 
intervening sonority is A major, a chord that through the course of the symphony has 
been seeking affirmation as the structural dominant. As will be discussed next, the 
process of affirmation involves the reemergence of the A-C-C#-E tetrachord from Part I.

\(^{27}\) In the terminology of Lerdahl and Jackendoff, a structural downbeat is the convergence of structural 
accent, metrical accent, and harmonic arrival at a single moment. Fred Lerdahl and Ray S. Jackendoff, \textit{A 
Significantly but not surprisingly, a sustained A major dominant seventh chord (mm. 725-730) drives the music of the symphony to its climax (Figure 6-30). This first starts to happen in the Scherzo, where local V - I cadences in D major contain C#, the leading tone (Figure 6-31), but their resolutions to the tonic are later weakened by downward chromatic motions to C-natural (see Figure 5-17). In addition, the movement ends with a ^5^-^1 melodic motion in D major that is unharmonized and therefore lacks the leading tone (Figure 6-32). In the Adagietto, the passage in D major that ends the B section (see Figure 6-4) contains the leading tone resolving to the tonic, but the dominant-seventh chord underneath has dissolved into F major (Figure 6-33).
CLIMAX OF THE SYMPHONY

Figure 6-30: Mahler, Fifth Symphony, V

Figure 6-31: Mahler, Fifth Symphony, III

Figure 6-32: Mahler, Fifth Symphony, III
Only at the Finale does C# appear frequently as the leading tone of D major. This occurs especially at the first theme group of the exposition but here C# functions more as a melodic than a harmonic tone. Figure 6-34 shows C# in the first theme and in its fugal interlude, which alternates presentations of the subject and answer respectively in the tonic and the dominant. Significantly, the second theme (in B major) and the development do not feature A major as a key area or the dominant of D major.

Furthermore, the recapitulation (occurring on the second theme instead of the first) is not reached through a dominant to tonic progression (Figure 6-35). Therefore, C# does not fully perform its role as the leading tone in V until after the recapitulation. This first occurs at a long dominant pedal and an authentic cadence that leads to the arrival of the first theme in D major, as illustrated in Figure 6-36. Here the A bass pedal is not played in mm. 495-496 but carries through as the implied bass of V7. Mahler must have avoided stating it here in order not to overemphasize the arrival of D major, which would diminish the power of the upcoming V - I cadence at the symphony’s climax.
FIRST THEME

**Allegro giocoso**

24  Fr. horn 1

Fr. horn 3

Cello, Bassoons

C# as melodic tone

FUGAL INTERLUDE

**SUBJECT**

Woodwinds

D major

C# as melodic tone

A major

**ANSWER**

Violin II

Figure 6-34: Mahler, Fifth Symphony, V

RECAPITULATION

(on second theme)

Dδ: V5/IV  D: 14  -----------------------------------  V5

recapitulation not reached through a dominant to tonic progression

Figure 6-35: Mahler, Fifth Symphony, V
The cadence at the symphony’s climax is stronger than the one above. Here the sonority leading to the tonic is a sustained dominant seventh chord rather than varying harmonies over a pedal that only at the last moment become V7. In addition, this time the authentic cadence is also perfect since the melodic line peaks on a high D (Figure 6-37). Furthermore, A major has been further stabilized through tonicization in the previous six measures (Figure 6-38).
As will be presently discussed, the perfect authentic cadence at the climax consolidates the reemergence of the A-C-C#-E [0, 3, 4, 7] from Part I, now in a shifted segmentation that deemphasizes the adjacent A-C—C#-E minor thirds in favor of the interlocking C-E — A-C# major thirds. An intriguing event in the coda of the Finale brings back the tetrachord. After not participating in the music since the end of the Adagietto, the harp plays a dyad four times in a row and disappears for the rest of the
piece (Figure 6-39). The dyad is C#-E. Its occurrence over a melodic bass, its doubling in the winds, and its register change in m. 256 are obvious references to the passage near the end of Part I, where the harp and woodwinds play the A-C dyad over a melodic bass (Figure 6-40). The A-C dyad of the second movement is prolonged over the Scherzo and the Adagietto and connects with the C#-E dyad in the coda of the finale in the A-C-C#-E tetrachord. Such a long prolongation is possible because of the memorable ending of the second movement with the A-C dyad in the low register (see Figure 5-18). As discussed above, this ending negates the A-major potential of the A-C-C#-E tetrachord. When the harp completes the tetrachord in the finale, it reverses the order in which the dyads appear, leaving C#-E as the last sonority and thus pointing to the tetrachord’s regained major-function potential (Figure 6-41).

Figure 6-39: Mahler, Fifth Symphony, V

Figure 6-40: Mahler, Fifth Symphony, II
In it, C moves to C# as the A-C dyad surfaces in the F major triad and the F Lydian scale and is soon followed by the A major dominant seventh chord (Figure 6-42). The use of the F Lydian scale (with B-natural) ties this passage to the Adagietto in F major not only because of the shared tonal center, but also due to the joint reference to A minor. In this passage the reference occurs in the horn figuration; in the Adagietto it appears in the chord progressions that in turn link the Adagietto to the second movement through tonal ambiguity, as proposed in Chapter 5 (Figures 5-10 through 5-14). In addition, the appearance of B-natural in the Lydian scale of the Finale helps ease the way into the D major scale used from m. 711 to the end of the work. The use of F major (and F Lydian) in mm. 701-710 is crucial in crystallizing the tonal processes prompted by the [0, 3, 4, 7] tetrachord. On one hand, pitch C in F major’s A-C dyad moves to C# in the A major dominant chord. On the other, F major’s F-A major
third smoothly transmutes to D-F# in the climax, the last step in securing D major’s role as the goal key of the work. Figure 6-43 summarizes both processes (given that both thirds of F major, A-C and F-A, appear melodically highlighted in m. 703, this measure is used for illustration purposes to represent the music of mm. 701-710). As a result, the passage confirms the shifted emphasis of the A-C-C#-E tetrachord from minor in Part I to major in Part III (Figure 6-44) while, as discussed above, it brings the D-F-A-F# tetrachord to its fullest expression (see Figure 6-29). Thus the climax fuses the two transpositional levels of the [0, 3, 4, 7] tetrachord in a dominant-tonic relationship that involves the dominant A-C-C#-E sonority and its resolution to the tonic D-F-F#-A. Figure 6-45 illustrates.
BRIDGE TO CLIMAX

A - F to F♯ - D

A - F

A - C

C to C♯

eq[0, 3, 4, 7]

ff

etc. to m. 711

F - A

A major dominant chord

F major chord

ff sempre

D Major

CLIMAX OF THE SYMPHONY

PART I

emphasis on A-C

transformation of C to C♯

causes emphasis on A-C♯

FINALE

A - C

[0, 3, 4, 7]

F major

A major

[0, 3, 4, 7]

Figure 6-43: Mahler, Fifth Symphony, V

PART III

Figure 6-44: Mahler, Fifth Symphony, Parts I and III
The gradual modal transformation of the symphony from minor in Part I to major in Part III interrelates with the shift of emphasis from minor to major thirds in the \([0, 3, 4, 7]\) tetrachord, a shift that in turn springs from an overall tonal plan rich in submediant relationships. Parallel to these processes is the work’s increasing use of whole-tone elements that, as will be discussed, interact melodically and harmonically with pitch A to enhance the music’s sense of wonder and joy.
CHAPTER 7

WHOLE-TONE ELEMENTS

A novel moment in Mahler’s Fifth is the appearance of a whole-tone scale shortly before the end of the work (Figure 7-1). Adding to the overwhelming happiness of the music, the sound of the scale is curiously refreshing but not totally unexpected. It is as though it had been already present in the symphony without the listener being aware of it. Whole-tone elements have in fact been influencing the tonal processes of the work and have surfaced several times in varying degrees of prominence but never as overtly as in the final passage.

Figure 7-1: Mahler, Fifth Symphony, V
As the symphony journeys from sorrow to joy and from minor to major keys, the presence of whole-tone elements evolves from being virtually intangible in Part I to becoming increasingly ubiquitous in Parts II and III. A product of the overall tonal processes in the symphony, whole-tone elements help to unfold these processes within individual movements and in the context of the work as a whole. At first they appear embedded in tonal contexts but eventually they stand on their own right as a distinctive sound in the music. As the major mode emerges in the symphony, the augmented triad, a symmetric whole-tone structure, replaces another symmetric structure, the diminished-seventh chord, associated with the minor mode, that is characteristic of the second movement. The gradual assertion of whole-tone elements also reflects the shift in the segmentation of the \([0, 3, 4, 7]\) tetrachord from minor adjacent thirds in Part I to major interlocking thirds in Part III.

The present discussion contemplates the interactions of the two whole-tone collections of the chromatic scale, labeled as WT-0 and WT-1 respectively, with 0 representing pitch D, the tonic of the symphony’s goal key.\(^{28}\) Both in the foreground and background levels, each of the two scales is associated with specific sections of the symphony, particularly in Part III, where they become an integral structural component. Since WT-1 contains pitch A and C#, and WT-0 contains pitch D and F#, tones of V and I respectively, the consistent use of one scale or the other gives dominant or tonic emphasis to extended areas of the work, as is the case of the Adagietto that will be discussed below.

\(^{28}\) In the present study, \{\} are used to label the actual pitches being used in WT-0 or WT-1, with 0 corresponding to D. For example, \{3, 7, 11\} is the augmented triad F-A-C# and \{4, 2, 0\} is the whole-tone scale fragment F#-E-D.
As we have seen with other tonal processes of the piece, whole-tone elements are already present in the opening passage of the symphony (Figure 7-2). As discussed in Chapter 3, here the whole-tone elements support the music's tragic message. The music sounds strikingly dislocated due to its use of whole-tone elements consisting of a four-note whole-tone scale fragment and two pairs of triads separated by a tritone. However, the whole-tone elements as such are not prominent, given that they occur in an entirely functional tonal context.

No other whole-tone elements appear in Part I until the coda of the second movement. Here an augmented dominant chord precedes the arrival of the second part of the hymn in D major at the climax of the movement (Figure 7-3). For the first time in the symphony, whole-tone elements stand out as a distinct sonority. These are the F-A-C# augmented triad, the whole-tone melodic fragment B-A-G-F, and the complete C#-B-A-G-F-Eb whole-tone scale in an inner voice. Even though the augmented triad acts as the dominant chord, the whole-tone scales give new weight to the whole-tone idiom.

(Bass line only)

Figure 7-2: Mahler, Fifth Symphony, I
Two significant tonal processes of the entire symphony are previewed in this structurally important moment of the symphony, the climax of the second movement. First, the passage contains two diminished-seventh chords immediately preceding the augmented triad. That is, a diminished symmetrical structure opens into an augmented one, previewing the overall process of the work by which the major thirds of Part III ultimately predominate over the minor thirds of Part I. And second, the augmented triad of mm. 497-499 of the second movement resolving to D major in m. 500 summarizes the tonal plan of the entire symphony, in which a C#-A-F arpeggio leads to D, the ultimate tonal center (Figure 7-4).29

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29 Rick Cohn discusses a characteristic tonal relationship between major and minor keys that are separated by four semitones. In his new treatise of late-Romantic harmony, he groups all twenty-four major and minor keys into four hexatonic cycles. One of these cycles contains C# minor, A minor, and F major, the three combined keys leading to D major, the goal key of Mahler’s Fifth Symphony. Rick Cohn, Audacious Euphony: Chromatic Harmony and the Triad’s Second Nature (Oxford: Oxford University Press, 2012), 18.
The Scherzo movement takes the whole-tone explorations initiated at the end of Part I a step further. A phrase charged with whole-tone elements in the clarinets appears early in the movement (Figure 7-5). The context is diatonic as suggested by the viola line, but the clarinet parallel augmented triads of measure 46 tend to dilute the dominant function of V+ and to give the whole-tone sonority a structural role of its own. This passage and its transposition down a perfect fourth (mm. 89-94, not illustrated here) alternate WT-0 and WT-1. When whole-tone elements return towards the end of the movement, it is chiefly using WT-0. Starting on m. 779, the melodic line is F#-E-D, ^3-^2-^1 of D major, but the harmonic context is an augmented dominant chord of B major.
This tonal dichotomy between D major and B major as well as the parallel augmented
triads and whole-tone scales destabilize D major, increasing the music’s sense of frenzied
anxiety (Figure 7-6).

Soon after, during six entire measures, parallel whole-tone triads appear in
combination with an E major chord (Figure 7-7). Two A-related chords in mm. 797-798
act as the dominant of D major, creating with E major an E-A-D progression of
descending fifths. However, the abundance of whole-tone elements in mm. 791-797
weakens the tonal relationship. Furthermore, the insistent melodic repetition of G#-F#-E
in E major causes G# to sound retrospectively as #A 4 once D major arrives. This
emphasizes the whole-tone drop from E major to D major and gives to whole-tone
elements an added structural prominence.

Another instance of a whole-tone collection serving a structural purpose in the
Scherzo is at the bridge to the interlude (Trio I), where a Bb augmented triad
(enharmonically D+) transitions the music from D major into Bb major. An incomplete
common-tone diminished-seventh chord (enharmonically vii°7 of D major) enhances the
modulation. This is another case where augmented and diminished symmetric structures
appear next to each other reflecting large-scale relationships in the symphony. In
accordance to the movement’s uneasily festive character, here major thirds contract into
minor thirds, momentarily contradicting the overall expansion process of the symphony
(Figure 7-8). The Bb/D augmented triad returns at the end of the movement in D major
(Figure 7-9). There is no modulation here, but the bass line in m. 812 does suggest the
presence of the Bb major triad and the French horn melody asserts D major as pitch Bb
progresses to A in m. 815.
parallel augmented triads

WT-0: \{0, 2, 4, 6, 8, 10\}

Figure 7-5: Mahler, Fifth Symphony, III

B: V+ ___________________________ I

Figure 7-6: Mahler, Fifth Symphony, III
Figure 7-7: Mahler, Fifth Symphony, III

Whole-tone drop from E major to D major

Figure 7-8: Mahler, Fifth Symphony, III

Strings

Augmented triad

Fr. horns

6 Strings

D: V^7

{0, 4, 8}

(VI+ (enharmonically I+))

B♭: I

Wt-0: {0, 4, 8}

Figure 7-8: Mahler, Fifth Symphony, III
In Part III, the influence of whole-tone elements grows from being a structural agent to becoming an essential organizing force. The tonal plan of section B of the Adagietto, a movement in ternary form, is based on WT-1. Likewise, the entire Finale is structured on whole-tone relationships, with main sections of the movement corresponding to either WT-0 or WT-1. Significantly, all tonal areas of the Adagietto and the Finale are in the major mode, making the major-third a prominent interval in Part III. Given that complete sections of both movements are rooted in keys associated with WT-0 or WT-1, the passage from one key to the other produces the effect of parallel major thirds, which are idiomatic of whole-tone collections.

In the Adagietto, whole-tone elements first happen at the phrase leading to the climax of the first A section (Figure 7-10). An incomplete WT-1 scale that appears in mm. 29-30 is striking because of how it fits in the tonal progression. In particular, the leap away from C# to A is unexpected in the minor subdominant and gives prominence to
Figure 7-10: Mahler, Fifth Symphony, IV

C# as the middle point of an augmented-triad arpeggio F-C#-A. The subsequent leap up to an A at the climax, and the stepwise A-G-F descent (with octave displacement) connect this passage to the opening of the symphony, where the trumpet fanfare starts on C#, reaches an A by upward leap (m. 13), and descends by step also with octave displacement to a G# in m. 19. The tragic passage of the symphony’s opening acquires in the Adagietto an exultant meaning due to the F major tonal context, the whole-step A-G-F descent, and the WT-1 scale fragment that precedes the upward leap. In addition to contributing to the uplifting quality of the music, the appearance of WT-1 in section A previews section B by highlighting pitches that will be important to its tonal plan. Figure 7-11 shows this tonal plan.
The main chords of the Adagietto section B are major triads, dominant-ninth chords, and a French augmented-sixth chord. Therefore, the music is not filled with destabilizing augmented triads as happened in the Scherzo. However, here the whole-tone presence is strong, given that, starting on m. 50, the tonal plan unfolds as a succession of root-position chords descending by whole step. This is an elaboration of the process started at the end of the Scherzo with the descent from E major to D major, as shown in Figure 7-7. In the Adagietto, the chord succession is [Db9 - B9 - A7 - G French+6 - F major] (WT-1 {11, 9, 7, 5, 3}). Of these chords, Db9, A7, and F major are particularly prominent as the starting, middle, and end points of the succession, with A7 acting as a sustained dominant of D major, strongly suggesting the presence of its tonic, but progressing down to F major instead (see Figure 6-33). The Db9 - A7 - F arpeggiation
relates to the overall plan of the symphony, where the large-scale C#-A-F descent of
movements One, Two, and Four leads to D major of the Finale as shown in Figure 7-4. In
this regard the Adagietto condenses the tonal plan of the symphony as outlined by the
C#-A-F augmented triad but does not take the plan to completion until reaching D major
at the beginning of the Finale. In addition, just as the symphony previews D major in Part
II, the Adagietto hints at the presence of D major before the actual arrival of the goal key
in the Finale. It does so not only by means of the expected resolution of the A7 chord, but
also through the use of whole-tone relationships as illustrated in Figure 7-12. Here the
keys implied by the three unresolved dominant chords (Db9, B9, and A7) are Gb/F#, E,
and D, respectively. Their roots spell ^3^-^2^-^1 of D major; thus the Adagietto states WT-
1 but at the same time hints at WT-0 in anticipation of the Finale.

Whole-tone elements are also apparent at the foreground level in section B of the
Adagietto. Here the melodies are rich in whole steps spanning a tritone, and they are
presented linearly or as inversions in expressive leaps (Figure 7-13).

Figure 7-12: Mahler, Fifth Symphony, IV
In the Finale, whole-tone elements influence the tonal plan of not just a section but of the entire movement (Figure 7-14). The tonal plan unfolds as follows:

- The first theme group of the exposition is in D major and the transition to the second theme starts in Bb major (Figure 7-15); both keys are rooted in WT-0.
- B major is the key of the second theme (Figure 6-5) and it is prolonged throughout the development\(^{30}\) (Figures 7-16 and 7-17). G major and A major intervene. All three keys are based on WT-1.
- The complete recapitulation is based on WT-0, with both themes in D major and transitional music in Bb major and C major.
- Virtually the whole coda is based on WT-0, with episodes in Bb major, Ab major, and D major (triumphant hymn). An intervening section is in WT-1, with passages in A major, G major, Eb major, and F major, some of which will be examined below.
- The keys of each section of the movement outline a tritone, as will be discussed below.

\(^{30}\) A passage in C major (not belonging to WT-1) acts as an upper neighbor to its surrounding music in B major.
EXPOSITION DEVELOPMENT RECAPITULATION CODA

First theme group
Second theme
Second theme
First theme

Hymn

Transition

m. 24 167 241 293 349 441 497 526 623 681 725 791
191 253 307 373 455 581 659 687 731
280 337 423 496 592 666 711 789

Note: each bass note represented supports a major root-position triad

Figure 7-14: Mahler, Fifth Symphony, V
TRANSITION to second theme

**sempre l’stesso tempo**

![Musical notation](image)

Figure 7-15: Mahler, Fifth Symphony, V

DEVELOPMENT, second return to B major

![Musical notation](image)

Figure 7-16: Mahler, Fifth Symphony, V

DEVELOPMENT, second return to B major

![Musical notation](image)

Figure 7-17: Mahler, Fifth Symphony, V
The Finale tonal plan is not very different from that of a traditional sonata-form movement in major, where the exposition takes the music from the home key to a secondary key (usually the dominant); the development elaborates on the secondary key as it prepares the return of the home key; the recapitulation asserts the home key; and, if there is a coda, it reconfirms the home key by elaborating on it through episodic passages. The Finale from Mahler’s Fifth symphony resembles this plan in all respects but one: the secondary key is not A major, the dominant, but B major, the chromatic submediant. Therefore, it is expected that the development will somehow take the music from B major to A major so that the recapitulation in D major, the home key, will be reached through a V - I cadence. However, as indicated above (Figure 6-35), the return to I at the recapitulation is not from V. Instead, it is from Db major, the leading-tone major key. This peculiar progression is actually consistent with the tonal organization of the movement, which is determined by whole-tone connections. Db major belongs to WT-1, while D major belongs to WT-0. In a broad sense, WT-1 and WT-0 act as the dominant and tonic in a tonal universe of major keys governed by underlying whole-tone relationships. Each whole-tone collection takes the place that I and V would occupy in a traditional major-key sonata movement: WT-0 represents I in the first theme group, WT-1 stands for V in the second theme group and the development, and WT-0 corresponds to I in the recapitulation and coda.

In addition to shaping the tonal framework of the Finale, whole-tone elements also appear in the foreground, at first discretely in a tonal context, later more prominently through repeated transposition, and finally completely unrestrained in the colorful whole-tone scale that appears just a few seconds before the end of the piece. The first
occurrence is at the second theme of the exposition. As in the Adagietto, where the theme is first introduced, the melody outlines the tritone (Figure 7-18) and the harmonization includes dominant-ninth chords (Figure 7-19). In the coda, an episode based on the second theme precedes the bridge that leads to the triumphant hymn. The episode starts in G major (Figure 7-20) and eventually descends in parallel dominant-ninth chords that are a whole step away from each other (Figure 7-21).

![Figure 7-18: Mahler, Fifth Symphony, V](image1)

![Figure 7-19: Mahler, Fifth Symphony, V](image2)
Figure 7-20: Mahler, Fifth Symphony, V

Figure 7-21: Mahler, Fifth Symphony, V
At the surface, the dominant ninth chords of mm. 659, 666, and 681, each containing three whole steps, enrich the whole-tone sound of the passage. At the background level, they imbue with whole-tone relations an otherwise tonal harmonic context, given that they do not resolve to their local tonics but instead progress by descending whole step. The successive transposition of the music down a step generates the complete WT-0, as does the contrapuntal contrary motion with voice exchange at mm. 682-686. The dominant chords D9 (m. 659), C9 (m. 666), and Bb9 (m. 681) imply the keys of G, F, and Eb, respectively, keys that correspond to WT-1. Similarly to the passage at the Adagietto B section (see Figure 7-12), this passage combines elements from WT-0 and WT-1 by associating stated dominant chords with their implied tonic resolutions. In fact, the two chord progressions are nearly identical, the one in the Finale being a half step higher than the one in the Adagietto, and neither of them resolving the dominant chords but instead both progressing to F major (Figure 7-22).

**ADAGIETTO, section B**

<table>
<thead>
<tr>
<th>m. 46</th>
<th>50</th>
<th>60</th>
<th>64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated chords</td>
<td>D9</td>
<td>B9</td>
<td>A7</td>
</tr>
<tr>
<td>Implied keys</td>
<td>Gb</td>
<td>E</td>
<td>D</td>
</tr>
</tbody>
</table>

→ F major

correspond to WT-1

correspond to WT-0

**FINALE, episode from coda**

<table>
<thead>
<tr>
<th>m. 623</th>
<th>659</th>
<th>666</th>
<th>681</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated chords</td>
<td>D9</td>
<td>C9</td>
<td>Bb9</td>
</tr>
<tr>
<td>Implied keys</td>
<td>G</td>
<td>F</td>
<td>Eb</td>
</tr>
</tbody>
</table>

→ F major

correspond to WT-0

correspond to WT-1

Figure 7-22: Mahler, Fifth Symphony, IV and V
A possible explanation for this remarkable resemblance will be explored at the end of the paper. In the Finale passage, if the tonic roots of the implied keys are added to the bass line, they complete an outlined tritone that is consistent with other ones in the main sections of the movement (Figure 7-23).

The fully-fledged surfacing of the whole-tone scale at the end of the Finale is a strikingly bold gesture that nonetheless seems to be the logical and inevitable outcome of an ongoing process. Plentiful preparation has led to this moment, with whole-tone elements starting as early as the opening passage of the symphony and gaining structural importance as the work unfolds. WT-0 and WT-1, two collections used in the symphony to fulfill a role akin to that of a tonic and dominant, alternate with one another to enhance the large-scale tonal plan of the work. The final, unharmonized manifestation of WT-0, played in juxtaposition to the D major scale, brings to the foreground pitch A-flat, reinterprets it as G#, and resolves it to A, as if mockingly celebrating the triumph of joy over gloom (Figure 7-24).

In Chapter 8, a Schenkerian view summarizes the overall melodic and harmonic shape of the symphony as determined by the processes discussed in previous chapters. Concluding comments revisit the comparison initially proposed in the Introduction between the Fifth Symphonies by Mahler and Beethoven.
EXPOSITION  DEVELOPMENT  RECAPITULATION  CODA

First theme  Second theme  Second theme  First theme  Hymn
theme group  Transition

m.  253  349  592  681
     373  581
      D\textsuperscript{9}  C\textsuperscript{9}  B\textsubscript{b}\textsuperscript{9}

outlined tritone  outlined tritone  outlined tritone

WT-0  WT-1  WT-0  WT-1  WT-0

Figure 7-23: Mahler, Fifth Symphony, V
Figure 7-24: Mahler, Fifth Symphony, V
CHAPTER 8

SCHENKERIAN PERSPECTIVE AND CLOSING REMARKS

According to Mahler, “The task of contemporary creative musicians would be to combine the contrapuntal skill of Bach with the melodiousness of Haydn and Mozart.”

Mahler is most certainly successful not only in combining contrapuntal skill and melodiousness, as epitomized in his extraordinary Adagietto and Finale of the Fifth Symphony, but also in having these elements permeate the underlying relationships of the music to the point of shaping its inner structure. In this, his musical architecture, like Beethoven’s, matches that of the great masters Bach, Haydn, and Mozart.

As discussed in Chapter 3, the structural plan of Mahler Fifth Symphony is laid out in the first 20 measures of the work. Similarly, local plans emerge in each individual movement, where the opening themes foreshadow upcoming processes and help shape the Urlinie of the movement. A Schenkerian perspective of each movement and the symphony as a whole are outlined below. A middleground graph of each movement shows the movement’s most significant melodic and harmonic motions. The graphs of the five movements are then summarized into a middleground graph of the complete symphony, which is in turn reduced to a background graph. Closing remarks for the entire paper follow.

A common trait to all movements is that the Urlinie emerges at the end of the movement. In all cases, the Urlinie is related to the opening theme, and in most, it follows the shape of the theme. Remarkably, the dominant chord of each of the first two movements does not play a structural role, but in movements Three to Five the dominant chord of each movement’s key becomes increasingly influential. Postponing the dominant weight to the end of the symphony helps emphasize in each movement the importance of the chromatic submediant. Likewise, it is particularly significant that the climax of each movement features pitch A as either the climactic pitch or an important pitch of the climactic area, a factor that will determine A’s frequent appearance in the middleground graph of the entire work and A’s ultimate prominence in the Urlinie of the symphony. Remarkably, the A of the climaxes occurs always in the same octave (A5), a bright note in the high register of the trumpet that is first signaled by this instrument in m. 13 of the symphony. Trumpets play an A5 in all these climaxes except of course in the Adagietto, since the movement is scored for strings and harp. Finally, connections between movements Two to Five arise through pitch A that lingers in the listener’s memory at the end of a given movement and links to a prominent A at the beginning of the following one.

The Urlinie of the Trauermarsch in C# minor is A5-A1. Typically a bass line motion, this Urlinie represents a melodic transference to the “ground level” that matches the dramatic situation of a burial suggested by the movement’s title (Figure 8-1). As discussed in Chapter 4, this tragic plunge leaves no room for hope, given that there is no possibility of process that would otherwise exist with stepwise motion.

32 In the Scherzo and Adagietto, the melody is doubled at the octave. Trumpets play an A5 in the Scherzo climax, though as part of a countermelody (see Figure 8-4 below).
Figure 8-1: Mahler, Fifth Symphony, I (complete movement, middleground)

climax of the movement

chromatic descent

A minor

VI  #vi  #iii  i

c#: i

vi

i
The movement ends with a non-literal version of the March theme from the beginning (see Figures 3-1 and 4-5). Since the theme does not have a stepwise descent to \(^1\), it follows that the Urlinie will end too with a wide leap, as in fact it does in the last two measures. The secondary key of the movement is A minor, a chromatic submediant. Here the C-section theme previews the second theme of the second movement and outlines a local \(^3\)-\(^2\)-\(^1\) descent that starts in m. 323. The movement climaxes on pitch A, still in the secondary key, at m. 369.

Figure 8-2 is a middleground graph of the second movement. Like the Trauermarsch, the climax of the movement is not in the home key but in this case in D major, the major subdominant. Even though the climactic point is pitch F# and not A, pitch A does introduce the climactic passage by starting the triumphant hymn introduced in m. 646 (see Figure 4-14). As in the Trauermarsch, the movement ends with the theme with which it started. The opening theme of the movement is in A minor and features a \(^3\)-\(^2\)-\(^1\) descent that becomes the Urlinie of the movement. In addition to containing the \(^3\)-\(^2\)-\(^1\) melodic fragment, the theme outlines the A minor triad \(^5\)-\(^3\)-\(^1\). On a large-scale, this triad is transposed a half step below (a reflection of the downward pull of Ab over A) and becomes the basis for the development. Also far-reaching is the prolongation of bass pitch F, the root of F minor (a chromatic submediant used for the second theme in mm. 74-213) that becomes part of the Urlinie at the end of the movement. This happens when F minor is transformed into F major in m. 557 (see Figure 4-18) and the Urlinie is transferred to the bass in m. 574.
EXPOSITION DEVELOPMENT RECAPITULATION CODA

First theme Second theme  First theme Second theme
m. 1 74 214 266 288 316 356 428 464 500 526 556 557 574

climax of the movement

First theme Second theme
m. 1 74 214 266 288 316 356 428 464 500 526 556 557 574

First theme Second theme

m. 1 74 214 266 288 316 356 428 464 500 526 556 557 574

First theme Second theme

m. 1 74 214 266 288 316 356 428 464 500 526 556 557 574

First theme Second theme

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m. 1 74 214 266 288 316 356 428 464 500 526 556 557 574

First theme Second theme

m. 1 74 214 266 288 316 356 428 464 500 526 556 557 574

First theme Second theme

Figure 8-2: Mahler, Fifth Symphony, II (complete movement, middleground)
As discussed in Chapter 6, the modal transformation of F minor into F major at the end of the second movement enables an overarching tonal connection of the second movement with the Adagietto that closely relates to the emotional unfolding of the symphony. A more local tonal connection carries the submediant relationship of the second movement a step further as F minor (second theme of the exposition and recapitulation) moves by descending third to D major (hymn at the coda). As a result, the tonal plan of the movement is by descending thirds outlining a minor subdominant arpeggio (Figure 8-3). The change of mode from D major at the hymn to D minor in m. 526 confirms the mode of the arpeggiated D triad. This large-scale arpeggiation relates to the connections by descending thirds that are characteristic of the overall tonal plan of the symphony. In addition, it helps prepare the tonal center of the Scherzo. However, as discussed in Chapter 6, D major in the second movement and the Scherzo is still an unstable key within the symphony’s overall tonal plan and will become fully affirmed only in the Finale.

![Figure 8-3: Mahler, Fifth Symphony, II (complete movement, harmonic reduction)](image-url)

Exposition and recapitulation

<table>
<thead>
<tr>
<th>First theme</th>
<th>Second theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>m. 1 and 316</td>
<td>m. 74 and 400</td>
</tr>
</tbody>
</table>

| a: 1 | vi | IV | iv | 1 |

D minor arpeggio
The second movement and the Scherzo are connected not only tonally but also motivically as evidenced by the strong resemblance between their main themes (Figure 8-4). Like the previous two movements, the Scherzo ends with the same theme that it started. Therefore, the assumption would be that the Scherzo too would have a \( ^3-A^2-A^1 \) Urlinie. However, while the second movement theme lands on \( A^1 \) on a downbeat, the Scherzo theme does so on a weak beat and arpeggiates up to an A. As shown in Figure 8-5, a middleground graph of the Scherzo, the movement’s Urlinie actually starts earlier on a previous melody containing \( ^5-A^4-A^3 \) (mm. 799-813), where pitch A marks the climax of the movement and starts the melodic descent. Since \( A^3 \) connects to \( A^1 \) at the end of the movement, the resulting Urlinie is therefore an almost stepwise \( ^5-A^4-A^3-A^1 \); \( A^2 \) is not missing altogether, however, as it is featured as part of the theme in m. 816.

Second movement  
First theme

![Figure 8-4: Mahler, Fifth Symphony, III](image)

Third movement  
Scherzo theme

![Figure 8-4: Mahler, Fifth Symphony, III](image)
Figure 8-5: Mahler, Fifth Symphony, III (complete movement, middleground)
The secondary key of the Scherzo is Bb major, a chromatic submediant suggestive of D minor, a key that contributes to Part II’s sense of tonal unfulfillment. Pitch Bb is featured melodically as a chromatic inflection of B-natural, an important pitch from the first theme. The inflection occurs in the Trio (m. 310) and the end of the movement (mm. 799 and 814). In the two closing measures of the movement, the melodic ^5-^1 leap, both in the top voice and the bass, suggest a V - I cadence that signals the gradual emergence of dominant harmonies in Part III.

Figure 8-6 is a middleground graph of the Adagietto. The Urlinie of the movement is ^3-^2-^1, corresponding to the last three notes of the A section theme. This Urlinie is the first successful ^3-^2-^1 motion in the entire symphony. Significantly, it starts on pitch A, a tone that marks the climax of the first A section and the climax of the entire movement in the second A section. During the climax of the movement, the Urlinie is transferred from the top voice to the bass. The melodic fragment C-Bb-A, played by the first violins in parallel tenths (plus an octave) above the Urlinie, causes pitch A to linger into the Finale. Section B is tonally unstable and suggests the presence of D major, a chromatic submediant of F major, without actually stating the D major tonic chord (see Figure 6-4). At the same time, the cadential six-fours of F major in mm. 30 and 85 add prominence to the dominant chord of the movement, continuing the process of dominant assertion started at the end of the Scherzo. However, the dominant-chord resolution both in m. 30 and m. 85 lacks an E, the leading tone, and in mm. 85 the cadential six-four becomes somewhat diluted as the chord shifts position in order for the bass to play the Urlinie notes.
Section:

Figure 8-6: Mahler, Fifth Symphony, IV (complete movement, middleground)
Figure 8-7 is a middleground graph of the Finale. The movement starts with the striking horn call on pitch A mentioned in Chapter 2 (see Figure 2-1). Pitch A is next prominently featured at the return in m. 711 of the hymn first presented in the second-movement coda. At the symphony’s climax in m. 731, the hymn starts a descending motion eventually ending in ^5-^4-3-2-1, the Urlinie of the movement. This Urlinie is delivered in two stages, first as ^5-^4-3-2 in mm. 745-747, and then as ^5-^4-2-1 in the last two measures of the piece. The lack of an F# in the second-to-last measure is compensated by three significant F# former appearances: at the climax of the symphony (m. 731), at the ^5-^4-3-2 descent of mm. 745-747, and in the whole-tone scale of mm. 785-787 that repeats several times the fragment F#-E-D (see Figure 7-1). Especially because of the appearance of F# in the whole-tone scale it would have been redundant to end the symphony with a melodic F#-E-D.

As in the Adagietto, the dominant chord is prominent in the Finale too. V has increasingly gained force through the movement, as discussed in Chapter 6, and reaches its full expression as a dominant-seventh chord in the second-to-last measure, where it resolves normally in a perfect authentic cadence. As shown in Figure 8-7, this perfect authentic cadence supports the last scale-wise melodic descent from A to D. B major, the key of the second theme, plays an important role in the tonal plan. However, it does so more as a whole-tone member of WT-1 than as a chromatic submediant. As will be presently discussed, the events in the last two measures of the Finale consolidate the Urlinie and the dominant-to-tonic resolution not only of the movement but also of the entire symphony.
Figure 8-7: Mahler, Fifth Symphony, V (complete movement, middleground)
The following middleground graph of the complete symphony shows the Urlinien and basic chord progressions of the five movements (Figure 8-8). In the five Urlinien, pitch A evolves from being a dependent tone to becoming a determinant one in the overall Urlinie of the work. The five stages in the gradual assertion of pitch A in the symphony are:

- A is subordinate to G# in the first movement in C# minor
- A becomes the tonal center of the second movement in A minor
- A is part of an almost stepwise descending line to D in the third movement
- A descends by step to F in the fourth movement in F major, the symphony’s first successful ^3-^2-^1 motion in a major key
- A descends to D by stepwise motion in the fifth movement in D major, making ^5-^4-^3-^2-^1 the Urlinie of the movement and the Urlinie of the symphony

In addition to showing the main melodic motions of the symphony, Figure 8-8 presents the tonal plan of the entire work. An ascending motion from C# minor in the Trauermarsch to D major in the Scherzo is followed by a long-term I-V-I progression that ultimately establishes the goal key of the symphony. This representation does not contradict the one presented in Figure 6-7 that highlights the submediant connection between movements. Both graphs show the tonal relationship by descending thirds as an essential element in the unfolding of the work, but the Schenkerian graph acknowledges the ultimate ascending motion by half step from C# minor in the Trauermarsch to D major in the Finale and shows this motion being previewed by the appearance of D major in the Scherzo.
Movement:

1. A is subordinate to G#
2. A becomes tonal center
3. A is part of an incomplete descent to D
4. A descends by step to F
5. A descends by step to D

D major previews the goal key of the symphony

Figure 8-8: Mahler, Fifth Symphony (complete work, middleground)
The graph points too to the melodic conflict between A and G#. A is initially subordinate to G# and gradually gains independence to eventually become ^5 of D major. The ascent from G# to A happens in the second movement where A is the tonic of A minor and participates in the movement’s climax in D major. This ascent smoothens the appearance of D major in the Scherzo as it forms part of a large-scale 5-6 technique. The following background graph of the complete symphony illustrates (Figure 8-9).

**Movement:**

1. 2. 3. 4. 5.

**5 - 6 technique:**

^4 - ^5 in D major

^5 - ^6 in C# minor

D: vii I V I

Figure 8-9: Mahler, Fifth Symphony (complete work, background)
The 5-6 ascent from C# minor in Part I to D major in Part II is the first step in asserting D major as the goal key of the symphony. The Scherzo movement plays a central role in this process through its intriguingly ambiguous character, on one hand anxious and complex and on the other marked by an “unheard-of power”. In spite of - or perhaps because of - its failed attempt to assert D as the tonal center of the symphony as a symbol of triumph over tragedy, the Scherzo sets the conditions for success to be attained in Part III of the work. The willfulness and drive of this movement, not to speak of its technical demands, match those same qualities found in the greatest music by Beethoven. At the beginning of this paper, a parallel was made between Mahler’s Fifth and Beethoven’s Fifth referring to their journey from tragedy to joy. Further comparison shows how Mahler in every respect magnifies Beethoven’s masterful achievements. Regarding the change of mode, Mahler not only goes from minor to major but also lifts the tonal center half a step. In addition, he alters not only the minor triad but also the diminished-seventh chord, a structure built on minor thirds, to make it become an augmented triad, built on major thirds.

As pertains to the submediant, Mahler extends Beethoven’s use of the diatonic VI as the large-scale upper neighbor to V by creating a set of chromatic submediant relationships that serve as the basis for the tonal unfolding of his symphony. Product of this unfolding is the large-scale C#-A-F arpeggiation, an augmented triad otherwise obtained by enlarging minor thirds into major thirds.

Beethoven introduces a Neapolitan sixth chord at a pivotal point in the first-movement coda (example not shown here - see Beethoven’s Fifth Symphony, I, mm. 382-386). Here the chord extends the phrase by one measure, upsetting the rhythmic
balance and launching the movement into its precipitous ending. Mahler too uses the Neapolitan sixth in a dramatic context (first movement m. 17). However, he resolves the chord unconventionally and makes it the ultimate harmonic goal of the piece.

Following Beethoven’s example, Mahler stretches these and other elements to achieve a heightened intensity, depth, and variety of expression. In Mahler’s Fifth, this is manifest in the increased durations of movements, the enlarged forms (especially the Scherzo movement), the broadened size and range of the orchestra, and the intensified contrast between solo and tutti passages. Beethoven’s skilled codas take new form in the Finale of Mahler’s Fifth, where the music synthesizes not only the fifth movement but also the long-term processes of the entire work. Most instances of how this occurs have been discussed above, leaving just a few points remaining to consider.

First is the curious moment when the harp plays the C#-E dyad that at the same time brings back the A [0, 3, 4, 7] tetrachord and restores the tetrachord’s major quality (m. 592, see Figure 6-39). This entrance coincides with a transposition up half a step of the previous passage, from Ab major to A major, an upward motion that recalls the liberation of pitch A from the downward pull of G#/Ab. This upward motion and the upward motion from Db major to D major at the recapitulation of the Finale (see Figure 6-35) are a perfect fifth apart from each other. Together they reflect the symphony’s large-scale raise from C# minor to D major. This overall motion cancels a thwarting local half-step descent from D major to C# minor that occurs near the end of the Trauermarsch (Figure 8-10).
Here the D major triad, expanded in a chord progression involving a circle of fifths and a sequence of descending thirds, slides down to a C# open-fifth chord (no third). The empty sound of the arrival chord and the parallel fifths and octaves leading to it are connotative of death. Significantly, the passage places the F major, A major, and D major chords in close succession, hinting at the large-scale connections of the A-C-C#-E and A-F-F#-D [0, 3, 4, 7] tetrachord that, as discussed in Chapter 6, reaches its full expression in the symphony’s climax at the coda of the Finale.

Second, the WT-0 scale that surfaces in the closing measures of the symphony (see Figure 7-24) hints one last time not only at the looming presence of pitch Ab/G# but
also of Ab major, the dominant chord of the first movement key. Its minor version was the arrival point of the tragic plunge in m. 19 of the first movement. The WT-0 scale at the end of the symphony recalls Ab major through its second trichord, C-Bb-Ab. The scale thus fits two tonal contexts, D major (through the F#-E-D trichord) and Ab major, one representing tragedy and the other joy (Figure 8-11). The hinted-at Ab major flavor of WT-0 humoristically undermines the triumphant stability of the D major goal key just recently asserted by the coda hymn. The destabilizing potential of Ab major is reinforced by the appearance of an Eb major chord in m. 788 (Figure 8-12). Here the D major 6 - Eb major chord succession brings to mind the first harmonic progression of the symphony, where Eb major is notated enharmonically as D# major. In the first movement, the progression takes a devastating turn into G# minor; in the Finale, Eb happily progresses into the symphony’s conclusion in D major as a G#-A upward melodic motion confirms the stability of pitch A.

[Figure 8-11: Mahler, Fifth Symphony, V]
Third, the Eb and Bb7 chords in m. 788 of the Finale presumably connect with the Bb9 chord of m. 681 (see Figure 7-22) and its implied Eb tonic, chords that appear in a progression that in turn refers to the Adagietto. In the Adagietto, the progression suggests D major and in the Finale it suggests Eb major. The dichotomy between both keys is retaken in m. 788 and is resolved once the music progresses to V and I of D instead of plunging into G# minor.

Finally, a detail in the voicing of the last melody of the symphony is highly revealing. The trumpets and French horns descend in unison, but upon reaching pitch A, the horns sustain the A while the trumpets continue descending to D (Figure 8-13).
The horn A, played in two octaves, is evocative of the bridge between the Adagietto and the Finale, where the solo horn plays an octave higher than the first violins. It also recalls the connections between movements Two, Three, and Four, by means of a lingering memory. Ultimately, it encapsulates the power of pitch A as the all-encompassing, harmonizing agent in a sonic constellation formerly wrecked by chaos and despair.
APPENDIX

FORMAL CHART OF THE SYMPHONY’S MOVEMENTS

Table 1

First movement: Trauermarsch
(Form: Rondo A B A C A)

<table>
<thead>
<tr>
<th>Event</th>
<th>Location (measure numbers)</th>
<th>Key</th>
<th>Outstanding features</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>a 1 - 34</td>
<td>C# minor</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>35 - 60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>61 - 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>89 - 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>121 - 154 Ab major</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>a 155 - 202</td>
<td>Bb minor</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>203 - 220 Gb major</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>221 - 232 F minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>a 233 - 262 C# minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>263 - 294</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>295 - 316 Db major</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>317 - 322 C# minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>323 - 400 A minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>a 401 - 415 C# minor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Second theme of next movement</td>
</tr>
</tbody>
</table>
Table 2

Second movement: Stürmisch bewegt. Mit größter Vehemenz
(Form: Sonata allegro)

<table>
<thead>
<tr>
<th>Event</th>
<th>Location</th>
<th>Key</th>
<th>Outstanding features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposition</td>
<td>First theme 1</td>
<td>1 - 64</td>
<td>A minor</td>
</tr>
<tr>
<td></td>
<td>Bridge 65 - 73</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second theme 74 - 140</td>
<td>F minor</td>
<td>First presented in previous movement</td>
</tr>
<tr>
<td>Development</td>
<td>Episode 1 141 - 176</td>
<td>Unstable</td>
<td>Based on first theme</td>
</tr>
<tr>
<td></td>
<td>Bridge 177 - 213</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Episode 2 214 - 253</td>
<td>Eb minor</td>
<td>Based on second theme</td>
</tr>
<tr>
<td></td>
<td>Bridge 254 - 265</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Episode 3 266 - 287</td>
<td>B major</td>
<td>Based on first movement A c</td>
</tr>
<tr>
<td></td>
<td>Episode 4 288 - 316</td>
<td>Ab major</td>
<td>Based on first movement A c</td>
</tr>
<tr>
<td>Recapitulation</td>
<td>First theme 317 - 355</td>
<td>A major - A minor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second theme 356 - 427</td>
<td>E minor - F minor</td>
<td></td>
</tr>
<tr>
<td>Coda</td>
<td>Episode 1 428 - 463</td>
<td>Eb minor</td>
<td>Based on first and second themes</td>
</tr>
<tr>
<td></td>
<td>Episode 2 464 - 519</td>
<td>D major</td>
<td>Triumphant hymn of Finale introduced</td>
</tr>
<tr>
<td></td>
<td>Episode 3 520 - 576</td>
<td>D minor - A minor</td>
<td>Based on first theme</td>
</tr>
</tbody>
</table>
Table 3

Third movement: Scherzo
(Form: Scherzo - Trio - Scherzo)

<table>
<thead>
<tr>
<th>Event</th>
<th>Location</th>
<th>Key</th>
<th>Outstanding features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scherzo</td>
<td>A</td>
<td>1 - 130</td>
<td>D major</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>131 - 173</td>
<td>Bb major</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>174 - 200</td>
<td>D major</td>
</tr>
<tr>
<td>Transition</td>
<td></td>
<td>201 - 307</td>
<td>Unstable</td>
</tr>
<tr>
<td>Trio</td>
<td></td>
<td>308 - 336</td>
<td>D minor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>337 - 388</td>
<td>Ab major</td>
</tr>
<tr>
<td></td>
<td></td>
<td>389 - 428</td>
<td>A minor</td>
</tr>
<tr>
<td>Transition</td>
<td></td>
<td>429 - 489</td>
<td>Unstable</td>
</tr>
<tr>
<td>Scherzo</td>
<td>A</td>
<td>490 - 561</td>
<td>D major</td>
</tr>
<tr>
<td>Episodes</td>
<td></td>
<td>562 - 595</td>
<td>D major</td>
</tr>
<tr>
<td></td>
<td></td>
<td>596 - 613</td>
<td>F minor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>614 - 632</td>
<td>A minor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>633 - 661</td>
<td>G major</td>
</tr>
<tr>
<td></td>
<td></td>
<td>662 - 819</td>
<td>D major</td>
</tr>
</tbody>
</table>

Table 4

Fourth movement: Adagietto
(Form: A B A)

<table>
<thead>
<tr>
<th>Event</th>
<th>Location</th>
<th>Key</th>
<th>Outstanding features</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1 - 38</td>
<td>F major</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>39 - 71</td>
<td>Unstable. Eventually suggests D major.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Second theme of next movement introduced</td>
</tr>
<tr>
<td>A</td>
<td>72 - 103</td>
<td>F major</td>
<td></td>
</tr>
<tr>
<td>Event</td>
<td>Location</td>
<td>Key</td>
<td>Outstanding features</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------</td>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Introduction</td>
<td>1 - 23</td>
<td>D major</td>
<td></td>
</tr>
<tr>
<td>Exposition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First theme</td>
<td>24 - 55</td>
<td>D major</td>
<td></td>
</tr>
<tr>
<td>Fugal interlude</td>
<td>56 - 99</td>
<td>D major, (A major)</td>
<td></td>
</tr>
<tr>
<td>Bridge</td>
<td>100 - 137</td>
<td>(A major), D major</td>
<td></td>
</tr>
<tr>
<td>First theme (2nd time)</td>
<td>138 - 166</td>
<td>D major</td>
<td></td>
</tr>
<tr>
<td>Transition</td>
<td>167 - 190</td>
<td>Bb major, D major</td>
<td></td>
</tr>
<tr>
<td>Second theme</td>
<td>191 - 232</td>
<td>B major</td>
<td>First presented in previous movement</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing idea</td>
<td>233 - 240</td>
<td>B major</td>
<td></td>
</tr>
<tr>
<td>Episode 1</td>
<td>241 - 252</td>
<td>(B major)</td>
<td>Based on closing idea, transition, fugal interlude, and motives from hymn tune</td>
</tr>
<tr>
<td>Episode 2</td>
<td>253 - 296</td>
<td>G major, D major</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(briefly), A major, B major</td>
<td></td>
</tr>
<tr>
<td>Episode 3</td>
<td>297 - 306</td>
<td>B pedal</td>
<td></td>
</tr>
<tr>
<td>Episode 4</td>
<td>307 - 336</td>
<td>C major</td>
<td>(upper neighbor to B major)</td>
</tr>
<tr>
<td>Recapitulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second theme</td>
<td>337 - 372</td>
<td>B major</td>
<td></td>
</tr>
<tr>
<td>Transition</td>
<td>373 - 422</td>
<td>D major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>423 - 496</td>
<td>Bb major, D major</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>major, C major</td>
<td></td>
</tr>
<tr>
<td>First theme</td>
<td>497 - 525</td>
<td>D major</td>
<td></td>
</tr>
<tr>
<td>Coda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Episode 1</td>
<td>526 - 580</td>
<td>Bb major, C major</td>
<td>Based on first theme</td>
</tr>
<tr>
<td></td>
<td></td>
<td>major, (G pedal)</td>
<td>Based on first theme</td>
</tr>
<tr>
<td>Episode 2</td>
<td>581 - 591</td>
<td>Ab major</td>
<td>Based on second theme</td>
</tr>
<tr>
<td>Episode 3</td>
<td>592 - 605</td>
<td>A major</td>
<td>Based on second theme</td>
</tr>
<tr>
<td>Episode 4</td>
<td>606 - 622</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Episode 5</td>
<td>623 - 686</td>
<td>G major, Eb major</td>
<td>First presented in second movement</td>
</tr>
<tr>
<td>Bridge</td>
<td>687 - 710</td>
<td>F major</td>
<td></td>
</tr>
<tr>
<td>Episode 6 (Hymn)</td>
<td>711 - 748</td>
<td>D major, (A7)</td>
<td></td>
</tr>
<tr>
<td>Episode 7</td>
<td>749 - 791</td>
<td>D major</td>
<td>Based on first theme and hymn</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY


