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A MUSICAL ANALYSIS OF SELECTED CHORAL COMPOSITIONS OF JEAN BERGER.

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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

A MUSICAL ANALYSIS OF SELECTED CHORAL COMPOSITIONS OF JEAN BERGER

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

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GERALD LYNN MOORE

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1970

A MUSICAL ANALYSIS OF SELECTED CHORAL

COMPOSITIONS OF JEAN BERGER

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G.L.M.

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A MUSICAL ANALYSIS OF SELECTED CHORAL COMPOSITIONS OF JEAN BERGER

CHAPTER I

PURPOSE OF THE STUDY

The purpose of this study is to present a musical analysis of selected choral compositions of Jean Berger on the premise that this analysis can influence the rehearsal and performance techniques of the music. This study is confined to six compositions for mixed voices, each of which is analyzed harmonically, structurally, melodically, and rhythmically. These elements are treated individually and collectively, and the theoretical data is then applied in a practical manner.

Jean Berger studied musicology at the universities of Heidelberg and Vienna, received the Ph.D. degree from Heidelberg University, and studied composition privately with Louis Aubert in Paris. He has served on the faculties of four colleges and universities in the United States and Brazil and presently is on the faculty at Temple Buell College in Denver, Colorado.

Dr. Berger has served as guest composer and conductor at several universities and has frequently served as clinician and conductor of all-city and all-state choruses. He has conducted research on choral music in Italy, edited choral works for publication, and written articles on music history for The Musical Quarterly and Journal of the American Musicological Society. He has also spoken to music educators at clinics and conventions and to church organizations dealing with worship and music. Over 200 of his choral compositions are in print in the United States at this time.

It is expected that this study will provide new data which can aid choral conductors with the preparation and performance of Berger's music--the specific examples included in this study and, to some extent, all of his works.

Most musicians believe that there is a direct correlation between the understanding of a piece of music and the ability to perform it effectively. Assuming this to be true, any theoretical information about a composition should contribute to this end even though, in many instances, no overt relationship between the understanding and the performance can be observed. However, there are some direct ways in which formal, melodic and harmonic analyses can aid musical performance.

A conductor's knowledge of the formal structure of a composition will aid in several ways. Perhaps the most direct

result of this knowledge is an overview of the complete composition which can organize memorization. Within this formal overview of a composition, the conductor will have identified the relationships of phrases and other formal subdivisions from which can emerge a sense of the unifying and contrasting structural elements.

An understanding of the melodic organization is especially important in choral music. Locating points of linear tension and release is important to the proper interpretation of the melodic line. Identifying homophonic and polyphonic sections is necessary in order to emphasize the proper line or lines in the texture. Certain tones in melodies should receive special attention when the scale basis is known--major, minor, modal, or artificial.

The conductor's knowledge of the harmonic analysis can be beneficial to both conductor and students. The location of dissonant vertical sonorities and nonharmonic tones may be helpful when emphasizing tension and release in the music. Identifying tonal centers and modulations are necessary to understand how the music progresses toward cadences. Understanding the description and function of cadences is important when interpreting the musical effect of phrase endings. Foreknowledge of nontraditional vertical sonorities can aid the singers not only in accuracy of performance but in understanding the relative consonance and dissonance within a particular harmonic context.

CHAPTER II

SCOPE OF THE STUDY

Material Selected

The six specific compositions included in this study, and the years in which they were composed, are listed below.

1. "Brazilian Psalm" (1941)
2. "The Eyes of All Wait Upon Thee" (1959)
3. "A Rose Touched by the Sun's Warm Rays" (1960)
4. "Pater Noster" (1961)
5. "De profundis clamavi" (1961)
6. "The Fiery Furnace" (1962)

The criterion for selecting these works was twofold. Since several of Berger's compositions have been performed frequently, it was appropriate that some of the more "popular" works be examined. Numbers one, two, and three of the above list were selected for this reason. The remaining three compositions have not been performed as often, but they were considered worthy of greater attention because of their

musical interest. The composer listed the last three works among his "favorites."[1]

Treatment of Material Selected

Harmonic Analysis

A complete harmonic analysis appears on each of the six published scores in Volume II of this study. This analysis includes the naming of the tonalities, the Roman numeral chord symbols, the pitch names of chord roots, the labeling of nonharmonic tones, and the locating and naming of cadences. An abstraction of this analysis also appears in the main volume. The purpose of the second analysis is to show more clearly the root motion of consecutive chords.

Some few chords or passages which seem harmonically ambiguous are included in an alternate harmonic analysis on manuscript following the abstracted analysis in Volume I. Each of these chords or passages is fully stated in condensed score with the alternate chord symbols and nonharmonic tones indicated. The factors which create the harmonic ambiguity are then discussed.

Formal Analysis

A formal analysis for each composition is included and illustrates the following: (1) the location of large formal sections, (2) the location of phrases, (3) the length

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[1]Letter received from composer, August 12, 1969.

of each phrase, (4) the specific musical unit used in each phrase, (5) the reuse and modification of musical units, (6) the tonalities, (7) the homophonic (or monophonic) and polyphonic sections, and (8) the number of measures in each section and in the entire composition.

Scale Bases

If the scale basis for any portion of a composition is anything other than major or minor, the actual scale is illustrated on manuscript. The illustrations include the name of the scale, the actual scale notation, and the measure numbers where the scale basis is used.

Compositional Techniques

A detailed discussion of the composer's compositional techniques is included for each of the compositions. Elements which seem particularly strong or weak, unusual, or otherwise noteworthy are included in the discussion. These specific elements include the following: (1) harmony (chord types, nonharmonic tones, harmonic rhythm, voicing, root movement, and cadential harmony), and tonality (2) melody (scale basis, phrase length, intervals, active tones, doubling, and parallism), (3) rhythm, and (4) counterpoint.

The combinations of specific elements and the manner in which these combinations create unity and variety are listed on a chart. This chart contains four parallel vertical columns in which the following items are listed: (1) the

source (measure numbers) of unifying compositional elements, (2) the categorizing of the elements (melody, rhythm, chord type, cadence, texture, dynamic level, tempo, voicing, or formal unit), (3) the location (measure numbers, beats and vocal lines) of the elements reused, and (4) a brief description of the variance of the musical unit as it is restated.

A discussion of the combined elements which create musical tension and release are discussed chronologically within each composition. The identification and the discussion of these elements indicate the placement of the climaxes. The elements which are considered include chord types, nonharmonic tones, harmonic rhythm, melodic rhythm, tempo, dynamics, voicing (range and register), and texture.

The balancing features of each composition are discussed in general terms when it seems appropriate to do so. The elements considered are primarily those which comprise the form: duration of stylistic writing, texture, and tonality. One other factor, which influences balance and is not necessarily a formal element, is the location and relative impact of the points of climax. It is the collective impact of these elements that creates balance.

The discussions of the composer's compositional techniques are, for the most part, purely objective. However, when it seems appropriate, the author states certain inferences which are his own. These deal with the

following: (1) musical elements and techniques which the composer seems to stress or avoid, (2) influences which seem to bear on the composer, and (3) musical elements or techniques which seem particularly weak or strong.

Anticipated Rehearsal Problems (With Some Suggested Solutions)

After the detailed analysis is given, rehearsal procedures are suggested for each composition. Certain anticipated problems are discussed, and some possible solutions are presented. These problems may be for either the conductor, the choir, or both. The difficulties include the following: (1) singing correct pitches, (2) singing correct rhythms, (3) interpreting certain rhythmic and textual accents, (4) observing certain variations of established melodic or rhythmic patterns, (5) obtaining the proper balance between vocal lines, and (6) conducting certain difficult passages. The particular difficulties, which are discussed, are directly related to the analysis.

CHAPTER III

PROCEDURES OF ANALYSIS

Tonality

The names of all tonalities for each of the six compositions appear in three locations in this study. These three locations are (1) on the score in Volume II, (2) on the abstracted harmonic analysis in Volume I, and (3) in the formal analysis.

The determining factors in naming the tonalities are harmony and nonharmonic tones, cadences, scales, form, duration, and the subjective aural effect of the music. The name of the key is given, followed by a colon. Capital letters indicate major tonalities and small letters indicate minor tonalities. When the music is modal, the name of the mode follows the letter name.

Harmony

A complete harmonic analysis appears in two locations. An analysis appears in the published score of each of the six compositions included in this study. This analysis includes tonalities, Roman numerals, root names, and labeled

nonharmonic tones. The six scores are bound in the supplementary volume. An abstraction of this analysis also appears in the main volume. The purpose of the second analysis is to show more clearly the root motion of consecutive chords. An attempt is made to analyze all vertical sonorities with traditional nomenclature. In some few instances traditional names and/or symbols may seem unusual, but it is the unusualness which reveals the more contemporary or non-traditional features of the harmony.

Chord Symbols

Each chord has two separate symbols. A Roman numeral is used showing the relationship of the root of the chord to the tonal center, and a letter name is given identifying the pitch of the root. The Roman numerals are placed above the letter names.

When certain chords or chord progressions seem ambiguous, an alternate analysis is given on manuscript following the abstracted analysis in Volume I. Each of these chords or passages is fully stated in condensed score with the alternate chord symbol and nonharmonic tones given. The ambiguous factors allowing for the various harmonic interpretations are then discussed.

Triad qualities.--Major triads are indicated with upper case Roman numerals, minor triads with lower case Roman numerals, diminished triads with lower case Roman

numerals which are followed by a small superscript circle, and augmented triads with upper case Roman numerals which are followed by a plus sign. Examples of all four triad symbols are illustrated below in the key of C major.

major:	I = C, E, G C
minor:	ii = D, F, A D
diminished:	vii^{o} = B, D, F B
augmented:	V+ = G, B, D# G

Seventh chords.--Seventh chords are defined as four-tone tertian chords. They are distinguished from triads with nonharmonic sevenths by (1) the longer duration of the sevenths and/or (2) the simultaneous resolution of the roots and sevenths.

Seventh chords are indicated with the Arabic numeral seven following the Roman numeral and letter name. Major sevenths and diminished sevenths are indicated by "M" and "^{o}," respectively, following the seven. A minor seventh is indicated by seven alone. These three symbols are illustrated below in the key of C major.

triad with major seventh:	I7M = C,E,G,B C
triad with diminished seventh:	vii^{o7o} = B,D,F,Ab B
triad with minor seventh:	V7 = G,B,D,F G

Ninth chords.--Ninth chords are indicated with the addition of the Arabic numeral nine following the Roman / numeral and letter name. A nine followed by a small "m" indicates minor; a nine alone is understood to be major. Sevenths are usually present, and they are also indicated. These symbols are illustrated below in the key of C major.

minor ninth and minor seventh:	V^{9m}_{7} G	= G,B,D,F,Ab
major ninth and minor seventh:	V^{9}_{7} G	= G,B,D,F,A
major ninth and major seventh:	I^{9}_{7M} C	= C,E,G,B,D

Eleventh chords.--Eleventh chords are indicated with the Arabic numeral eleven following the Roman numeral and letter name. An eleven followed by a plus sign is augmented; an eleven alone is understood to be perfect. The presence and qualities of sevenths and ninths are also indicated. Structures are considered to be eleventh chords when the following conditions are present: (1) the harmonic eleventh is spaced near the top of the structure, (2) the harmonic seventh and ninth are present, and (3) the seventh is present but the fifth and ninth are not. Eleventh chord symbols are illustrated below in the key of C major.

perfect eleventh, major ninth, and minor seventh:	vi^{11}_{7} A	= A,C,E,G,B,D

augmented eleventh and minor seventh: $\underset{D}{ii^{11+}_{7}} = D,F,C,G\#$

No thirteenth chords were found in any of the compositions analyzed.

Augmented sixth chords.--The German augmented sixth chord is indicated by its real root and followed by a "G." There are no Italian or French chords in the six compositions analyzed. The symbol for the German sixth is illustrated below in C major.

German: $\underset{F\#}{\#iv^{G}} = F\#,Ab,C,Eb$

Tall tertian harmonies (seventh, ninth, and eleventh chords), complete or incomplete, are distinguished from added tone chords and polychords in the following ways. Extended thirds are often considered "active" tones and require special melodic resolution while added tones usually have a static quality. This static quality is generally created by the lack of melodic resolution of the added tones, its placement at a cadence, or its formal location which contains similar vertical structures. The upper tones in tall tertian chords, ninths and above, are often placed high in harmonic structures while added tones may appear anywhere in the structures. Tall tertian harmonies function and resolve as a single entity while polychords may not. The chords comprising the polychords usually move, function, and

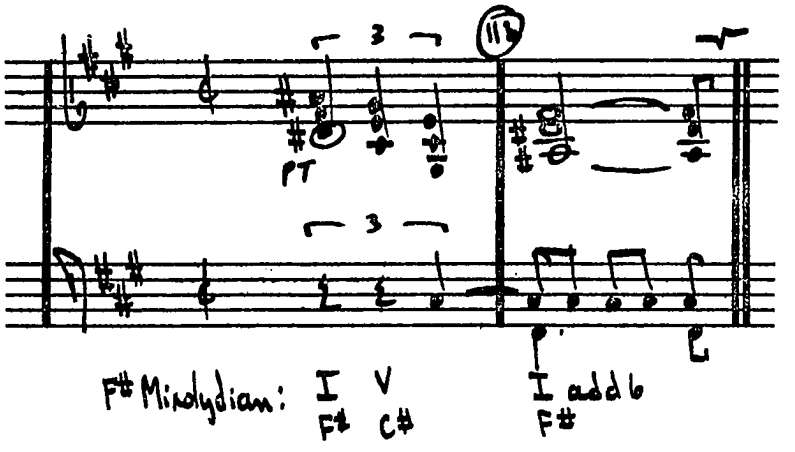
resolve independently. The single chords comprising poly-chords are often widely spaced. This is not the case with tall tertian chords.

Added tone chords.--Added tone chords are indicated with the word "add" and the number of the interval formed by the root and the added tone, i.e., "2," "4," or "6." An "add2" or "add6" followed by a small "m" is minor, and an "add2" or "add6" alone is understood to be major. An "add4" followed by a plus sign is augmented, and an "add 4" alone is understood to be perfect. A chord may have more than one added tone. Examples of these symbols are illustrated below.

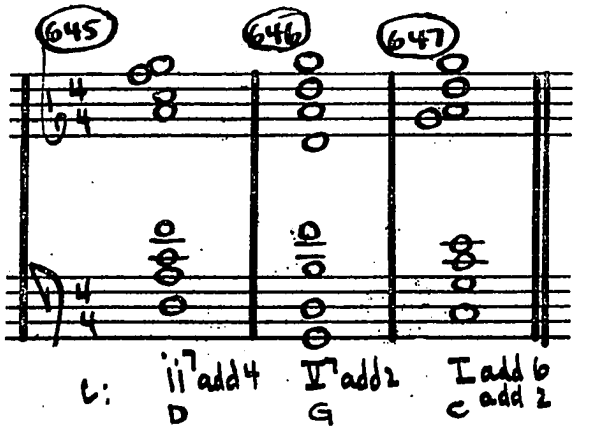
Example 1. "Brazilian Psalm"



Example 2. "Brazilian Psalm"

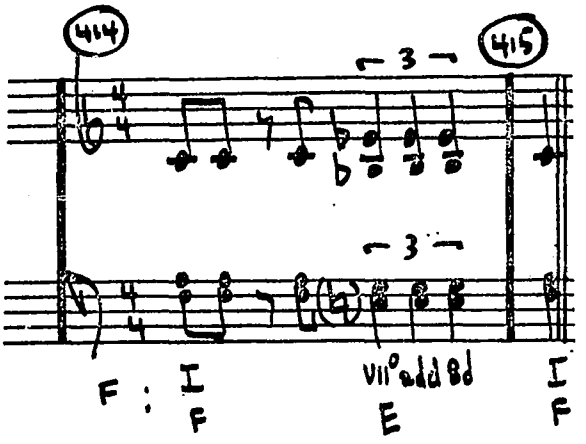


Example 3. "The Fiery Furnace"



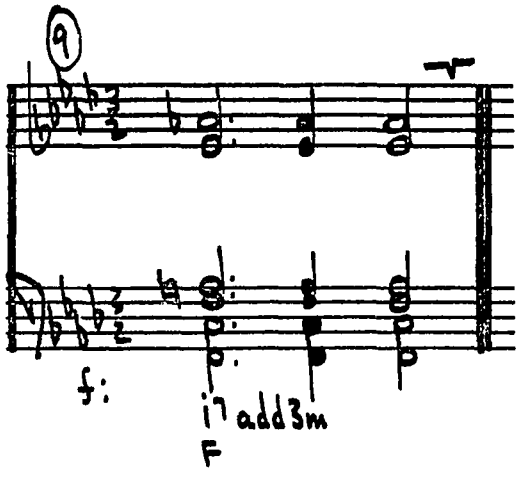
Diminished triads with diminished octaves are symbolized with "add8d" following the Roman numeral.

Example 4. "The Fiery Furnace"



Chords with mixed thirds (containing both major and minor thirds) are analyzed as having added thirds. The quality of the third, which is implied by the Roman numeral, is determined by its diatonic placement in the scale.

Example 5. "De profundis clamavi"



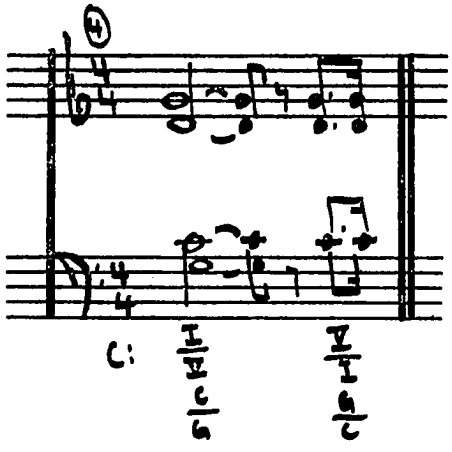
Polychords.--Polychords (or superimposed triads) are given two separate Roman numerals and two separate letter names. One example is illustrated below.

Example 6. "Brazilian Psalm"



Quartal and quintal harmony.--Nontertian chords such as quartal and quintal harmony are analyzed as superimposed incomplete (omitted thirds) triads even though they function as single chords. Such chords are given two Roman numerals and two letter names, and each pair of symbols is separated by a horizontal line. These symbols should not be confused with "secondary" type chord symbols often used by theorists. One such symbol is illustrated below.

Example 7. "The Fiery Furnace"



All quartal and quintal chords are also included in the alternate harmonic analysis where they are classified according to the three major premises of chord analysis of Paul Hindemith.[1]

Inversion symbols.--Inversions are indicated by Arabic numbers arranged vertically and to the right of the Roman numeral and below any added tone symbol. These numbers give the numerical intervals formed by the bass tone with all other tones. All compound intervals are reduced to simple ones. The interval numbers do not indicate in any way the quality of the intervals or the chords. Inversions are only shown for triads, seventh chords, and added tone chords.

Triad inversions are indicated by 6 and $\frac{6}{4}$ for first and second inversions. Seventh chord inversions are indicated by $\frac{6}{5}$, $\frac{4}{3}$, and $\frac{4}{2}$ for first, second, and third inversions. When added tone chords are inverted, the added tone is not included in the inversion symbol. When the qualities of the harmonic sevenths, ninths, and added tones are not understood, it is necessary that their qualities be shown above the inversion symbol. One such example is illustrated below in C major.

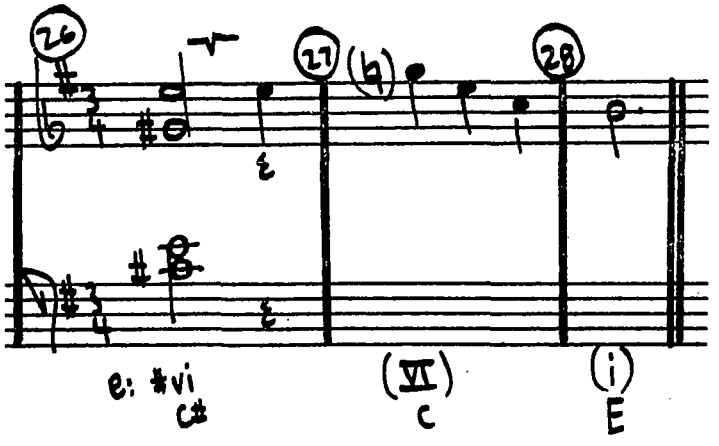
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[1]Paul Hindemith, Craft of Musical Composition, Vol. I (New York: Associated Music Publishers, Inc., 1937), pp. 94-95.

minor triad with added minor sixth, entire chord in first inversion:	iii add6m = E,G,B,C 6 E

Implied harmony.--Textures, which are composed of only one or two lines, have chord symbols in parentheses indicating the implied harmony. One such example is illustrated below.

Example 8. "The Eyes of All Wait Upon Thee"



No harmonic implication.--Monophonic passages which are very ambiguous or which have no harmonic implication are not analyzed harmonically. In such passages only the tonal center(s) are indicated.

Summary.--Each chord symbol indicates the following: (1) the relationship of the chord root(s) to the tonal center, (2) the quality of the triad, (3) the relationship of the roots of superimposed chords, (4) the presence and qualities of any extended thirds past the triad, and (5) the

presence and qualities of any added tones. The first three factors are expressed by the Roman numeral(s) and root name(s) of each chord. The remaining two factors are expressed by the Arabic numbers and other symbols which follow the Roman numeral(s) and root name(s).

Nonharmonic Tones

A complete analysis of all nonharmonic tones is included on the scores in the supplementary volume. Each of these tones is circled and labeled with an abbreviation.

A nonharmonic tone is defined as any tone which is not considered a part of the vertical chord structure. These tones are not indicated in any way by chord symbols. The nonharmonic tones which are included are listed, abbreviated, and defined (according to melodic approach and resolution) below.

1. Passing tone, (P.T.): approached by step upward or downward) and resolved by step in the same direction.

2. Auxiliary tone, (A.T.): approached by step (upward or downward) and resolved by step in the opposite direction.

3. Appoggiatura, (App.): approached by leap (usually upward) and resolved by step (usually in the opposite direction).

4. Escape tone, (E.T.): approached by step

(usually upward) and resolved by leap (usually in the opposite direction).

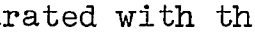
5. Pedal tone, (Ped.): approached by the same pitch and resolved by the same pitch.

6. Changing tones, (C.T.): two separate pitches a melodic third apart, approached and resolved by step.

7. Suspension, (S.): approached by the same pitch and resolved downward (usually by step).

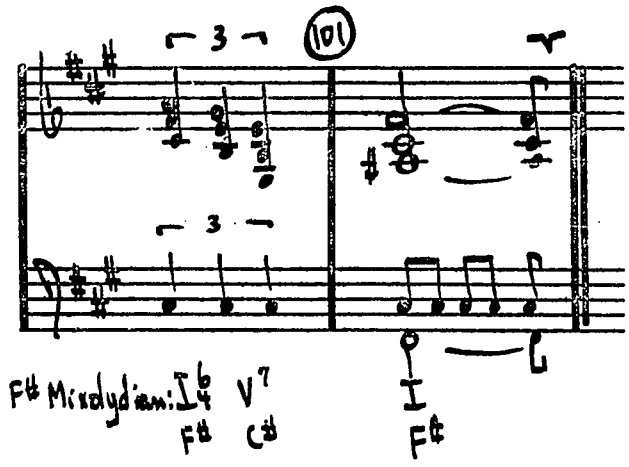
8. Anticipation, (Ant.): approached by step and resolved by the same pitch.

Cadences

In both the score and the manuscript analysis phrases are separated with the symbol  , and cadences are labeled on the manuscript analysis. Traditional names are used, despite some contemporary additions to or substitutions of established formulas. The cadences which are included are listed, abbreviated, defined, and illustrated below.

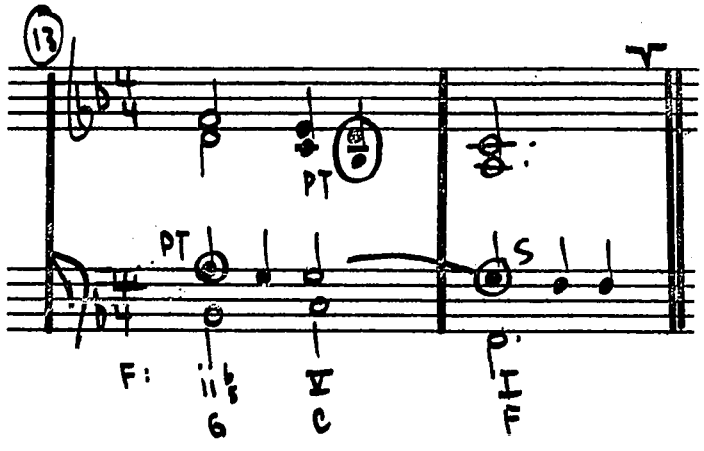
1. Perfect authentic, (P.A.C.): chord progression--dominant to tonic, with roots in the bass in both chords and in the soprano in the cadence chord.

Example 9. "Brazilian Psalm"



2. Imperfect authentic, (I.A.C.): chord progression--dominant to tonic, with at least one of the root placements listed for P.A.C. changed.

Example 10. "A Rose Touched by the Sun's Warm Rays"

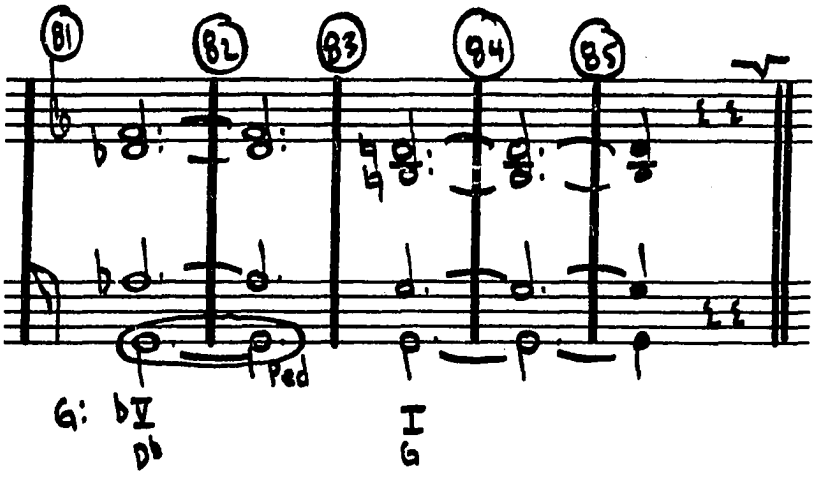


Certain chords which serve the same function may be substituted for the dominant in either the perfect or imperfect authentic cadence.

Example 11. "Brazilian Psalm" (P.A.C.)

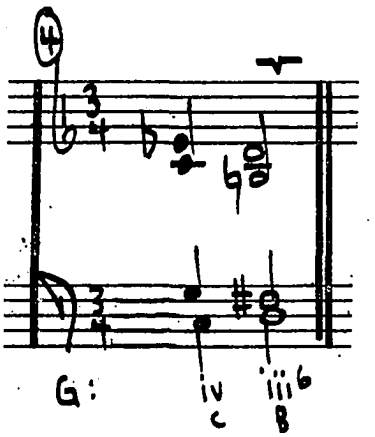


Example 12. "Pater Noster" (I.A.C.)



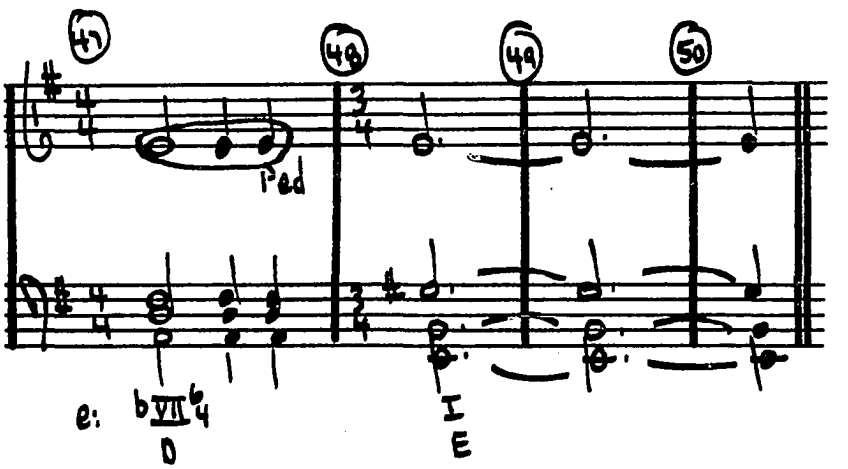
3. Authentic half, (A.H.C.): any cadence ending with the dominant chord or a dominant substitute.

Example 13. "Pater Noster"



4. Perfect plagal, (P.P.C.): chord progression--subdominant (or subdominant substitute) to tonic, with roots (or implied roots) in the bass in both chords and in the soprano in the cadence chord.

Example 14. "The Eyes of All Wait Upon Thee"



5. Imperfect plagal, (I.P.C.): chord progression--subdominant to tonic with at least one of the root placements listed for P.P.C. changed.

Example 15. "Brazilian Psalm"



6. Plagal half, (P.H.C.): any cadence ending with the subdominant chord.

Example 16. "Brazilian Psalm"



7. Deceptive, (D.C.): any cadence ending with the submediant chord, usually preceded by the dominant.

Example 17. "The Eyes of All Wait Upon Thee"



Form

Each of the melodic units is illustrated once on manuscript and labeled chronologically with small Arabic letters. Significant variations are shown on the formal diagram by separate letters. Major variations and deviations of earlier units are regarded as having significant distinctions from the original to merit a different formal designation.

The formal analysis for each composition illustrates the following: (1) where each formal "section" begins, (2) where each phrase begins and ends, (3) the length of each phrase, (4) the specific musical unit used in each phrase, (5) the reuse and modification of musical units, (6) the tonalities throughout, (7) the homophonic (or monophonic) and polyphonic sections, and (8) the number of measures in each section and in the entire composition.

Formal Sections

The sections are represented sequentially by upper case Roman numerals. A section is defined as a large formal division. Each section ends with a relatively strong cadence, and each begins with new musical material or new treatment of old material.

Phrases

Phrases are indicated by straight horizontal lines with the cadences marked thus: ——v—— . A phrase is defined as a melodic unit which exhibits some degree of completeness, comes to a point of relative melodic and rhythmic repose, and is terminated by a cadence. Phrases are often characterized by the following: (1) an increase in harmonic rhythm before the cadence, (2) a longer tone at the cadence, (3) a rest after the cadence, (4) the end of a melodic curve, and (5) a time limit of twelve seconds.

The measure numbers in which each phrase begins and ends are given above the horizontal line between the indicated cadences and are illustrated thus: v5——8v . The exact beat of a measure is not indicated. The length of each phrase is given below the horizontal line between the indicated cadences is illustrated thus: v——4——v.

Musical Units

The specific musical unit (represented by small letters) which is used in each phrase is given above the

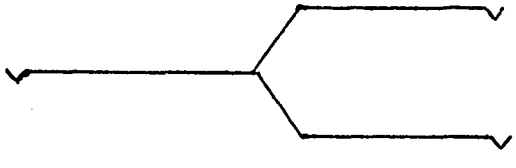
horizontal line and between the indicated phrases. These musical units are the same as those illustrated on manuscript preceding each formal analysis. When a unit is modified, each new treatment of the idea is marked sequentially with numbers following the letter. These musical units may be illustrated thus: a a^1 b.

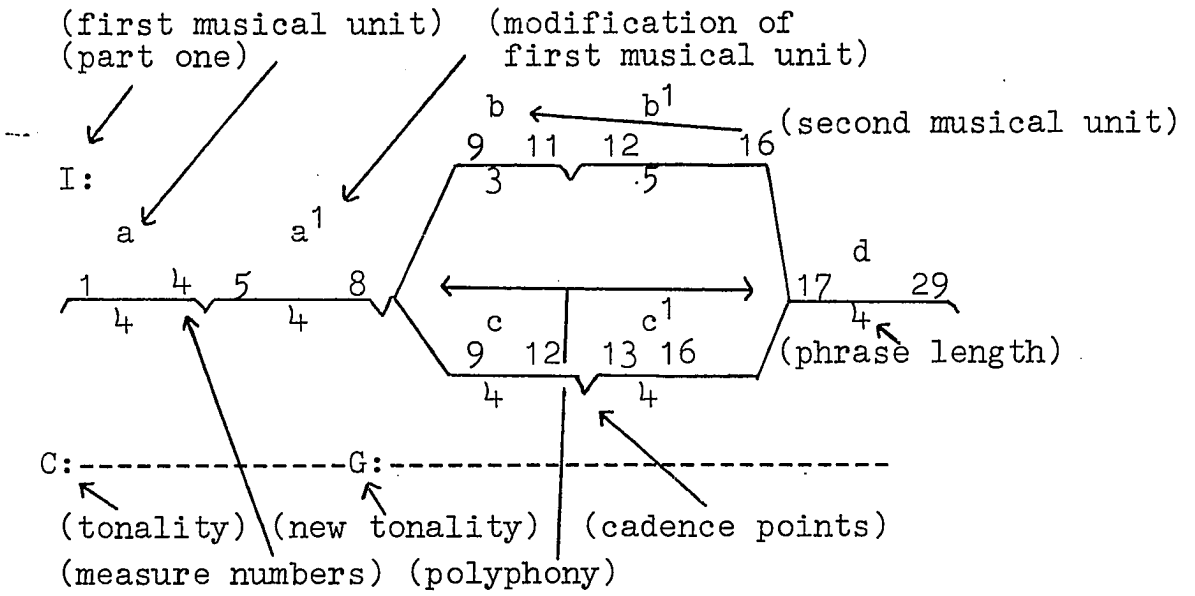
Tonal Centers

The tonalities are given before the horizontal line begins in the same manner they are given in the harmonic analysis, i.e., large letters for major, small letters for minor, and modal names when appropriate. The key name is followed by a colon and a dotted line which either continues to a new tonal center or to the end. The tonal centers may be illustrated thus: C:------a:-------C:-----.

Textures

Homophonic and monophonic textures are indicated by one horizontal line, and polyphonic textures are indicated by the number of lines necessary to show the proper number of independent melodic lines. When changing from one texture to another, the horizontal lines will divide and combine at the proper points. A homophonic texture followed by a polyphonic texture may be illustrated thus:





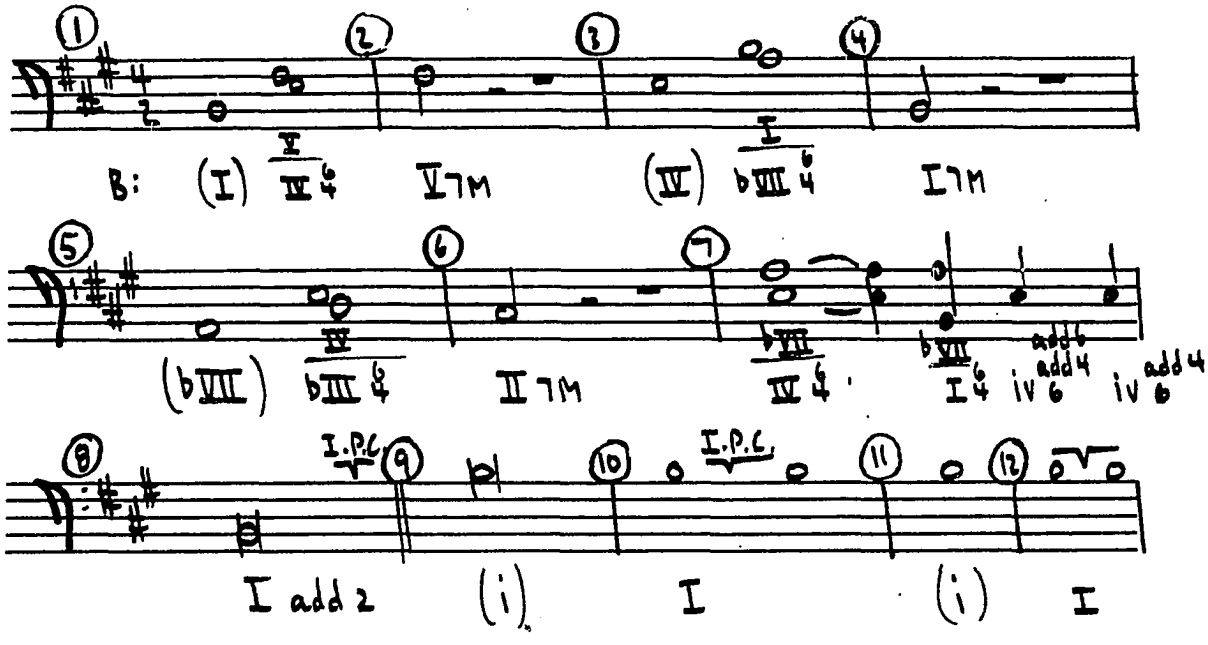
Scales

When the scale basis for any portion of a composition is anything other than major or minor, the actual scale is illustrated on manuscript. The illustrations include the name of the scale, the actual scale notation, and the measure numbers where the scale basis is used.

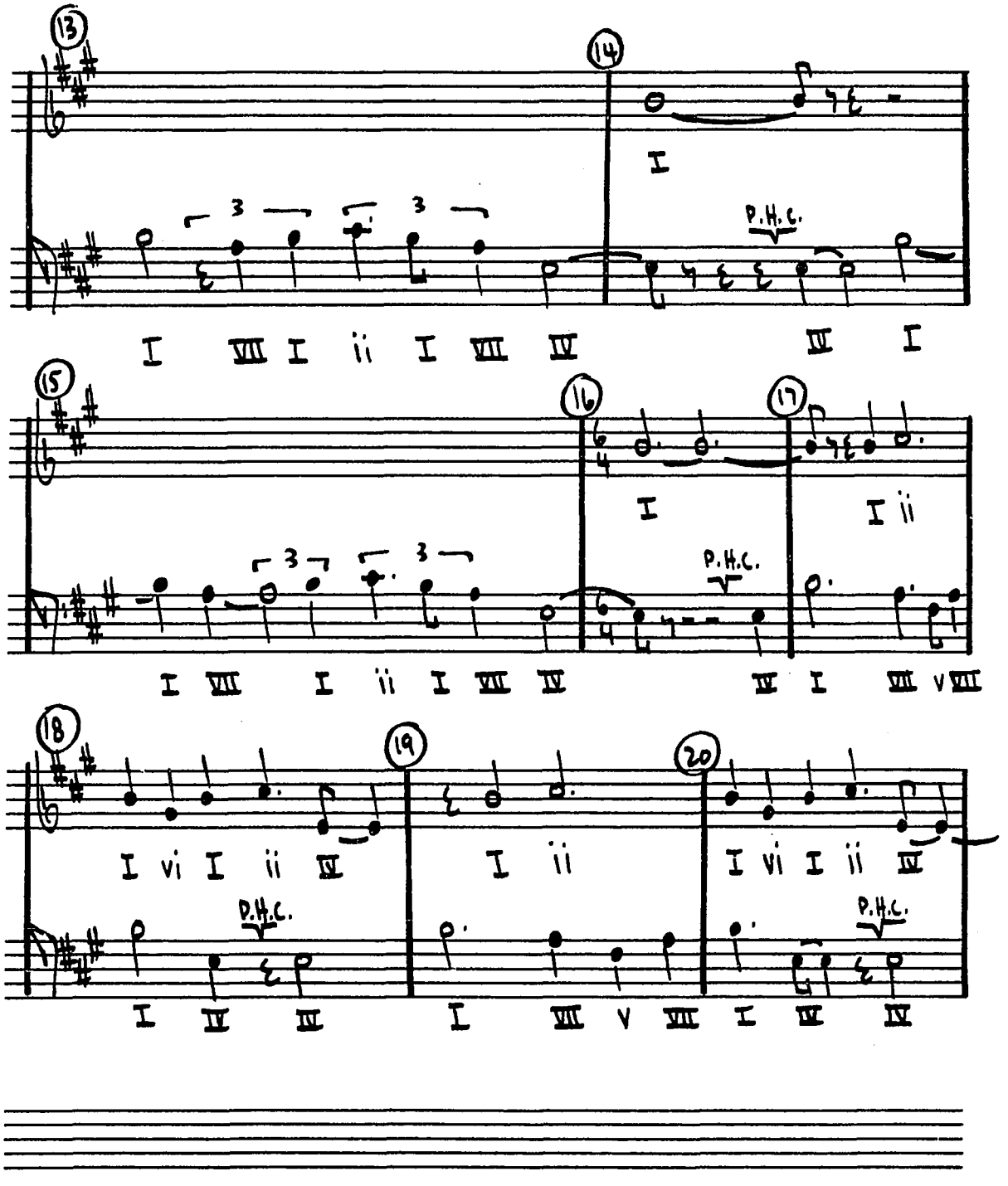
CHAPTER IV

BRAZILIAN PSALM[1]

Harmonic Abstract



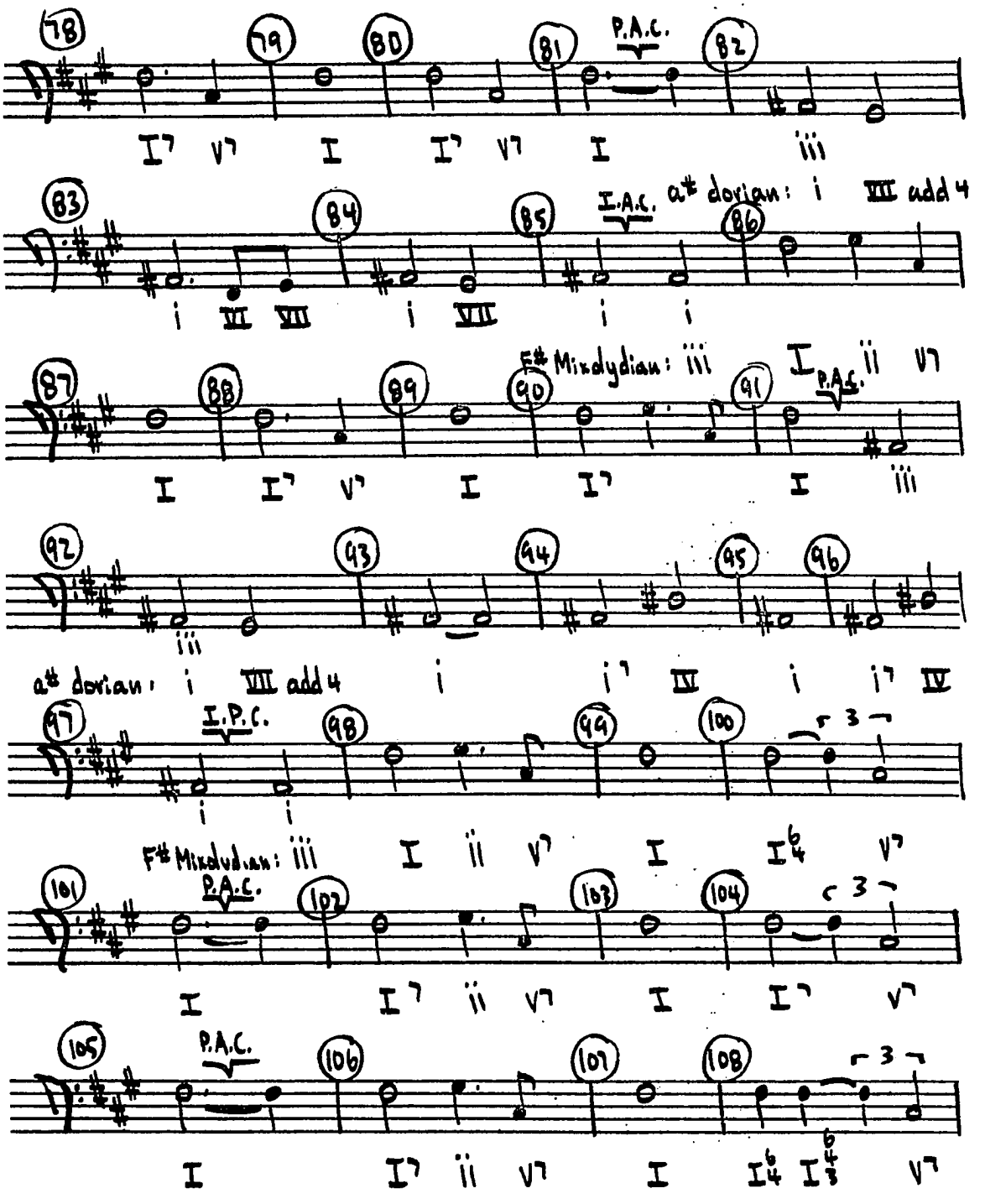
[1]Used by permission, G. Schirmer, Inc., New York, 1941.


13
14
I
P.H.C.
I VII I ii I VII IV
IV I
15
16
17
I
I ii
P.H.C.
I VII I ii I VII IV
IV I VII V VII
18
19
20
I vi I ii IV
I ii
I vi I ii IV
P.H.C.
P.H.C.
P.H.C.
I IV IV
I VII V VII I IV IV


21
P.H.C.
22
A.H.C.
3
VII bVII V
bVII VIII i VII bVII V
A.H.C.
3
VII i bVII VII i VII bVII V
23
24
A.H.C.
3
VII bVI VII
I VII I c#: i VII VI V
A.H.C
3
VII i VII i
ii
c#: i VII VI V
I
25
26
27
Homophonic .....
VI V VI
VII VI
VI
VI VII
VI VII i f#: V VI


28
Homophonic
29
30
P.A.C.
I VII v VII I IV
III V7 I B mixolydian: I ii I vi I
P.H.C.
31
32
P.H.C.
P.H.C.
P.H.C.
I VII v VII I IV IV
ii IV IV ii I vi I ii IV
33
34
35
46
P.A.C.
Melodically Conceived
VII7M V7 III7M I add 2


47
48
49
f#: V VI V IV V VI V IVadd6 V VI
50
51
52
53
V III V VI V IV V iv7 V V iv V (ii07)
54
A.H.C.
55
56
57
ii07 V add2 F# Mixolydian: V7 I V7 I
58
59
P.A.C.
60
61
62
I V7 I iii iii
63
I.P.C.
64
65
66
67
P.A.C.
a# dorian: i IIIadd4 i i IV
F# mixolydian: iii I V7 I I V7 I
68
69
70
71
P.A.C.
72
I7 V7 I I7 V7 I iii iii
73
74
75
I.P.C.
76
77
a# dorian: i IIIadd4
i i IV i i
F#Mixolydian: iii I V7 I


78
79
80
81
P.A.C.
82
I7 V7 I I7 V7 I iii
83
84
85
I.A.C.
a# dorian: i III add 4
86
i VI VII i VII i i
87
88
89
90
F# Mixolydian: iii
91
I P.A.C. ii V7
I I7 V7 I I7 I iii
92
93
94
95
96
iii
a# dorian: i III add 4 i i7 III i i7 IV
97
I.P.C.
98
99
100
3
i i
F# Mixolydian: iii I ii V7 I I6 4 V7
101
P.A.C.
102
103
104
3
I I7 ii V7 I I7 V7
105
P.A.C.
106
107
108
3
I I7 ii V7 I I6 4 I6 4 3 V7


109
P.A.C.
110
111
112
3
I
I ii V7 I I V
113
P.A.C.
114
115
116
3
I add 6
I7 ii V7 I I 4/3 V7
117
P.A.C.
118
119
120
3
I
I7 ii V7 I I 4/3 V7
121
122
I.A.C.
V7
I7 add 2

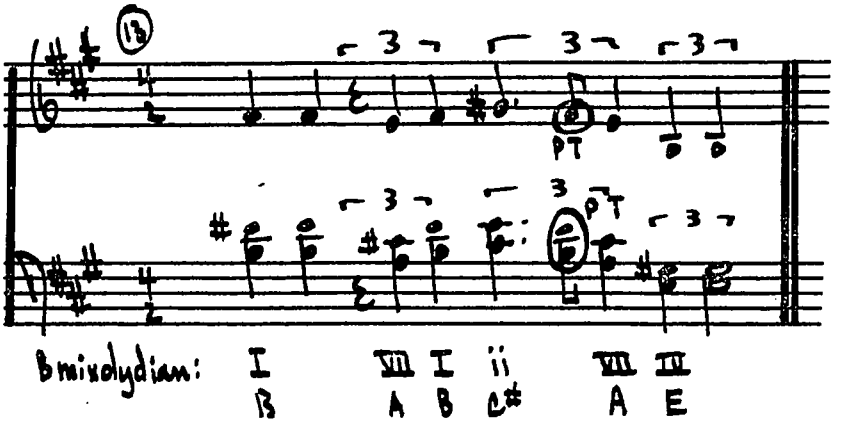
Alternate Harmonic Analysis

Example 18.



All of the above structures are identical in construction and are classified in the Hindemith system as "III 1." The chords contain seconds and sevenths but no tritones, and the roots and bass tones are identical.

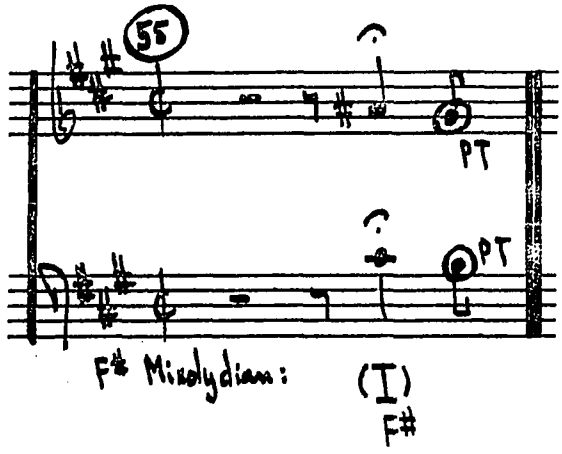
Example 19.



Between measures 13 and 25 there are several triads which are relatively short, rhythmically. At these points each of the triad tones within each line may appear to be a passing tone or some other nonharmonic tone. Since the harmony is entirely parallel, these triads may be interpreted as triple passing tones.

Measure 13, illustrated above, contains triple passing tones in the third beat. Measures 15, 22, 23, 24, and 25 also contain similar sounds.

Example 20.



The pickup notes in the allegro may be heard as having an implied tonic sound instead of dominant. The harmony is somewhat ambiguous with only two vocal lines present. If either the tonic or leading tone were present, the chord would be easier to classify. The tonic could confirm the I chord or the leading tone could establish the V chord.

The factors favoring the primary analysis are: (1) The harmonic rhythm with a chord change at the bar line is stronger than a repeated chord, (2) the preceding chord is a C# major (with an added second) which has the same root as the dominant in the F# tonality and (3) in measures 85 and other similar measures the leading tone is present in an inner voice giving it a dominant sound.

Both of the vertical sounds are sustained, giving each more emphasis. The result may be two implied chords instead of one. If this is the case, the third possible analysis is I_4^6 - V^7.

To further compound the ambiguity of the pickup notes, they are treated differently when the other vocal lines are added. In some phrases they are sounded over a double tonic-dominant pedal and in others as part of the mediant triad.

Example 21.



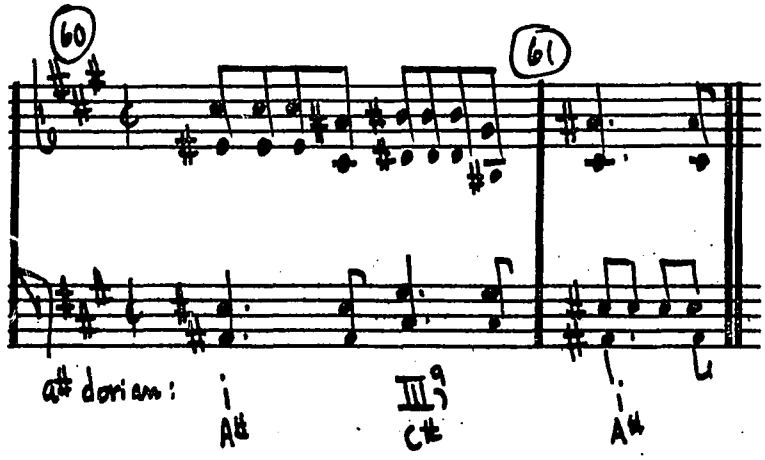
On the third and fourth beats the "G#" and "B" may be heard as the root and third of the ii chord and the "E" and "G#" as third and fifth of the v chord. The "F#" and "C#" form double pedal tones.

Another possible analysis is to name only the tonic chord in measures 56 and 57. The nonharmonic tones in the alto and tenor lines would then be changing tones.

The tempo may have some effect on the harmonic interpretation. A slow tempo would favor the alternate analysis. A very fast tempo would favor the second alternate. A moderately fast tempo (the one given) favors the primary analysis.

With the addition of the second alto line in measure 86 the harmony is not as ambiguous since there are three voices instead of two over the double pedal. In this measure the chords heard are I-ii-v^7 as in the first alternate analysis.

Example 22.



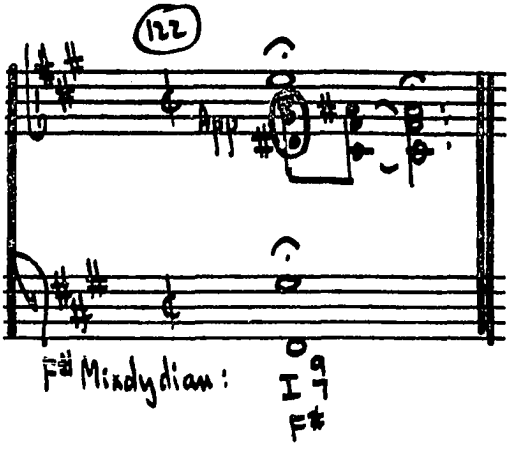
On the third and fourth beats of this measure the chord may be interpreted as a ninth chord constructed on "C#" with an omitted third.

The primary analysis, though somewhat unusual, has two strong arguments favoring it over the alternate. In measure 82, where the tonal center, harmony, and formal structure, are identical or similar to the one above, the chord is the VII triad built on G#. This is the same chord named in the primary analysis for measure 60 except that the added tone, the "C#" in the bass, is not present.

In the primary analysis of measure 60, the "C#" is called an added tone even though it is the lowest tone sounding. It might better be called a nonharmonic tone, except for the fact that it does not conform with any conventional definition of nonharmonic tones.

The baritone and bass lines move almost entirely in parallel fifths. The "G#" in the baritone line is harmonic, but the "C#" in the bass is present only because it is a fifth below. In other words, this tone is melodic, not harmonic, and it seems to have no bearing on the harmonic analysis. This same chord is also used in measures 72 and 92.

Example 23.



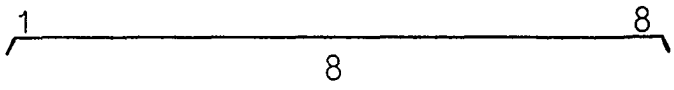
The tones in the final chord in this composition may be rearranged to form an F# ninth chord. The naming of the "G#" in the baritone determines the true name of the chord. In the alternate analysis the "G#" is the harmonic ninth of the ninth chord. In the primary analysis the "G#" is the added second.

The placement of the "G#" in the vertical structure is more like that of an added tone than a harmonic ninth. Ninths usually appear near the top of chords and rarely below the root. In this chord both conventions are violated. The "G#" is second lowest of six tones and below the root, the "F#" in the alto.

Major chords with added seconds are also found in measures 8, 34, and 54. Each of these chords ends a large formal division of the entire composition. It then seems consistent that the final formal division as well should close with a chord with an added second.

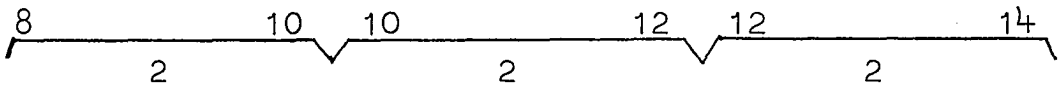
Formal Diagram

I (Introduction)

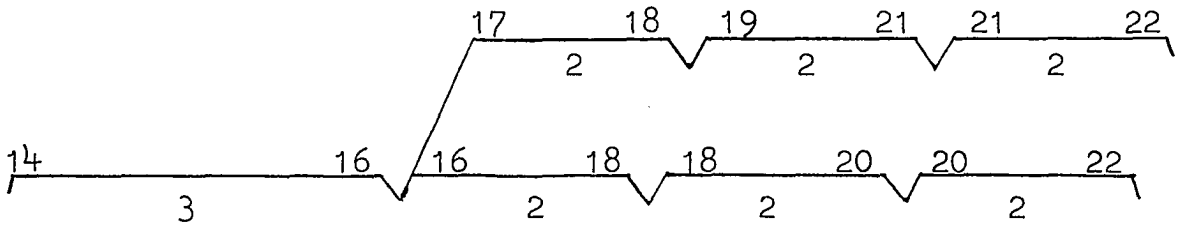


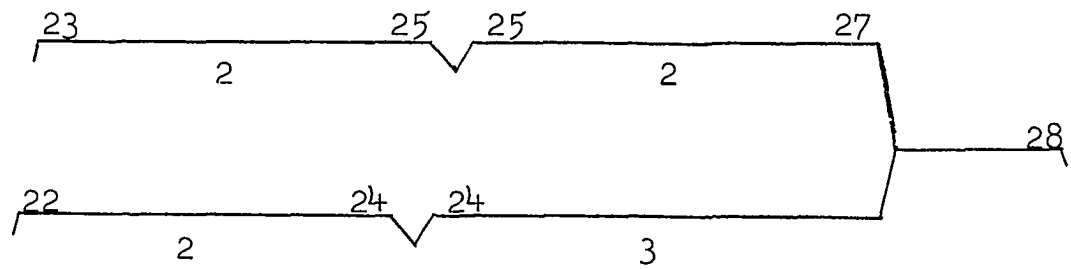
B:----------

II

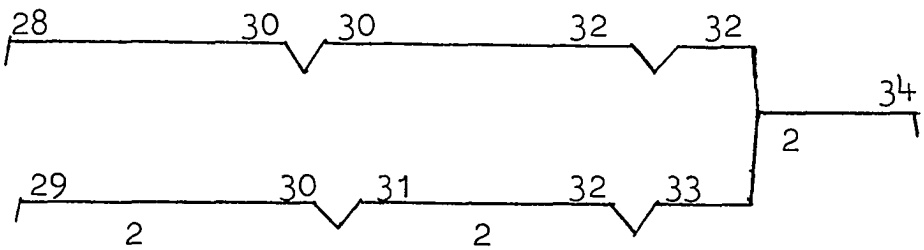


B mixolydian:----------



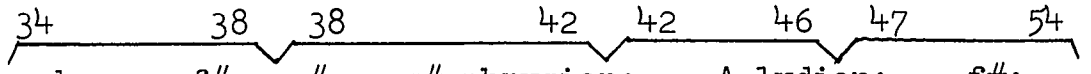


----------c#:----------f#:----



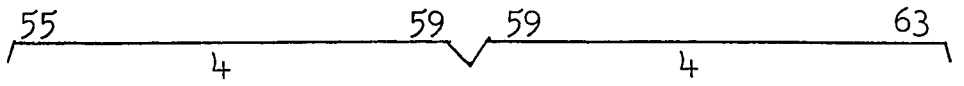
B mixolydian:----------

III

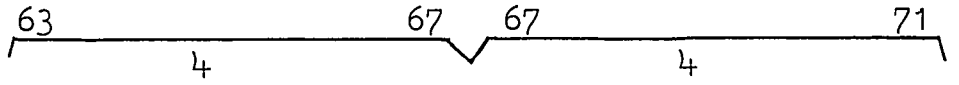


b:-----f#:--c#:---g# phrygian:----A lydian:----f#:------

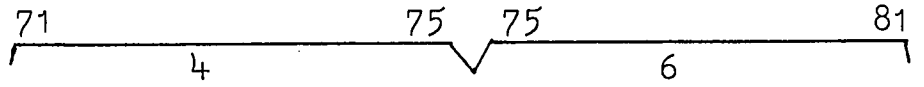
IV



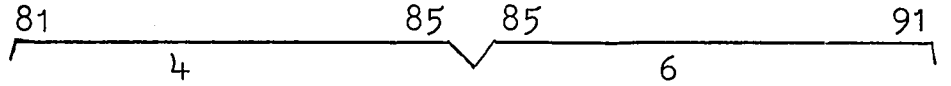
F# mixolydian:----------a# dorian:----------



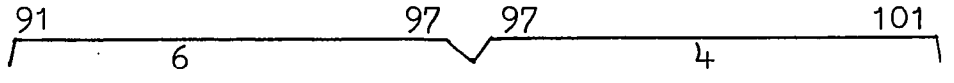
F# mixolydian:----------



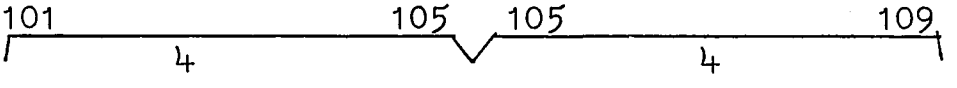
a# dorian:---------- F# mixolydian:-------

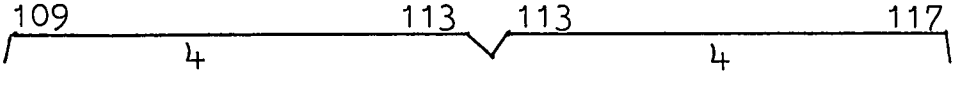


a# dorian:---------- F# mixolydian:-------



a# dorian:---------- F# mixolydian:-------





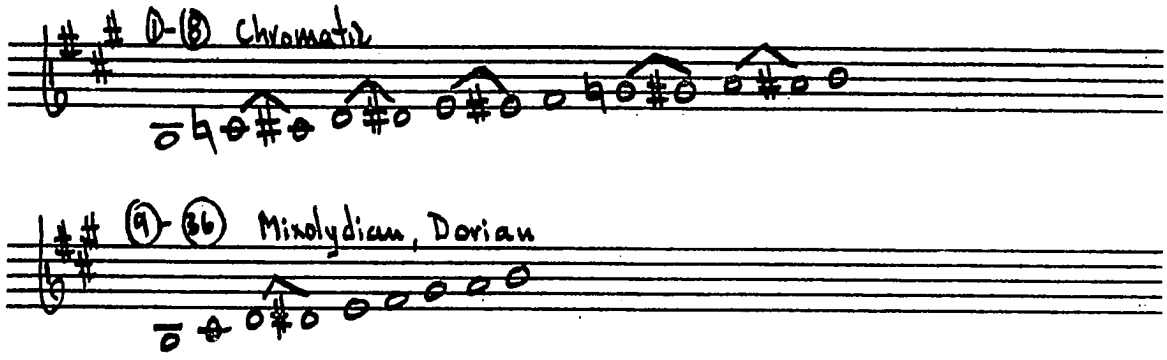
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117 122
5

Section I	8 measures
Section II	26
Section III	20
Section IV	68
Total	122

In the above formal analysis the phrases are not labeled with letters because the letters would confuse rather than clarify the relationships between phrases. The reason for this is that nearly all of the phrases are variations or transformations of the tenor line in measures 8 through 10. The chart on unity and variety shows how the many phrases relate to the original line.

Scale Bases




37 Aeolian
38 Aeolian
39-42 Phrygian
43-46 Lydian
47-54 Minor
47 54 Modified Phrygian (Alternate)
55-59 Mixolydian
60-63 Dorian

Compositional Techniques

Harmony

Chord types.--The entire "Brazilian Psalm" includes a variety of chord types. From the beginning it is seen that the harmony will be one of the interesting elements of the composition. The first eight measures contain nontertian chords, major major seventh chords, and added tone chords.

Nontertian chords are found in two places. In measures 1 through 6 a harmonic sequence occurs with nontertian chords and major major seventh chords alternating. The sequence of root movement is broken when the chord in measure 6 is constructed on "C#" instead of "E." Each of the nontertian chords contain four tones with only one imperfect consonant, a major sixth. The predominant intervals are fifths, fourths, major seconds, and major ninths. Each of these vertical sounds contains the roots and fifths of three triads whose roots are a fifth apart. The first measure contains "B," "E," "F#," and "C#," the roots and fifths of the tonic, subdominant, and dominant triads. The other nontertian chords in the introduction are identical or similar in construction.

Nontertian sounds also occur between measures 43 and 46. These vertical sounds are quite different from those in the introduction. Whereas the chords in the beginning are vertically conceived, these sounds are melodic

developments of fourths and fifths with the upper and lower pairs of voices centering around separate pitches. In the upper voices the melodic and harmonic intervals gravitate around "G#" and "D#" forming fourths and fifths. The lower voices form continuous parallel harmonic fifths, "E" - "B" and "A" - "E." When the upper pair and lower pair of lines are combined, harmonic major sevenths, minor seconds, and augmented fourths result at different points giving the passage a somewhat more dissonant effect than the introduction.

Chords with different added tones are used in several places and in different ways. The last two chords in measure 7 contain added tones, and each is an E minor triad in first inversion. The first has an added fourth and an added minor sixth. The second contains only an added fourth.

The cadence chord in the next measure is a B major triad with an added second. Similar chords are found in measures 34, 54, and 122. Each of these are also major chords with added seconds and each is used as a cadence chord.

The most common added tone chord used by most composers is the major triad with an added sixth. In this composition only one occurs and is found in measure 113.

Although a number of less common chord types are used, most of the chords are simple triads and seventh chords in root position. One distinguishing feature of the

harmony is the relative absence of the major minor seventh chord which, when it appears, is used in a free manner. This common chord type is used only on the tonic but it is not treated as a secondary dominant seventh of the subdominant. In the F# tonality in the allegro, the soprano obligato contains "E♮" over the F# tonic triad in several places as in measure 68. In combination this tone and this triad form an F# major minor seventh chord, but the "E♮" (the harmonic seventh) is not treated as an active tone. This can best be seen in the last three measures where the "E♮" has the effect of an inverted pedal tone. This tone is never resolved and sounds until the very end.

Another noteworthy feature of the harmony is the use of polychords occurring between measures 16 and 32. Both chordal lines are diatonic, are in the same tonality, and include only major and minor triads. Much of the sound of these passages will not be characteristically polychordal because of the presence of so many common tones in the simultaneously sounded triads. The polychordal effect is more obvious when there are no common tones and/or when there is some chromatic cross relation within the triads. Measures 20 and 22 show these two contrasting relationships.

Nonharmonic tones.--Conventional nonharmonic tones are used freely in this composition. The most obvious and effective device used is the tonic-dominant double pedal beginning in measure 56. The presence of parallel triple

passing tones creates an effect of a "passing chord" in such places as the third beat of measure 13. (See the alternate harmonic analysis for this measure.)

Scale influence.--The tonalities at times are somewhat ambiguous. The factors contributing to this are the following: (1) the music is modal; (2) some of the music is bimodal; (3) the modes change at various points; (4) there are at times no conventional harmonic cadences establishing a tonality; and (5) the tonal center changes several times.

The modes which are used are mixolydian, dorian, aeolian, lydian, and phrygian. At a few points harmonic minor and major are briefly included. The short introduction includes every tone in the chromatic scale. Characteristic chords resulting from the various modes are minor dominants, Neapolitan chords, subtonic chords, major subdominants (with minor tonics), and major tonic chords with minor sevenths.

Because of some chromatic variance, tonalities at times may fluctuate between two modes. Beginning in measure 9, the B tonality alternates between mixolydian and dorian because of the third of the scale which alternates between "D♮" and "D#." A similar situation exists between measures 47 and 54 where all of the tones in F# minor and F# major are found. Also the F# mixolydian harmony is mixed with F# major when the "E#" is added beginning in measure 85.

Harmonic rhythm.--The harmonic rhythm is in some ways similar to the melodic rhythm. Both are irregular from the beginning to measure 34, and both have a more predictable movement from that point to the end.

In the introduction a harmonic rhythm of one chord per measure generally prevails although the melodic rhythm, tempos, and fermatas tend to disguise the harmonic rhythm.

Within the second large formal division (measures 9 through 34) the bar line has little or no effect on chord changes. The frequency of chord changes, which is determined by the parallel melodic movement, is irregular. In the canonic section each chordal line begins and cadences at different points in the measure, often on weak beats.

Beginning in measure 35 (the third large formal division) the harmony changes become more regular, and the frequency of chord changes is slower than in the previous sections. In measures 39 through 46, there are no harmonic cadences, but the repeated sonorities and melodic rhythm help identify the metric organization. In the passage from measure 47 to 52, each measure begins with a C# major triad even though some measures contain several different chords.

Within the entire composition, the harmonic rhythm is the most regular in the allegro which is characterized by chord changes on strong beats. There are usually one or two chords per measure.

Root movement and cadence harmony.--The kinds of root movement in the harmony varies considerably within the composition. In the first eight measures there is a strong plagal character which results from a predominance of bass movement by descending fourths.

Beginning in measure 13 the music is horizontally conceived. Since the texture is that of parallel triads, the root movement is the same as the melodic movement. This effect is very much like ancient parallel organum which is a series of harmonic fourths or fifths moving in parallel motion with unison rhythm. Another similarity between this passage (measures 13 through 15) and organum is the prose effect in the melodic rhythm. In measure 47 another passage begins with parallel chords and root movement by seconds.

The root movement from measure 55 to the end is more conventional than the other sections within a modal context. Because of the more simple chord types, the conventional root movement, the regular harmonic rhythm, and harmonic repetition, the entire harmonic effect in the allegro section is the most traditional of the entire composition.

Most of the harmonic cadences bear some resemblance to traditional formulas. The chord types are sometimes unusual, but the root movements are quite conventional.

The plagal cadence is used in two variations. The first occurs across the bar line at measure 8 where the

harmony is iv add$^{4}_{6}$ - I add2. The root movement is the conventional descending fourth, but the subdominant is in first inversion, and both chords have added tones. The other variation of the plagal cadence is found in measures 63, 75, and 97. The progression is IV - i. The major subdominant and the minor tonic are a result of the dorian mode.

Each appearance of the plagal half cadence is different as it is used in measures 13, 18, and 20. The cadence chord in each case is the IV chord, but the chords preceding are VII, I, and ii respectively. The harmonic cadences are merely results of the parallism in the melodic lines.

The authentic cadence is used in measure 28 and several times in the allegro (measure 59 and others). In each of these cadences it is seen that the composer avoids the more conventional major dominant seventh chord (V^7) and substitutes the minor dominant seventh (v^7). In measure 33 the VII^{7M} chord is substituted for the v^7 in an authentic cadence. Both the v^7 and VII^{7M} chords are modal.

The first two phrases after measure 9 contain only the tonic chord. At their cadences the harmony changes from the minor tonic to the major tonic, changing the mode from dorian to mixolydian.

Tonal centers.--In several places the tonal centers are subject to aural interpretation. The first of these is

the cadence in measure 28 where the F# major triad may be heard as a new tonic chord or as the dominant in the previously established B tonality.

The tonal centers between measures 35 and 46 may theoretically be B minor, F# minor, C# minor, G# phrygian, and A lydian, because the melodic lines contain these tones at strong rhythmical points. However, since there are no cadences or conventional chords, no one pitch seems to predominate.

As stated earlier the passage between measures 47 and 54 has all the tones in both F# major and F# minor. Another interpretation is possible. The tonality may appear to be modified C# phrygian. This effect is caused by the placement of C# triads at the beginning of most measures and the presence of so many D (Neapolitan) triads. Phrygian tonic triads are conventionally minor, but in this passage the presence of the "E#'s" make it major.

The primary analysis of F# minor is weakened by the absence of its tonic chord, but the final two chords in measure 54, $g\#^{o}{}_{5}^{6}$ and C# add2, form a strong half cadence in the tonality.

Melody

Scale bases.--Most of the melodies in this composition are modal and diatonic, and the lines are predominantly conjunct although the range is often wide. The two melodic passages which are somewhat chromatic are the introduction

and the four measures beginning at 47. The chromaticism in the introduction is caused by the strict harmonic sequence. The lines beginning in 47 alternate between F# minor and F# major.

Melodic intervals.--Most of the melodic lines are conjunct, but there are several passages where fourths and fifths are common. They appear in the chordal lines beginning in measure 12 and the measures between 35 and 46.

Phrase lengths.--Nearly all phrases have a regular length of four measures (or two measures in a slower tempo). Beginning in measure 35, there are no clearly defined phrases because of the over-lapping lines and the absence of harmonic cadences. However, the lines seem to be grouped in four-measure patterns with a new treatment of the melodic motif beginning every fourth measure. This continues through measure 54 where there is finally a definable cadence.

The only clearly defined phrases which are not two or four measures in length are found in the allegro. These phrases are six measures long and are composed of three two-measure motifs.

Parallelism.--There is a great deal of parallelism and melodic doubling. The most obvious parallism begins in measure 13 where the upper three and lower three lines form parallel triads.

Beginning in measure 47 there is melodic doubling at the octave (first soprano with first tenor and second soprano with second tenor), parallel thirds (first soprano with second soprano and first tenor with second tenor), and parallel triads (alto, tenor, and bass).

Beginning in measure 55 the alto and tenor lines form parallel sixths. In the next measure the baritone and bass lines form parallel fifths. First and second altos move in parallel sixths beginning in measure 82, and the first and second sopranos move in parallel thirds beginning in measure 93.

There are other passages which contain parallel melodic motion, but the harmonic intervals do not remain constant. The first of these passages is found between measures 39 and 46. The other begins in measure 82 where the upper three lines move in similar motion.

Rhythm

There are two extremes in the melodic rhythm in this composition. There are sections where the rhythms and meters have a free effect, and there are other sections where it is more precise.

The first effect is created from the beginning where the tempo is marked "molto largo." In the first eight measures there are four fermatas and an accelerando. At measure 9 the tenor solo enters marked "quasi recitativo," which adds a chant-like effect to the music. The beat and

meter seem obscure beginning in measure 12 due to the effect of the syncopation, triplet quarter notes (containing dots, ties, and rests), ties across the bar lines, meter changes, tempo changes, polyrhythms, and ascending melodic intervals on various beats of the measure.

The opposite effect of more clearly defined rhythms and meters begins in measure 35 where longer note values are on the strong beats and are approached by leaps from below. The natural accents in the text correspond with the accented beats and are sustained to emphasize the beat groupings in the meters.

The natural effect of the meter in the allegro is sustained throughout even though there are several devices which could have weakened it. Syncopation is used a great deal, but rarely does it disguise the first beat of any measure. Triplet quarter notes are utilized nine times and often superimposed over the regular rhythms, but they always begin on the resolve to strong beats. Rhythms receiving special attention, such as the dotted eighth and sixteenth notes in measure 72 and the sixteenth and dotted eighth notes in measure 84, usually occur on strong beats. Another factor which reinforces the regular meter is the presence of long tones beginning on the first beat in many of the measures.

Counterpoint

Several contrapuntal sections are included in this composition. The first begins with the pickup notes to measure 17. At this point the male voices begin a canon with the female voices following one beat later. The second entrance in measure 17 is at the ninth and is tonal. Their rhythmic entrances are reversed in measure 28, and the male voices answer the female voices at the seventh.

Beginning with the pickup notes to measure 35 each of the vocal lines has a short motif. This motif is based on the tenor line in measure nine but with the deletion of some tones and a change of rhythm. As each successive voice enters, the motif is restated in a new tonality with a real answer.

Beginning with the pickup notes to measure 39, the motif is developed further for four measures with the upper pair of voices stating it in two-voice counterpoint. The intervals are changed slightly and the rhythms in the two lines are reversed. On the first beat the soprano rhythm is  and on the second it is . In the alto line, it is the opposite.

soprano: 

alto: 

The bass and tenor lines then present a tonal answer at the ninth with a one measure time interval. These two measures are repeated with no variation.

Beginning with the pickup notes to measure 43 the motif is reduced to its first two pitches. The lower voices continue with the tonal answer, but the time interval is reduced to half a measure. This stretto effect continues for two measures after which the two-pitch motif is rhythmically modified and stated in diminution. The lower voices continue to answer, but the baritone and bass divide with a mirroring effect.

There is another short canonic section beginning in measure 47 and continuing for four measures. The sopranos and tenors have a short motif derived from measure 35. It is stated twice in parallel thirds. Each statement is answered harmonically by the other voices with a tonal answer and a one-measure time interval.

The remaining contrapuntal device is the recurring soprano obligato used in the allegro. It forms free counterpoint with the other voices and has a much slower melodic rhythm.

Unity and Variety

Source	Unifying compositional elements	Location of reuse	Variance
1	chord type	3, 5	change of root and voicing
2	chord type	4, 6	change of root and voicing

Source	Unifying compositional elements	Location of reuse	Variance
8	chord type at end of formal section	34	change of voicing
		54	change of root and harmonic function
		122	change of root, voicing, and dynamics, harmonic seventh added
8(4)-10(3)	melody	10(3)-12(2)	change of rhythm
		12(3)-14(1) (T)	change of rhythm and intervals, rests added, harmony added
		14(2)-16(1) (T)	change of intervals and rhythm
		16(6)-18(4) (T)	change of rhythm and intervals, deletion of tones, canon begun, change of meter
		17(3)-18(6) (S)	change of rhythm and intervals, deletion of tones, change of register
		18(5)-20(4) (T)	change of rhythm and intervals, deletion of tones
		19(2)-21(2) (S)	change of rhythm and intervals, deletion of tones
		20(5)-22(7) (T)	change of rhythm, intervals, and melodic curve
		21(3)-22(7) (S)	change of rhythm, intervals, and melodic curve

Source	Unifying compositional elements	Location of reuse	Variance
		22(4)-24(7) (T)	change of rhythm, intervals, melodic curve, and tonality
		23(3)-24(8) (S)	change of rhythm, intervals, melodic curve, and tonality
		28(9)-30(5) (S)	change of rhythm and intervals, deletion of tones
		29(3)-31(2) (T)	change of rhythm and intervals, deletion of tones
		30(6)-32(5) (S)	change of rhythm and intervals, deletion of tones
		31(3)-38(3) (B)	change of rhythm and intervals, deletion of tones
		32(6)-34(4) (S)	change of rhythm and intervals, deletion of tones, change in melodic curve
		34(6)-36(2) (T)	shorter duration, change of rhythm and meter
		35(6)-37(2) (A)	change of rhythm, transposition, change of register
		36(6)-38(2) (S)	change of rhythm, transposition, change of register and tonality
		37(6)-39(1) (B)	change of rhythm, transposition, change of tonality

Source	Unifying compositional elements	Location of reuse	Variance
		38(6)-42(1) (SA)	change of rhythm, transposition, change of register, texture (polyphonic), and change of melodic curve
		39(6)-43(1) (TB)	change of rhythm, transposition, change of register and of melodic curve, tonal answer to measures thirty-eight through forty
		42(6)-45(2)	line reduced to its head, change in rhythm, melodic doubling at the fourth and fifth
		45(3)-46(4)	repetition of head, change in rhythm, doublings at fourths and fifths, melodic mirroring in bass
		46	
		46(4)-50(1) (SSTT)	new meter, change of rhythm, melodic doubling in octaves and thirds, change in melodic curve
		47(6)-51(1) (ABB)	change of rhythm and melodic curve, melodic doubling in parallel triads
		50(6)-52(2) (ST)	change of rhythm, reduced to the head, change of interval
		51(3)-52(5) (AABB)	change of rhythm, reduced to the head, change of interval

Source	Unifying compositional elements	Location of reuse	Variance
		52(6)-54(6)	change of rhythm, tones sustained, harmony added in descending arpeggio
		55(3)-57(2) (AT)	melodic derivation in direction of intervals
55(3)-59(3)	texture	67(3)-71(3)	soprano obligato added
	melody	75(3)-81(3) (AT)	syncopation added, phrase two measures longer
	texture and harmony	85(3)-91(3) (AT)	inner voice added (second alto)
	dynamics		change from "p" and "mf"
	melody		first use of triplet quarter notes
	melody	97(3)-101(3) (AAT)	first use of triplet quarter notes on the beats three and four
	melody	101(3)-105(3) (AAT)	change of pitches
	accompaniment	106-108 (BB)	unison rhythm, unison pitch
	melody	109(3)-113(3) (AAT)	change of rhythm, partially transposed (m. 112)
	harmony		harmonic sixth added to tonic chord (m. 113)
	tempo	177(3)-122	<u>ritardando</u> to <u>molto lento</u>

Source	Unifying compositional elements	Location of reuse	Variance
	dynamics		diminuendo to "ppp"
	melody	121	rests added
	harmony	122	triple appogiaturas and added harmonic second to tonic chord
59-63	texture	72-75	soprano line added
	melody (AT)		addition and deletion of notes, rests omitted
	accompaniment (BB)		rests added, first use of unison rhythm
	texture	81-85	addition of tenor obligato, voices crossed
	harmony		new bass tone (m. 82), new chord (m. 84)
	melody and accompaniment		partial exchange of rhythms
	dynamics		all voices louder: T "f" and others "mf"
	texture	92-97(3)	extended to eight vocal lines
	melody	92(2)-47)3 (S)	rests added, rhythm changed, transposed, parallel thirds
	dynamics		crescendo to "ff"
	phrase		extended two measures

Source	Unifying compositional elements	Location of reuse	Variance
	accompaniment (BB)		eighth notes added and contrasting rhythms (m. 92), syncopation added (m. 93), note values augmented (m. 94-97), doubling at unison and octaves only (m. 94-97)
	melody	96 (AAT)	eighth notes changed to quarter notes
(67-71)	melody	117(4)-122 (S)	extended to an unresolved dissonance

Tension and Release

A wide variety of musical devices are used to create tension and relaxation in the total composition. These devices include (1) relatively dissonant and consonant chord types, (2) a wide range of dynamics, (3) various textures (monophonic, homophonic, and polyphonic), (4) tempo and meter changes, and (5) voicing and range.

Tension in the introduction is created with chords, range, and dynamics. In the first two measures an arpeggiated nontertian chord resolves to a sustained major major seventh chord. The tension will probably seem greater in the first of these two chords even though the second contains the harmonic major seventh. The tension in the first measure is created both by the crescendo and by the entry of

the tones one at a time causing the vertical sonorities to become thicker and more dissonant. There are no harmonic thirds in this chord. The harmonic resolution to the second measure is similar to that in a plagal cadence because of the descending fourth bass movement ("B" descending to "F#"). The next two measures and the following two measures are similar harmonically in that the two chords in each pair are the same type as those in measures 1 and 2. However, the tension increases because of the rise in pitch in the upper voices. In measure 7 the dynamics increase, the tempo is reduced, the texture becomes thicker, all voices sing instead of hum, and the soprano line leaps to and from its highest tone. All of these elements come together on the last quarter note in the measure creating the climax for the introduction.

Beginning with the unaccompanied tenor line in measure 8, the tension is at a low point and then begins to rise. The harmonic rhythm is static and triads are added to the texture. In measure 13 the harmonic rhythm begins to accelerate and the melodic line is doubled. Polychords are then introduced gradually as the two chordal lines move canonically. In measure 17 there is a slight increase in tempo. The polychords become more dissonant in measure 22 because of the harmonic intervals between chords and the cross relation formed by the two chordal lines. A similar harmonic situation occurs in measure 24 but one whole step

higher. In measures 25 and 26 there are both an accelerando and a crescendo leading to a secondary climax in measure 27.

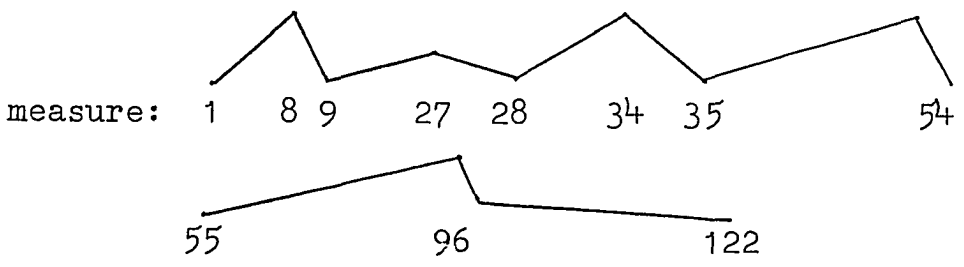
This secondary climax is immediately followed by a sudden reduction of volume, texture, and register and then a cadence. With the pickup notes to measure 29, tension begins to build again leading to a greater climax in measure 34 than that which occurred in measure 27. The dynamics increase from "f" to "ff" and then to "fff" in measure 33. At this point the soprano line begins to rise higher with a final ascending leap to the "B." The harmony at the cadence (VII^{7M} - I^{add2}) also helps to create the climax. Both of the final chords are somewhat dissonant. The VII^{7M} chord contains a harmonic major seventh, and the cadence chord contains the added second. The tempo is reduced before the cadence so each may receive more emphasis. In the last few measures leading to the climax the number of vocal lines increases from six to seven to nine.

Musical tension again begins at another low point following the climax in measure 35. The texture is reduced to single melodic lines and the dynamic level is "mf." Four measures later the texture is increased to two alternating pairs of melodic lines, and the dynamic level begins to rise. In measure 43 the rhythmic activity begins to accelerate and the vertical sounds become more dissonant. The texture becomes thicker, and the soprano and tenor lines become higher, thus creating greater tension. This tension is

sustained for several measures and finally leads to another climax in measure 54. This climax is created by (1) the long sustained "G#," (2) the staggered entrances of each vocal section, (3) the placement of the high tones in the vocal ranges of the sopranos, altos, and tenors, (4) the dissonant harmonic intervals formed in measures 53 (an augmented fourth with soprano and alto tones, and a major ninth with tenor and soprano tones), (5) the added tone, "D#," in the C# major chord of measure 54, and (6) the long silence which follows.

In the allegro section the one climax is in measure 96 on the second beat. The elements which build to this point are (1) the long gradual crescendo leading to the fortissimo dynamic level, (2) the highly placed tones in most vocal ranges, (3) the highest tone in the allegro, "A#," (4) the upward leap in most voices, (5) the slower tempo allowing greater vocal accents, (6) the eight-part texture, (7) the wide range from top to bottom, (8) the extension of the phrase, and (9) the sudden decrease in dynamics, range, and texture which follows.

The high and low points in musical tension throughout the composition may best be seen in the illustration below.



Total Balance

In spite of the fact that the harmonies, rhythms, textures, voicings, and tempos vary considerably within the total composition, there are certain elements which give a semblance of balance to the entire work. There is a type of formal balance from measure 8 through 54 and again from measure 55 through the end.

The melodic source for the entire work is the tenor line in measures 8 through 10. After this original monophonic statement, the line goes through several changes and the texture becomes polyphonic until the music reaches a climax and a strong cadence in measure 34. Beginning at this point the melodic line and texture are similar to the original source. They then begin to progress through another series of modifications until the music reaches another climax and strong cadence in measure 54. The original material, its melodic and textual variations, the partial return to the original material, and its second series of melodic and textual variations creates an A (monophonic) B (polyphonic) A' (monophonic) B' (polyphonic) type of balanced form.

The allegro section bears little resemblance to any of the preceding musical units. The recurring theme which begins in measure 55 is derived from the tenor line in measures 8 through 10; but the rhythm, texture, and harmony are quite different from all preceding material. This particular

section, which is also independently published, has a symmetrical balance of its own. The predominant tonality, F# mixolydian, and the dynamic level, "pp" begin and end the section. The other factor which contributes to symmetry is the climax point which is located near the mid-point.

Subjective Effect

The techniques employed in this work could reflect an influence of Brazilian folk music: Portuguese text, the modal scale bases, the melodic parallelism, and the dance-like rhythms in the allegro section.

The elements which seem deliberately avoided are certain chords such as the major minor dominant seventh, completely conventional cadences, and clearly defined tonal centers. The elements which seem to be emphasized are the characteristic modal tones in both the melodies and the harmonies.

Nearly all of this composition has a natural or folk-like character, but the one obvious exception is the relatively short introduction. These first eight measures, which are very chromatic and contain several contrived chords, establish an aural expectation of a synthetic or artificial framework for the remaining portions of the composition. The anticipated sounds are never heard. Instead, the listener hears chants, parallel diatonic triads, modal melodies, and dance rhythms.

Rehearsal Problems (with Some Suggested Solutions)

In the first eight measures the chord types as well as the poorly defined tonal center may present some problems with hearing the correct pitches. The chord types used are nontertian chords, major major seventh chords, and triads with added tones. If the major major seventh chords are difficult to perceive, the harmonic sevenths, e.g. the "E#" in measure 2, should be identified and perhaps added to the chord after the other tones have been sounded. The same may be true of the chords with added tones. The harmonic sevenths and added tones should present more of a problem when approached by a leap or sounded without any preceding tone.

Beginning in measure 9 the melodies and harmony are mainly diatonic but the tonal center may not be clear. The two predominant tones in the harmony and melody are "B" and "E." Normally these two tones would form a dominant-tonic relationship in an E tonality. However, in retrospect it is seen that the true tonic is "B" and the "E" is the subdominant.

In the soprano and alto voice of measure 13 the "F#" pickup note is to sound over an E major triad. The "F#" can be thought of as a second above the root of the E triad, or more properly the "F#" should be remembered as a tone in the B major triad which is sounded in the preceding and following measures.

The three part homophonic section in the lower three voices in measures 12 through 16 may present some rhythmic problems. The rhythms include the divided and subdivided beat, syncopation, ties across bar lines, superimposed triplets, and triplets containing rests and dotted notes. All of these must be interpreted in the quasi recitativo context which is indicated on the score.

Beginning in measure 14 and continuing through measure 32 the harmony becomes polychordal, with the upper three voices and the lower three voices each sounding independent major and minor triads. It should be noted that within each of the chordal lines all of the triads are in root position and the three vocal lines form parallel thirds and fifths consistently throughout the polychordal passages.

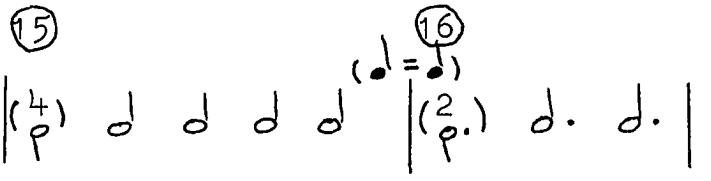
When combining the two chordal lines, attention should be given to the root relationships formed by the two triads sounding simultaneously. In some few instances the two triads have the same root; however, most of the combined triads do not. Much of the time the two triad roots are a third apart implying that the triads will have two common tones. In isolation two such triads combined sound like a seventh chord. For example, in measure 17 on the second beat the upper triad is a C# minor triad while the lower is an A major triad. The two common tones are "E" and "C#." When

all tones are sounded, the effect may be that of a major major seventh chord on A, i.e. A, C#, E, G#.

In some instances the two triads will have only one and sometimes no common tone. In measures 21 and 24 vertical cross relations are created between second alto and baritone lines. In measure 22 the simultaneous pitches are "A♮" and "A#"; in measure 24 they are "B♮" and "B#."

In the early rehearsals it is advisable to have the two chordal lines sing separately. The conductor should then identify specific pairs of pitches which may be difficult to perceive when the two chordal lines are combined. The "problem" tones are most likely these: (1) pitches forming a consecutive cross relation, (2) pitches forming a simultaneous cross relation cross relation, and (3) pitches forming dissonant harmonic intervals such as minor ninths.

At the bar line at measure 16 there is a meter change from $\frac{4}{2}$ to $\frac{6}{4}$. There are no markings to indicate tempo; however, it must be understood that note values remain constant which means that while the unit of value is changing from a half note to a dotted half note, the tempo must be reduced accordingly. The following illustration using alternate time signatures may help with the interpretation of the tempos and the units of value in measures 15 and 16.



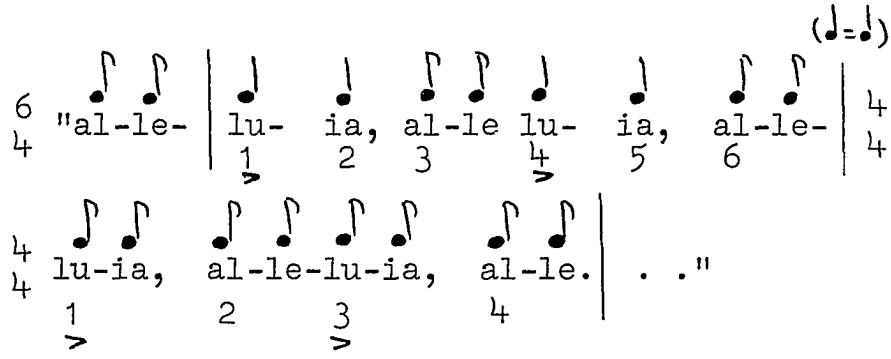
Meter changes such as the one at measures 22 should present no problem since the only change is the number of beats per measure not the tempo nor the unit of value.

On the last three quarter notes of measure 33 the soprano and first tenor lines form parallel sevenths with the baritone and bass lines. This may create some problem with finding the correct pitches, especially with the baritone and bass tones since they are approached without preparation.

In measures 39 through 46 the vertical sounds center on harmonic fourths and fifths. The top two lines and lower two lines should present no pitch problems when they are separated from one another, but they might do so when combined. The reason is that the upper voices center on the pitches "G#" and "D#" while the lower voices center on two different pairs of tones, "E" - "B" and "A" - "E." For example, in measure 39 on the third quarter note the upper voices sound "G#" and "D#" while the lower sound "B" and "E." On the next quarter note the lower voices change to "E" and "A." Each pair of voices should take care not to be "pulled off" their pitches by the other pair.

The metric change at measure 46 should be given special attention by the conductor because of the effect it

has on the accents in the meter. The note values remain constant, but the implied natural accents in the meters do not. In the illustration below the implied accents are marked (>) on the strong beats in each meter.



In measures 47 through 54 there are several pitches which may be difficult to perceive. Crossing the bar line at measure 47 the second tenor must leap upward from "B" to "E#," an ascending augmented fourth. The following interval is a descending augmented second which also appears in the second soprano line. The problem is compounded by the harmonic change at this point. The vertical structures change from mixed fifths to a C# major triad.

In measure 49 the first and second sopranos and first and second tenors must sing "A#" and "Fx" which is an alteration of the previous line sung in measure 47. These pitches are not particularly difficult, but it may be necessary to point out the differences in measures 47 and 49.

Within these same measures the alto line contains both "D#'s" and "D♮'s," the latter possibly difficult to sing. The first "D♮" appears in measure 51 creating a

melodic augmented second with the preceding and following "E#'s." The "D♮" in measure 53 is approached by the first and second altos with the descending intervals of an augmented fourth and an augmented second. To further complicate the singing of this tone it must form harmonically a compound augmented fourth with the soprano tone, "G#." The first chord in each of the five preceding measures is a C# major triad. The expected sound may be another C# sung on triad instead of the G# diminished chord.

Beginning in measure 47 there is a short canonic effect where the alto, baritone, and bass lines answer the soprano and tenor lines. The answer might appear at first to be a real answer at the octave, but the few differences in the two lines create a tonal answer.

Since the sopranos and tenors have triplet pickup notes to this measure (47), they have a different syllable on the down beat than do the altos and basses. This difference in the text setting continues to contrast the rhythms in each group of pickup notes. The pitches in the pickup notes also vary from each other.

The sopranos and tenors move in parallel thirds doubled at the octave. The other voices form parallel triads. There are also some differences in pitches: Measure 47 contains "D♮" in the second soprano and second tenor, and the alto line answers with "D#." As previously stated, measure 44 contains "A#" and "Fx" in the tenor and soprano

lines, and the alto and baritone lines answer with "A♮" and "F#." Since these two chordal lines contrast as they do, it is recommended that each be rehearsed separately beginning on the fourth beat of measure 46.

The tenor entrance in measure 43 may need special attention because of the intervals it forms with the upper pitches and the distance it is from them. The "F#" is theoretically the harmonic seventh of an incomplete G# half diminished seventh chord.

Baritones might miss the pitch of the "G#" in measure 54 by repeating the "F#" in the pattern established in measures 51 and 52. The wrong pitch would scarcely be noticed since both "G#" and "F#" are chord tones.

The time signature given at measure 55 is ¢ . Because of the tempo marking, allegro moderato, and the number of syllables per measure, a more accurate time signature would be $\frac{4}{4}$. The music beginning at this point has a dance-like character which often has an alla breve signature even though it is to be interpreted with four beats per measure.

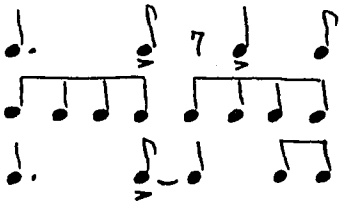
Beginning in measure 55 the alto and tenor lines move almost entirely in parallel sixths. In measure 85 the second alto adds an inner line which then created parallel triads in the two alto and two tenor lines. The bass and baritone lines in measure 56 begin moving almost entirely in

parallel fifths. Many times these pitches are nonharmonic tones such as pedal tones and passing tones.

The predominant scale basis beginning in measure 55 is the F# mixolydian mode. There may be a melodic problem caused by the lowered seventh scale degree, "E♮." In a few measures "E#" is used in an inner voice creating a major dominant. The natural melodic tendencies of these two tones are reversed. The "E♮" usually moves upward while the "E#" always descends.

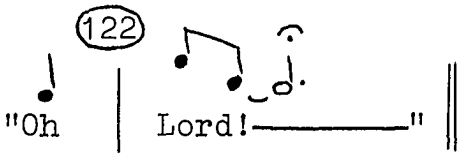
Careful attention should be given to the syncopated rhythms beginning in measure 56. Tones occurring on an after beat should receive special rhythmic attention and be clearly articulated. The notes which begin on an after beat and which need this attention include the following: (1) any note followed by a rest and (2) any relatively long note (a quarter note or longer). The illustration below shows the type of notes which need this attention.

(57)



One exception to this practice is caused by the text setting. When a syllable begins on a down beat and is sustained through a pitch change, the rhythmic emphasis should coincide with the beginning of the syllable. The soprano obligato line as in measure 69 and the moving lines in the last measure should have no syncopated accent. Any rhythmic

emphasis should be on the down beat. The illustration below shows where the emphasis should be placed.



The "B#" in the soprano line in measure 59 is a pitch which might be sung incorrectly because it does not belong in the F# mixolydian scale. The "B#" helps establish the A# dorian tonality beginning in the next measure. The same problem may exist in measures 71 and 91.

Four transient modulations to A# dorian begin in measures 60, 72, 82, and 92. The F# mixolydian and A# dorian are not relative modes; they have only four common tones. The "B#," "E#," and "Fx" belong only in A# dorian.

The bass tone on the second beat of measure 60 may present a pitch problem since this tone, "C#," is not part of the chord. (See the alternate harmonic analysis for this measure.) To correct any pitch problem, rehearse the upper two and lower two lines separately. The same vertical sounds are found in measures 72 and 92.

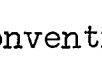
The tenor line in measure 62 contains an ascending augmented fourth, "C#" to "Fx." The "Fx" is a characteristic tone in the A# dorian scale and is foreign to the preceding tonality, F# mixolydian. The same augmented fourth is found in measure 96.

Most of the phrases in the allegro section are regular and are four measures in length. When memorizing

the music however, it is necessary to remember that there are three phrases with six measures each. They begin in measures 75, 85, and 91.

The first and second altos divide in measure 81 on the third beat. At this point the harmonic interval they form is a minor second. Attention should be given to the "E#" in the second alto line. The natural tendency of the singers may be to repeat the "E♮," a diatonic tone in the F# mixolydian mode.

A problem in balance may result beginning in measure 82 if the four accompanying voices (altos and basses) do not observe the dynamics. The marking for altos and basses is "m f." The tenor line marked "f" should be predominant for four measures.

The rhythm  is included in the allegro several times, but the more unconventional rhythm  is used once in measure 84. This rhythm is in the two alto lines and may need special attention in rehearsals.

As the main theme returns in measure 85, the second alto adds an inner line. The anacrusis notes in this phrase is the first place where the raised leading tone, "E#," replaces the "E♮" in the F# tonality. The two pitches alternate from this point to the end. In the F# tonality the "E#" is used only in the second alto line and only in the pickup notes to the phrases.

In the allegro, triplet quarter notes are used for the first time in measure 86. Since this rhythm is very similar to ♪ ♩♪, it is necessary to make a precise contrast in the two.

A problem with dynamics will probably be encountered in measure 97 as the dynamics change from "ff" to "p subito." Such an abrupt change is further complicated by the rhythmic placement of the "p" marking on an up beat. Another problem is the proper release of the sopranos and basses whose tones are sustained to different points.

The first alto line in measure 103 contains a "B#." This tone is an accidental and is foreign to the mode. Care should be given not to sing a "B♮," the diatonic tone.

The soprano obligato line is varied slightly in measures 107 and 108. The pitch on the fourth beat of the first measure and the pitch and rhythm on the first beat of the second measure are different from earlier statements of this melody.

The baritone entrance in measure 112 may present a rhythmical problem. In order to begin properly on the third of three quarter note triplets, the baritones should enter with the last note of the triplets in the upper voices.

A similar problem may be encountered in measure 120 where the basses and baritones must properly place the

second and third notes in triplet quarters. An upbeat eighth note is tied to the first note in the triplets. The second and third must be sounded simultaneously with the triplets in the upper voices.

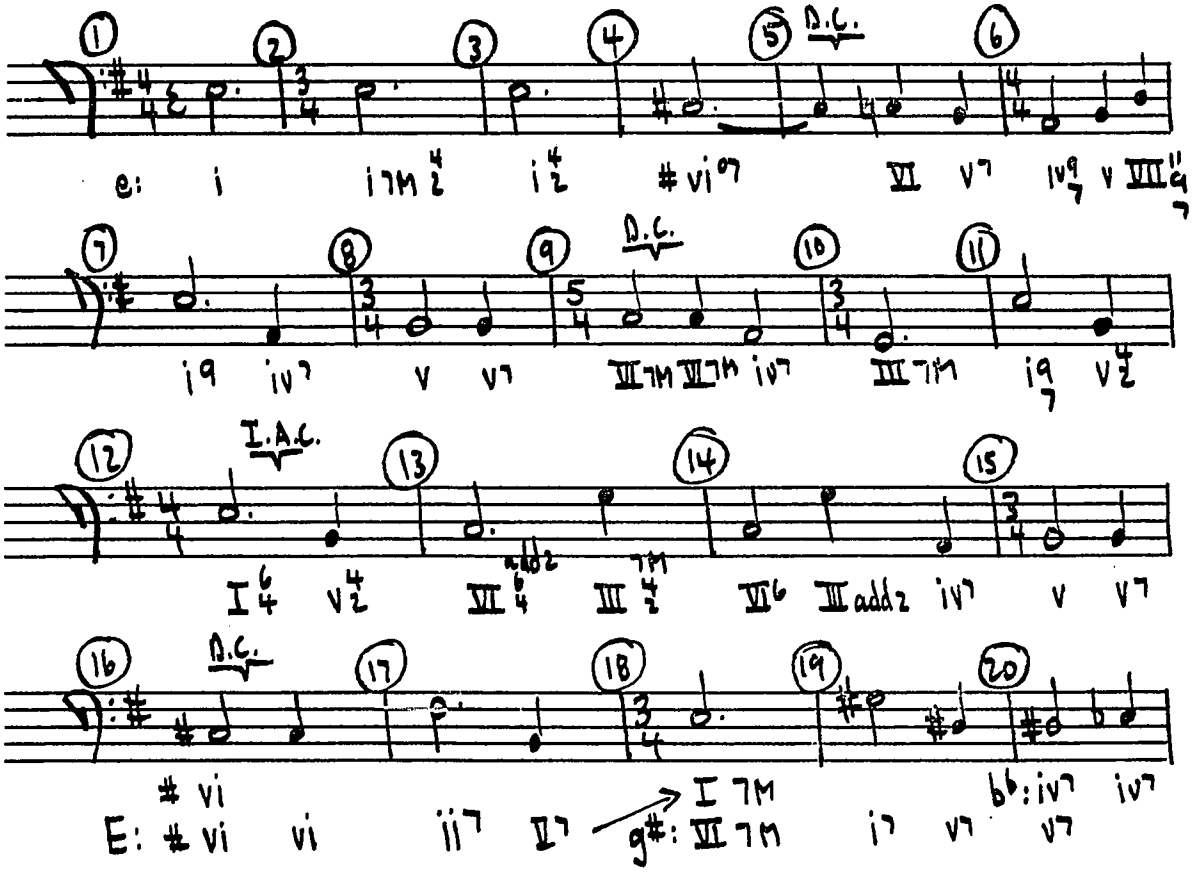
The natural tendency of baritones when singing the last two chords is to sing the roots of the two chords, dominant ("C#") and tonic ("F#"). However, the last tone is not the tonic but the added second in the chord, "G#." (See the alternate harmonic analysis for the last measure.) If the "G#" presents a pitch problem, the baritones may "find" the tone by first singing the root and then moving up a whole step to the added tone.

Throughout the entire composition there are several passages where a conductor may wish to re-assign voices for a more balanced sound. When either or both the female and/or male voices have three tone chords, re-assignment may strengthen or weaken appropriate lines. It may also seem advisable to have some sopranos sing the alto lines in the allegro especially where the altos divide and the sopranos are singing the obligato in a considerably higher register.

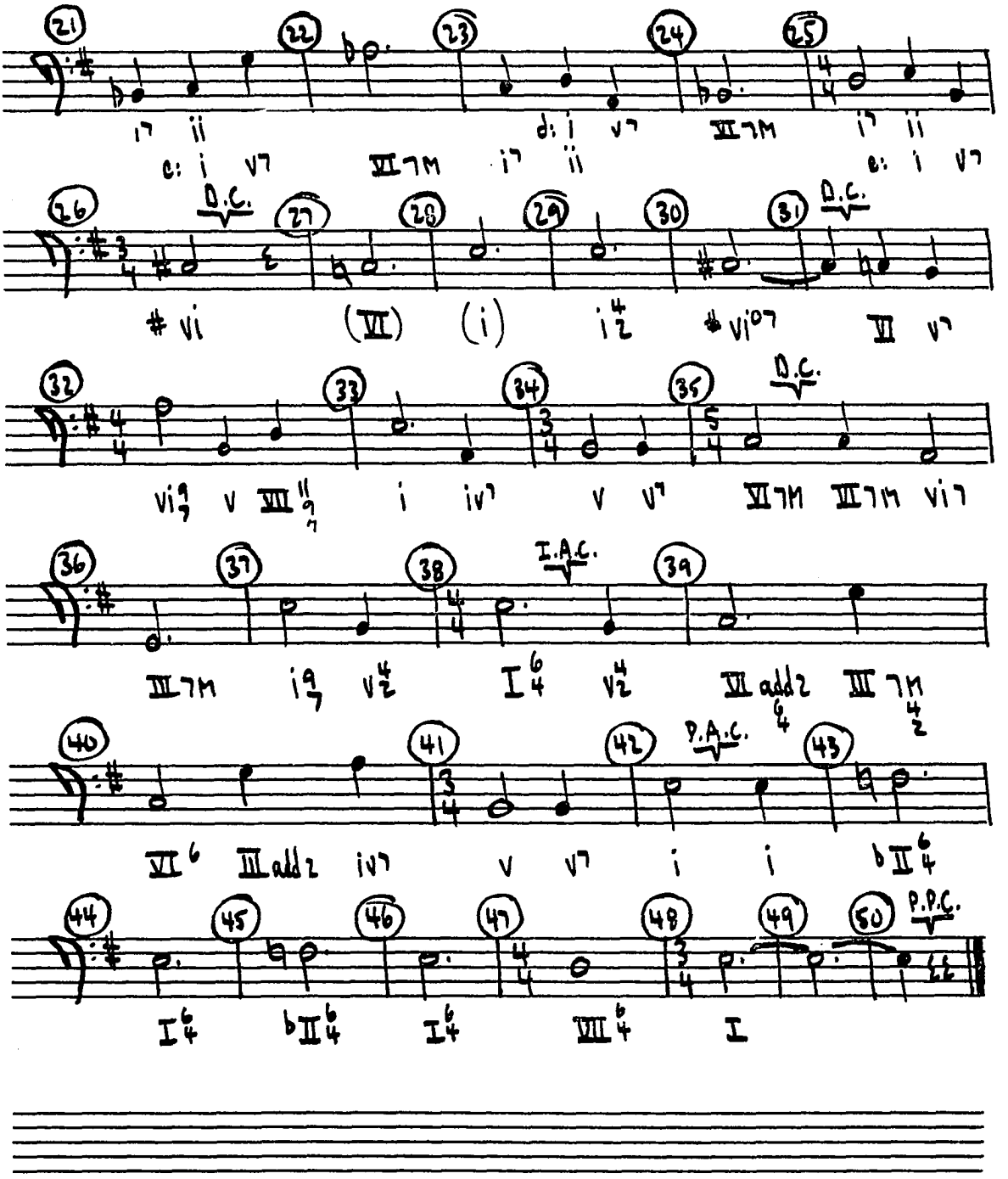
CHAPTER V

THE EYES OF ALL WAIT UPON THEE[1]

Harmonic Abstract

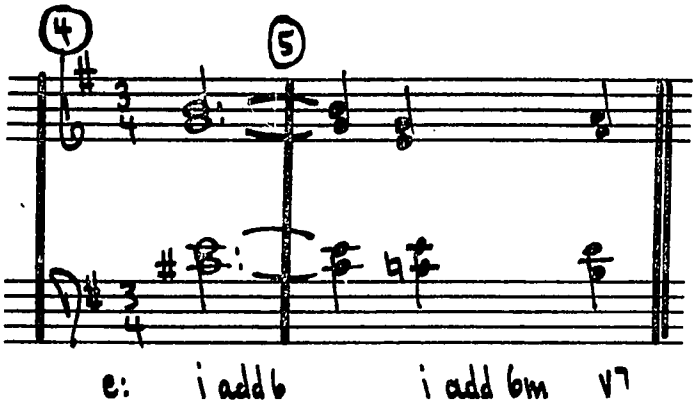


[1]Used by permission, Augsburg Publishing House, Minneapolis, Minnesota, 1959.


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D.C.
27
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D.C.
32
33
34
35
D.C.
36
37
38
I.A.C.
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P.A.C.
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P.P.C.

Alternate Harmonic Analysis

Example 24.

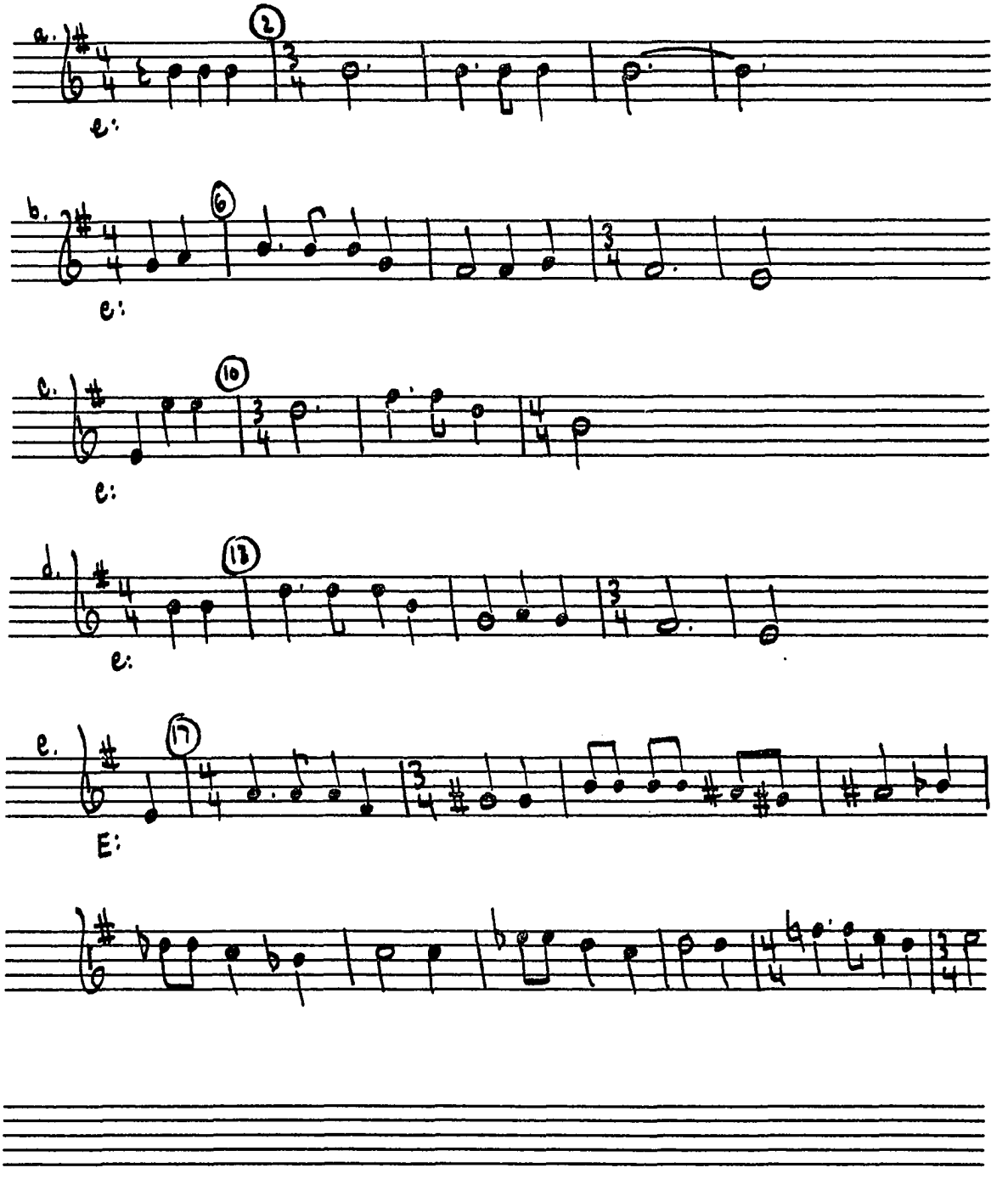


The tonic triad is sounded in the first measure. In the second and third measures the bass line adds the harmonic major seventh and minor seventh. By descending again and again by half steps the bass tones may be considered as added tones to the tonic. In which case the "C#" and "C♮" are the added tones instead of the roots. The two chords in question function as either tonic or submediant progressing to the dominant.

These two chords appear again in measures 30 and 31.

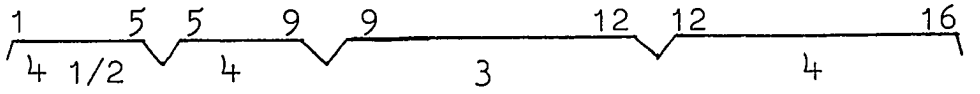
Formal Analysis

Melodic Units



Formal Diagram

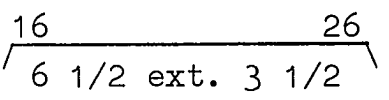
I



e:----------

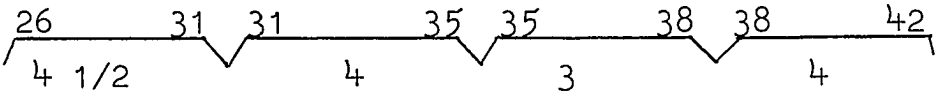
II

e



E:----g#:--b^{b}:--c:d:--e:

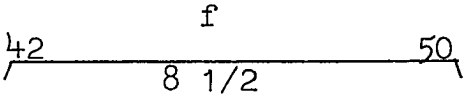
I'



e:----------

Coda

f



Part I	16 measures
Part II	10
Part III	24
(Total)	50

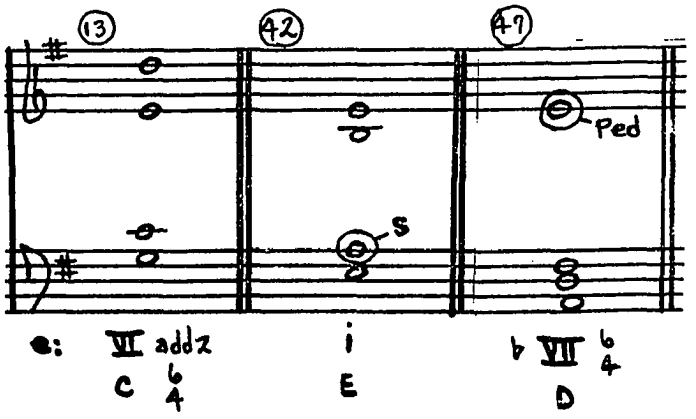
Compositional Techniques

Harmony

Chord types.--The harmonies in this choral work include triads, added-tone chords, and extended tertian chords, several of which are uncommon. With all of the seventh chords in this work, the major minor seventh

(dominant seventh type) is not included. Because of the extended thirds, omitted tones, added tones, inversions, and nonharmonic tones many of the chords may have a non-tertian sound. The following chords may have this non-tertian effect:

Example 25. "The Eyes of All Wait Upon Thee"



Nonharmonic tones.--Very few nonharmonic tones are used, and most of them are treated conventionally. The most unusual nonharmonic device is the inverted tonic pedal in measures 42 to the end.

Harmonic rhythm.--The harmonic rhythm throughout corresponds with the meters in the sense that the chord changes occur on strong beats in most instances. Measures 5 and 31 are the only exceptions. The frequency of chord changes is rather consistent, with a slight increase of the harmonic rhythm in measures 21 through 26. This increase

contributes to the musical tension leading to the climax in measure 27.

Cadence harmony.--None of the harmonic cadences are entirely conventional, but most of them do bear some resemblance to traditional formulas, especially the deceptive cadence. The first cadence ending in measure 5 (also measure 31) is the most unconventional of all. The progression i_2^4 - #vi^{o7} might best be classified as a modified deceptive cadence, because it ends with a form of the submediant chord.

The cadence ending in measure 9 (also in measure 35), v^7 - VI^{7M}, is another modified deceptive cadence. The modifications are (1) the minor dominant and (2) the added harmonic major seventh to the submediant chord.

The cadence ending in measure 12 (also measure 38), v_2^4 - I_4^6, is an imperfect authentic cadence. The root movement, dominant to tonic, is normal; but both chords appear in unusual inversions. The dominant seventh chord is in third inversion, and the cadence chord, the tonic, is in second inversion which is normally considered the weakest position for any triad.

The cadence ending in measure 16, v^7 - #vi, is another modified deceptive cadence. The modifications are (1) the minor dominant and (2) the borrowed submediant triad from the parallel major.

The phrase ending in measure 26 is extended by a harmonic sequence using a cadence formula three times. Across the barlines at measures 22 and at 24 the formula is v^7 - VI^7 (as in measures 8 and 9). Across the barline at measure 26 the cadence is v^7 - #vi (as in measures 15 and 16). In this sequence, the second and third dominant chords are one step higher than each preceding dominant chord.

The cadence ending in measure 42 is a modified perfect authentic cadence, v^7 - i, with a minor dominant and a tonic with a suspended fourth which resolves on the first beat of the next phrase.

The final cadence is VII^6_4 - I under an inverted tonic pedal. This cadence resembles both the authentic and plagal cadences. The VII chord resembles the minor dominant in an authentic cadence, because the VII and v have two common tones. The similarity of the final cadence with the plagal cadence is in the voice leading of the outer voices. This plagal movement of a melodic fourth in the bass is prepared with several harmonic fourths beginning in measure 42 with the suspended fourth in the tenor.

Inversions.--Second inversion triads are used freely and not in any of the conventional ways. In measure 12 the I^6_4 cannot be classified as any traditional type, but the harmonic effect is not weak. It is used at the cadence with no resolution expected or needed. The bass tone (the fifth of the chord) is close to the other voices and only

one octave from the soprano tone. This keeps it from being isolated and receiving special aural emphasis. The melodic approach to this bass tone is an ascending second which is used throughout at the cadences having already been used in the preceding cadence.

In measures 43 through 47 the lower three voices form major triads in second inversion. The harmonic progressions are not determined by root movement but by parallel melodic motion.

Melody

Scale basis.--Most of the melodic lines are diatonic and have a modal character resulting from the natural leading tone. From measure 1 to 15 and from 27 to the end the aeolian mode on E is used. In the middle section (from measure 16 to 26) the music may appear to be chromatic but is actually diatonic with changing tonal centers. There are a few accidentals added for color. In the first phrase in the bass line, "D#" and "C#" are used to make the line descend chromatically. In measure 12 the first alto tone is "G#" making the chord a major tonic at the cadence, and the same is true in measures 38, 44, and 58. The altered "F♮" of measures 43 and 44 serves as the root of the Neapolitan chord, which also has a modal character in this context.

Melodic intervals.--The melodic lines have a good balance of greater conjunct and lesser disjunct motion. The

one unusual aspect of the lines is the approach and resolution of harmonic sevenths and ninths. These tones are treated as freely as one expects triad tones to be treated in a traditional style. At times there is independent directional movement among the four vocal lines, and at others deliberate parallelism (including parallel fifths) is used.

Rhythm

The melodic rhythm in this choral work is not unusual or difficult, but the meter changes freely from $\frac{4}{4}$ to $\frac{3}{4}$ and $\frac{5}{4}$. These changes serve the text and give it a free prose effect. The natural accents of the text correspond with the natural accents in each meter. This is illustrated from the beginning phrase as the first four words are scanned thus: "The eyes of all. . . ." The note values are ♩ ♩ ♩ 𝅗𝅥. with the quarter note as the unit of value in a moderate tempo. Some beat groupings are better than others. A few possible ways to notate would be as follows:

"The eyes of all . . ."

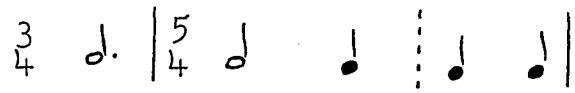
1. $\frac{3}{4}$ ♩ ♩ ♩ | 𝅗𝅥.
2. $\frac{3}{4}$ ♩ | ♩ ♩ ♩ | 𝅗𝅥
3. $\frac{3}{4}$ ♩ ♩ | ♩ 𝅗𝅥 | ♩
4. $\frac{2}{4}$ ♩ ♩ | ♩ ♩ | 𝅗𝅥

5. $\frac{4}{4}$ 

6. $\frac{4}{4}$ 

The actual four-beat measure (#6 above) is suggesting a slight accent on the third beat with the word "eyes." If the other notations were used (#1-5 above), the accents in the text and the natural accents in the meters would not agree.

The $\frac{5}{4}$ meter in measures 9 and 35 should be considered as having three beats plus two beats. Because of the slight accent on the word "eyes" in measure 9, the rhythmic notation at this point should be interpreted as having an implied "bar line" accent, or at least beginning on a strong beat.

actual notation: 

"sea - son. The eyes of . . ."

Perhaps the reason for the use of $\frac{5}{4}$ instead of $\frac{3}{4}$ plus $\frac{2}{4}$ is that the intended accents on "-son" is to be slightly greater than on "eyes."

Unity and Variety

Source	Unifying compositional element	Location of reuse	Variance
9	cadence harmony	42	different cadence: -deceptive v^7 - VI^7 -authentic v^7 - i

Tension and Release

Tension in this work is created primarily with relatively consonant and dissonant chord types, and the few nonharmonic tones have little effect on tension. Dynamics and melodic direction in the soprano line rise and fall together, creating tension and release.

Several devices progress toward the first beat of measure 27, creating the primary climax for the entire composition. The "G" in the soprano, which is approached and left by leap, is the highest pitch in the entire composition. The chord progressions in measures 20 through 26 form a harmonic sequence in which the tonality rises a step every two measures, and there is also a slight increase in harmonic rhythm. There is a long gradual crescendo leading up to this point and a short molto dimuendo following.

This climax is achieved despite two characteristics which may seem to work against the rise in musical tension. The cadence chord in measure 26 is not a major major seventh chord as used earlier in the cadence formulas in the harmonic sequence, but it is a minor triad. The more consonant cadence chord may seem to lessen tension while the unexpected change may seem to increase it.

The other element possibly working against the climax is the absence of the lower three voices. The soprano line must achieve the climax alone. Even though

there is no harmony at the climax, the "G" and "C" create a mild false relation with the C# minor triad, the last chord preceding the climax.

The climax is located at the beginning of a modified restatement of the very first phrase of the composition. This means that even though both phrases have formal characteristics in common, they must be interpreted quite differently. Phrase "a" begins at a low point dynamically, and phrase "a^1" begins "f" and is followed by a molto dimuendo.

There are two identical secondary climaxes in measures 11 and 37. These points contain the second highest soprano tones, the harmony is an incomplete ninth chord, and all voices leap upward approaching the climax. The dynamics increase to and decrease from these points.

These three climaxes, the primary and two secondary, may best be seen in the following illustration.



Total Balance

An examination of the form, tonality, and climaxes shows how carefully the entire composition is balanced. The balancing feature of the form is the restatement of the first four phrases at the end preceding the coda. The tonalities at the beginning and end are E minor with several transient

modulations near the middle of the composition. A large climax is located near the midpoint, and two secondary climaxes are quite evenly spaced between the beginning and the primary climax and between the primary climax and the end.

Anticipated Rehearsal Problems (With Some Suggested Solutions)

The major problems which might be encountered during rehearsals deals with the difficulty in hearing the harmonies and the melodic lines. One of the first things that should be pointed out is that much of this composition is based on the E aeolian scale which uses the natural leading tone "D" instead of the raised leading tone "D#."

In measures 1 through 4 the bass line descends chromatically and is written in the upper range. These two factors combined may cause basses to flat slightly as they sing through the phrase. A solution to this problem is to be aware that it may exist and to have basses think of "small" descending half-steps.

In measure 6 on the fourth beat, the "D" in the bass line may be difficult to perceive even though the tone is theoretically the root of an eleventh chord. The root motion of a descending sixth may be unexpected, and the upper three voices may sound as a C major triad.

The last alto tone of the first phrase, the "B" in measure 9, is approached by a downward leap of a minor third

so that the "B" will form a harmonic seventh with the bass tone, "C." The cadence chord at this point is an unexpected major major seventh chord with the "problem" tone in the alto.

In measure 11, the first chord is approached by leap from below in all voices, and the chord is a ninth. These factors may present some difficulties in finding the correct pitches. Each vocal section may have to approach its tone intervalically even though three of the tones, "B," "F#," and "D," are sounded in the previous chords.

The harmonic sequence in measures 20 through 26, harmonizing the words "of every living thing," should present no problem after the harmonic pattern is sung the first time. The second statement of the pattern is a strict answer a whole step higher. The third statement is another whole step higher with rhythmic augmentation in measure 25. The final cadence chord breaks the harmonic sequence.

Measure 29 is exactly like measure 3 except that the bass line enters on the harmonic seventh without any preparation.

CHAPTER VI

A ROSE TOUCHED BY THE SUN'S WARM RAYS[1]

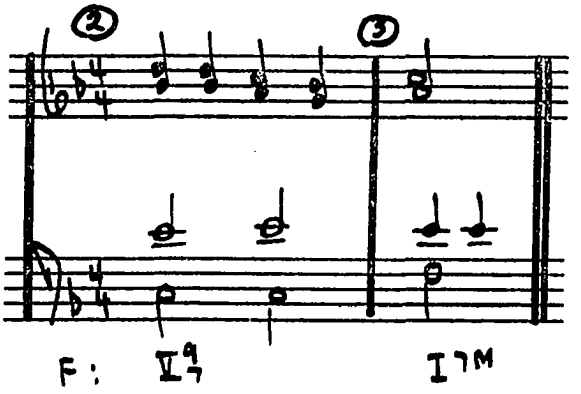
Harmonic Abstract



[1]Used by permission, Augsburg Publishing House, Minneapolis, Minnesota, 1962.

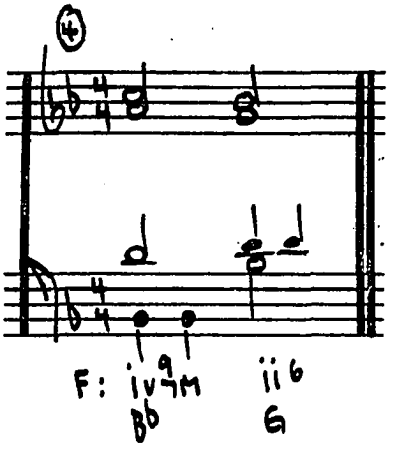
Alternate Harmonic Analysis

Example 26.



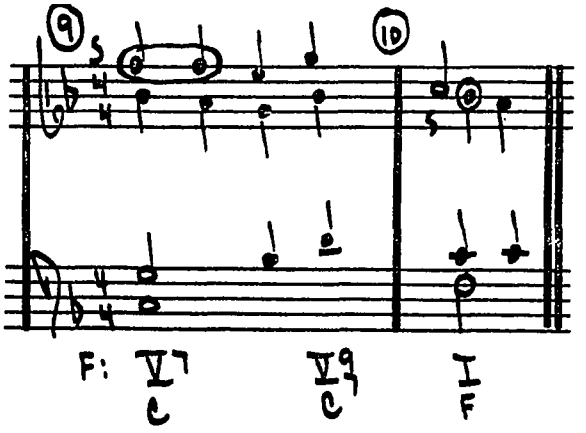
The vertical spelling on the first beat of this measure may be considered as a V^9_7 chord with an omitted fifth. If this is the case, the harmonic ninth resolves on the third beat, two beats before the root resolves. The one factor favoring the primary analysis is the presence of so much accented dissonance in this work. The "D" in the soprano may be interpreted as a nonharmonic 9-8 suspension over the V^7 chord.

Example 27.



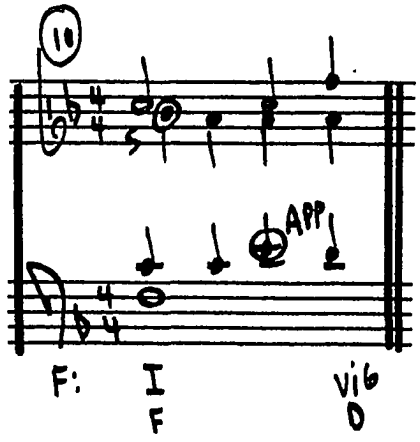
In the alternate analysis for this measure there are two separate chords IV_7^{9M} and ii^6. The best argument favoring the primary analysis is the consistent harmonic rhythm of the entire first phrase with one chord per measure. Also, measures 5 and 6 contain half-note suspensions as does measure 4. The alternate analysis is similar in construction and resolution to the vertical sonorities on the first beats of measures 2 and 4.

Example 28.



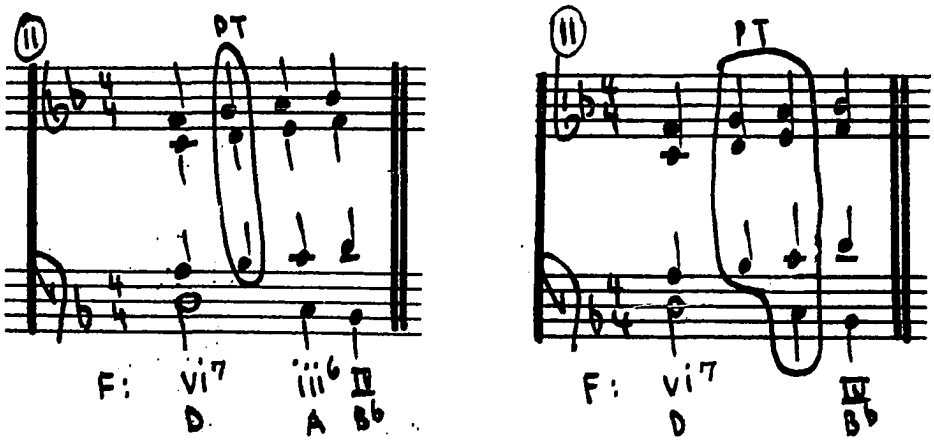
On the fourth beat of this measure the vertical sound may be heard as a V_7^9 chord. The harmonic ninth, the "D" in the tenor, resolves downward by step at the chord change. In the primary analysis the "D" is simply an unaccented appoggiatura.

Example 29.



A literal analysis of the chord on the fourth beat is the vi chord in first inversion. In favor of the primary analysis is the aural effect of the entire measure which sounds and functions as a tonic chord.

Example 30.

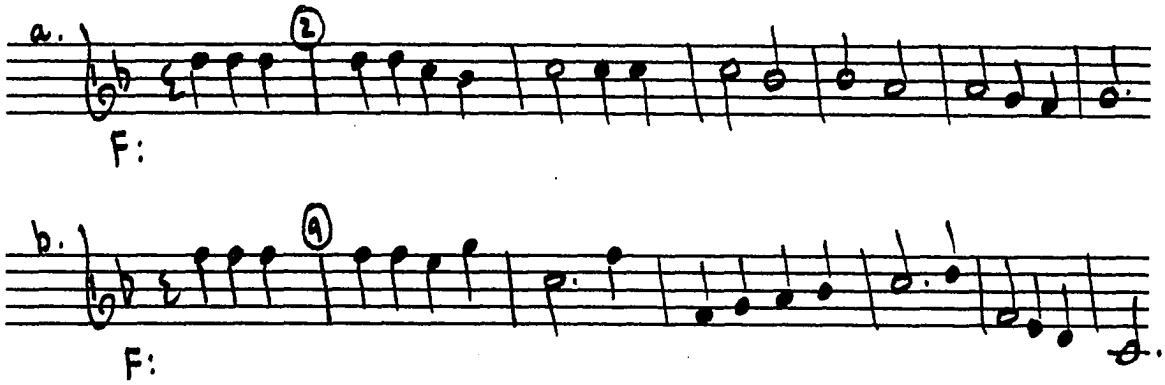


This measure may be analyzed in two alternate ways: (1) vi iii^6 IV with chord changes on the first, third, and fourth beats and (2) vi IV with chord changes on the first and fourth beats. Both of these require several nonharmonic

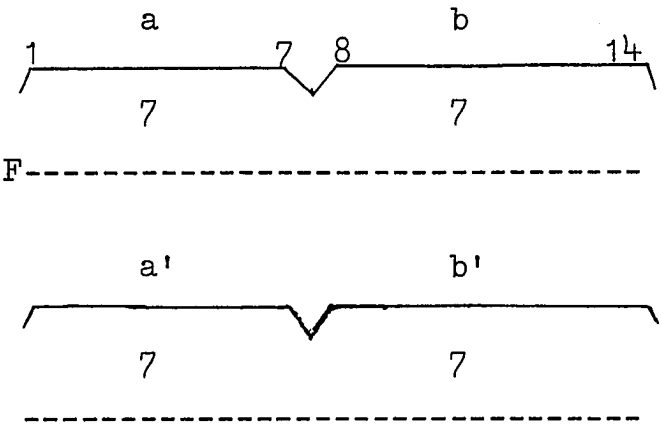
tones. The slower harmonic rhythm for the remaining measures of the composition tends to strengthen both of the alternate analyses.

Formal Analysis

Melodic Units



Formal Diagram



total number of measures: 28

Compositional Techniques

Harmony

Harmonic character.--The chords and root progressions in this devotional song are traditional, but unconventional melodic resolutions of seventh chords are used twice. In measure 6 the resolution of the seventh in the ii^7 chord, the "F" in the soprano, is delayed until the third beat of measure 9. In measure 11 the seventh of the vi^7 chord, the "C" in the alto, is approached by leap from above and resolves upward by step.

Parallel fifths and octaves have been avoided in several places. In measures 4 through 6, parallel octaves in the soprano and bass lines have been concealed by using suspensions in the soprano and leaps of a ninth in the bass. In measures 9 and 10, there are contrary fifths in the soprano and bass at the chord change. In measures 10 and 11

in the tenor and bass, parallel fifths across the bar line have been avoided by changing the fifth of the tonic chord, "C," to "D." The suspension in the tenor line in measure 14 prevents parallel fifths in the soprano and tenor at the chord change. The suspension in the tenor line in measure 17 also prevents parallel fifths with the bass at the chord change.

Nonharmonic tones.--A variety of nonharmonic tones are used profusely, most of them in a conventional form. However, there are a few which deserve special attention. A double suspension is used in measure 6: 9-8, and 4-3, and one triple suspension is used in measure 5: 9-8, 7-6, and 4-3. The suspension in the tenor voice in the last measure resolves not by step, but by leap downward.

Many of the nonharmonic tones are used in such a way that they do not temporarily replace a chord tone, but they are sounded with an entire chord. The tenor line in measure 7 is typical of this practice. The soprano, alto, and bass sustain a C major triad while the tenor adds the nonharmonic tones "A" on the first beat and "D" on the third.

Unity and Variety

Source	Unifying compositional element(s)	Location of reuse	Variance
(measures)		(measures)	
1 (S)	melody	15 (S)	change of harmony
2 (S)	suspension	9 (S)	change from 9-8 to 4-3
1-3	harmony	8-10	change of voicing, change of range, addition of harmonic seventh to supertonic and tonic chords
1-3 (S)	melody and rhythm	8-10 (S)	transposition
1-7	nonharmonic tones	8-14	change from a predominance of suspensions to very few suspensions
1-7	form	8-14	two phrases of equal length, downward direction in both phrases with change from conjunct to disjunct motion, change from predominantly parallel motion to contrary motion
7 (T)	melody	14 (T)	both "dovetail" with next phrase, same rhythm, change in direction
13-14 (S)	melody	16-17 (S)	change of direction
13-14 (A)	melody	16-17 (A)	change in rhythm and nonharmonic tones
14	cadence harmony	17	different cadences: -imperfect authentic -perfect authentic
14 (T)	suspension	17 (T)	change from 9-8 to 9-5

Tension and Release

Most of the tension in this work is created with a large number of accented nonharmonic tones, particularly suspensions. Both phrases begin with a gradual increase in harmonic tension. The first phrase begins with an open fifth, is followed with a complete triad, and is then followed with an implied ninth chord. The second phrase, which is somewhat similar to the first, begins with a root and third, is followed by a seventh chord, a seventh chord with a suspension, and then an implied ninth chord.

On the fourth beat of measure 9, there are three musical elements which come together at one time to create the climax of the entire piece. The dynamics crescendo to this point, the soprano line leaps to and from its highest tone, and the harmony is the implied V^9 chord.

Subjective Effect

There are several factors which give this composition a traditional character. The chord construction, chord progressions, harmonic rhythm, cadences, and voice leadings are mostly conventional. The careful use of nonharmonic tones and the deliberate avoidance of parallel fifths and octaves show how the composer is apparently influenced by the traditional style of the four-voice chorale.

The characteristics which give the work a slightly unconventional sound include the lowered seventh scale

degree, delayed tonic chord at the beginning, large number of accented nonharmonic tones, and occasional harmonic ambiguity.

Anticipated Rehearsal Problems (With Some Suggested Solutions)

In the first phrase (measures 1 through 7) rehearse the soprano and alto lines together and without the tenors and basses. These measures contain only parallel thirds and stepwise motion. Attention should be given the "Eb" in the alto line in measure 6. This tone is the only accidental in the entire song, and the tendency of many singers may be to sing an "E♮" keeping it entirely diatonic.

The bass and tenor lines when isolated from the upper voices in measures 1 through 7, should be easy to learn since most of the intervals are consonant. Measure 3 contains a harmonic major seventh (the root and seventh of a major major seventh chord) which, though carefully prepared, may be difficult to hear because of the difference in this chord and the more common dominant seventh type chord with a minor seventh. Measure 7 contains a harmonic major ninth which might be sung as an octave. This may be corrected by pointing out to tenors that the "D" is nonharmonic and is one step above the root.

When all four lines are combined in the first phrase, several dissonances result from the many nonharmonic tones. Special attention should be given the bass line even though

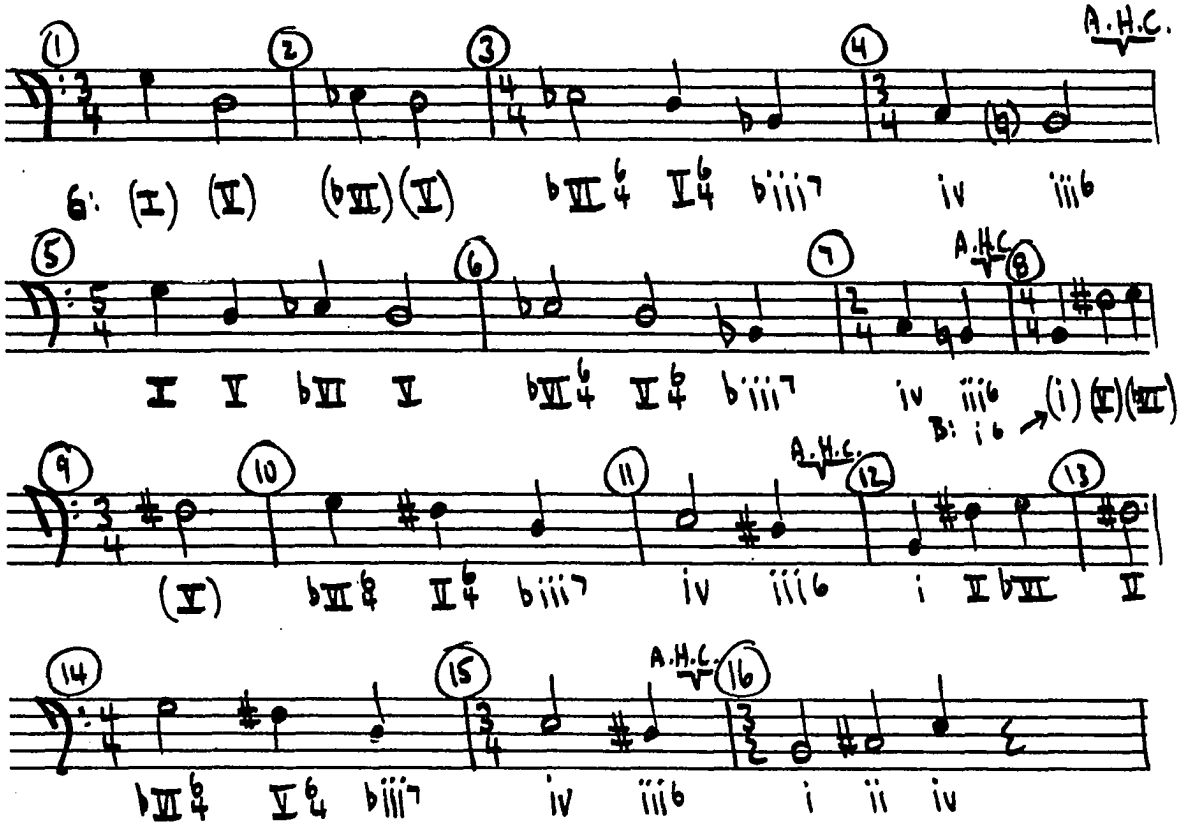
it contains only chord tones. In measure 2 the "C" might be sung a step high or low sounding two octaves below either the soprano or alto pitch, "D" or "Bb" of measures 1 and 2. In measures 4 through 6 on the first two beats of each measure, the pitches in the bass may be difficult to find because of the leaps downward (perfect fifth, minor ninth, and major ninth) and the double and triple suspensions in the upper voices.

One problem, which may be encountered during the first few rehearsals, is the difficulty in hearing the true tonality. This might result from the absence of a tonic chord or even a tonic tone until the third measure. A way of establishing the tonality is to sound the tonic triad before the starting pitches when giving pitches to the singers.

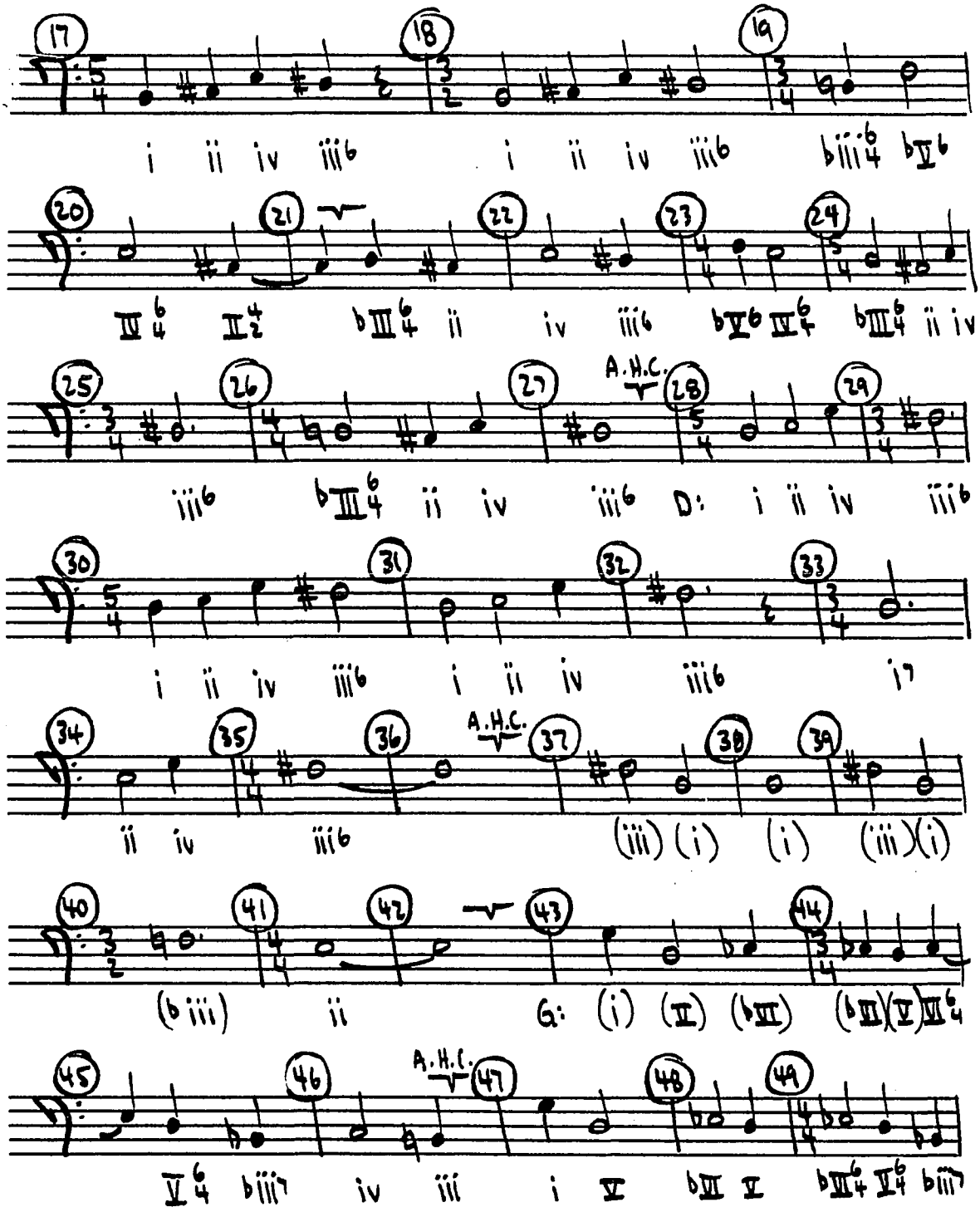
CHAPTER VII

PATER NOSTER[1]

Harmonic Abstract



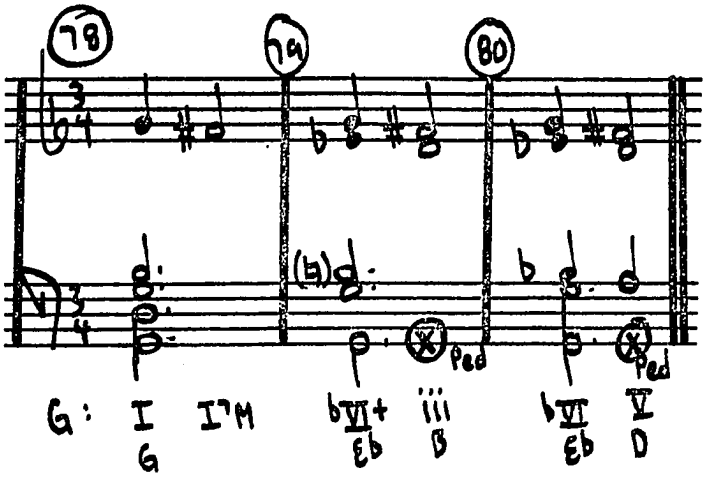
[1]Used by permission, Summy Birchard, Evanston, Illinois, 1962.


17 18 19
i ii iv iii6 i ii iv iii6 bIII6/4 bV6
20 21 22 23 24
III6/4 II4/2 bIII6/4 ii iv iii6 bV6 III6/4 bIII6/4 ii iv
25 26 27 A.H.C. 28 29
iii6 bIII6/4 ii iv iii6 D: i ii iv iii6
30 31 32 33
i ii iv iii6 i ii iv iii6 i7
34 35 36 A.H.C. 37 38 39
ii iv iii6 (iii) (i) (i) (iii) (i)
40 41 42 43 44
(b iii) ii G: (i) (II) (bIII) (bIII) (V) III6/4
45 46 A.H.C. 47 48 49
V6/4 biii7 iv iii i V bIII V bIII6/4 V6/4 biii7


50
51
A.H.C.
52
53
54
iv
iii6
(i)
(V)
(♭VII)
(V)
♭VII 6/4
V 6/4
♭iii 7
55
B: i 6
56
57
A.H.C.
58
iv
iii6
♭VI 6/4
V 6/4
♭iii 7
iv
iii6
i
ii
iv
59
60
61
A.H.C.
62
iii6
♭iii 6/4
iii 6/4
i
ii
iv
iii6
♭iii 6/4
i
ii
iv
63
64
65
66
A.H.C.
iii6
♭iii 6/4
iii 6/4
i
ii
iv
iii6
♭iii 6/4
67
68
69
70
71
72
D: i 6/4
73
i
ii
iv
iii6
♭iii 6/4
i
♭III 7M
74
75
76
77
78
79
(♭)
G: #IV 7M
I
I
V
♭III
V
80
81
82
83
84
85
I.A.C.
♭VII
V
♭VI
I

Alternate Harmonic Analysis

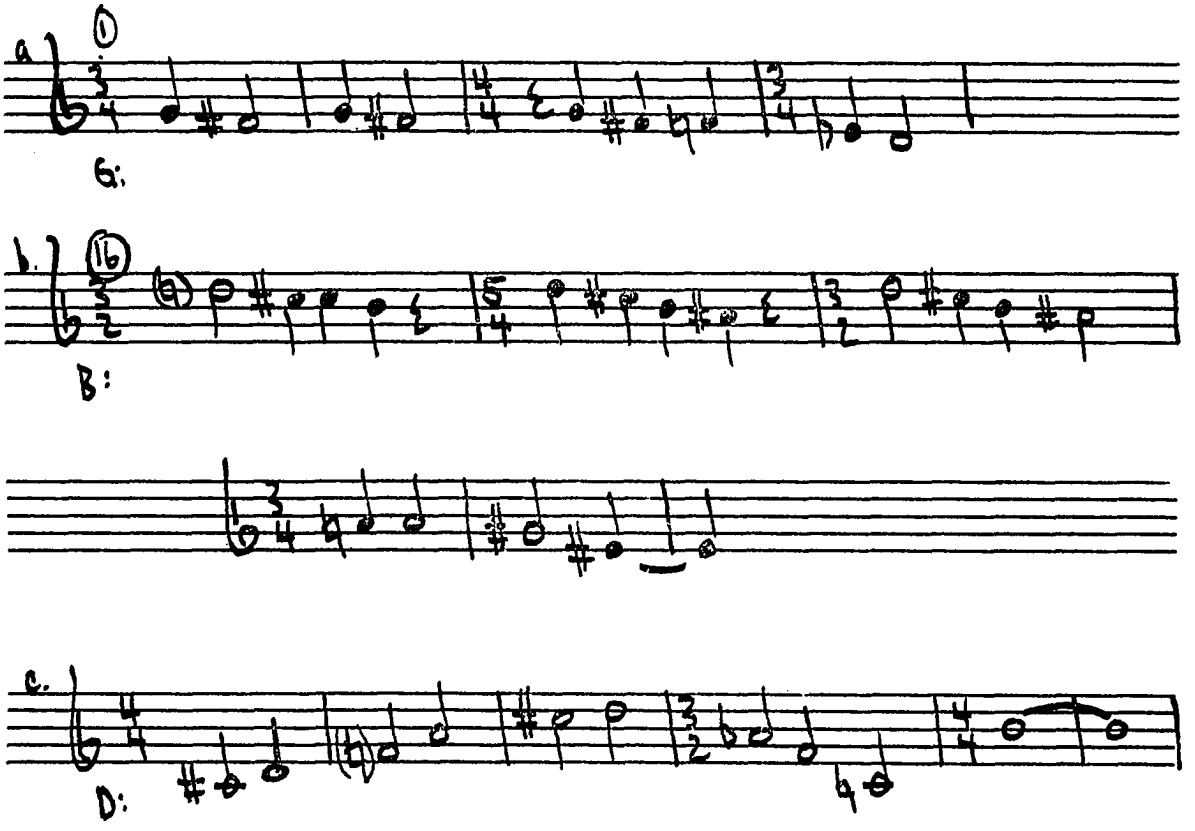
Example 31.



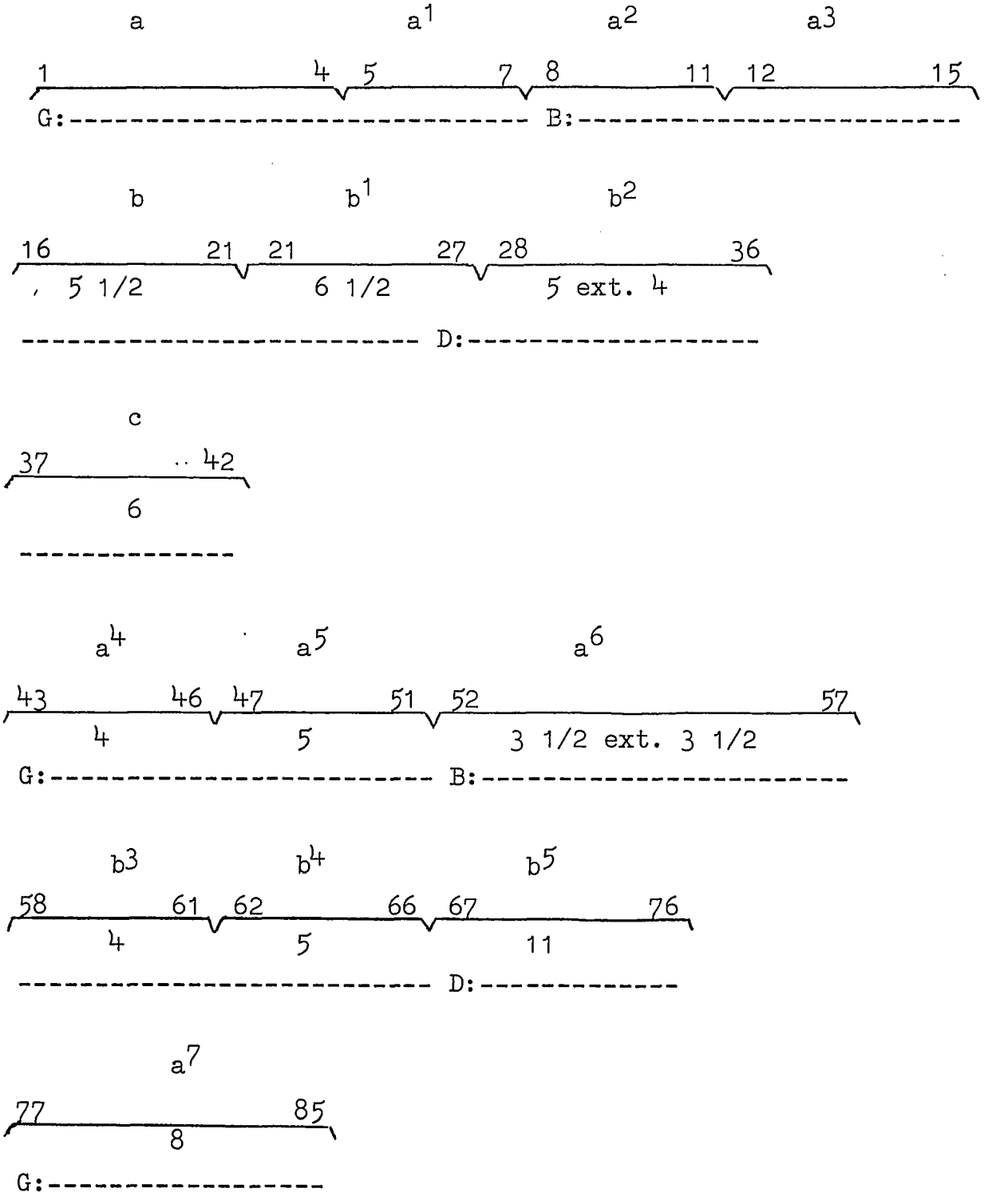
The only ambiguous harmony in this work is found in the last phrase. This phrase begins and ends with the tonic chord, but the intervening chords seem uncertain. The source of the ambiguity is the composer's restatement of the first phrase (melody and harmony) over a pedal. In the alternate analysis, an attempt is made to consider each tone as a chord tone, even though it is not possible with all. A more literal analysis of the harmony is the result.

Formal Analysis

Melodic Units

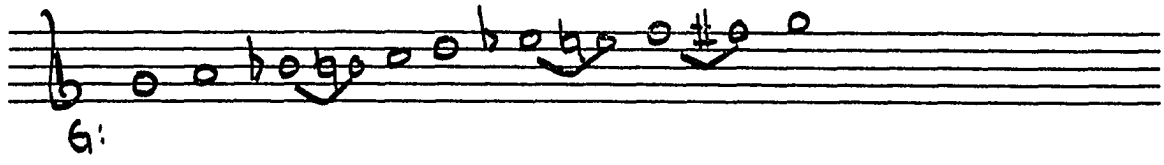


Formal Diagram

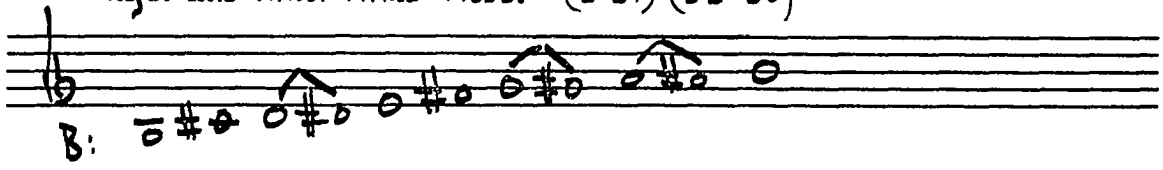


Scale Bases

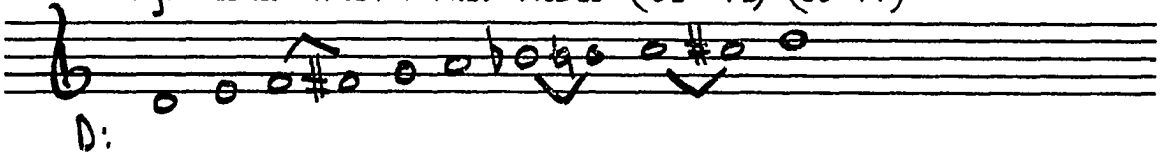
Major and Minor Mixed Modes (1-7)(43-51)(78-55)



Major and Minor Mixed Modes (8-27)(52-66)



Major and Minor Mixed Modes (28-42)(66-77)



Compositional Techniques

Harmony

Chord types.--All of the chords included in this work are tertian, and most are triads. The three seventh chords, which are used sparingly, are the minor minor, the major major, and the major minor. The harmony can be analyzed with Roman numerals even though some chords defy traditional identity. One noteworthy aspect of the harmony is the presence of many minor triads, especially in the "b" phrases. This can best be seen in measures 27 through 42 where the harmonic progression, real or implied, is composed entirely of minor chords.

Scale influence.--The harmony appears to be very chromatic, but this appearance may be misleading. The reason for the altered appearance is the unusual scale basis which is a combination of the major and minor scales. The two scales, when combined, have ten tones in the octave. The harmony which results from this ten-tone scale is used in a somewhat restricted and consistent manner. The two pitches for each of the dual scale degrees (third, sixth, and seventh) usually appear in different chords. The minor third scale degree appears in the i, biii, bIII, and bVI chords, but the major third scale degree appears only in the final tonic and in the iii chord when it serves as a dominant substitute. The minor sixth scale degree appears in the bVI and iv chords, but the major sixth scale degree

appears only in the ii chord. The minor seventh scale degree appears in the biii, bIII, and i^7 chords, but the major seventh scale degree appears only in the V, iii, and VII^{7M} chords. There are a few chords which do not conform to either scale and must be considered as truly altered. These chords include the $biii^7$ as in measure 3, the bV as in measure 19, and the VII^{7M} in measure 73.

Cadence harmony.--The V_4^6 harmony is used within several phrases, but the true dominant is never used as a cadence chord. The iii^6 chord is used at the end of most phrases creating implied half cadences. The iii^6 chord serves well as a dominant substitute because (1) the leading tone is always in the soprano line, (2) the dominant tone is always doubled and in the bass line, and (3) the real root is always in an inner voice and partially concealed. Most of the other cadences bear no resemblance to traditional formulas, but the final cadence, bV - I, may be considered as a weak imperfect authentic cadence with a root movement of a diminished fifth.

Harmonic rhythm.--The harmonic rhythm and the melodic rhythm are almost identical throughout since most of the melodic pitches are supported with a chord. While this is considered slow melodic rhythm, the harmonic rhythm is relatively fast. There are very few chord changes on weak beats, and there is very little harmonic syncopation.

The tonal centers for the composition are G, B, D, G, B, D, and G all of which are based on the mixed scales. The key changes are accomplished with direct modulations between phrases. In two instances common chords may be seen but probably not heard. The harmony crossing the bar lines at measures 8 and 52 remains constant, but it is doubtful that the two chords sound identical. In both of the locations there is a cadence separating the repeated harmony. The chord before the bar line is complete, is in first inversion, serves a function other than that of its real root, and may sound as if the implied root is the third of the chord (the bass tone). The harmony after the bar line is in a new tonality, which is perceived in retrospect, and is merely implied since the texture is monophonic for the first few beats following the cadence.

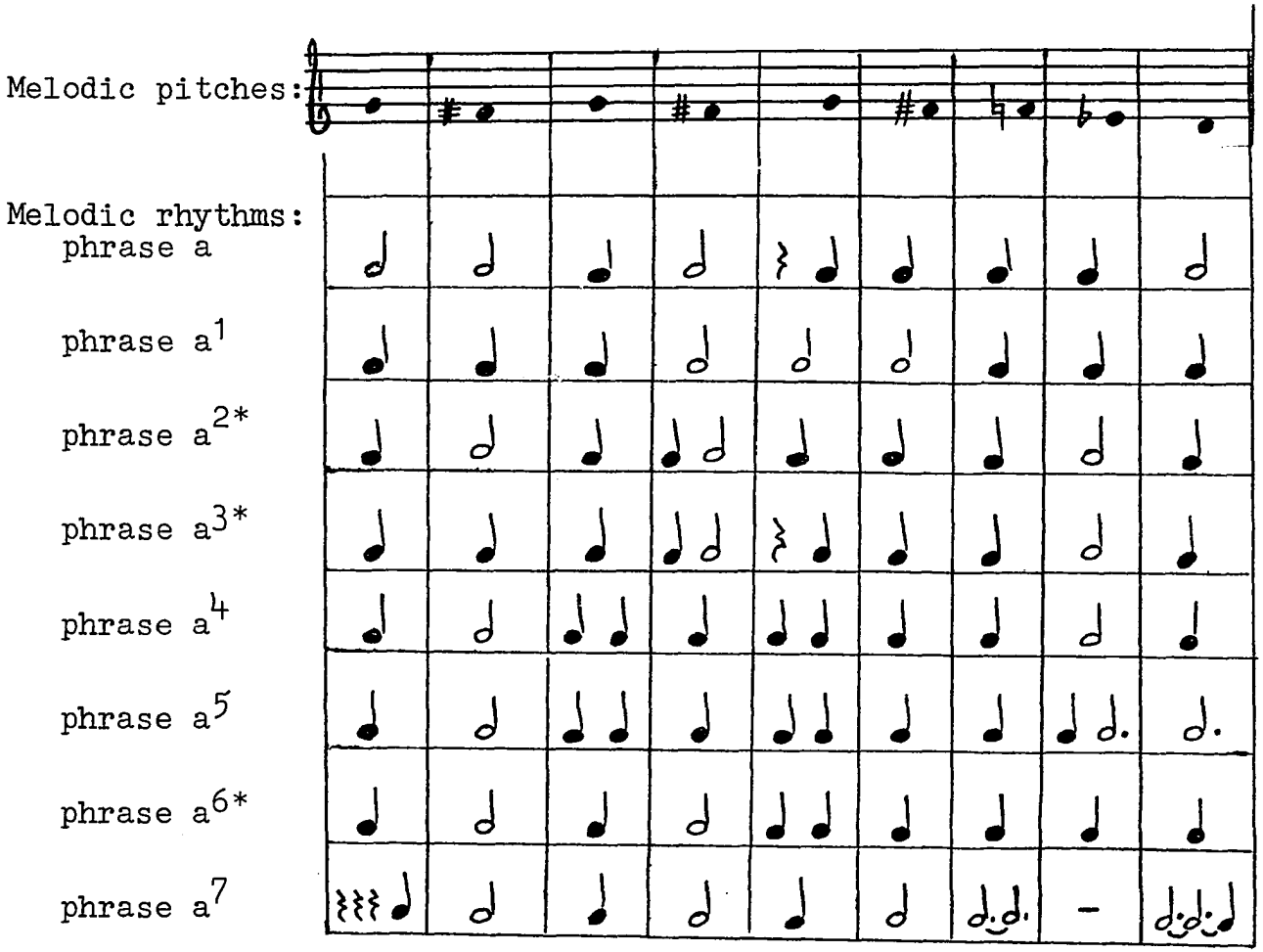
Melody

Scale bases.--The scale bases, as previously discussed, are mixed scales (major and minor). The melodic result is an unusual form of chromaticism in the lines. The scale contains two separate pitches for the third, sixth, and seventh scale degrees. All of these tones are used but always in the same directional manner and always as members of the same chords. The melodies may be labeled as diatonic since they adhere closely to the ten-tone scale, but they may also be labeled as chromatic since all but two tones of the chromatic scale are included in the combined major and

minor scales. A few of the tones are foreign to the mixed scales, but they are part of the altered chords previously discussed.

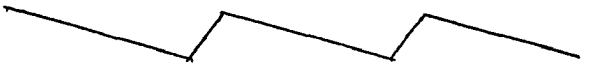
Phrase lengths.--The lengths of the phrases vary considerably because of the continuous changes in meter and rhythm, the phrase extensions, and the deletion and repetition of tones. The "a" phrases vary in length from twelve to twenty-five beats, and the "b" phrases vary in length from sixteen to thirty beats (or quarter notes). The "a" phrases, which have consistent melodic pitches, are shown below with the rhythmic and durational variations.

"a" Phrases[1]



*Phrases a^2, a^3, and a^6 are transposed down a major third from the B tonality.

Melodic intervals.--Most of the melodic intervals are conjunct and descending, and the wide skips are usually ascending, especially in the upper three lines. The typical melodic curve moves slowly downward and leaps upward in this manner:



etc.

Rhythm

The melodic rhythm is relatively slow throughout. With one minor exception, the note values are one beat in length or longer and in a moderate tempo. The meter changes freely between $\frac{3}{4}$, $\frac{4}{4}$, $\frac{2}{4}$, $\frac{3}{2}$, and $\frac{5}{4}$. An examination of the accents in the text and the natural accents in the various meters reveals that they coincide.

As the two main phrases, "a" and "b," are repeated and varied, the rhythm and meters always change, even though most of the other elements remain constant. The changing will give an aural effect of no meter at all in several places.

Unity and Variety

Source	Unifying compositional elements	Location of reuse	Variance
1-4	harmony and melody	5-7	change in rhythm and meters, later entrance for tenor line
		8-11	change in rhythm and meters, new tonal center

Source	Unifying compositional elements	Location of reuse	Variance
		12-15	change in rhythm and meters
		43-46	change in rhythm and meters
		47-51	change in rhythm and meters
		55-57	first half of phrase omitted, change in rhythm and meters
		78-85	change in rhythm and meters, one melodic tone omitted, change of harmony
16-21	harmony and melody	21-27	change in rhythm and meters, first two measures not repeated, new cadence, cadence repeated
		28-32	change in rhythm and meters, second measure repeated in rhythmic augmentation, new tonal center
		33-36	change in rhythm and meters, second measure stated in rhythmic augmentation
		58-61	change in rhythm and meters, second measure repeated, new chord added ($b\text{iii}^{6}_{4}$)
		62-66	change in rhythm and meters, second measure repeated

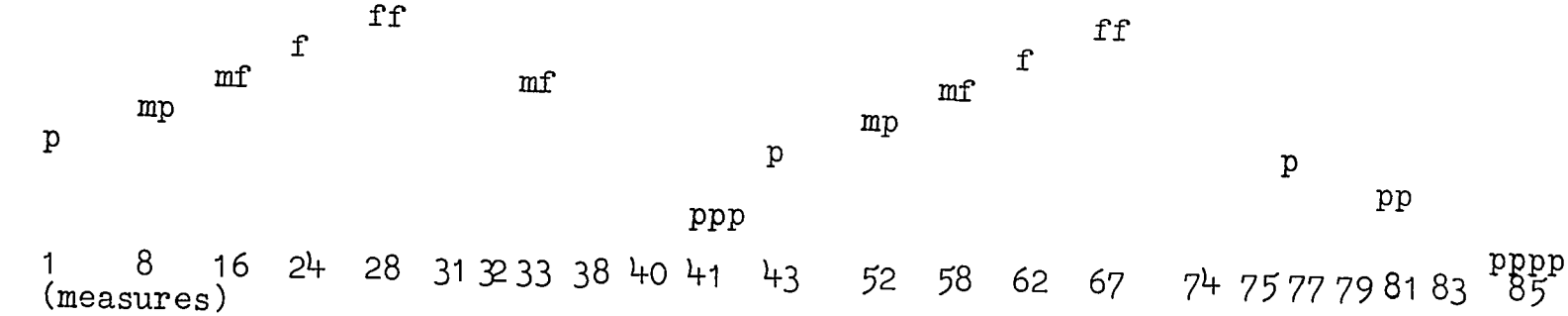
Source	Unifying compositional elements	Location of reuse	Variance
		67-76	change in rhythm and meter, second measure stated in rhythmic augmentation, new cadence chord (VII7M), longer phrase, new melodic tones, new tonal center

Tension and Release

The elements which usually contribute to tension and release are either absent or have little influence in this work. Most of the chords are major or minor triads; there are almost no nonharmonic tones; the harmonic rhythm is rather consistent throughout; and there is almost no contrast in the four-voice texture.

The contrast in dynamics is the most influential element in this composition. Climaxes are in the two loudest measures, 32 and 73. The dynamic markings throughout indicate where the points of relative tension and release are located.

(Dynamics)


p
mp
mf
f
ff
mf
p
ppp
mp
mf
f
ff
p
pp
pppp
1 8 16 24 28 31 32 33 38 40 41 43 52 58 62 67 74 75 77 79 81 83 85
(measures)

Both climaxes are reinforced by the melodic lines with the highest soprano pitches located near or at the climax points. In the second climax all four lines are near the tops of their ranges. The second climax is somewhat stronger than the first because of the sustained high pitches, the extended "ff," and the harmonization with the only major major seventh chord of the composition.

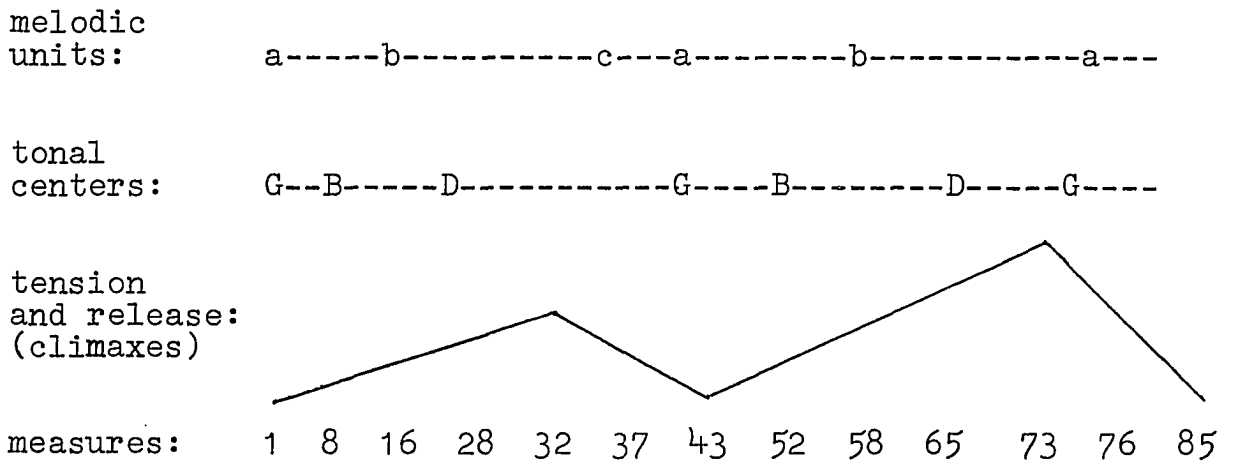
Tctal Balance

The three characteristics of this composition which give it a symmetrical balance are the phrases, the tonal centers, and the climaxes. Formal balance is created by the placement of the "a" and "b" phrases throughout the composition. The "a" phrases appear three times: at the beginning, near the middle, and at the end. The "b" phrases appear in two places, separating the "a" phrases. The re-transitional phrase, "c," is stated only one time, preceding the first return of the "a" phrases. The condensed formal structure is a b c a b a.

Tonal centers create another kind of symmetrical balance. Three key centers, G, B, and D, alternate throughout, and the composition contains seven separate key beginnings. The first, fourth, and seventh keys are G. The second and fifth keys are B, and the third and the sixth keys are D.

The remaining factor which creates balance in the composition is the placement of the climaxes. The two climaxes roughly divide the total composition into thirds.

The three balancing elements (phrases, tonal centers, and climaxes) may appear to function independently of one another. But as each contributes in its own way to the total balance, they also combine in such a manner as to reinforce each other. Both of the climaxes occur after a return to the D tonality, and both of the passages in the D tonality occur after a return to the "b" phrases.



Rehearsal Problems (With Some Suggested Solutions)

The first problem likely to be encountered involves the freely mixed melodic seconds. Since both the major and minor scales are combined, it may be necessary for singers to identify all seconds as minor, major, or augmented. The augmented seconds appear only in the alto line.

The only rhythmic problem which is anticipated is the difficulty in remembering the many rhythmic variations of the repeated phrases caused by the changing meters and changing rhythms.

As the meters change, the metric accents also change, and it is important for the director to know how the text and the meter coordinate. The natural accents in the text are scanned thus:

Pá-ter nós-ter qui es in cáe-lis,

Sanc-ti-fi-cé-tur nó-men tú-um:

Ad-vé-ni-at ré́g-num tú-um:

Fí-at vo-lún-tas tu-a, sí-cut in cáe-lo, et in tér-ra.

Pá-nem nós-trum quo-ti-di-á-num da nó-bis hó-di-e:

Et di-mít-te nó-bis dé-bi-ta nó-stra, sí-cut et nos

di-mít-ti-mus de-bi-tó-ri-bus nó-stris.

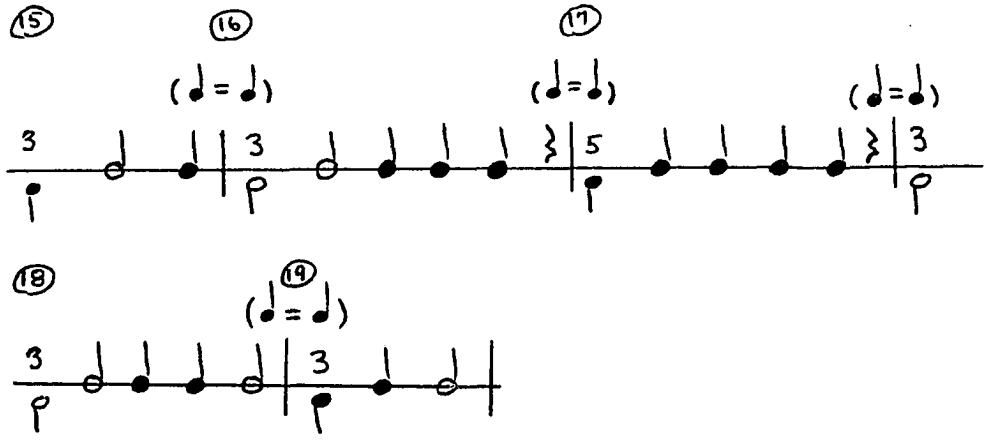
Et ne nos in-dú-cas in ten-ta-ti-ó-nem.

Sed lí-be-ra nos a má-lo. Á men.

In every measure except one, measure 17, the textual accents occur on the accented beats. The $\frac{5}{4}$ meter in measures 5, 6, 24, 28, 56, and 60 should be conducted with metric accents on the first and third beats in order to coordinate the

accents of the text and the meter. The $\frac{5}{4}$ meter in measure 30 should be conducted with metric accents on the first and fourth beats. The $\frac{5}{4}$ meter in measure 17 should have an accent on the second beat to coincide with the accented syllable "-ve-."

When one conducts the $\frac{3}{2}$ measures, the note values should remain constant even though the beat is doubled in length. The meter changes in measures 15 through 19 should be interpreted in the following manner:



Many melodic cross relations in this composition may present pitch problems for singers. The first occurs in measures 15 and 16 as the alto tone, "D#," preceding the bar line is immediately followed by "D♮'s" in the soprano and tenor lines. Other cross relations are listed below.

measures:	vocal lines:	pitches:
18-19	S and B	"A#" and "A♮"
22-23	S and B	"A#" and "A♮"
22-23	B and A	"F#" and "F♮"
25-26	S and B	"A#" and "A♮"
25-26	T and S	"D#" and "D♮"
27-28	S and A	"A#" and "A♮"
27-28	A and S	"F#" and "F♮"
27-28	T and B	"D#" and "D♮"
29-30	T and S	"F#" and "F♮"
30-31	T and A	"F#" and "F♮"
32-33	S and A	"C#" and "C♮"
32-33	T and S	"F#" and "F♮"
72-73	A and T	"A" and "A♭"

The remaining cross relations are repetitions of the ones listed above.

A problem with dynamics will probably be encountered beginning in measure 40. Two measures before this point a molto crescendo begins and should be continued through the descending leaps in measure 40. There are two factors working against this written crescendo. The natural tendencies of most singers is to sing louder when ascending and softer when descending which is opposite to that which is written. The tone "C♮," which is the last tone in the crescendo, should be the loudest. Since this pitch is near the middle or bottom of most vocal ranges, it may be

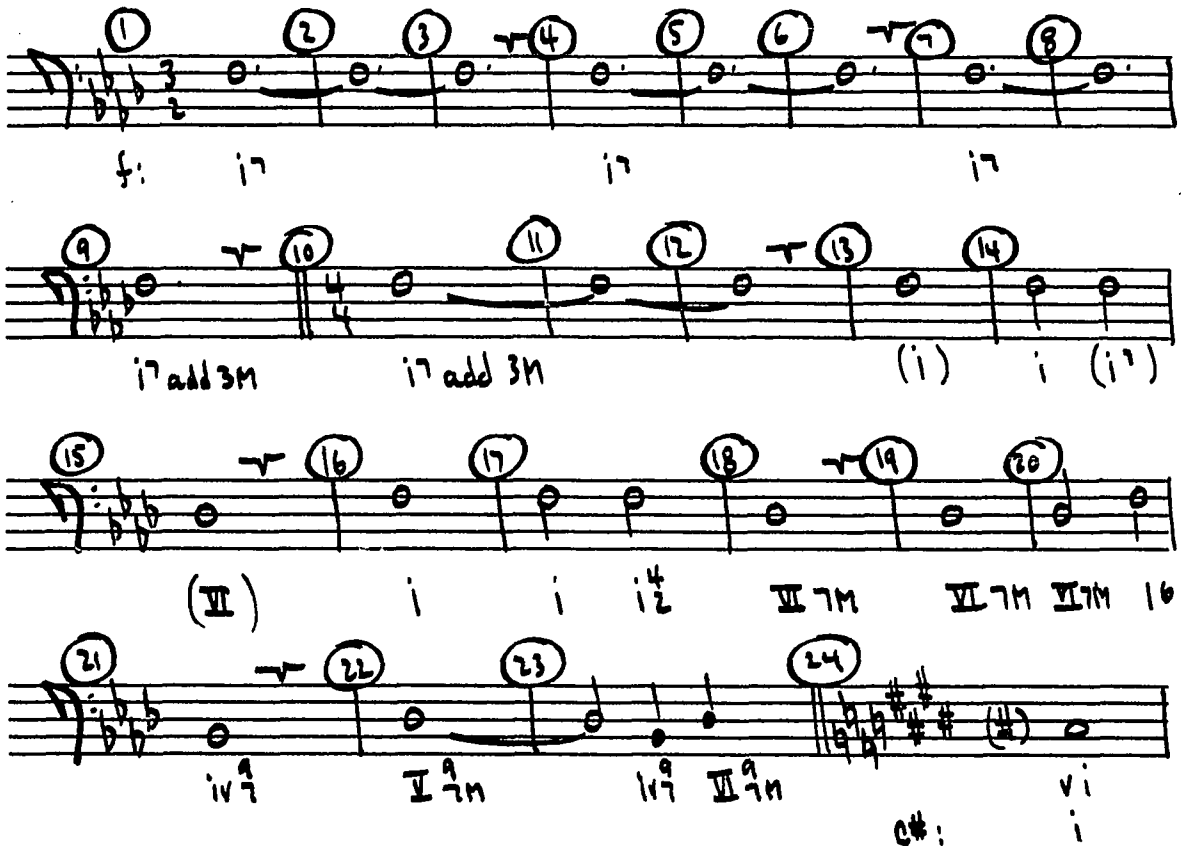
difficult to sing with the indicated volume. Immediately following the crescendo, the female voices divide, leap upward, and must observe the "ppp subito."

The pitch change in the alto line in measures 82 and 83 may be a problem. The melodic interval, a diminished third, or whole step, may appear wider than it actually is.

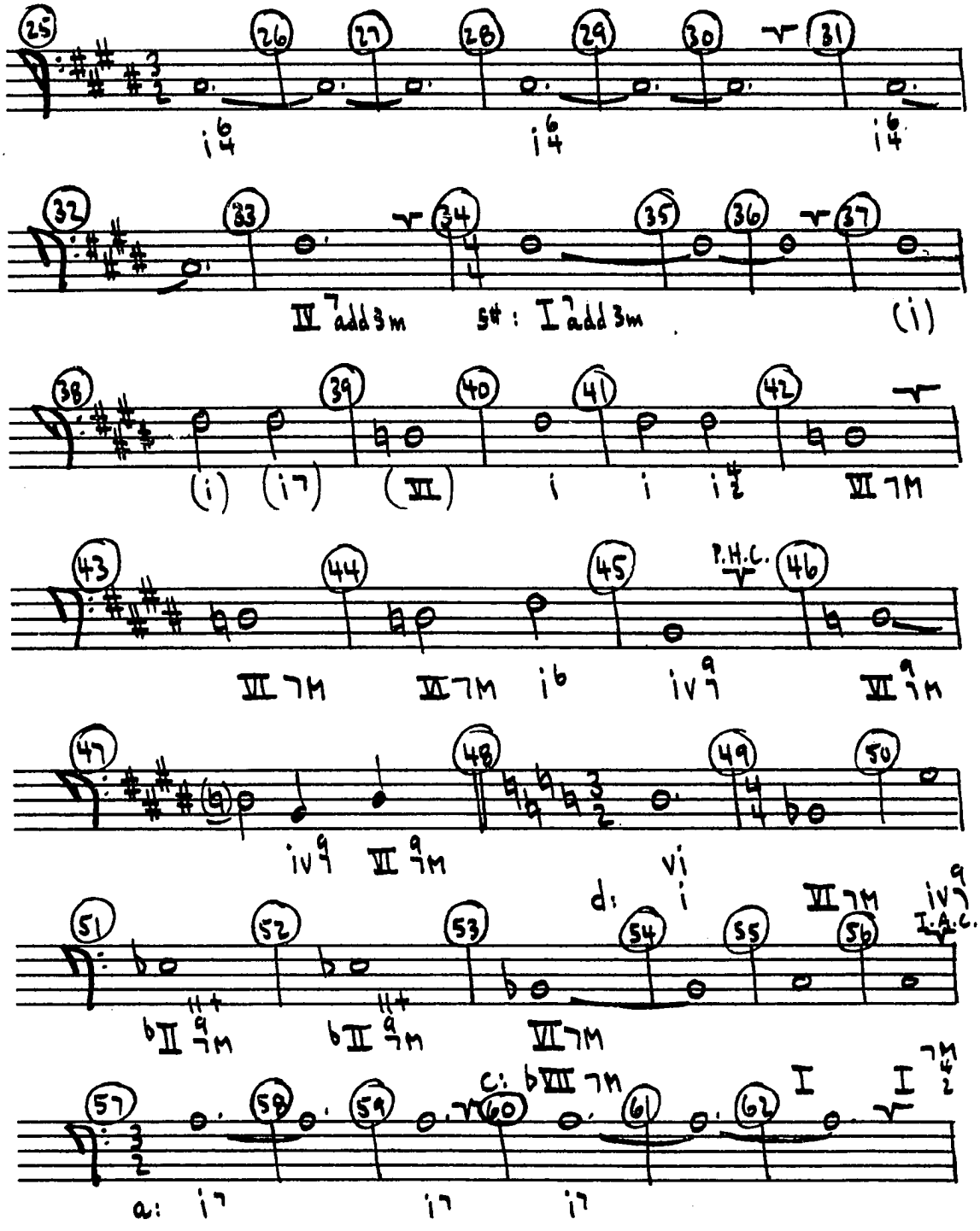
CHAPTER VII

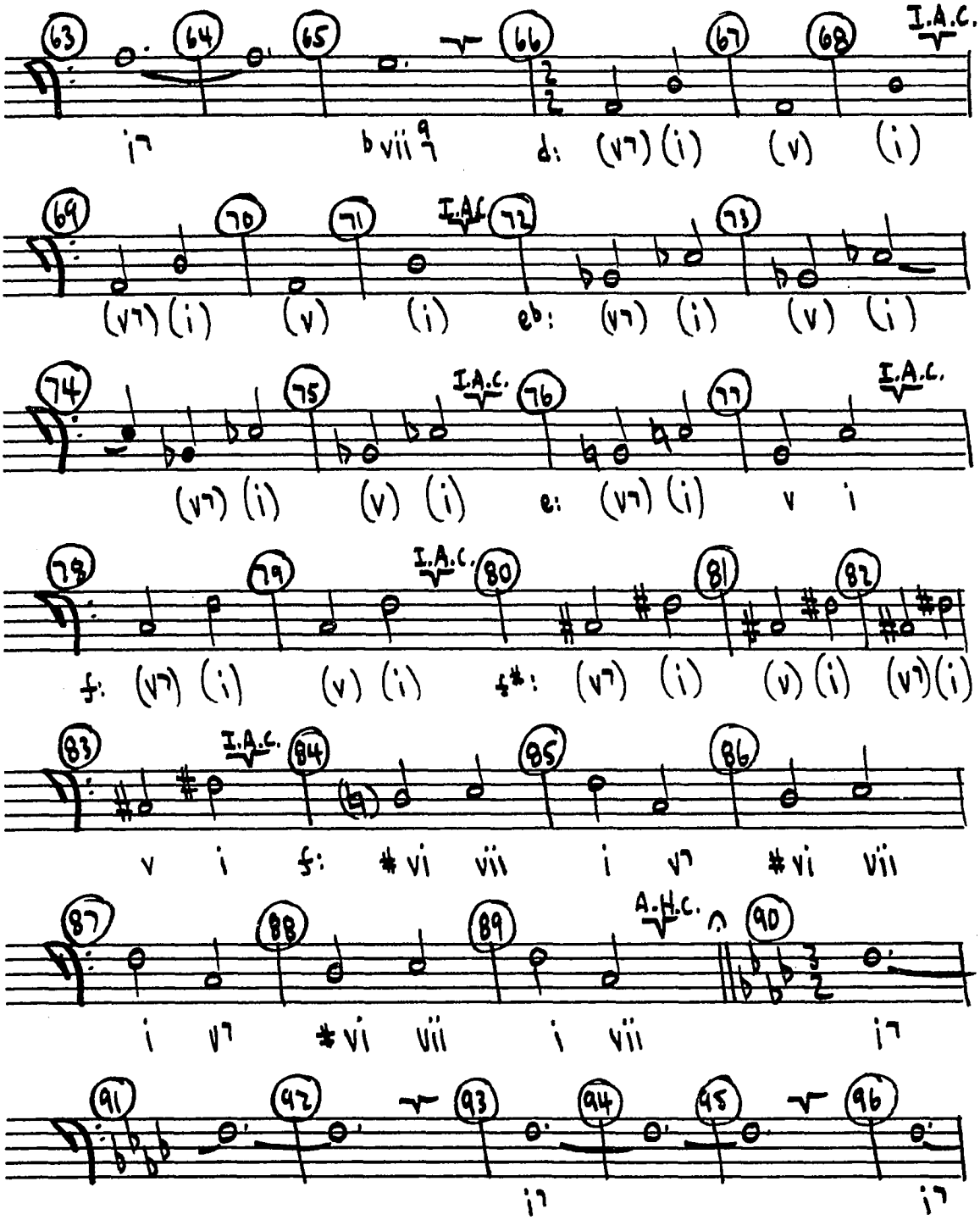
DE PROFUNDIS CLAMAVI[1]

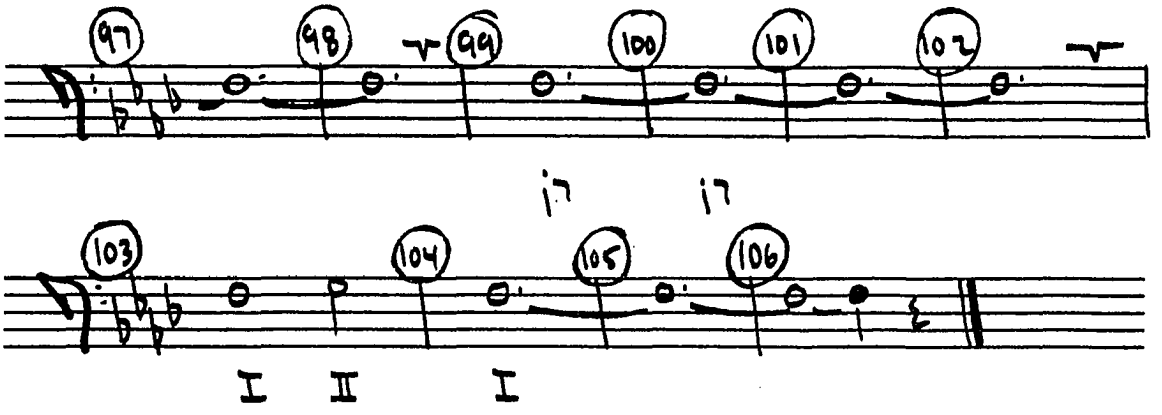
Harmonic Abstract



[1]Used by permission, Associated Music Publishers, Inc., New York, 1963.

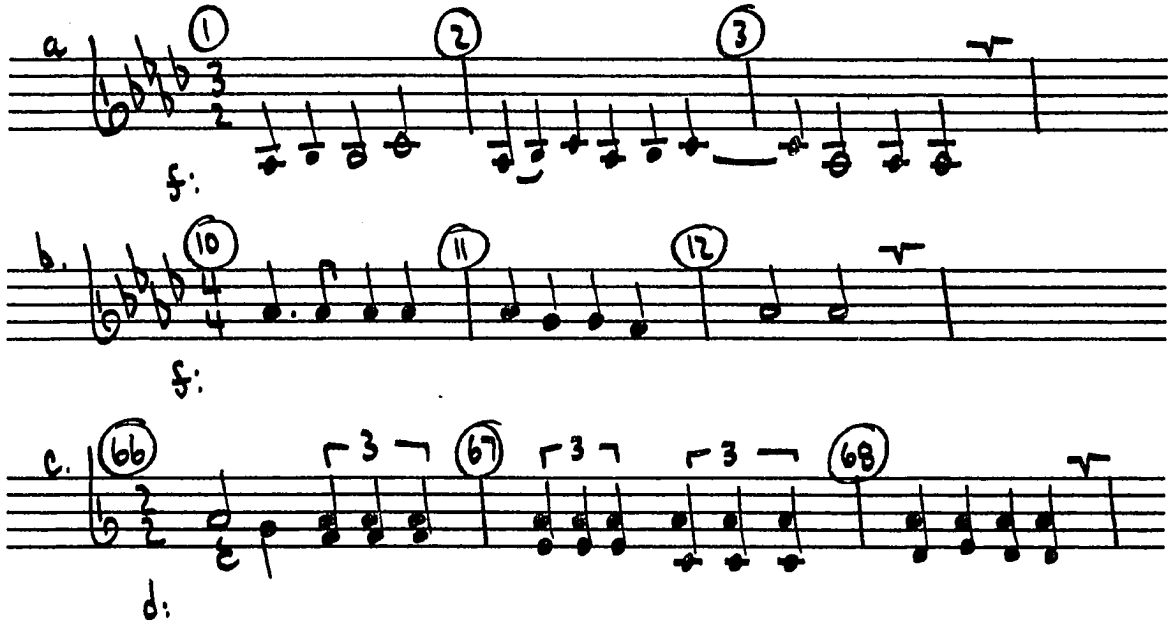

25 26 27 28 29 30 31
i6/4 i6/4 i6/4
32 33 34 35 36 37
IV7add3m 5#: I7add3m (i)
38 39 40 41 42
(i) (i7) (VII) i i i#2 VII7M
43 44 45 P.H.C. 46
VII7M VII7M i6 iv9/7 VI9/7M
47 48 49 50
iv9/7 VI9/7M vi
d: i
51 52 53 54 55 56 I.A.C.
bII9/7M bII9/7M VI7M VII7M iv9/7
c: bVII7M I I7M
57 58 59 60 61 62
a: i7 i7 i7


63 64 65 66 67 68
I.A.C.
i⁷ bvii⁹₇ d: (v⁷) (i) (v) (i)
69 70 71 I.A.C. 72 73
(v⁷) (i) (v) (i) eb: (v⁷) (i) (v) (i)
74 75 I.A.C. 76 77 I.A.C.
(v⁷) (i) (v) (i) e: (v⁷) (i) v i
78 79 I.A.C. 80 81 82
f: (v⁷) (i) (v) (i) f#: (v⁷) (i) (v) (i) (v⁷) (i)
83 I.A.C. 84 85 86
v i f: #vi vii i v⁷ #vi vii
87 88 89 A.H.C. 90
i v⁷ #vi vii i vii i⁷
91 92 93 94 95 96
i⁷ i⁷

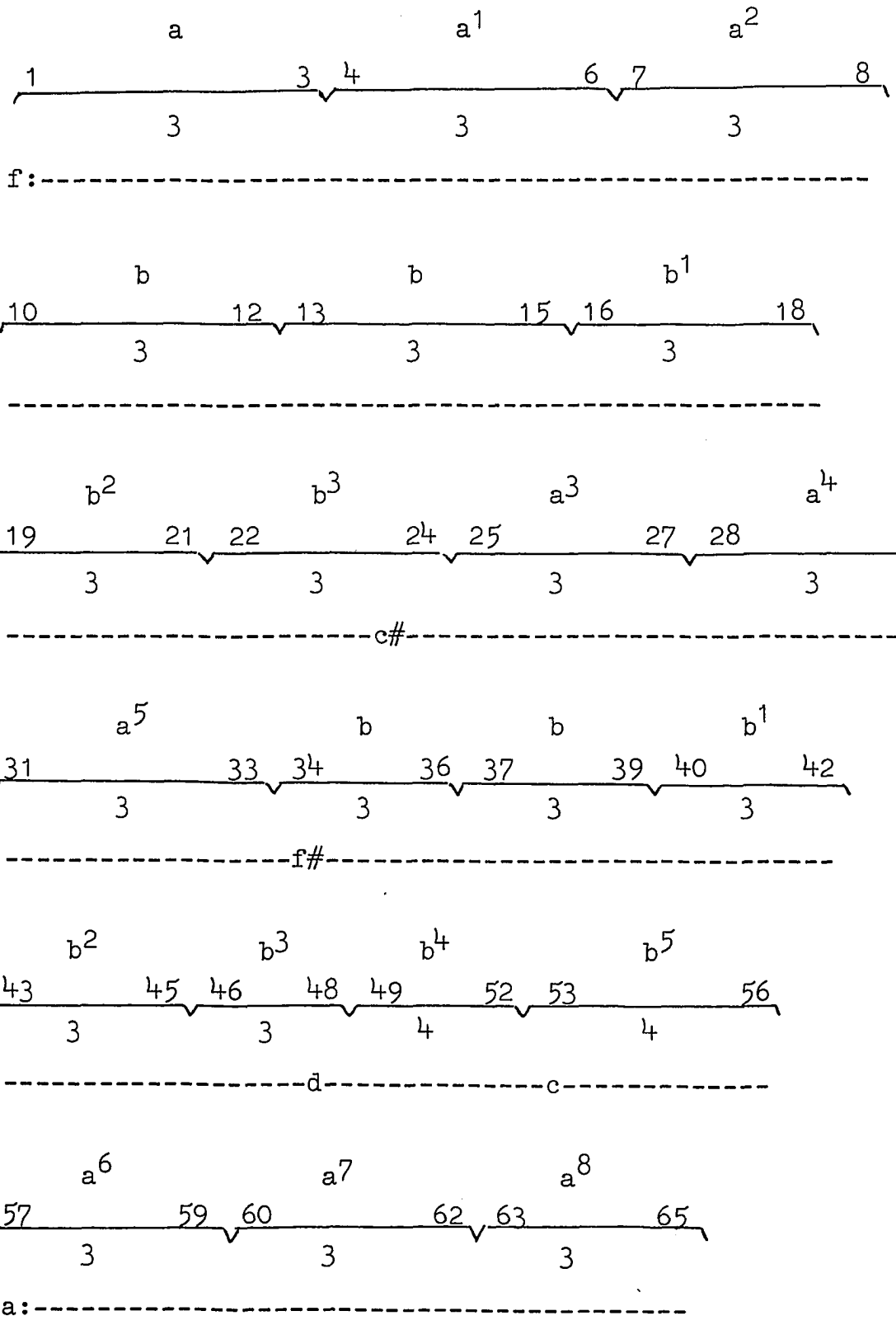

97
98
99
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101
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I
II
I

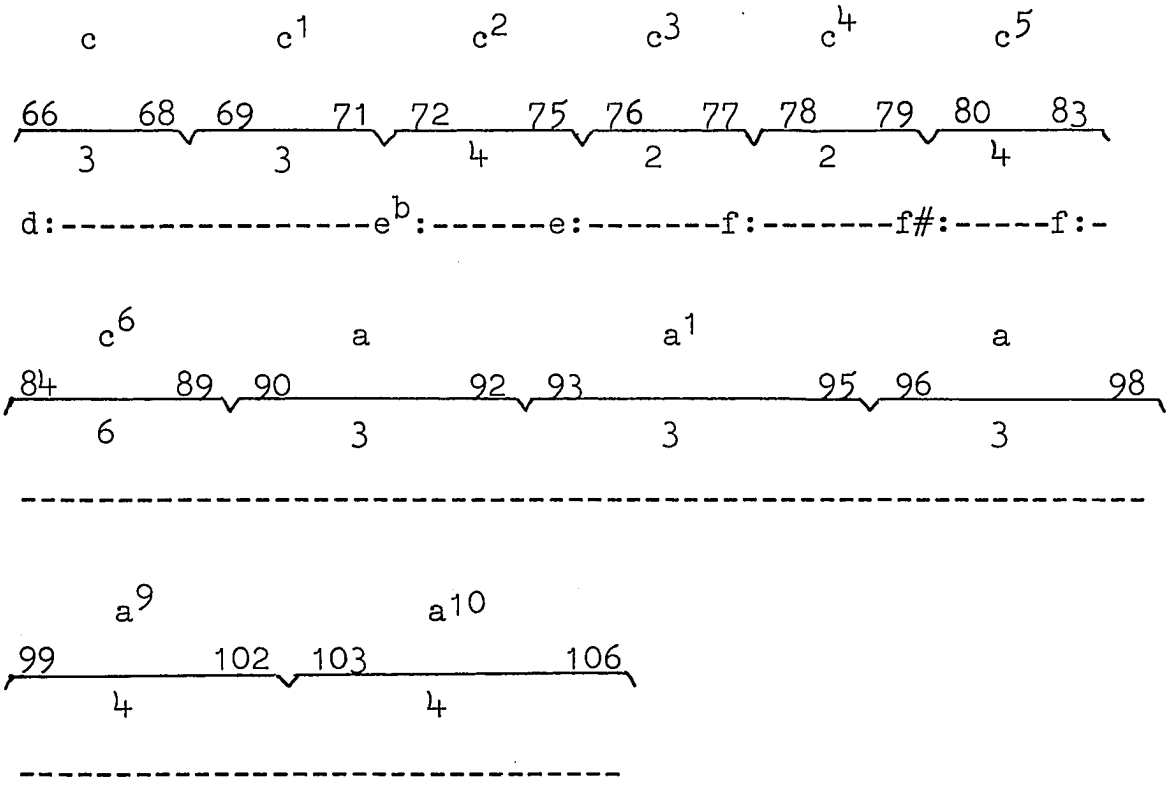
Formal Analysis

Melodic Units



Formal Diagram





Compositional Techniques

Harmony

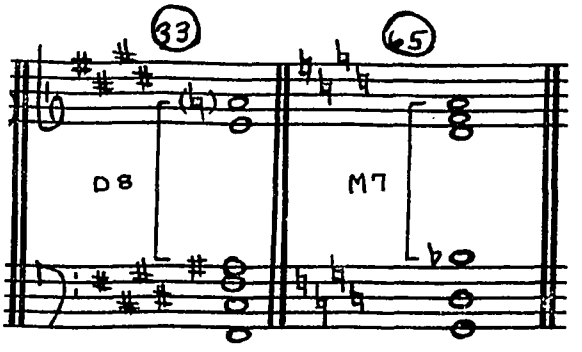
Chord types.--All of the chords included in this composition are tertian, and most are diatonic, but much of the musical interest is created by the chord types and the treatment of dissonance. Triads and seventh, ninth, and eleventh chords are used as well as chords with mixed thirds.

The only types of seventh chords included are the major major and the minor minor. The ninth chords which are used are major major major and minor minor major. The only eleventh chord included is a complete major major major augmented chord.

One of the most unusual sounds in the composition is the chord type with mixed thirds. It is used twice beginning in measure 9 and measure 33. The actual construction of the chord from the root up is: root, minor third, major third, perfect fifth, and minor seventh. In the actual spacing of the chord, the minor third is placed above the major third, creating its characteristic interval of a diminished octave. This chord first appears as a tonic in measure 9. The second statement of this chord type in measure 33, is a subdominant chord which serves as a pivot chord and becomes a new tonic.

The chord in measure 65, which has a formal location comparable to the two chords discussed above, is both similar to and different from the chord type with mixed thirds. In measure 65, as the chord type is changed to a minor minor major ninth, three characteristics remain common. The diminished octave appears as a major seventh. The chord type also contains five tones and the voicing remains in the same vertical texture. The two chord types are illustrated below.

Example 32. "De profundis clamavi"



The ninth chord does not function in the key, nor does it help to modulate to the next. But by constructing the chord as a minor minor major ninth, the composer has retained the characteristic dissonant interval and avoided the more common "dominant type" ninth chord.

Nonharmonic tones.--Real or implied pedal tones are found almost consistently throughout. In three of the passages, where the "a" phrases are repeated (beginning in measures 1, 57, and 90), the tonic pedal is sustained in the bass from the beginning to the end or near the end. A similar passage, beginning in measure 25, has a sustained dominant pedal in the bass. In the "c" phrases, in measures 66 through 83, inverted dominant pedals are implied. Beginning in the next measure, the inverted tonic pedal appears which descends an octave and remains until measure 102. There are no pedal tones in the "b" phrases, but the effect is there. The soprano line (second soprano when divided) begins on a tone, repeats it several times, moves away temporarily, returns to it, and then repeats the entire process.

Harmonic rhythm.--The placement of chord changes is usually on strong beats, but the frequency of chord changes is very slow in many sections, especially in the "a" and "c" phrases where the tonic harmony is repeated for several measures at a time. Because of the slow tempo in the "c"

phrases, the harmonic rhythm is also relatively slow with only one or two chords per measure.

Root movement and cadence harmony.--Cadences are created more by rhythm and text than by harmony. In most of the "a" phrases there is only one chord throughout with no chord change at the cadence. Most of the "b" phrases end with a submediant chord creating types of deceptive cadences. The cadence chord in measure 33 is a subdominant chord which forms a plagal half cadence. The important element in this cadence seems to be chord quality rather than the chord root. The cadence chord in measure 52, bII^{11+}_{7M}, is created by adding a series of descending thirds to the tonic chord. The cadence harmony in measures 54 and 55, $bVII^{7M}$- I, creates a modal imperfect authentic cadence. The harmony in measure 89 is a half cadence, i - v^7, under an inverted tonic pedal. The final cadence in measures 103 and 104, II - I, is weak because of the voice leading of the raised fourth and sixth scale degrees.

In spite of the predominantly nontraditional sequence of chord qualities, traditional root movement by ascending seconds, descending thirds, and descending fifths prevails. The "c" phrases have the most conventional harmonic effect in all of the composition in that there is primarily an alteration of tonic and dominant chords.

Conventional resolution of extended thirds usually does not occur. In many instances the sevenths, ninths, and elevenths simply appear and disappear without any kind of resolution.

Some of the more unexpected chord changes are (1) measure 23 to 24, VI^{9}_{7M} - bvi, where the harmonic seventh and ninth resolve up by half step, (2) measure 65 to 66 where there is a key change following a vii^{9}_{7} chord and where the harmonic sevenths and ninths are not resolved, (3) measure 83 to 84 where there is a direct modulation without an interruption in the flow of the harmony, and (4) in measures 103 and 104, where the II chord follows and resolves to the I.

Melody

Scale bases.--Most of the melodic lines in this composition are diatonic and modal. The predominant mode is aeolian, but there are a few exceptions worth noting. The music in measures 48 through 52 is in the D tonality. The only second scale degree used is the "Eb," the bass tone beginning in measure 51. This tone, which serves as the root of a Neapolitan chord, makes the mode phrygian. The music in measures 54 and 55 suggests the mixolydian mode in C with major tonic and subtonic chords.

The alto and tenor lines in measure 61 briefly hint at bimodality. With an A tonal center, the alto "F#" suggests the dorian mode while the tenor "F♮" returns to the

aeolian mode. If the two tones were reversed, the effect would not be nearly as obvious. As they are stated, the more surprising tone is in the top line, and both tones function as modal scale degrees. These two tones appear again in measure 64.

Melodic intervals and phrase lengths.--The melodic techniques used in this composition are relatively conservative. The melodies are mostly conjunct and have narrow to moderate ranges. The predominant phrase length is three measures and is approximately twelve seconds for the "a" phrases and seven seconds for the "b" and "c" phrases.

Melodic parallelism is an obvious trait of the textures throughout. All of the "a" phrases have parallel sixths in the alto and tenor lines. The divisi passages of the "b" phrases contain parallel thirds, two pairs of parallel thirds, and parallel ninth chords. In measures 80 through 89 the "c" phrases contain melodic doubling at the octave and parallel chords.

Rhythm

The overall rhythmic effect of the entire composition is stable, but the metric patterns are not especially strong. The stable quality is created by repeated rhythms, steady tempos, and the relatively long passages in the same meter. The weak metric accents result from the moderate

and slow tempos, syncopation, ties across bar lines, long tones (especially in the bass), and a few textual accents placed on weak beats or after-beats.

Tempos and/or meters change abruptly eight times, but only three meters ($\frac{3}{2}$, $\frac{4}{4}$, and $\frac{2}{2}$) are used. $\frac{3}{2}$ and $\frac{4}{4}$ are stated and reused several times, and as these two meters alternate, the note values remain constant. The $\frac{2}{2}$ meter is used only once and in a very slow tempo.

Apparently attempts have been made to coordinate the accents in the text with the accents of the various meters. In the "b" and "c" phrases where the meters are more symmetrical ($\frac{4}{4}$ and $\frac{2}{2}$), the textual accents invariably fall on strong beats. In the "a" phrases, where the meter is a weaker $\frac{3}{2}$ with syncopation and ties across bar lines, accented syllables fall either on strong beats or longer tones. Two notable exceptions are in measures 30 and 62 where accented syllables are one half of a beat long and enter on upbeats. A printed accent mark occurs at these points to show where the emphasis should naturally fall.

Unity and Variety

Source	Unifying compositional elements	Location of reuse	Variance
1-9	melody	25-33 (AT)	new tonality, transposition, new location in the scale, change in slurs and rhythm, slight change in the melodic curve at the end of the phrase
		57-65 (AT)	new tonality, transposition, change in slurs, ties and rhythm, partial change of mode, rests added
		90-102	extra phrase added, change of melodic curve and rhythm, partial rhythmic augmentation
1-9	texture	90-102	inverted tonic pedal added
1-9	accompaniment	25-33 (B)	new tonality, change of rhythm, new location in the scale, one pitch change
		57-65 (B)	new tonality, change of rhythm and pitches, voices divided
		90-102 (B)	extra phrase added, change of rhythm
9	harmony	33	new tonality, new Roman numeral, change of harmonic and melodic preparation
		65	new tonality, new Roman numeral, new chord type, change of harmonic and melodic preparation
10-24	melody and harmony	34-48	new tonality

Source	Unifying compositional elements	Location of reuse	Variance
		48-56	new tonality, note values combined, rhythm repeated, rhythmic augmentation, change of harmony, thicker texture
66-68	melody and harmony	69-71	change in melody (alto) and rhythm
		72-75	new tonality, change in melody (alto) and rhythm, phrase extended
		76-77	new tonality, change in melody (alto) and rhythm, phrase shortened
		78-79	new tonality, change in melody (alto) and rhythm, phrase shortened
		80-83	new tonality, change in melody (alto and bass) and rhythm, phrase extended, texture thickened
		84-89	new tonality, change in melody (lower voices), new harmony, change in rhythm, phrase extended, texture thickened.
		103-106	new tonality; change in register, rhythm, texture, and pitches

Tension and Release

The elements which create musical tension in this composition are dynamics, texture, vocal ranges, chord

types, harmonic progression, modulation, rhythm patterns, pauses, accents, and repeated tones. Three large climaxes occur in measures 24, 52, and 89. Measures 9 and 33 also have a slight increase in tension. In all five locations, there is a sudden musical relaxation immediately following the high points in tension.

The first increase in tension occurs in measure 9 where there is a crescendo, a thickening of texture, a rise in the melodic line, and a dissonant chord. An almost parallel occurrence takes place in measure 33.

Separating these two points is a much greater climax in measure 24. This greater point of tension is partially created by a gradual increase in volume, thickening of texture, and dissonance. A rise in pitch and an unexpected harmonic progression occur at the end of this succession.

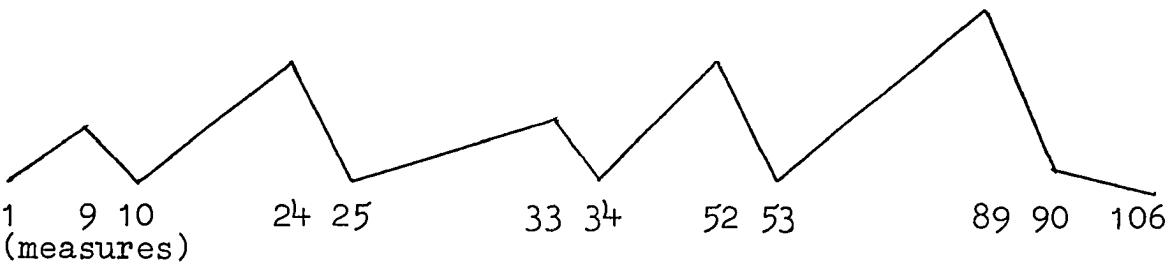
An exact repetition of this climax is in measure 48. However, it is stated one half step higher and is lengthened to measure 52. In the extension the bass and baritone lines are added, thickening the texture and allowing the chord types to become taller and taller. Also, the high pitch in the soprano remains much longer.

Immediately following this second and stronger climax, the music begins a long progression to the final and strongest climax in the entire composition, measure 89. In measures 53 to 65 the dynamics increase from "pp" to "f" and the texture thickens. In measures 66 through 79 the rhythms

become progressively faster and the tonal centers begin to rise by half steps every few measures. The tonal center rises once again in measures 80 through 83, the two treble lines are doubled as the texture thickens, and the passage ends with accented tones and a crescendo to "ff." Beginning in measure 84 the tonal center changes abruptly, the chords become complete, the upper and lower ranges are extended, the texture becomes thicker, and the highest pitch in the entire composition is approached by an ascending leap to be repeated for several measures. The harmonic pattern established at this point is then repeated two times, the texture thickens again, the tenor line becomes higher, and the melodic rhythm is repeated in triplets and marked with heavy accents. All of these elements lead to a strong half cadence in the original tonality. A long silence follows which also emphasizes the preceding climax.

The music in measure 90 begins with very little tension as does the very beginning, but instead of building, the tension further decreases with a drop in dynamics, slower rhythms, lower vocal registers, and a ritardando.

The tension and release in the entire composition may best be seen in the following illustration:



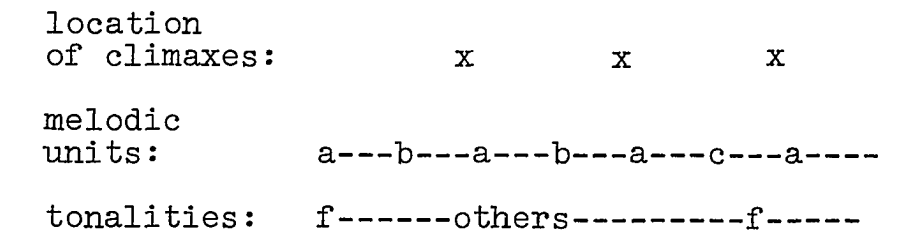
Total Balance

Balance in the composition is achieved through form, tonalities, and climaxes. These three elements work independently and collectively toward this end.

A rondo type of formal pattern is created by the order and repetition of melodic units. The three types of phrases appear in a balanced pattern. The "a" phrases begin the composition, alternate with the other two phrases, and then end it. The condensed formal pattern appears thus: a b a b a c a. The tonal centers change eleven times, but the composition begins and ends in the same key, F minor.

The three climaxes are spaced in such a way as to divide the total work into relatively equal fourths. Each climax is located immediately before a return to the "a" phrases.

The three elements of form, tonalities, and climaxes combine in this fashion:



Subjective Effect

There seems to be an attempt by the composer to give this work a medieval or ancient character. This is accomplished in spite of the more modern effects such as tall tertian chords, mixed thirds, and abrupt modulations.

The use of the Latin text certainly adds to the ancient character, but several of the musical techniques contribute much more to this end. The use of modal harmony, parallelism, and the deliberate emphasis of characteristic modal scale degrees reminds the listener of early Christian music. Other contributing factors are the weak metric accents, diatonic lines with conservative ranges, and the Psalm tone effects of the repeated tones in the soprano line.

Rehearsal Problems (With Some Suggested Solutions)

From the very beginning, conductors should avoid strong down beats. Since the metric patterns are weakened by slow tempos, long tones, syncopation, and ties, strong down beats would work against the intended effect of the rhythms and meters.

Because it appears that the composer has carefully set the text to the music, directors should know where all of the textual accents are and should give each its proper emphasis. The Latin text of this Psalm is scanned thus:

De pro-fún-dis cla-má-vi ad-te, Dó-mi-ne,
Dó-mi-ne, ex-áu-di vó-cem mé-am,
Fí-ant aú-res, tú-ae in-ten-dén-tes, in vó-cem depre-
cá-ti-ó-nis mé-ae,
Si in-í-qui-tá-tes ób-ser-vá-ve-ris,
Dó-mi-ne, quis su-sti-né-bit?

Qúi-a á-pud te pro-pi-ti-á-ti-o est:
et pró-pter lé-gem tu-am su-sti-nu-i te Dó-mi-ne.
Su-stí-nu-it á-ni-ma mé-a in vér-bo é-jus:
spe-rá-vit á-ni-ma mé-a in Dó-mi-no.
A cu-stó-di-a ma-tu-tí-na ús-que ad nó-ctem:
spé-ret Ís-ra-el in Dó-mi-no.
Qúi-a á-pud Dó-mi-num mi-se-ri-cór-di-a:
et co-pi-ó-sa á-pud é-um re-dém-pti-o.
Et ip-se ré-di-met Ís-ra-el ex ó-mni-bus in-i-qui-tá-ti-bus é-jus.

A pitch problem may be encountered in the chord which begins in measure 9. The characteristic sound, the diminished octave formed by the first tenor and first alto, should be emphasized slightly. Care should be given that neither of these two sections "pulls" the other off their correct pitch. Each of the pitches is melodically prepared by half steps. The identical chord type appears again in measure 33.

In measures 20 and 21, there may be some pitch difficulties caused by the chord types and the melodic leaps. The specific points are measure 20 (beat three) and measure 21 (beat one). It may help to rehearse the upper and lower pairs of voices separately before combining all four vocal lines.

The ninth chord in measure 22 may need special attention because of the close structure in the voicing, the

leaps in the melodic approach, and the tenor entrance without melodic preparation. All of the tones except the ninth, "Eb," are sounded or implied in the previous chord.

The harmonic resolution to measure 24 may sound much different from its visible appearance. As the key signature changes from four flats to four sharps, some enharmonic tones may appear to move down. Other tones, which retain the same letter name, should change pitch. The harmonic resolution to measure 48 has identical melodic movement to that in measure 24, but the written appearance is much different.

As the "a" phrases return in measure 25, it should be noted that there are several differences from the original three phrases. The bass tone is changed to the dominant, and the rhythm is altered slightly. The alto and tenor lines begin on different chord tones, their rhythm is changed slightly, and the slurs are placed differently. The entire rhythmic and melodic approach to the last chord is also changed.

Because of the harmonic dissonance, pitch problems may exist in the seventh, ninth, and eleventh chords in measures 49 through 52, especially in the baritone and bass lines. After finding the correct pitches in measure 49, the tones in the following measures are approached by descending thirds.

When the "a" phrases return a second time in measure 57, they are again altered rhythmically and melodically in all three vocal lines. One of the more important differences is the melodic cross relation in the alto and tenor lines in measure 61. The alto line contains a descending "F#," and the tenor line contains an ascending "F♮."

The chord type at the end of the third series of "a" phrases (measure 65) is different from the chords at the end of the first and second series of "a" phrases (see compositional techniques, example 32). Care should be taken so the previous chord type will not be repeated. It should also be noted that the melodic approach in the second alto line is an augmented second.

Because of the slow tempo in the "c" phrases, ($\frac{2}{2}$, d = 58), conductors may wish to conduct each quarter note or triplet quarter note separately. If this is done, all beats will not be equal in length, and all measures will not have the same number of beats.

Several ascending tritones appear in the alto line beginning with the approach to measure 72. As new keys are introduced (measures 76, 78, and 80), the problem recurs.

There may be several pitch problems in measures 84 through 89. The first occurs at the direct modulation in measure 84. The soprano pitch, "F♮," is approached by an ascending diminished fourth and forms a cross relation with

the "F#" in the previous measure. There are also cross relations in the two alto lines. "A♮" and "B♮" are repeatedly followed by "Ab" and "Bb." One other pitch problem in this passage is the descending diminished fifth in the tenor line which moves from measure 85 to 86.

In measure 90 when the "a" phrases last appear, an added soprano line contains both quarter notes and triplet quarter notes. Care should be taken to keep the simple divided beats and the superimposed compound divided beats distinct. The lower three lines at this point repeat the first three phrases of the composition except there is a different ending and an additional fourth phrase.

The "D♮" and the "B♮" in measure 103 may present a pitch problem. This combination of altered scale tones has not occurred previously in the "a" phrases, and the pitches involved do not resolve melodically as expected.

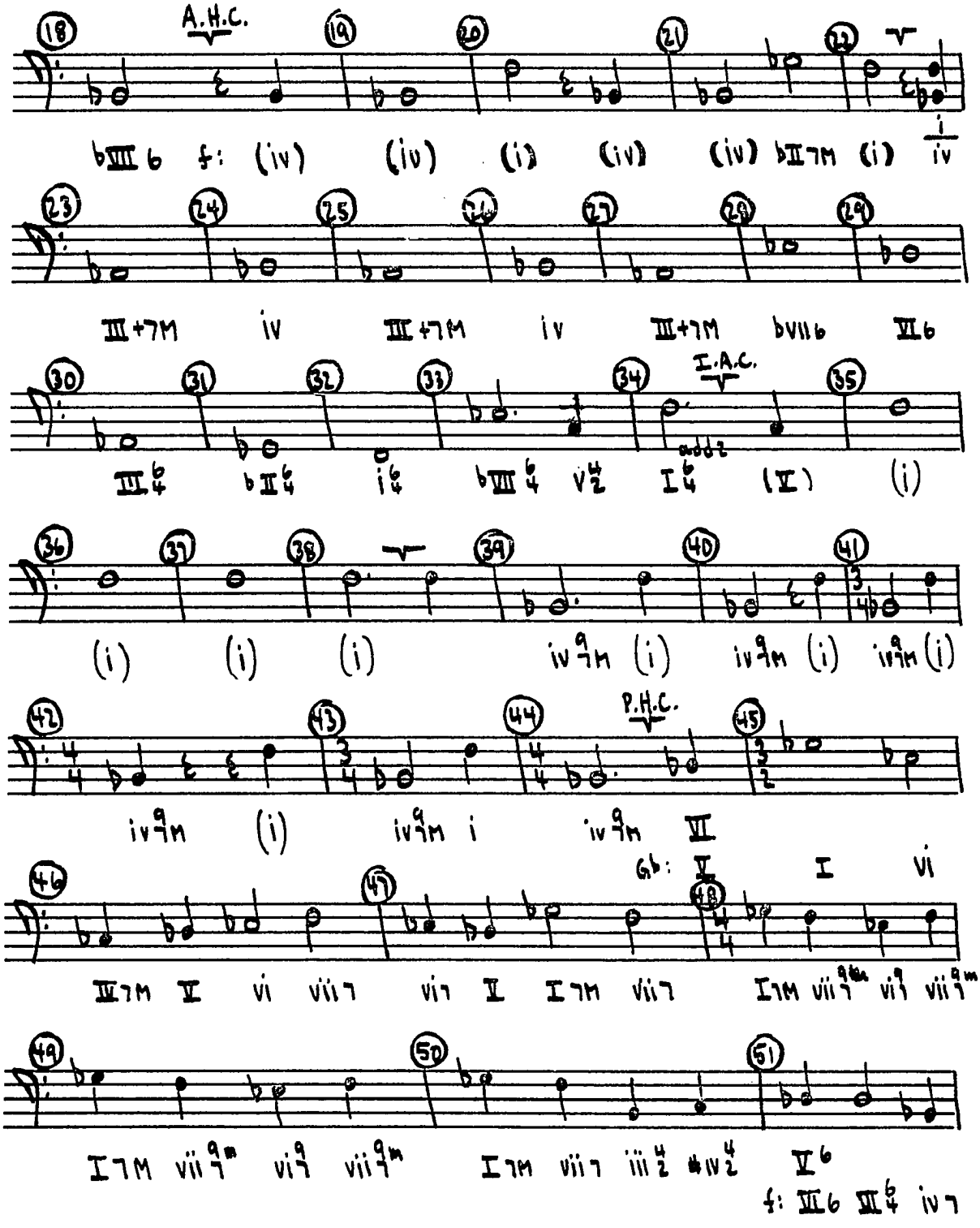
CHAPTER IX

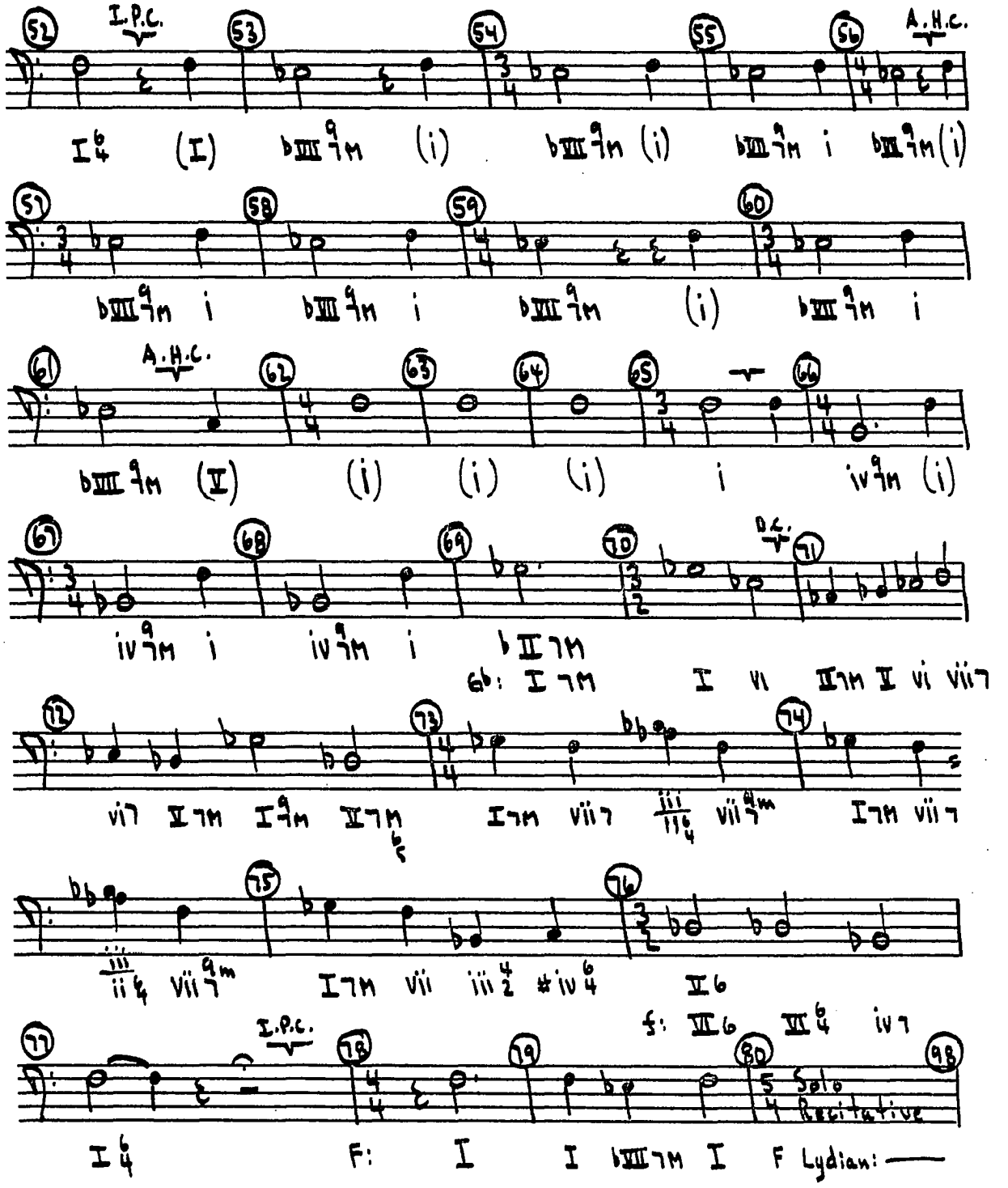
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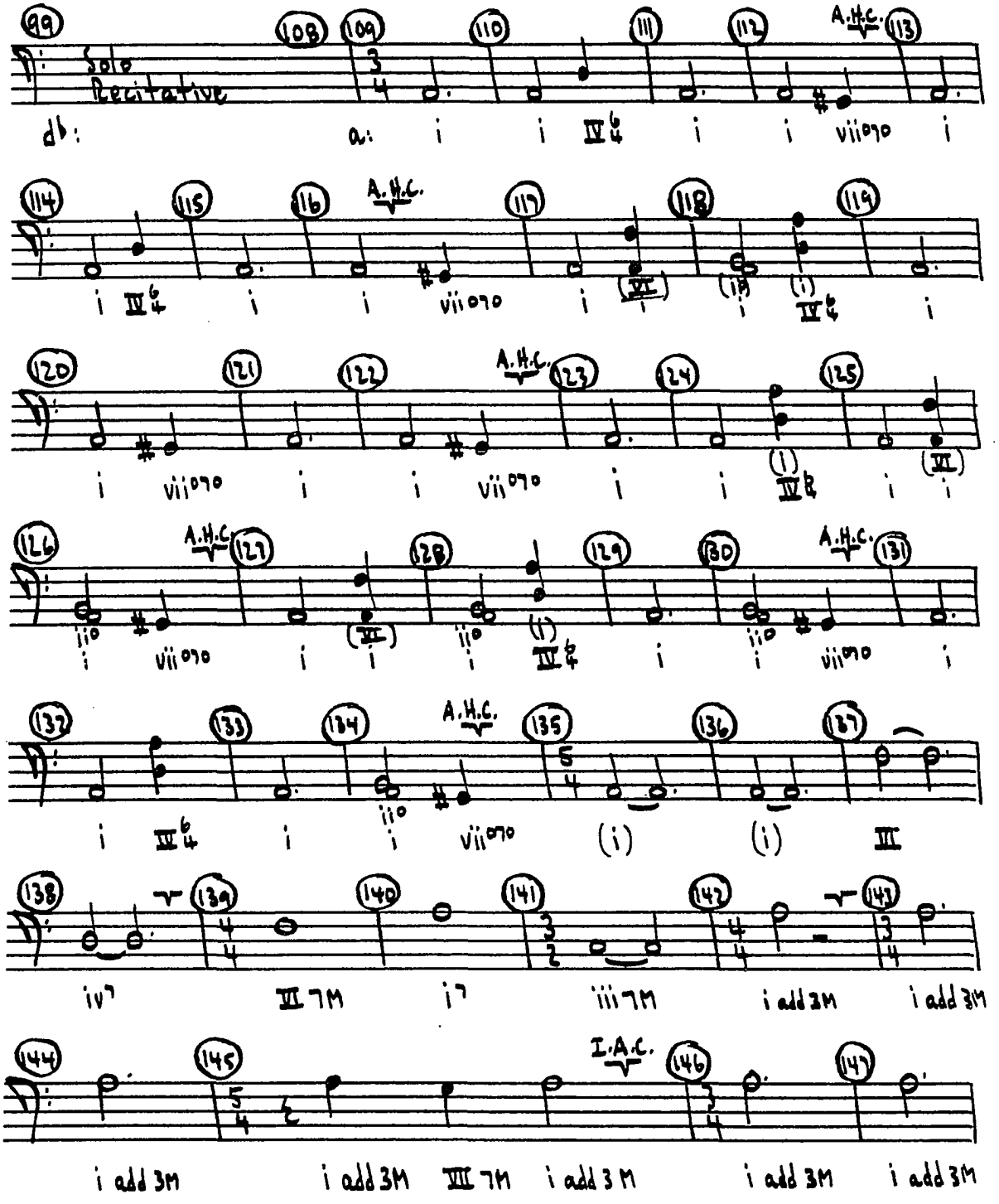
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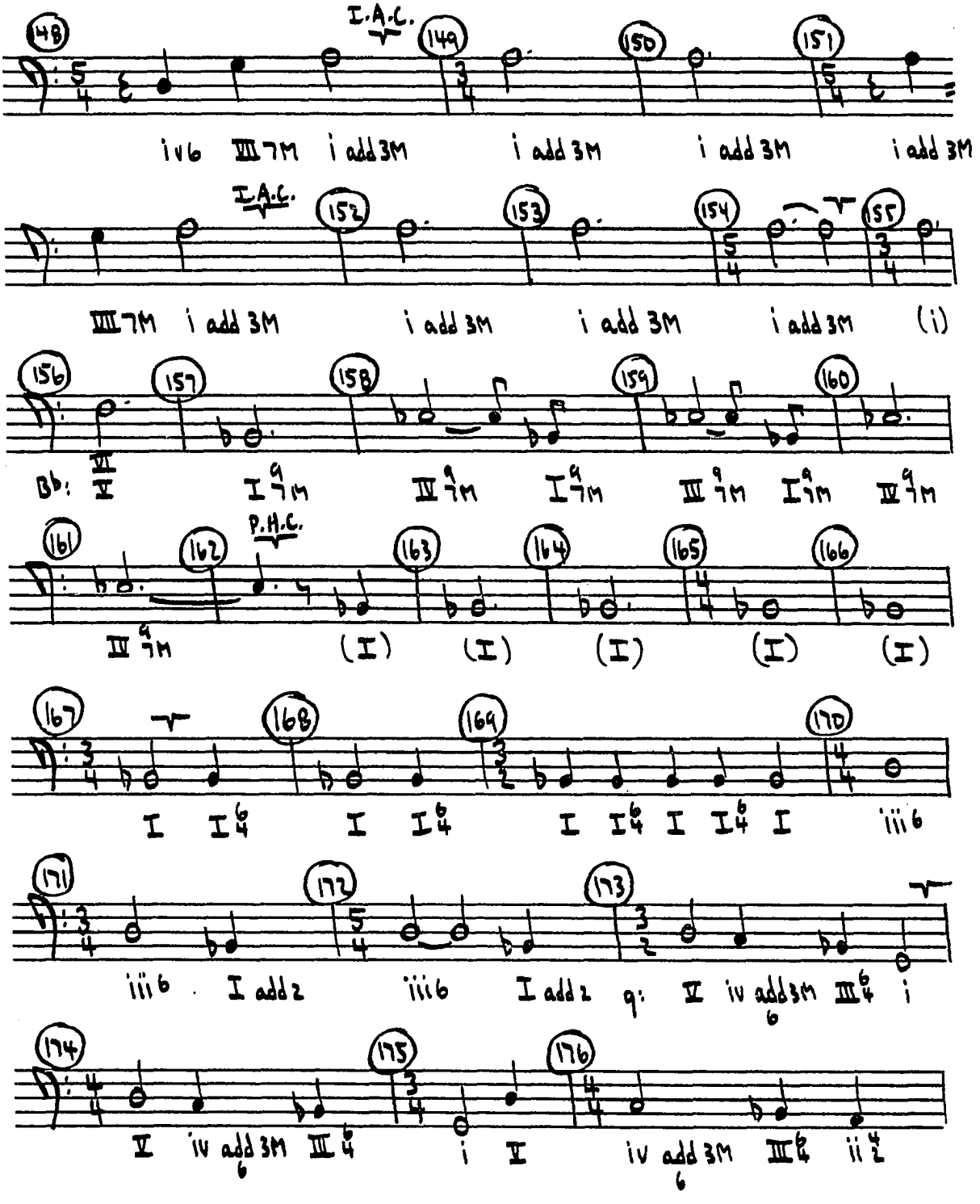


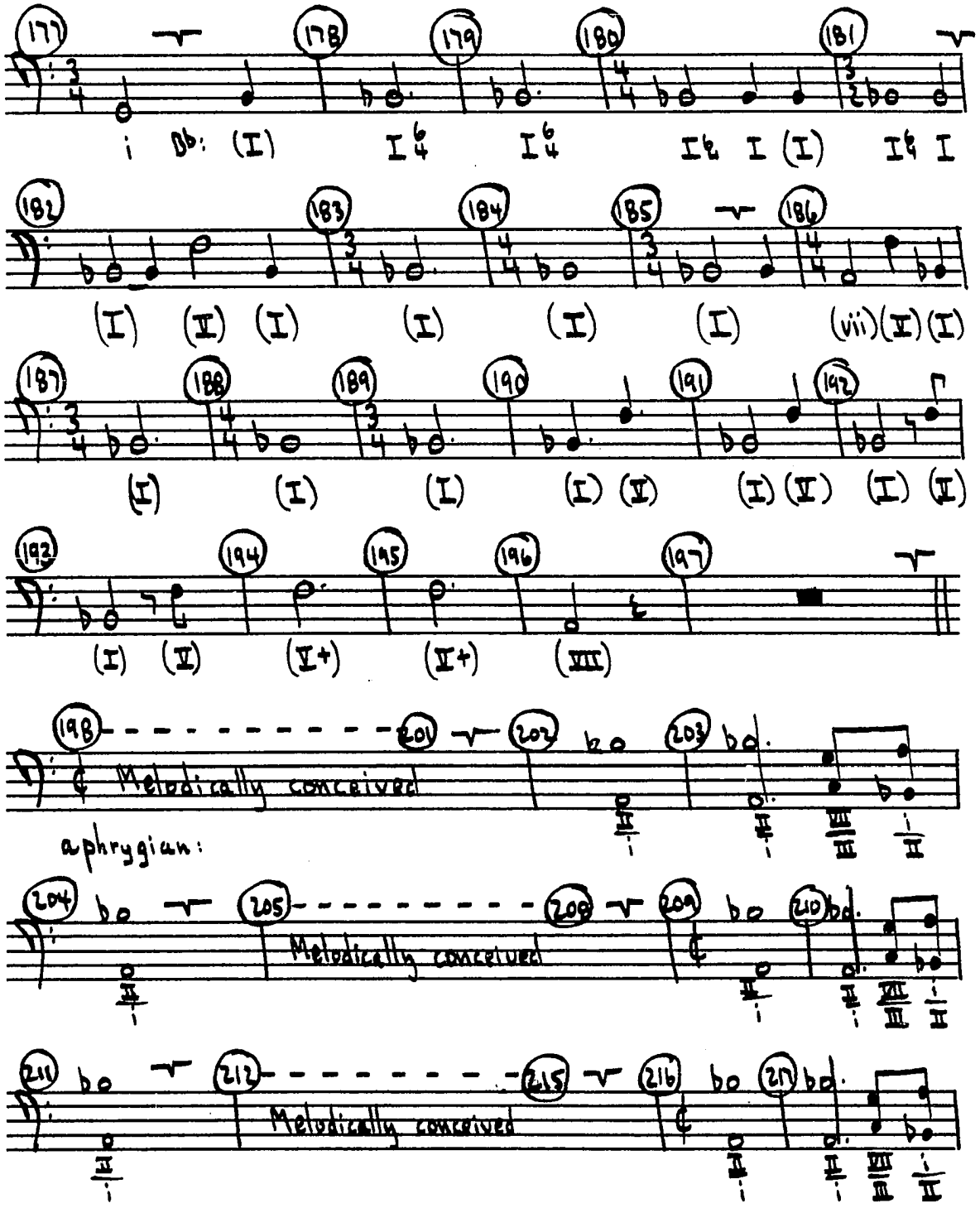
[1]Used by permission, G. Schirmer, Inc., New York, 1962.


A.H.C.
I.A.C.
P.H.C.
Gb: V I vi
f: III6 III6/4 iv7


52 I.P.C. 53 54 55 56 A.H.C.
I6/4 (I) bIII9/7M (i) bIII9/7M (i) bIII9/7M i bIII9/7M (i)
57 58 59 60
bIII9/7M i bIII9/7M i bIII9/7M (i) bIII9/7M i
61 A.H.C. 62 63 64 65 66
bIII9/7M (I) (i) (i) (i) i iv9/7M (i)
67 68 69 70 D.C. 71
iv9/7M i iv9/7M i bII7M
6b: I7M I vi II7M I vi vii7
72 73 74
vii7 II7M I9/7M II7M I7M vii7 iii/11 6/4 vii9/7m I7M vii7
75 76
iii/11 6/4 ii vii9/7m I7M vii iii 4/2 #iv 6/4 II6
5: III6 III 6/4 iv7
77 I.P.C. 78 79 80 Solo Recitative 98
I 6/4 F: I I bVII7M I F Lydian:


Solo
Recitative
A.H.C.
I.A.C.


148
I.A.C.
149
150
151
iv6 III7M i add 3M i add 3M i add 3M i add 3M
I.A.C.
152
153
154
155
III7M i add 3M i add 3M i add 3M i add 3M (i)
156
157
158
159
160
Bb: VII/V I9/7M III9/7M I9/7M III9/7M I9/7M IV9/7M
161
162
P.H.C.
163
164
165
166
III9/7M (I) (I) (I) (I) (I)
167
168
169
170
I I6/4 I I6/4 I I6/4 I I6/4 I iii6
171
172
173
iii6 I add 2 iii6 I add 2 g: V iv add 6 3M III6/4 i
174
175
176
V iv add 6 3M III6/4 i V iv add 6 3M III6/4 ii4/2


177 178 179 180 181
Db: (I) I6/4 I6/4 I6 I (I) I6 I
182 183 184 185 186
(I) (II) (I) (I) (I) (I) (vii) (II) (I)
187 188 189 190 191 192
(I) (I) (I) (I) (V) (I) (V) (I) (V)
193 194 195 196 197
(I) (V) (V+) (V+) (VII)
198 201 202 203
Melodically conceived
aphrygian:
204 205 208 209 210
Melodically conceived
211 212 215 216 217
Melodically conceived

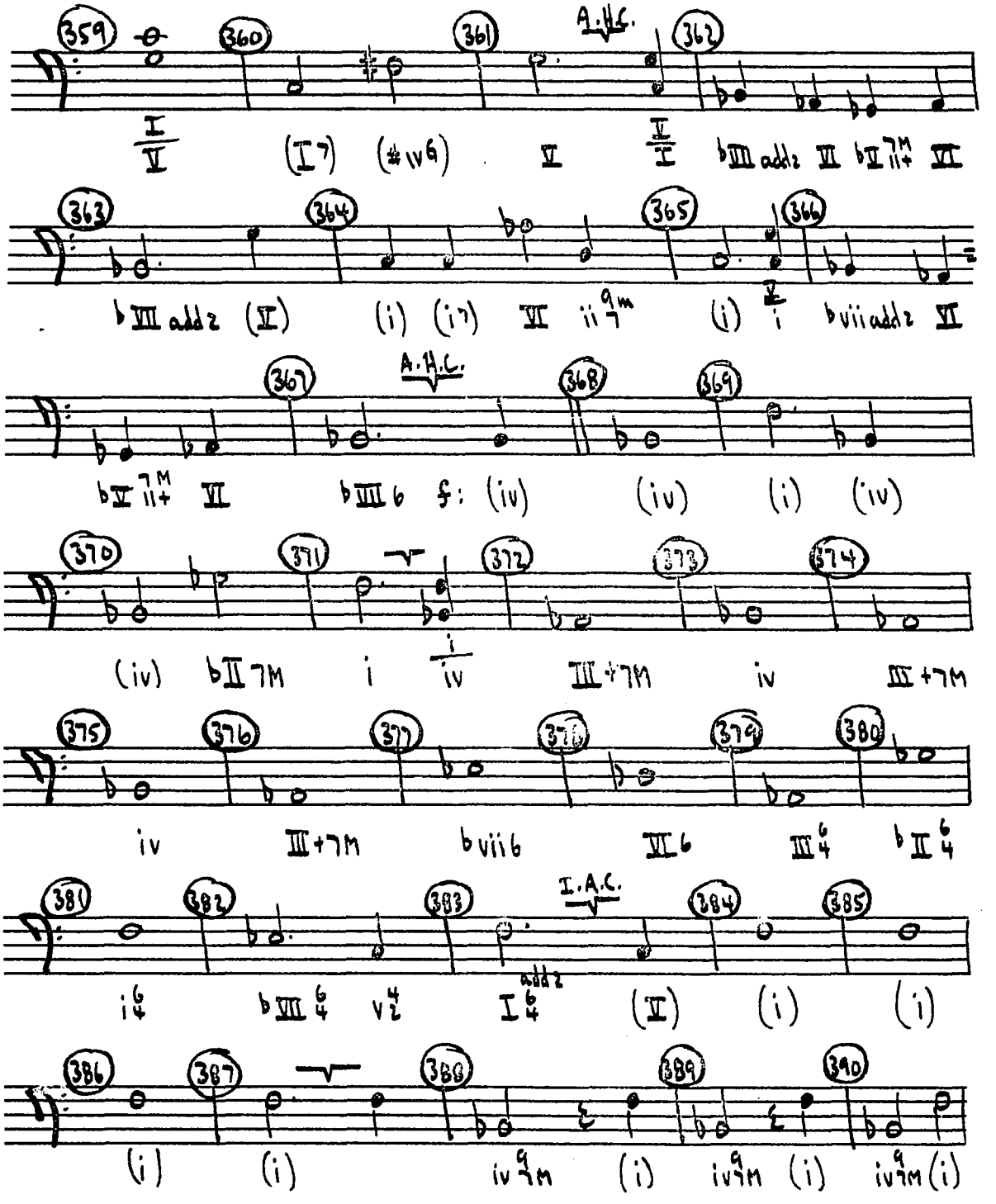
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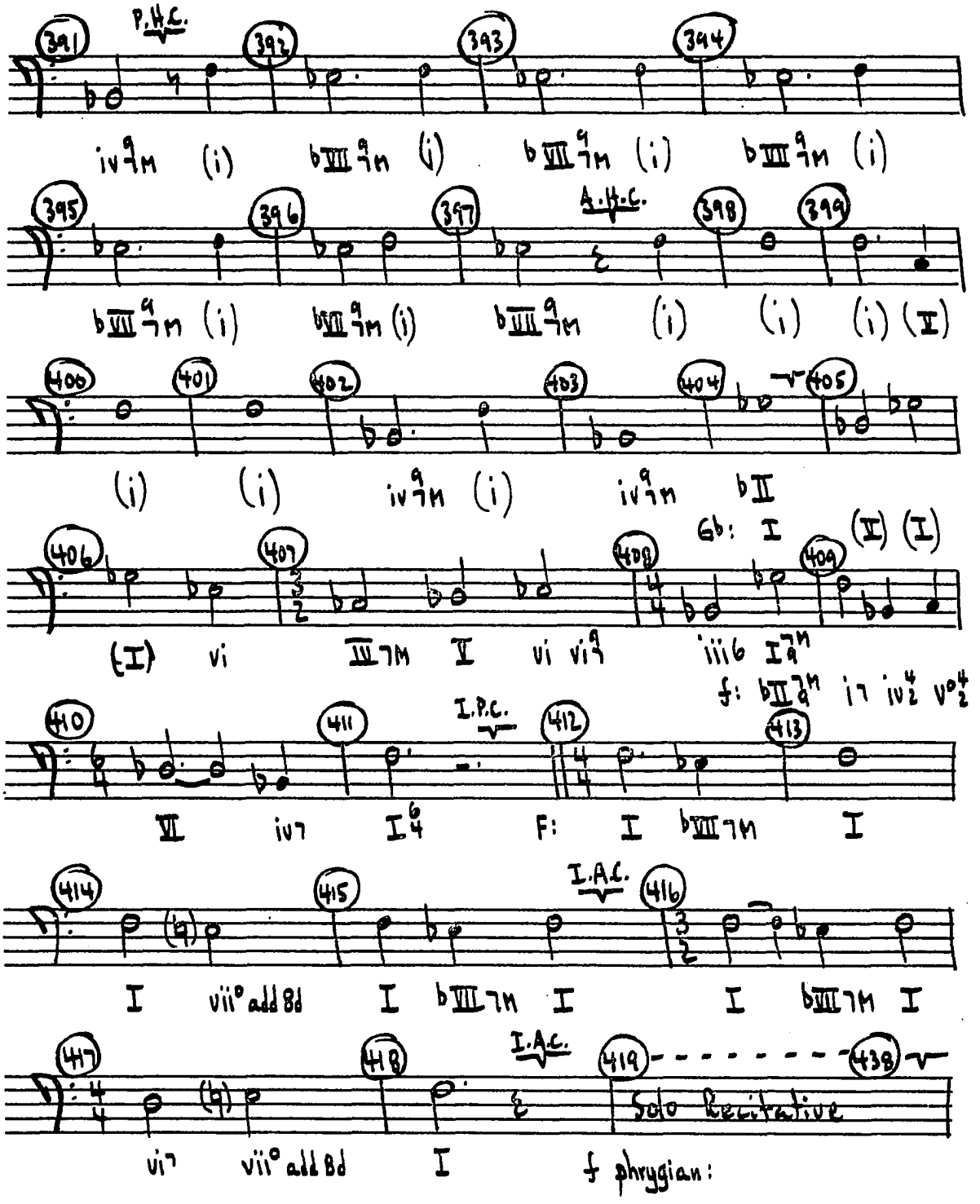
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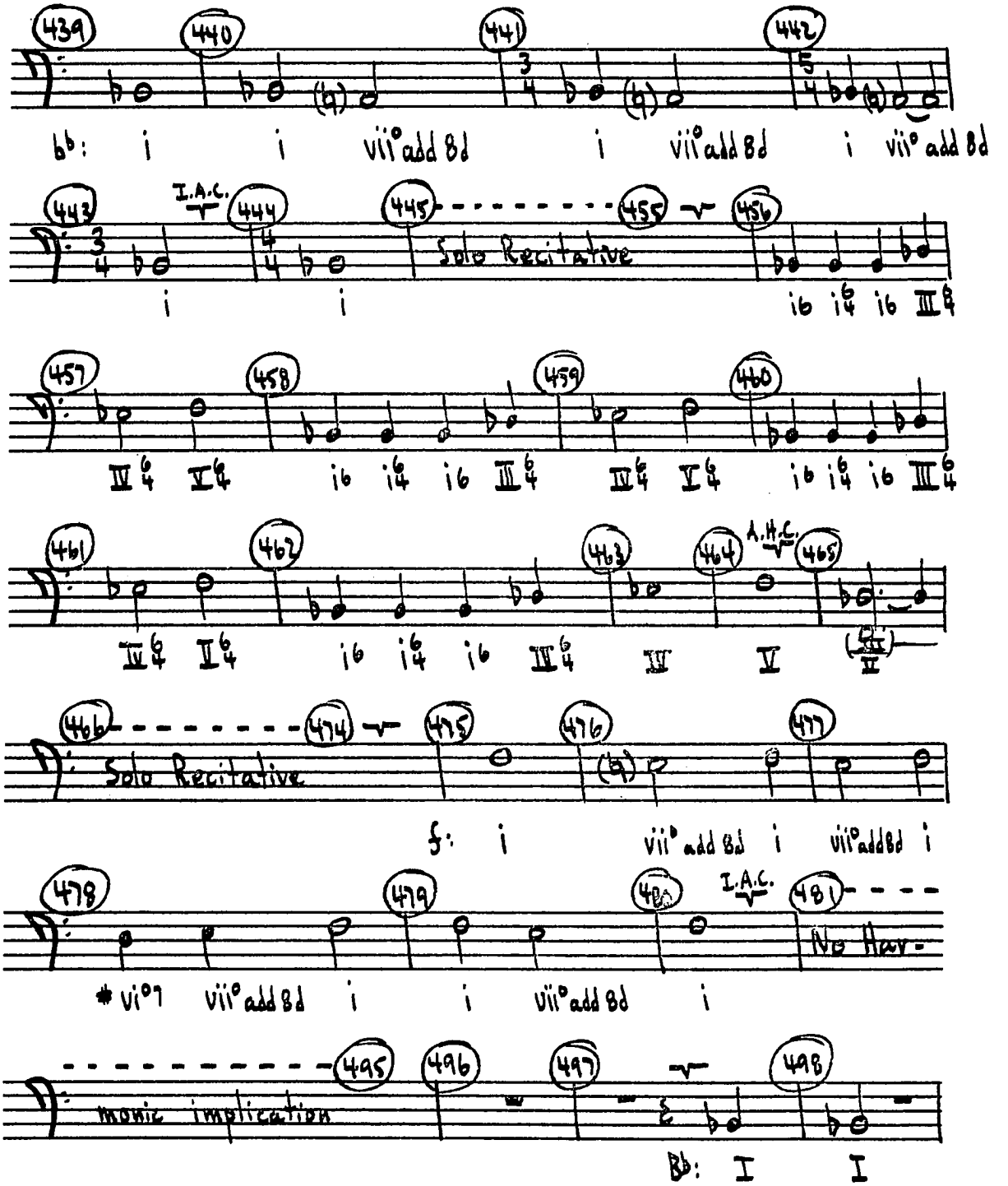
UNIVERSITY MICROFILMS.


302 303 304 305
I/VI V/I ♭VIIadd2 iv6/5 I/VI V/I I6/4 ♭VIIadd2 iv6/5
306 307 308 309
P.H.C.
I/VI V/I ♭VIIadd2 iv6/5 I/VI c: (i)
310 311 312 313
(VI) (V) (i) (III) (VII) (V) i6 i6/4 i6 III6/4
314 315 316 317 318
A.H.C.
IV6/4 V6/4 i6 i6/4 i6 ♭II6/4 i6/4
319 320 321 322 323
(i) (III) (V) (i) (III) (VII) (V) i6 i6/4 i6
324 325 326 327
i6/4 i6 i6/4 ♭II6/4 (i) (IV) (V) (i) (III)
328 329 330
A.H.C.
III V i6 ♭III6/4 i6/4 i6 ♭VII6/4 i6/4

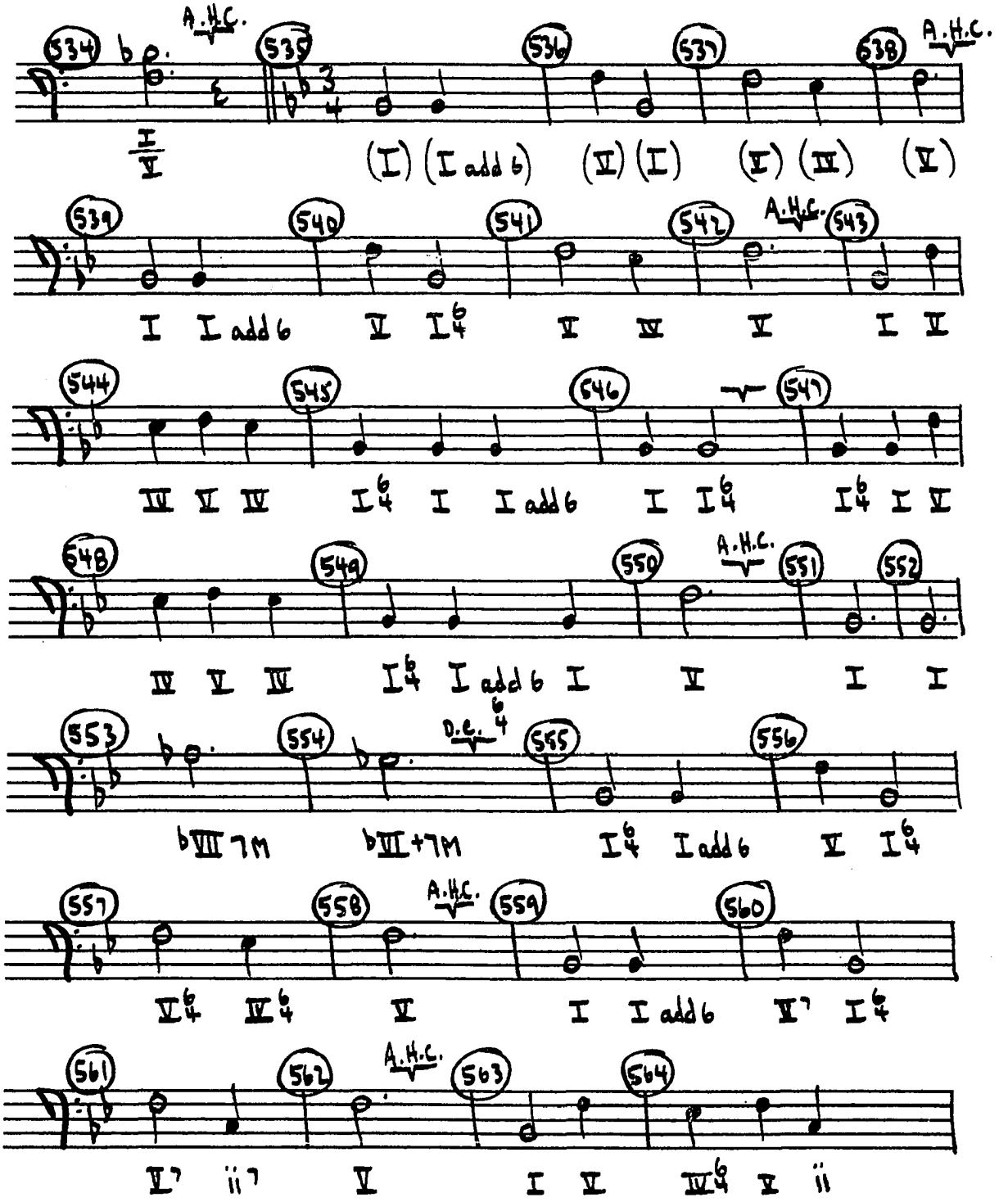

331 332 I.A.C. 333
i6 bVII6/4 i6/4 i6 bVII6/4 i6/4 eb: VI6/4 i6 i6/4 i6 III6/4
334 335 336 337
IV6/4 V6/4 i6 i6/4 i6 III6/4 IV6/4 V6/4 i6 III6/4 i6 i6/4
338 339 340 341
i6 III6/4 i6 i6/4 bII6/4 c: (i) (IV) (V)
342 343 344 345
(i) (III) (IV) (V) i6 i6/4 i6 III6/4 IV6/4 V6/4
346 347 A.H.C. 348 349 350
i6 i6/4 i6 III6/4 IV6/4 V6/4 (i) (IV) (V) i6 i6/4
351 3 3 352 353 A.H.C. 354
i6 i i6/4 IV V i bviio7 i bviio7
355 356 357 A.H.C. 358
i bvii add2 iv6/5 I/II II/I bvii add2 iv6/5

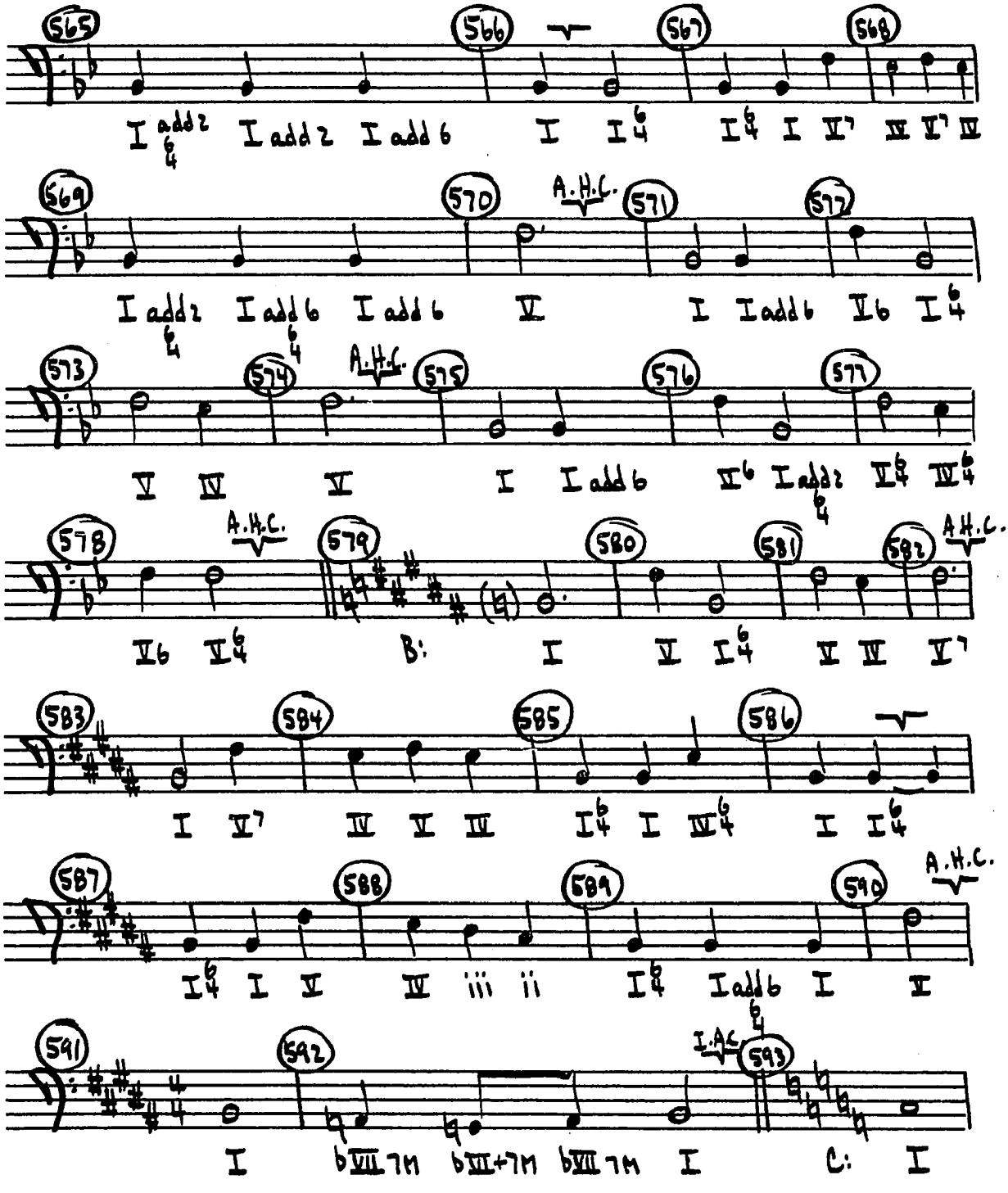

359
360
361
A.H.C.
362
I
V
(I7)
(#iv6)
V
V
I
♭VIadd2
III
♭VI M7
VII
363
364
365
366
♭VIadd2
(V)
(i)
(i7)
VI
ii9 m7
(i)
V
i
♭viiadd2
VI
367
A.H.C.
368
369
♭VI M7
VII
♭III6
(iv)
(iv)
(i)
(iv)
370
371
372
373
374
(iv)
♭II M7
i
i
iv
III+M7
iv
III+M7
375
376
377
378
379
380
iv
III+M7
♭vii6
VI6
III6 4
♭II6 4
381
382
383
I.A.C.
384
385
i6 4
♭III6 4
V2 4
I6 4 add2
(V)
(i)
(i)
386
387
388
389
390
(i)
(i)
iv9 m7
(i)
iv9 m7
(i)
iv9 m7
(i)

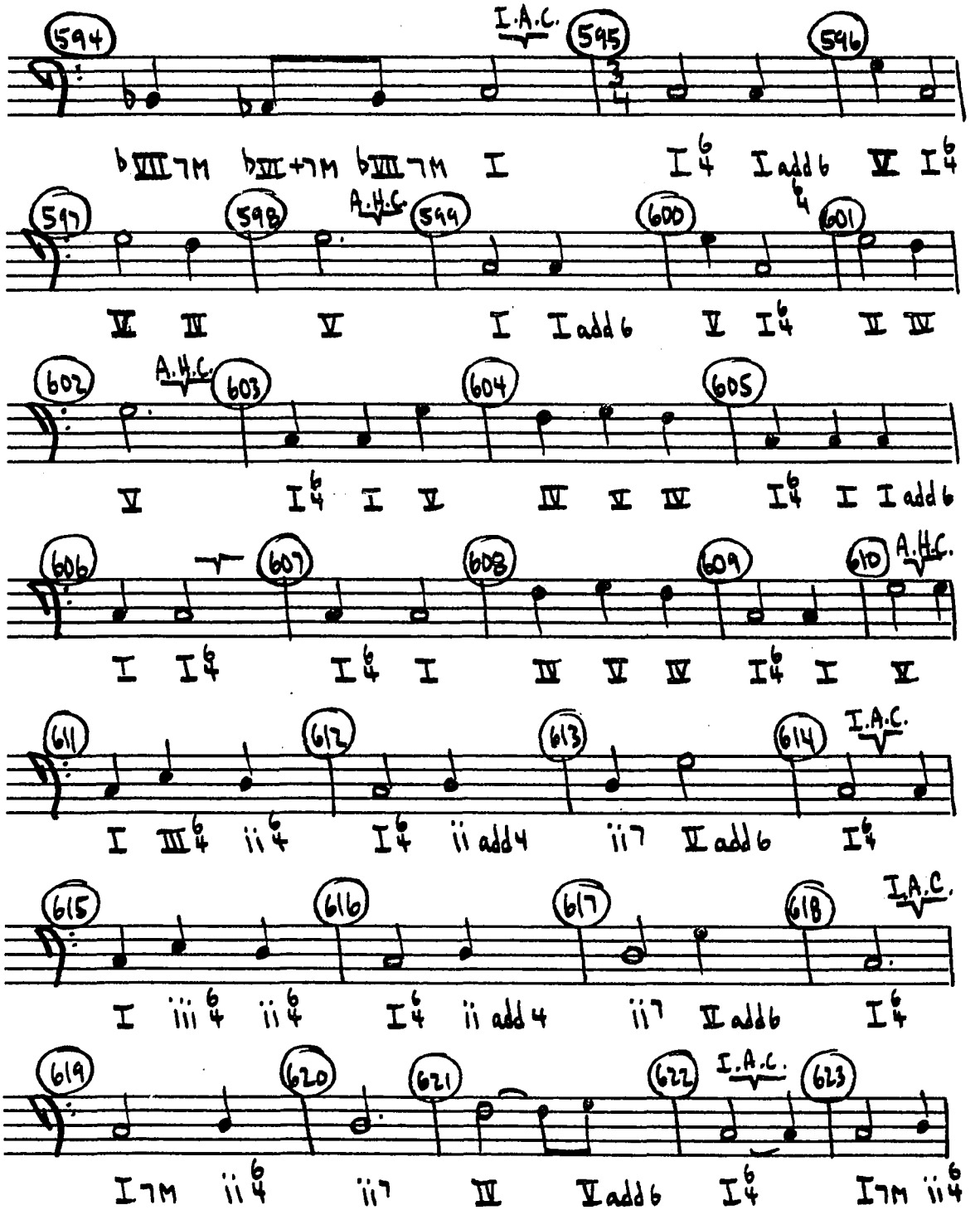

391
P.A.C.
392
393
394
395
396
397
A.A.C.
398
399
400
401
402
403
404
405
406
407
408
409
410
411
I.P.C.
412
413
414
415
I.A.C.
416
417
418
I.A.C.
419
438
Solo Recitative
f phrygian:

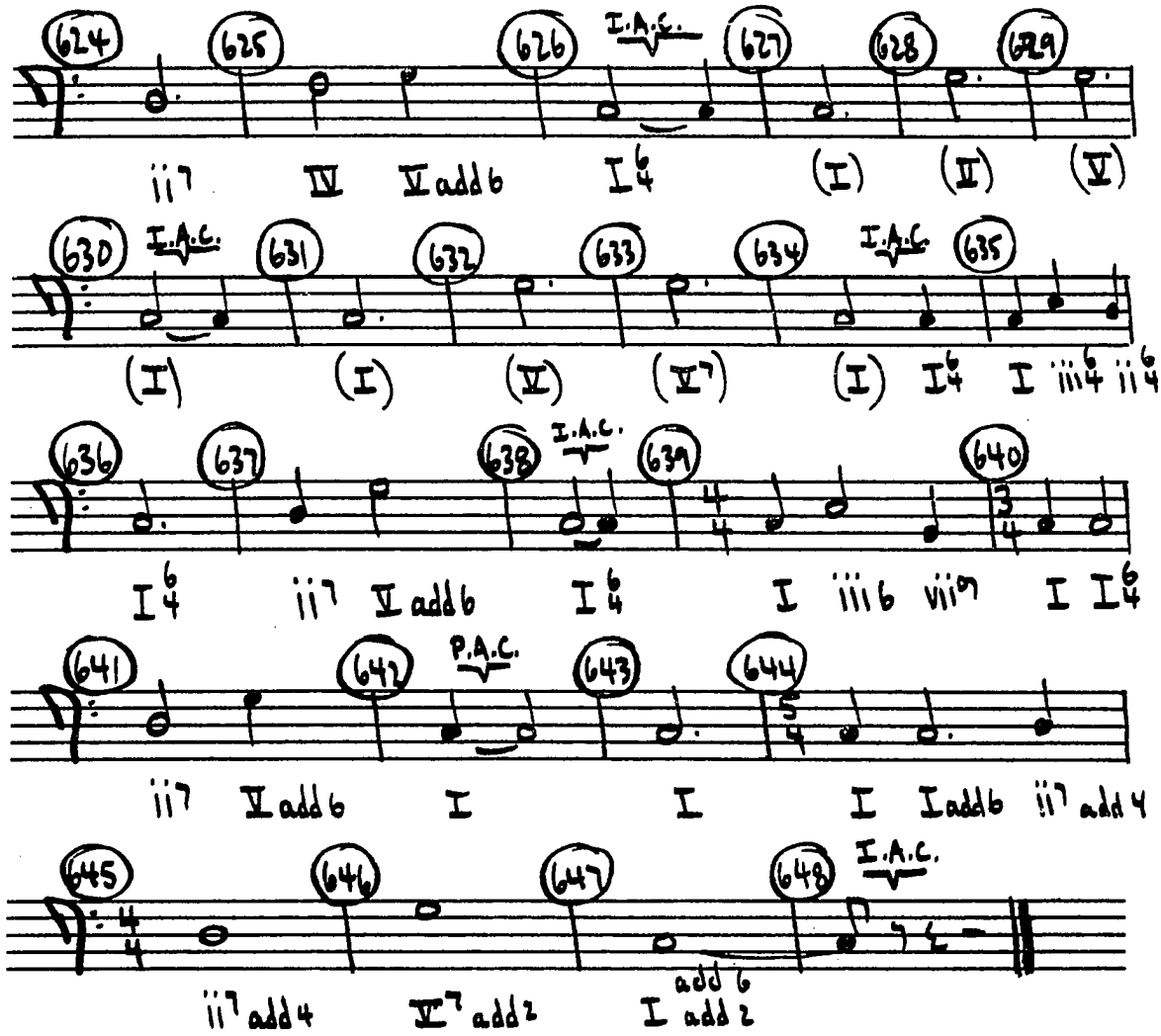

439
440
441
442
3/4
5/4
bb: i i vii°add 8d i vii°add 8d i vii° add 8d
443
I.A.C.
444
445
455
456
3/4
4/4
Solo Recitative
i i
i6 i6/4 i6 III6/4
457
458
459
460
IV6/4 V6/4 i6 i6/4 i6 III6/4 III6/4 V6/4 i6 i6/4 i6 III6/4
461
462
463
464
A.H.C.
465
IV6/4 II6/4 i6 i6/4 i6 III6/4 III V
466
474
475
476
477
Solo Recitative
f: i vii° add 8d i vii°add8d i
478
479
480
I.A.C.
481
No Harv-
vi°7 vii°add 8d i i vii°add 8d i
495
496
497
498
Modic implication
Bb: I I


499 500 501 507 503 A.H.C.
V6/5 bVII+7M I/V I V6/5 bVII7M I/V I
504 505 506 507 I.A.C. 508
V7 add 3m I V7 add 3m I I
509 510 511 512 513 A.H.C.
V6/5 bVII+7M I/V I V6/5 bVII7M I/V
514 515 516 517 518 I.A.C.
(I) (i) i bVII7M bVII7M V7 add3m i6/4
519 520 521 522 I.A.C.
(i) i bVII7M bVII7M V7 add3m i viiº add3d
523 524 525 526 I.A.C. 527
i i V7 add 3m I add 6m I
528 529 530 A.H.C. 531 532 533
V6/5 vii7 I/V I V6/5 bVII7M

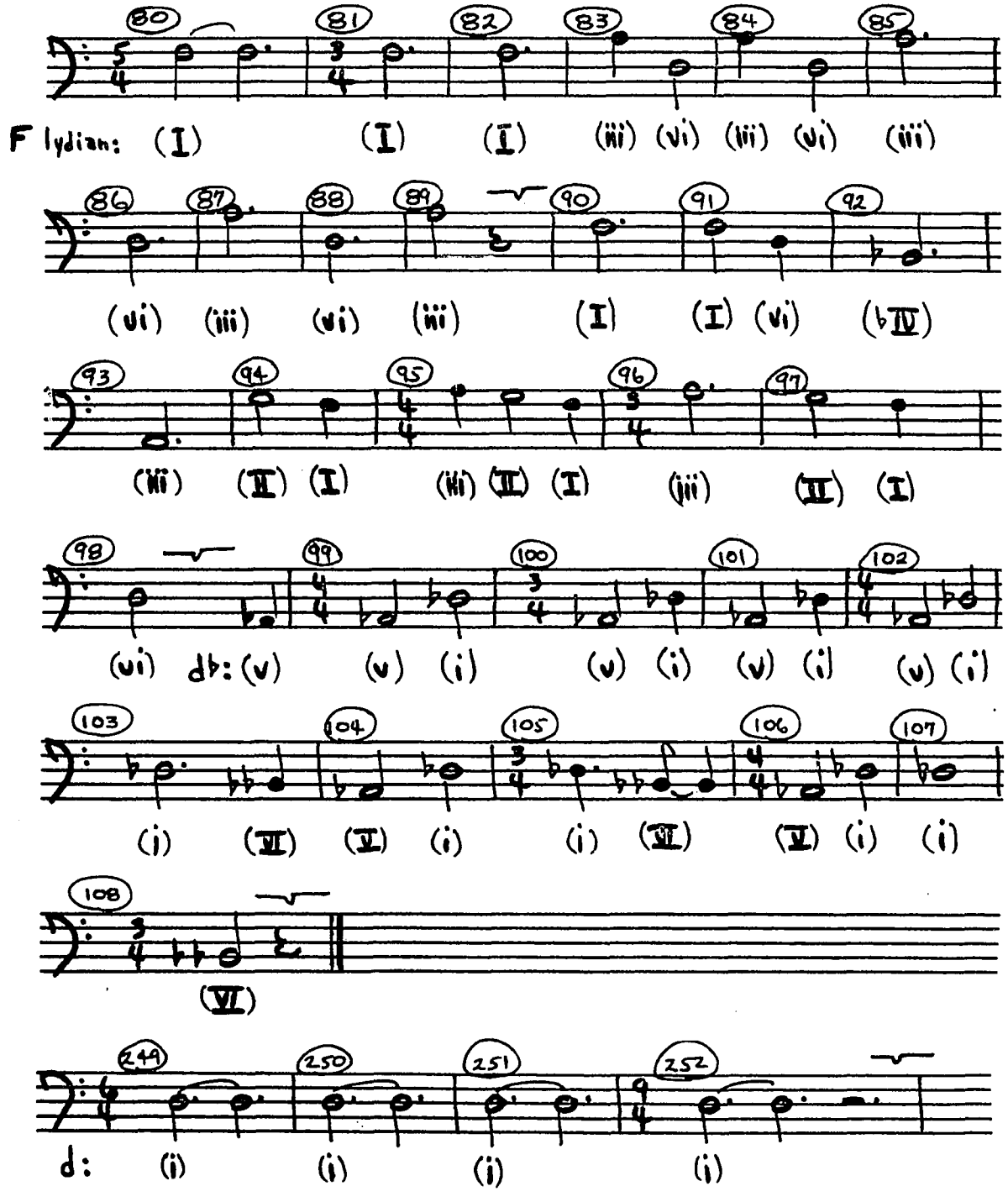

534 535 536 537 538
A.H.C. A.H.C.
I/V (I) (I add 6) (V) (I) (V) (III) (V)
539 540 541 542 543
A.H.C.
I I add 6 V I6/4 V VI V I V
544 545 546 547
III V IV I6/4 I I add 6 I I6/4 I6/4 I V
548 549 550 551 552
A.H.C.
IV V III I6/4 I add 6 I V I I
553 554 555 556
D.C. 6/4
♭VII 7M ♭VII+7M I6/4 I add 6 V I6/4
557 558 559 560
A.H.C.
V6/4 IV6/4 V I I add 6 V7 I6/4
561 562 563 564
A.H.C.
V7 ii7 V I V IV6/4 V ii

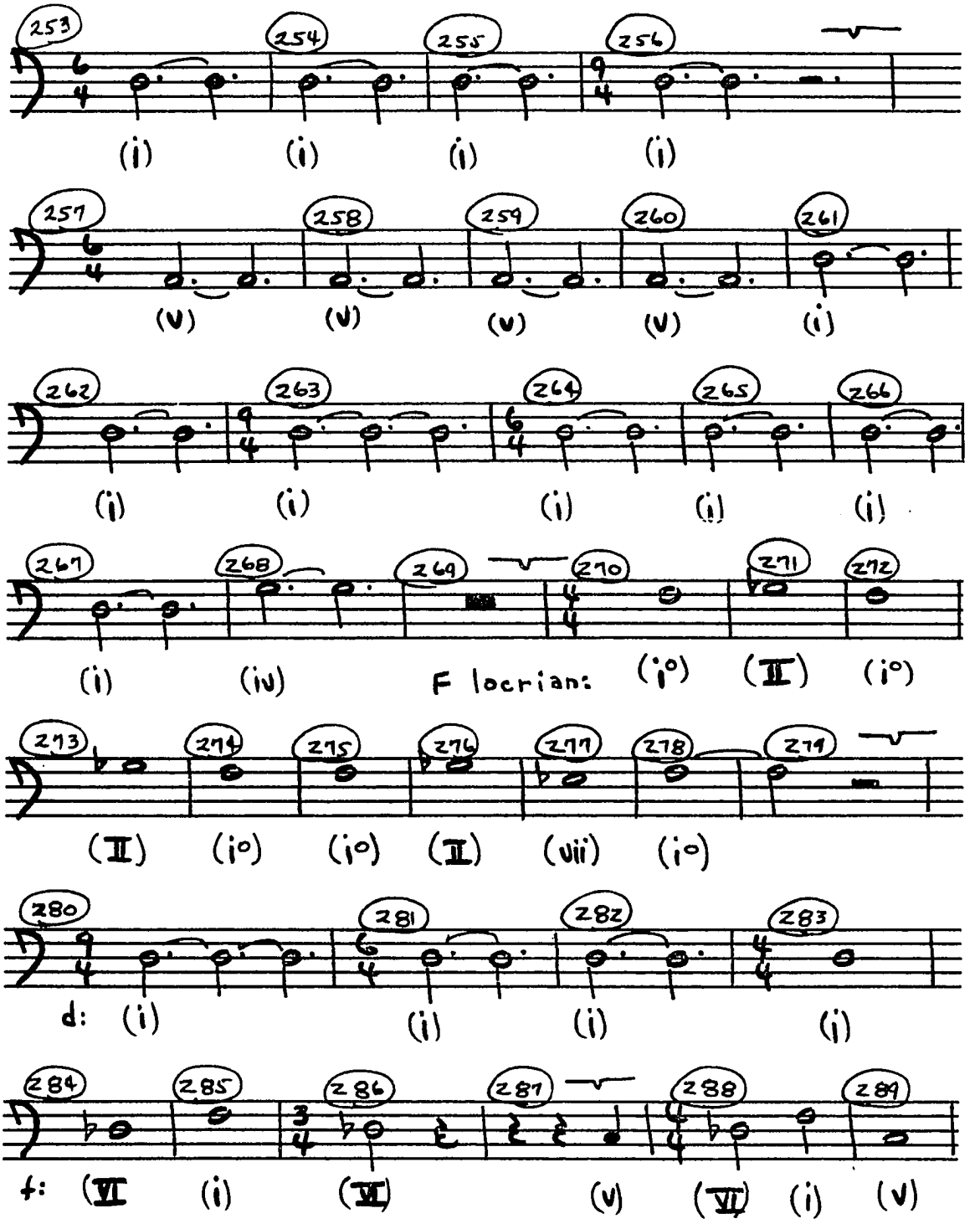

565 566 567 568
I add2 I add2 I add6 I I6 I6 I V7 IV V7 IV
569 570 A.H.C. 571 572
I add2 I add6 I add6 V I I add6 V6 I6
573 574 A.H.C. 575 576 577
V IV V I I add6 V6 I add2 V6 IV6
578 A.H.C. 579 580 581 582 A.H.C.
V6 V6 B: I V I6 V IV V7
583 584 585 586
I V7 IV V III I6 I IV6 I I6
587 588 589 590 A.H.C.
I6 I V IV iii ii I6 I add6 I V
591 592 I.AC 593
I bVIIdim bVII+dim bVIIdim I C: I

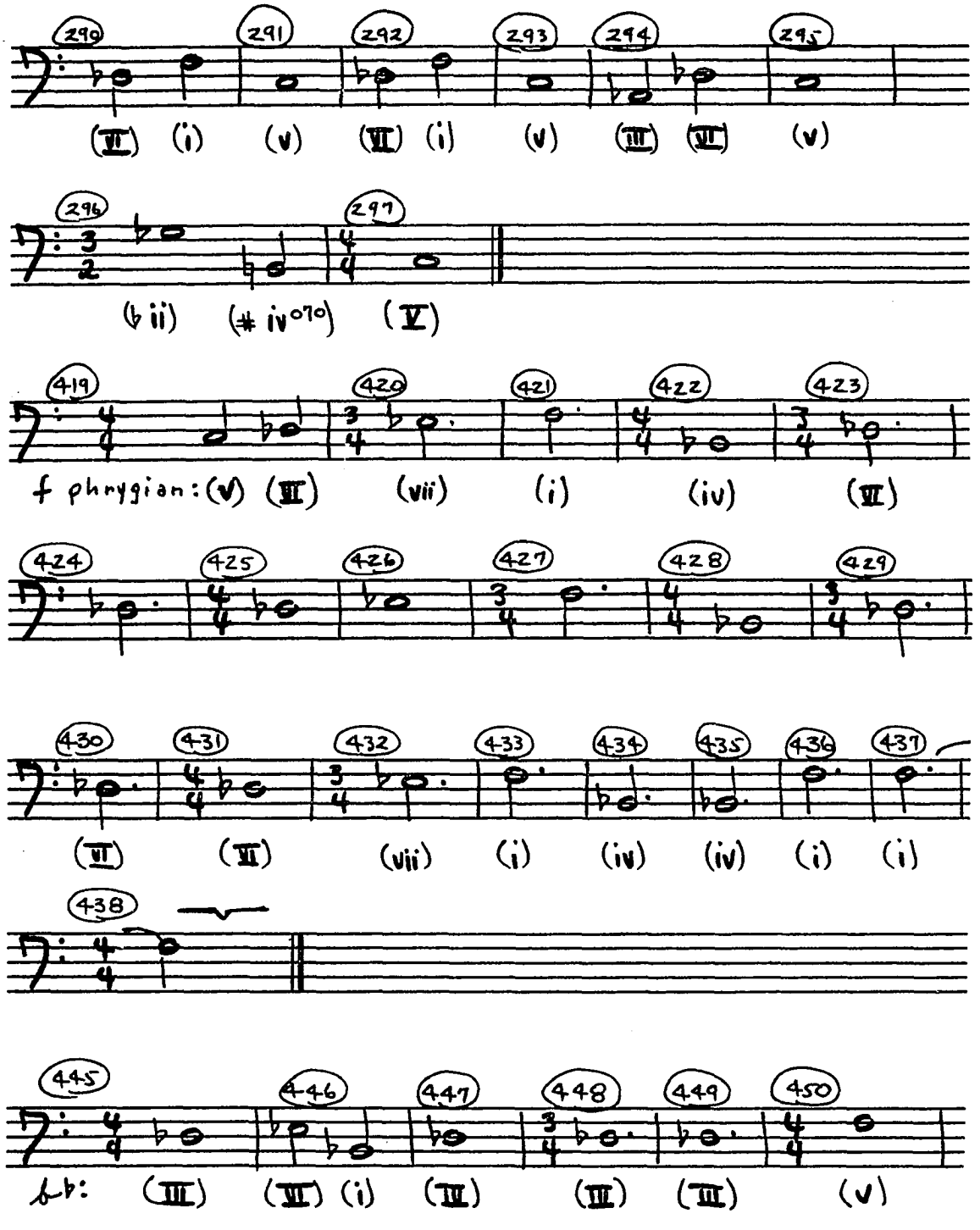

594
595
I.A.C.
596
♭VII7M ♭III+7M ♭VII7 I I6/4 Iadd6 V I6/4
597
598
A.H.C.
599
600
601
V III V I Iadd6 V I6/4 V IV
602
A.H.C.
603
604
605
V I6/4 I V III V IV I6/4 I Iadd6
606
607
608
609
610
A.H.C.
I I6/4 I6/4 I III V IV I6/4 I V
611
612
613
614
I.A.C.
I III6/4 ii6/4 I6/4 ii add4 ii7 V add6 I6/4
615
616
617
618
I.A.C.
I iii6/4 ii6/4 I6/4 ii add4 ii7 V add6 I6/4
619
620
621
622
I.A.C.
623
I7M ii6/4 ii7 IV V add6 I6/4 I7M ii6/4

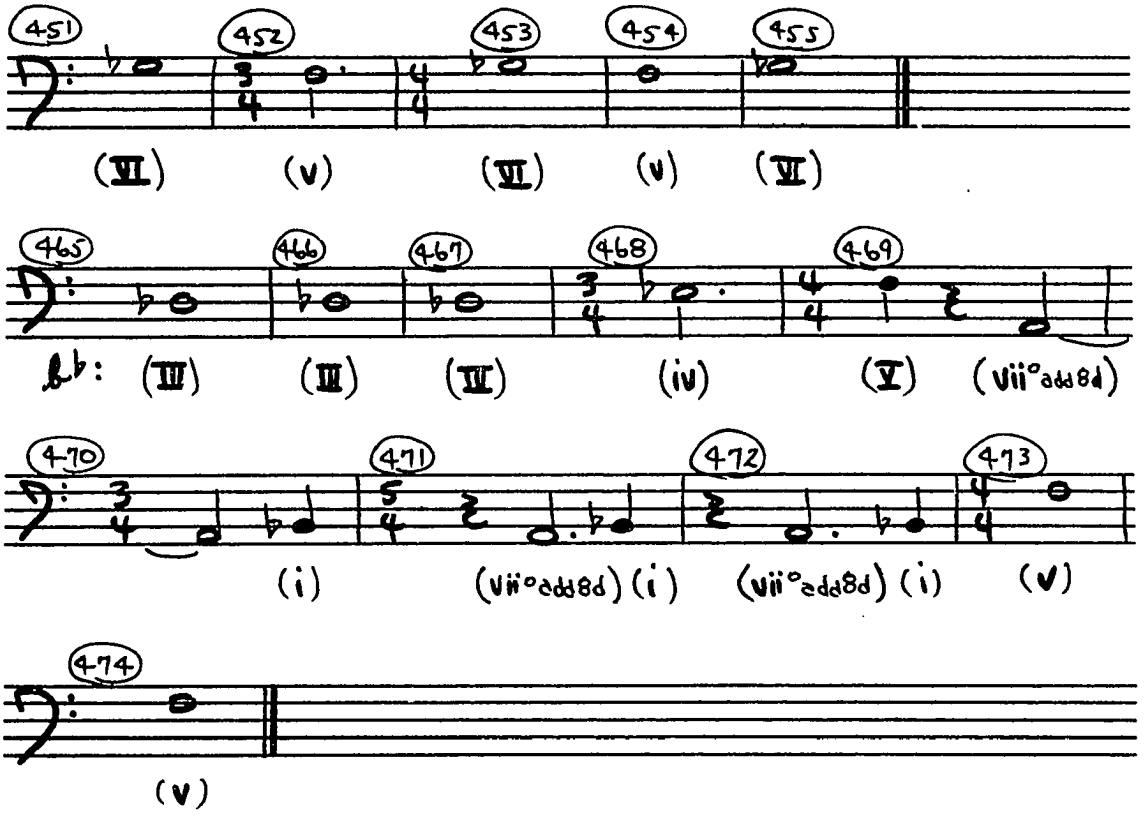


Most of the unaccompanied recitative passages in this cantata seem to have little harmonic implication. However, it may be theorized as to what the implied harmony may be. The following harmonic abstract contains the possible harmonic implications for these monophonic solos.


80 81 82 83 84 85
F lydian: (I) (I) (I) (iii) (vi) (iii) (vi) (iii)
86 87 88 89 90 91 92
(vi) (iii) (vi) (iii) (I) (I) (vi) (♭IV)
93 94 95 96 97
(iii) (II) (I) (iii) (II) (I) (iii) (II) (I)
98 99 100 101 102
(vi) d♭: (v) (v) (i) (v) (i) (v) (i) (v) (i)
103 104 105 106 107
(i) (VI) (V) (i) (i) (VI) (V) (i) (i)
108
(VI)
249 250 251 252
d: (i) (i) (i) (i)


253
254
255
256
(i) (i) (i) (i)
257
258
259
260
261
(V) (V) (V) (V) (i)
262
263
264
265
266
(i) (i) (i) (i) (i)
267
268
269
270
271
272
(i) (iv) F locrian: (i°) (II) (i°)
273
274
275
276
277
278
279
(II) (i°) (i°) (II) (vii) (i°)
280
281
282
283
d: (i) (i) (i) (i)
284
285
286
287
288
289
f: (VI (i) (VI (v) (VI (i) (v)


290 291 292 293 294 295
(VI) (i) (v) (VI) (i) (v) (III) (VI) (v)
296 297
(♭ii) (♯ iv°7) (V)
419 420 421 422 423
f phrygian: (v) (III) (vii) (i) (iv) (VI)
424 425 426 427 428 429
430 431 432 433 434 435 436 437
(VI) (VI) (vii) (i) (iv) (iv) (i) (i)
438
445 446 447 448 449 450
(III) (VI) (i) (III) (III) (III) (v)


451
452
453
454
455
(VI) (V) (VI) (V) (VI)
465
466
467
468
469
(III) (III) (VI) (iv) (V) (vii°add8d)
470
471
472
473
(i) (vii°add8d) (i) (vii°add8d) (i) (V)
474
(V)

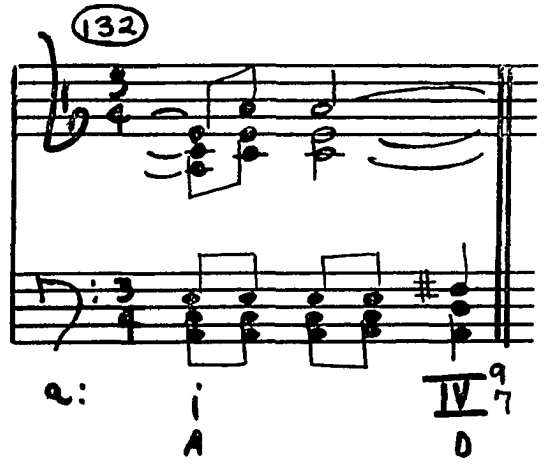
Alternate Harmonic Analysis

Example 33.



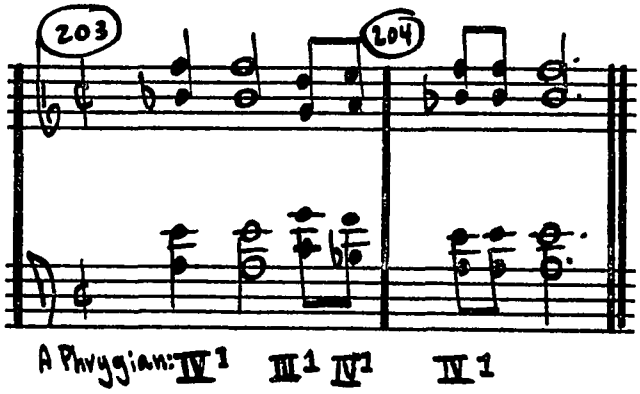
According to the Hindemith system, both of the structures above belong in the same chord class but have different roots, even though they contain the same three tones. This method of analysis seems to reinforce the functional character of both chords. In the C tonality, the two chords with roots "G" and "C" resolve and progress as dominant and tonic respectively. These two chords reappear many times throughout the cantata.

Example 34.



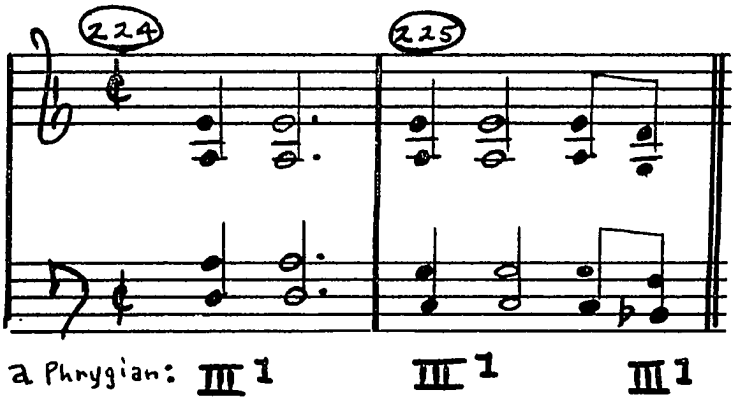
The vertical structure on the third beat may appear to be a subdominant ninth chord in second inversion because all five tones are present. In the primary analysis the structure is labeled as a polychord, $\frac{i}{IV\frac{6}{4}}$. The passage from measure 109 to 13^{4} is similar to the polychordal passage in the "Brazilian Psalm," measure 16 to 3^{4}. In both passages the treble and bass lines move independently. Other polychords in this composition are located in measures 118, 12^{4}, and 126.

Example 35.



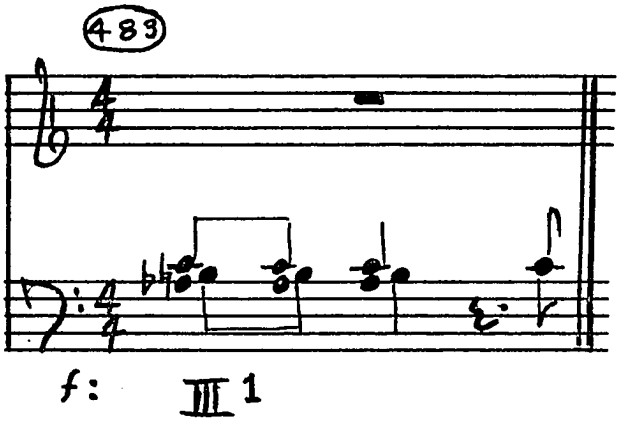
The three structures above are classified according to the Hindemith system. In all three chords the roots and bass tones are identical, but the first and third contain tritones which places them in a different class from the second.

Example 36.



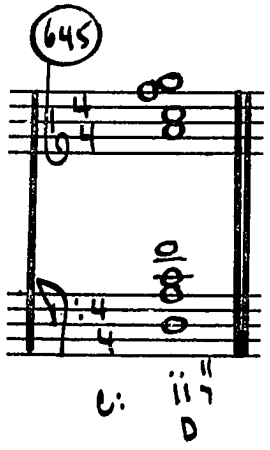
In the above example, the Hindemith system places all of the chords in the same class. All three chords contain seconds, and all three chords have their roots in the bass.

Example 37.



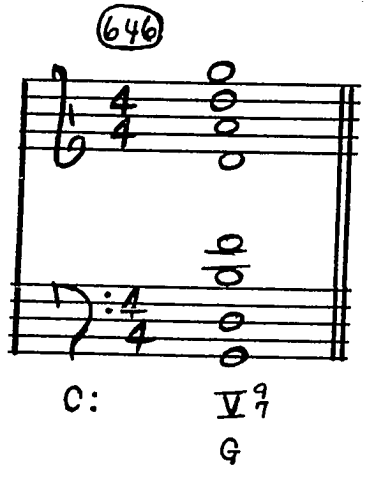
This dissonant tone cluster may be analyzed in the Hindemith system as belonging to the "III 1." class. It is in the same class with several of the other nontertian chords, because it contains seconds, it has no tritone, and the "root" is the lowest tone.

Example 38.



In this structure the top tone, "G," may be either an added fourth (primary analysis) or an eleventh in a tall tertian chord. There are two factors favoring the primary analysis. There is no harmonic ninth in the structure, and the "G" is not an "active" tone.

Example 39.



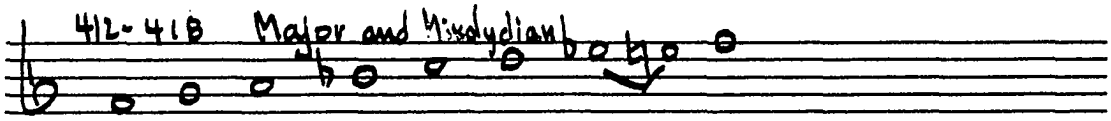
The five tones in the structure above may be rearranged in thirds to form a complete dominant ninth chord. In the primary analysis the structure is analyzed as V^7 add2. The proper analysis of the "A" determines the best

analysis for the entire chord. Two factors favor the primary analysis. The "A" is placed in the middle of the structure in the manner of an added tone, not a harmonic ninth. The "A" does not resolve as a ninth.

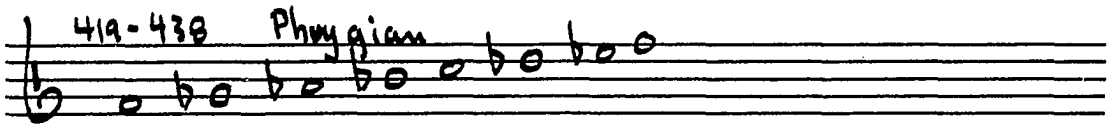
Scale Bases



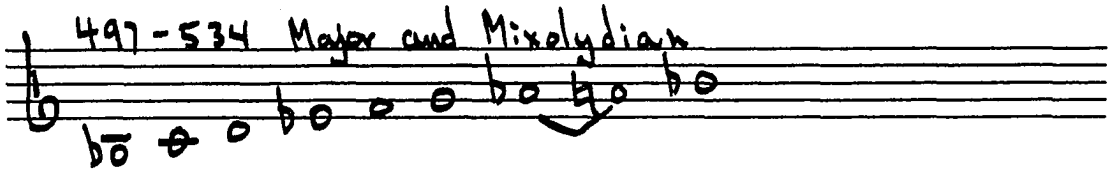
412-418 Major and Mixolydian



419-438 Phrygian



497-534 Major and Mixolydian

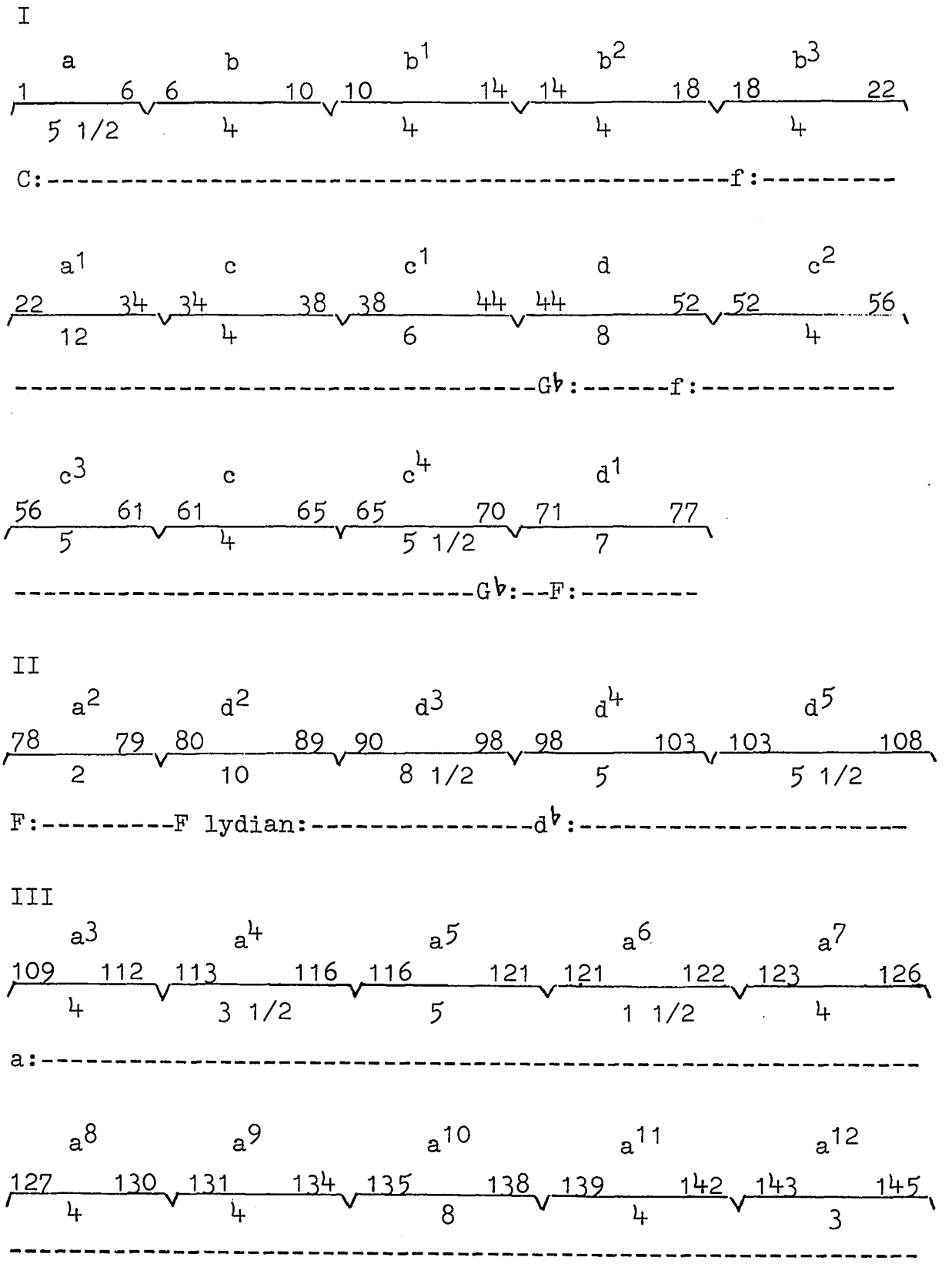


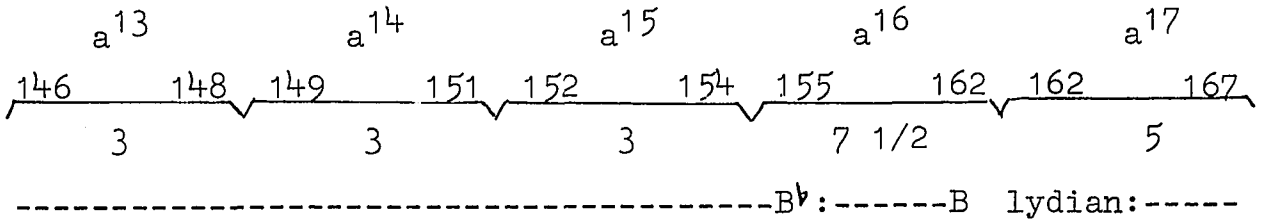
Formal Analysis

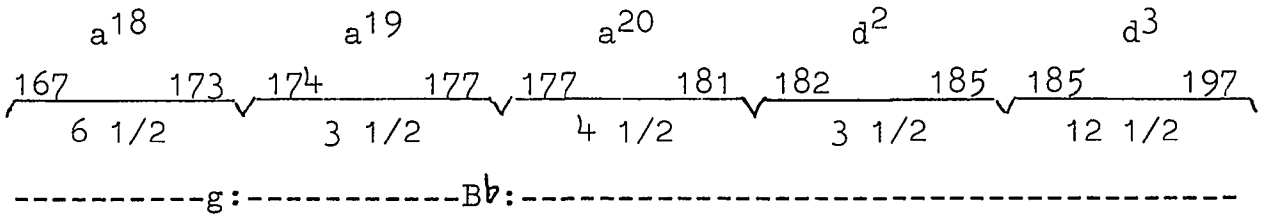
Melodic Units



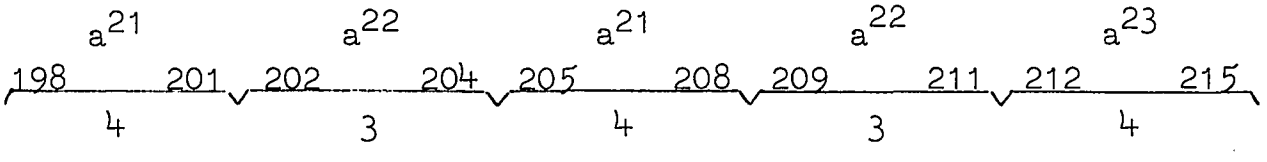
Formal Diagram

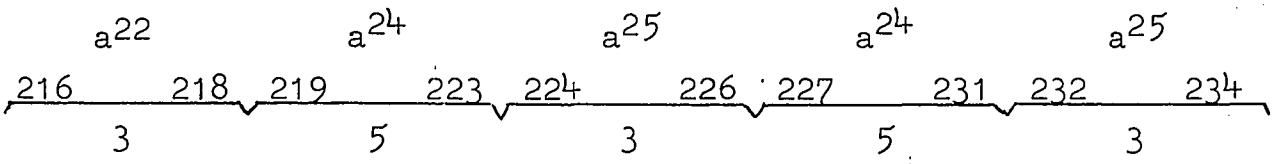


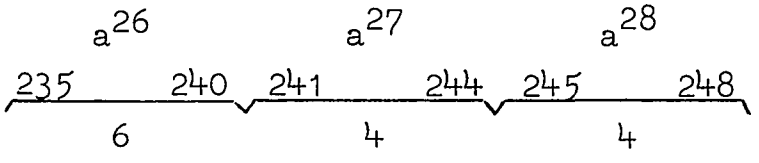

a13 a14 a15 a16 a17
146 148 149 151 152 154 155 162 162 167
3 3 3 7 1/2 5
B♭:------B lydian:-----


a18 a19 a20 d2 d3
167 173 174 177 177 181 182 185 185 197
6 1/2 3 1/2 4 1/2 3 1/2 12 1/2
g:----------B♭:----------

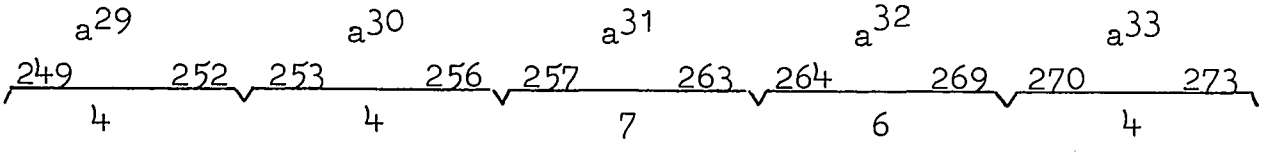
IV

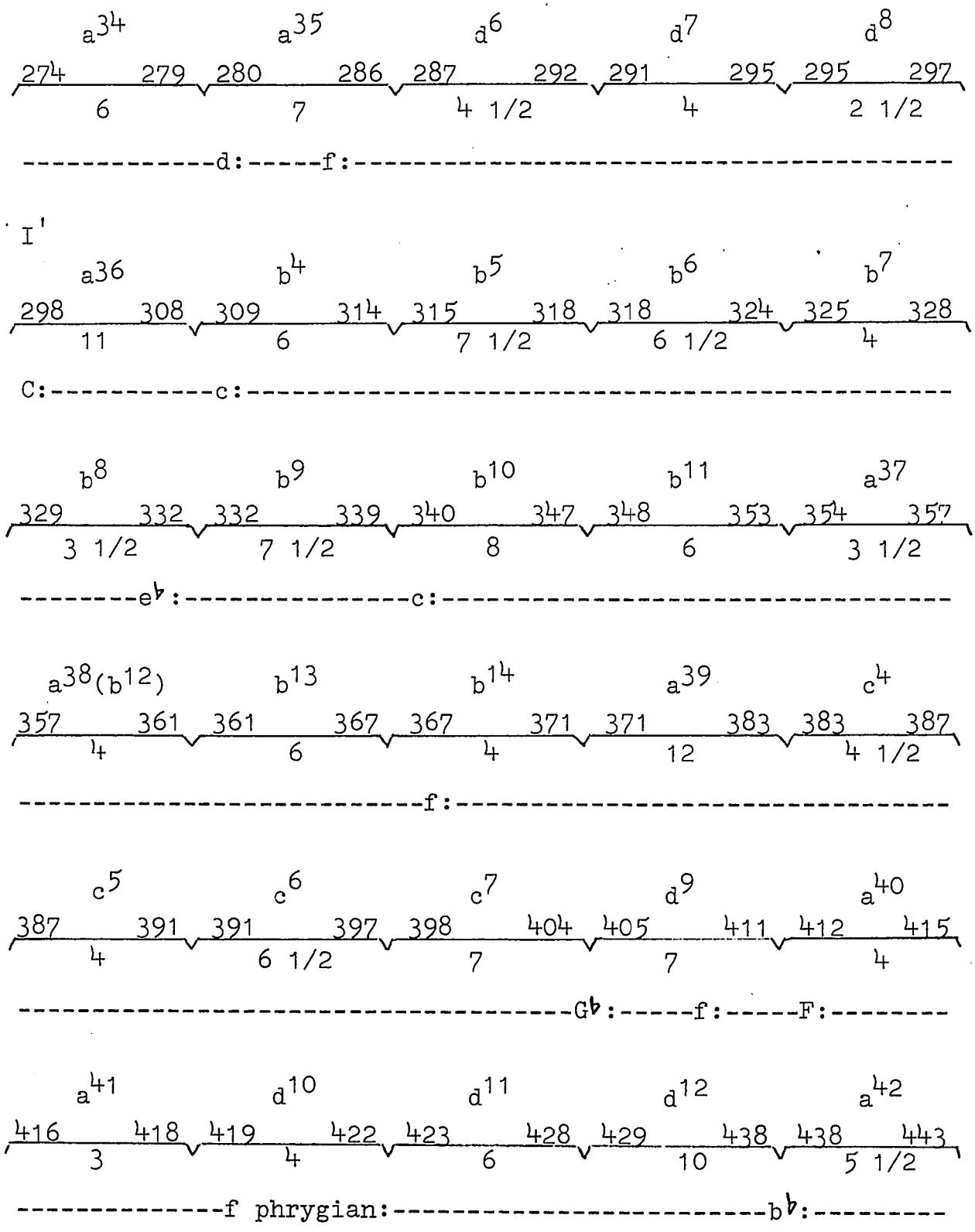

a21 a22 a21 a22 a23
198 201 202 204 205 208 209 211 212 215
4 3 4 3 4
a phrygian:----------

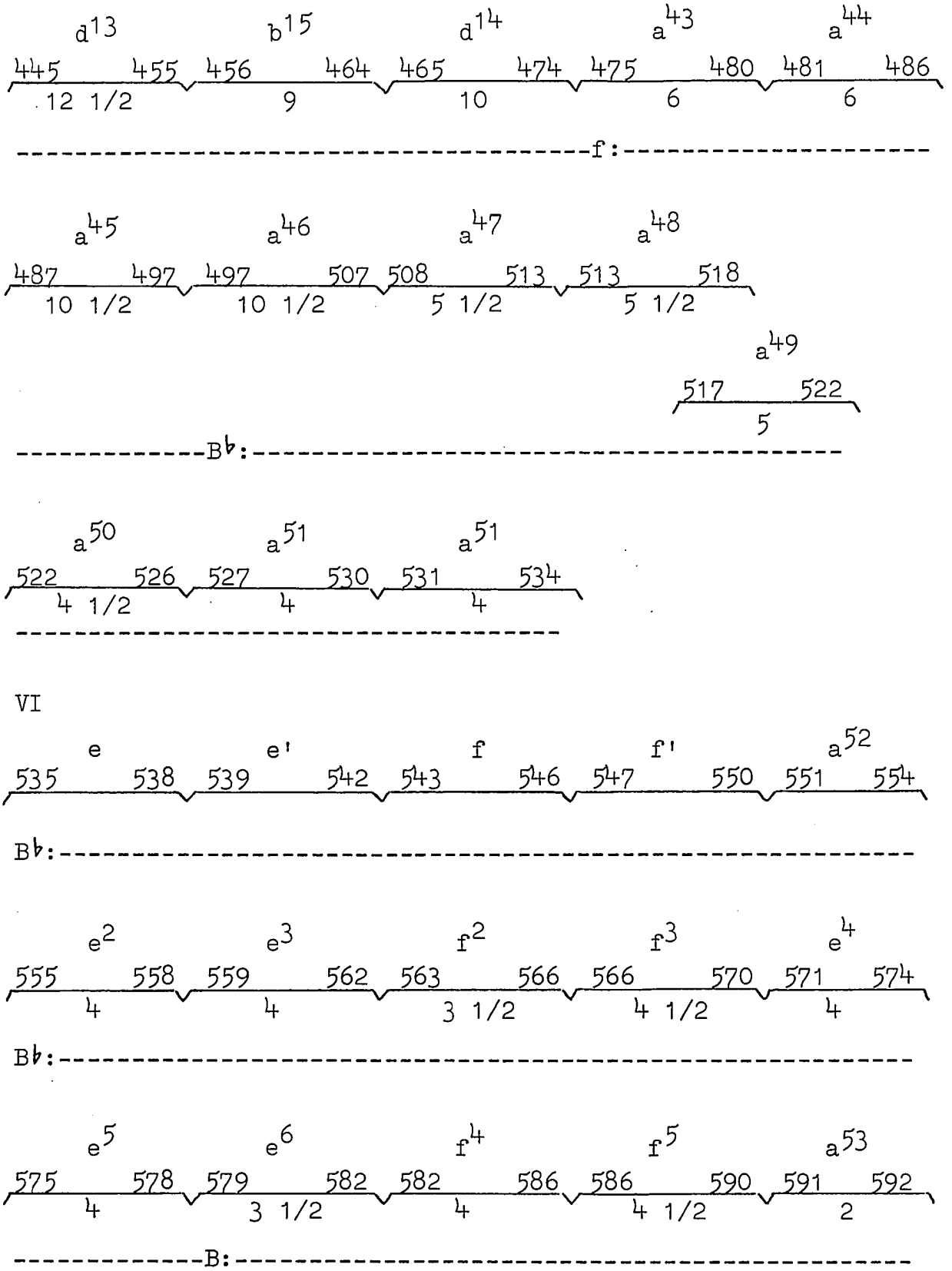

a22 a24 a25 a24 a25
216 218 219 223 224 226 227 231 232 234
3 5 3 5 3

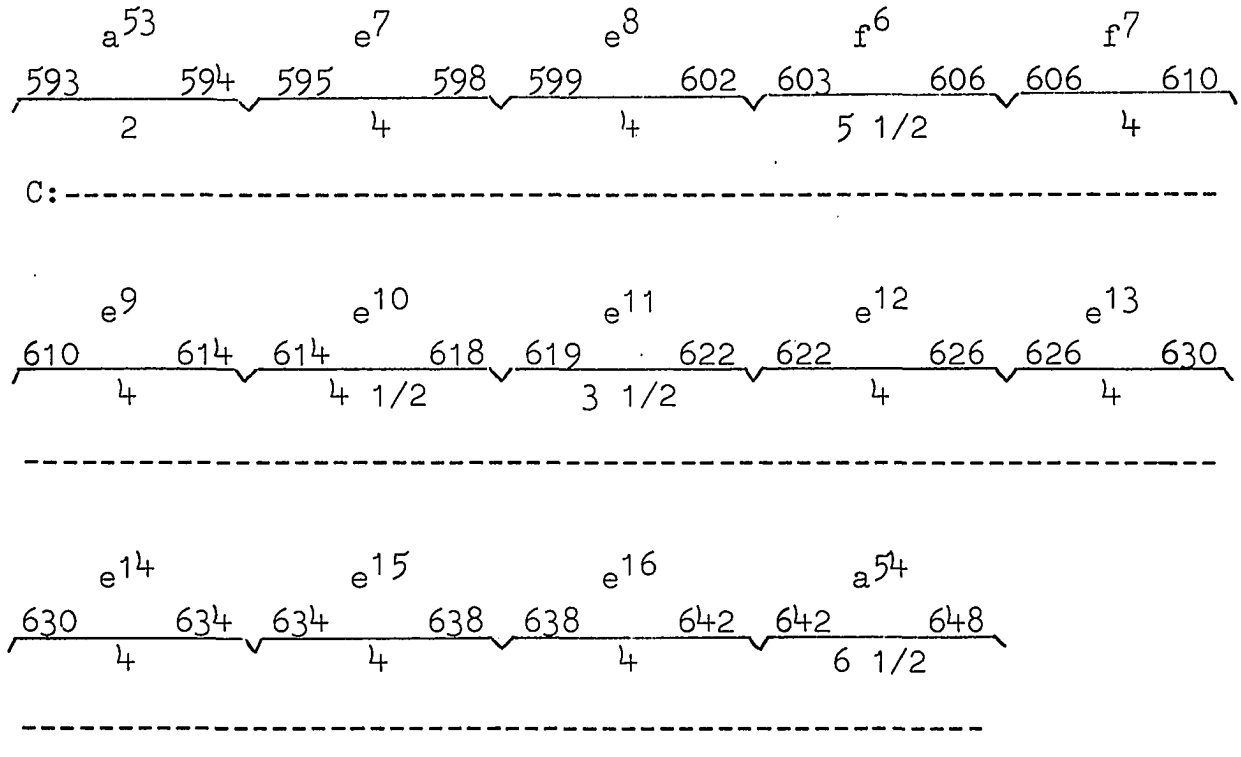

a26 a27 a28
235 240 241 244 245 248
6 4 4
d phrygian:----------

V


a29 a30 a31 a32 a33
249 252 253 256 257 263 264 269 270 273
4 4 7 6 4
d:----------f locrian:-----


a34 a35 d6 d7 d8
274 279 280 286 287 292 291 295 295 297
6 7 4 1/2 4 2 1/2
d: f:
I'
a36 b4 b5 b6 b7
298 308 309 314 315 318 318 324 325 328
11 6 7 1/2 6 1/2 4
C: c:
b8 b9 b10 b11 a37
329 332 332 339 340 347 348 353 354 357
3 1/2 7 1/2 8 6 3 1/2
e♭: c:
a38(b12) b13 b14 a39 c4
357 361 361 367 367 371 371 383 383 387
4 6 4 12 4 1/2
f:
c5 c6 c7 d9 a40
387 391 391 397 398 404 405 411 412 415
4 6 1/2 7 7 4
G♭: f: F:
a41 d10 d11 d12 a42
416 418 419 422 423 428 429 438 438 443
3 4 6 10 5 1/2
f phrygian: b♭:


d13 b15 d14 a43 a44
445 455 456 464 465 474 475 480 481 486
12 1/2 9 10 6 6
f:
a45 a46 a47 a48
487 497 497 507 508 513 513 518
10 1/2 10 1/2 5 1/2 5 1/2
a49
517 522
5
B♭:
a50 a51 a51
522 526 527 530 531 534
4 1/2 4 4
VI
e e' f f' a52
535 538 539 542 543 546 547 550 551 554
B♭:
e2 e3 f2 f3 e4
555 558 559 562 563 566 566 570 571 574
4 4 3 1/2 4 1/2 4
B♭:
e5 e6 f4 f5 a53
575 578 579 582 582 586 586 590 591 592
4 3 1/2 4 4 1/2 2
B:



Section I	77	measures
Section II	31	
Section III	89	
Section IV	51	
Section V	49	
Section I'	237	
Section VI	114	
(Total)	648	

Compositional Techniques

Harmony

The total harmonic effect of this composition is more dissonant than in the other five compositions included in this study. Dissonance is created by certain chord types, tone clusters, unusual nonharmonic tones, and simultaneous chromatic cross relations.

Tertian chords.--A wide variety of chord types are employed throughout this composition. In addition to simple major, minor, and diminished triads, several types of seventh, ninth, and eleventh chords are included. The variety of seventh chords includes the following: (1) the major major as in measure 1, $bVII^{7M}$, (2) the augmented major as in measure 1, bVI^{+7M}, (3) the minor minor as in measure 3, iv^{7}, (4) the fully diminished as in measure 126, vii^{o7o}, (5) the half diminished as in measure 354, $bvii^{o7}$, and (6) the major minor as in measure 586, V^{7}. The variety of ninth chords includes the following: (1) the minor major major as in measure 39, iv^{9}_{7M}, (2) the minor minor minor as in measure 48, vii^{9m}_{7}, (3) the major major major as in measure 53, $bVII^{9}_{7M}$, and (4) the major minor major as in measure 132, IV^{9}_{7} (alternate harmonic analysis). The eleventh chords include the following: (1) bV^{11+}_{7M} as in measure 13 and (2) ii^{11}_{7} as in measure 645 (alternate harmonic analysis).

The musical effect of all of the tertian harmony is somewhat different from that in the previous five

compositions. The other compositions in this study have a preponderance of diatonic harmony but this sixth composition is much more chromatic, which allows for a wider harmonic variety. The presence of more tones to the octave increases the resources for chord construction. Certain chord types appear on a greater number of scale degrees, and the variety of chord types is slightly increased.

Added tone chords.--Many added tone chords also contribute to the harmonic interest of this composition. These include the following: (1) bVII add2 as in measure 3, (2) i add3M as in measure 143, (3) vii add8d as in measure 414, (4) V7 add3m as in measure 504, (5) I add6m as in measure 526, (6) ii^7 add4 as in measure 645, (7) V^7 add2 as in measure 646, and (8) I^{add6}_{add2} as in measure 647.

In the measure between 142 and 154 a triad with mixed thirds is repeated several times. Even though the chord contains a dissonant diminished octave, it is used harmonically and cadentially as a tonic and thus has a stable harmonic effect.

Of all the added tone chords, the vii^{o7} add8d (as in measure 476) and the V^7 add3m (as in measure 504) are the most unusual. The vii^{o7} add8d may be considered an incomplete V^7 add3m. Both contain vertical cross relations, the leading tone and the subtonic tone. In "De profundis clamavi" (measure 9), there is a chord type identical to the V^7 add3m, and in both compositions the chord type is

dissonant, but each has an entirely different effect. In the first composition the dissonance does not resolve, but in the second the entire chord has a strong tendency toward the tonic.

Nontertian chord.--Some quartal and quintal chords are interspersed among the tertian harmonies. The most frequently used are the $\frac{I}{V}$ and the $\frac{V}{I}$. Both chords contain the same tones, but the bass tone seems to determine the function. The $\frac{I}{V}$ has a strong dominant character and is often used as a cadence chord (as in measure 6). The effect of this chord in the first few measures may be as a dominant triad with an unresolved fourth. In the later statements of the same chords, the harmonic effect seems more stable, needing no resolution.

The $\frac{V}{I}$ (as in measure 4) has a strong tonic character and may be heard as an incomplete tonic triad with an added second. The placement of the chord following the $\frac{I}{V}$ and the arrangement of the tones (tonic in the bass) give this quartal-quintal structure its tonic effect.

A much more dissonant nontertian chord is the $\frac{II}{I}$ (as in the phrygian mode in measure 202) in which the two roots are a minor ninth apart. In this section the short homophonic passages are preceded and followed by a polyphonic texture. The quintal chord is not approached or resolved harmonically, and apparently exists only for its dissonant effect.

Two other quintal chords, $\frac{i}{iv}$ and $\frac{i}{iii}$, are illustrated in the passage from measure 224 through 226. This example and the one above show a deliberate use of two pairs of parallel fifths which move independently.

A few tone clusters are included in the composition for dramatic effect. Between the measures 481 and 495, the male voices state a rhythmical declamatory passage which is quite dissonant. The clusters contain minor seconds, augmented seconds, and major thirds. The clusters are not analyzed harmonically, because the structures do not resemble any of the other chord types found in these six compositions. However, the three-tone cluster may possibly be perceived as an incomplete (missing root) F minor triad with and added augmented fourth, (i add4+). Even though this passage does not resemble others harmonically, the melodic movement is similar to others such as measures 25 through 34 and 497 through 503. In all of these measures the top voice repeats or sustains a tone in the manner of a pedal point while the other lines descend and broaden the range of the texture.

An earlier use of a tone cluster appears in measures 171 and 172 where the structure contains two major seconds and a major third. This effect is not as potent as the other clusters, because it is less dissonant and shorter.

Nonharmonic tones.--Most of the traditional nonharmonic tones are found throughout the work. Those included are passing tones, auxiliary tones, escape tones, appoggiaturas, suspensions, anticipations, and pedal tones. Many of the nonharmonic pitches are more than incidental melodic tones. They are often included for special musical purposes.

In measures 27 through 34, an unusual inverted supertonic pedal appears in the soprano voice. The sustained tone, "G," first appears as the harmonic seventh in a mediant chord and last as an added second in a tonic chord. With each of the intervening triads, the pedal forms bold dissonances--augmented octaves, major sevenths, tritones, and major ninths. The same pedal is restated in measures 376 through 383.

Auxiliary tones in combination are used to create unaccented but unusual dissonance in several passages. In measures 137 through 141, 170 through 172, 298, 299, 412, 416, 439, 444, 516, 520, 522, and 523 dissonances such as augmented unisons, augmented octaves, minor ninths, and major sevenths are common.

Accented triple appoggiaturas in measure 318 form a triad. This implied Neapolitan chord prepares the listener for the actual chord as it appears six measures later.

A suspension and a double anticipation are found in measures 417 and 478 respectively. They give the lines more

rhythmic independence and also create more harmonic dissonances.

From measures 538 to the end the bass line contains the tonic and dominant tones almost exclusively. On many beats the bass tone forms a pedal. In most instances it is prepared and resolved with the same pitch, but not in every case. Measures 547 and 548 contain pedal tones which are prepared and resolved by leap.

Scale influence.--Many of the chords show a strong modal influence. The modal traits are revealed in the combination of chord types and chord roots. The characteristic modal chords include the following:[1]

dorian- $bVII^{9}_{7M}$ and IV (followed by a minor tonic)

phrygian- (b)II and (b)vii

lydian- vii^{7} and $(\vec{\#})iv^{o}$

mixolydian- $(b)VII^{7M}$

aeolian- v^{7}

In some few instances the harmony indicates the presence of mixed modes or chromatic cross relation (simultaneous or sequential). These devices include the following:

major and minor sixth scale degrees-

$bVII^{7M}$ - bVI^{7M} (measure 1)

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[1]Vincent Persichetti, Twentieth-Century Harmony (New York: W. W. Norton and Company, 1961), pp. 32-33.

minor and major second scale degrees-

bV^{7M} - $\frac{I}{V}$ (measures 9 and 10)

major and minor seventh scale degrees-

(b)III+^{7M} - bvii (measures 27 and 28)

minor and major third scale degrees-

i - iv^{9}_{7M} (measures 38 and 39)

minor and major sixth scale degrees-

IV - vii^{o7o} (measures 110 and 112)

major and minor third scale degrees-

i add3M (measure 142)

minor and major sixth scale degrees-

iv - VII^{7M} (measure 148)

minor and major sixth scale degrees-

IV add6m (measure 173)

major and minor seventh scale degrees

V and (b)III (measure 173)

major and minor seventh scale degrees-

vii^{o} add8d (measure 414)

major and minor second scale degrees-

vii^{o} add3d

A few chords contain two or three tones which are not of the same diatonic scale. They include the following:

major third and minor sixth scale degrees-

iv^{9}_{7M} (measure 39)

bVI+7M (measure 500)

minor second, diminished fourth, and minor sixth scale degrees-

bvii^{o7} (measure 354)

Chord substitutes.--It appears that the composer deliberately avoided the common major minor seventh chord on the fifth scale step. Several chords serve the same function of tonal orientation, but they are either modal or contrived substitutes. They include the following: bVII^{7M} (measure 79), $\frac{V}{I}$ (measure 6), bVII add2 (measure 14), v^{7} (measure 33), vii^{7} (measure 47), bVII$^{9}_{7M}$ (measure 53), V+ (measure 194), bvii^{o7} (measure 354), vii^{o} add8d (measure 414), V^{7} add3m (measure 504), V add6 (measure 613), and V^{7} add2 (measure 646).

A few of the chord types, which reappear in the same comparable context, are restated with a slight change of quality. The bVII^{7M} chord which first appears in measure 1 becomes the bvii^{o7} in measure 354. The bVII add2 chord which first appears in measure 3 is modified in measure 356 and becomes the bvii add2 chord. The bVI+^{7M} which first appears in measure 500 is changed to the bVI^{7M} chord in measure 503.

Root movement and cadence harmony.--The chord changes in most passages have a functional effect in which the harmony progresses toward cadences. The predominant root movement is by ascending and descending seconds which

is sometimes caused by melodic parallelism. The following passages illustrate this practice: measures 1-2, 311-312, 173-177, 26-34, and 527-534.

Most cadences are forms of the half and authentic formulas. In nearly all instances the cadences contain dominant substitutes. Examples of the perfect and imperfect authentic cadences are as follows:

dominant substitute:	cadence chord:	measures:
v_2^4	I add2 $_4^6$	33-34
$bVII^{7M}$	I	79
vii° add8d	I	417-418
V^7 add3m	I add6m	525-526
V add6	I_4^6	613-614
V^7 add2	I_{add2}^{add6}	646-647

Variations of the authentic half cadences include the following:

preceding chord:	dominant substitute:	measures:
iv_5^6	$\frac{I}{V}$	5-6
bV^{7M}	$\frac{I}{V}$	9-10
bVI	bVII add2	13-14
bVI^6	$bVII^6$	17-18
(i)	$bVII_{7M}^9$	55-56
i	vii^{o7o}	112
i_4^6	bII_4^6	324
(#iv^G)	(V)	360-361

preceding chord:	dominant substitute:	measures:
iv^{9}_{7M}	bII^{7M}	403-404
iv^{7}	$\frac{I}{V}$	529-530
bVI^{7M}	$\frac{I}{V}$	533-534

The plagal cadence is employed a limited number of times. It includes the following:

subdominant chord or subdominant substitute:	tonic chord:	measures:
iv^{7}	I^{6}_{4}	51-52
bII^{7M}	i	21-22

A few phrases end with a subdominant chord which creates a plagal half cadence. It appears in the following forms:

preceding chord:	subdominant chord:	measures:
(i)	iv^{9}_{7M}	43-44
I^{9}_{7M}	IV^{9}_{7M}	159-160

Two phrases cadence with a submediant chord. Deceptive cadences may be seen at these points.

preceding chord:	submediant chord:	measures:
I	vi	70
$bVII^{7M}$	$bVI+^{7M}$	553-554

Several cadences are in no way related to the traditional formulas. These phrase endings are determined by melodic rhythm, rests, text, and duration. The music at these points has unusual cadence harmony or static harmonic rhythm. The exceptional cadences include the following:

preceding chord:	cadence chord:	measures:
iii^{7M}	i add3M	141-142
iii$^{6}_{4}$	i	173
ii$^{4}_{2}$	i	177
(I)	(I)	185
(V+)	(VII)	195-196
$\frac{\text{i}}{\text{(b)ii}}$	$\frac{\text{(b)II}}{\text{i}}$	203-204
$\frac{\text{VII}}{\text{(b)II}}$	(i)	225-226
tone cluster	tone cluster	485-486

Voicing.--Most chords are voiced in a conventional manner; however, there are two notable exceptions. In the passage from measure 109 to 134, the lower three vocal lines, which form the static accompaniment in the low register, are separated from the paired upper upper voices by as much as a thirteenth. Measures 142 to 154 contain a homophonic passage in which the lower and upper pairs of voices are widely spaced. The tenor line is especially low, separated from the alto line by as much as a tenth. This results from the 2:2 and 3:1 pairing of voices.

Inversions.--Many chords are inverted freely. This is caused by harmonic parallelism (as in measures 27 through 34 and 309 through 356), contrary motion in the bass and other melodic lines (as in measures 173 through 181), and repeated tonic and dominant tones (as in measures 535 through 644).

Melody

Scale bases.--With the exception of the last formal division (measures 535 to the end), the entire melodic effect is modal. The modal effects are created by the use of the ancient church modes, mixed modes, and some chromatic alteration within the major and minor scales. The characteristic modal tones are emphasized by repetition, placement on accented beats, and preparation and resolution with melodic skips. The characteristic modal scale degrees are listed below.[1]

modes:	scale degrees:
dorian	6th
phrygian	2nd
lydian	4th
mixolydian	7th

Some passages are very chromatic and have ambiguous scale bases. Most of the altered tones of the chromatic and modal scales are lowered rather than raised, giving most of the melodic lines a "dark" effect.[2]

In the passage from measure 1 through 18, several of the lowered "dark" tones appear, including the lowered second, third, fifth, sixth, and seventh scale degrees. In the four phrases which follow, the dark tones are again in abundance.

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[1] Vincent Persichetti, Twentieth-Century Harmony (New York: W. W. Norton and Company, 1961), p. 35.

[2] Ibid., pp. 33-34.

From measure 80 to 98, the baritone solo line is based on the F lydian mode. This short passage is a relief from the "dark" tones because of the presence of the augmented fourth scale degree, "B". This passage then returns to a much "darker" scale basis, d^{b} minor. Theoretically, this scale is based on a key signature containing eight flats. The "C♮" is the raised leading tone, and the "A♮" is the enharmonic equivalent of the "Bbb," the submediant scale degree.

In the passage from measure 137 to 154, chromatic cross relation results from lines which contain simultaneous soundings of diatonic and altered scale degrees. The tonic tone, "A," is the only tone which is not altered.

The lydian mode on Bb is the scale basis for most of the passage from measure 163 through 172 and 178 through 196. The characteristic tone, "E♮," is continually repeated, emphasizing the modal character of the lines--especially the soprano. In three measures, 170-172, "B♮" and "Eb" are added to the tenor and bass lines thus giving the combined lines a bimodal effect and create more harmonic dissonance.

Beginning with the imitative section in measure 198, the primary scale basis in the A phrygian mode. In measure 235 the tonal center changes to D, but the scale basis remains phrygian. Because of the real answers within the counterpoint, the combined melodies sometimes have a

bimodal character. This effect can be observed in measures 219 through 223 where the soprano and tenor lines contain "E♮" and the alto and bass lines contain "Eb." The "E♮" is the fifth of the A phrygian mode, and the "Eb" is the diminished fifth of the A locrian mode.

A short segment of the tenor recitative in measures 270 through 279 may be interpreted as being in F locrian. The "F#'s" are enharmonic equivalents of Gb, the second scale degree. The "G♮'s" are unaccented chromatic passing tones. The locrian mode is the "darkest" because the melodic fifth is diminished.

In three passages, measures 412 through 418, 439 through 444, and 475 through 480, the outer voices contain separate versions of the seventh scale degree. The soprano line contains the minor seventh of the key, and the bass line contains the major seventh. The same device is used in measures 497 through 526 where the soprano and tenor lines form the cross relation.

The tenor recitative beginning in measure 419 is in F phrygian. The characteristic second scale tone, "Gb," is emphasized by ascending melodic leaps. A few measures later the tonal center changes to Bb minor. In measures 469 through 472, the line contains both "A♮" and "Ab." This cross relation is a melodic version of the harmonic cross relation in measure 440.

The last formal division, which begins in measure 535, is based on major scales and is mainly diatonic. Since the preceding sections are predominantly modal and often chromatic, the final section has an entirely different effect. The melodies seem much more simple and predictable, and the many previous "dark" tones are contrasted with the "bright" tones of the major scale.

Melodic intervals.--Melodic intervals contrast considerably. Most lines are either predominantly conjunct or disjunct. The many conjunct lines are similar to the "a" phrase, measures 1 through 6. The disjunct lines are similar to the "b" phrase, measures 7 through 10. When compared to the previous five compositions, the total effect of this work is more disjunct.

Phrase lengths.--The lengths of most phrases seem unpredictable. This is caused by repeated cadences, changing meters, many melodic and rhythmic variations, and the various locations of strong punctuation in the text. In several instances cadences are not determined by harmonic patterns. Instead, they are determined by rests, time duration, changes in melodic treatment, long tones, and punctuation in the text. Several phrase endings may seem weak or ambiguous. They include the following:

cadence points (measure):	determining factors:
44	time duration
56	rest, punctuation, and time duration
70	rest, punctuation
138	punctuation and change in melodic treatment
173	rest and punctuation
332	punctuation
383	long tone
404	long tone, punctuation, and time duration
487	long tone and time duration
503	time duration

Most of the phrases in the final formal division are regular and predictable. This effect is created by the recurring four-measure pattern and the melodic repetition.

Parallelism.--Several passages containing melodic parallelism and doubling appear throughout the composition, and these melodic devices are characteristic traits of the work. The manner in which the lines are reinforced varies considerably from passage to passage, and the following chart reveals where and in what manner the parallelism is stated.

location (measures):	voices:	nature of the parallelism:
26-34	A,T,B	parallel triads with changing inversions
113-130	S,A	parallel thirds (with some fourths)
131-134	S,A,A	parallel triads with changing inversions
135-142	S,A and T,B	two pairs of thirds mirroring each other
157-162	S,A,A,T,B	parallel seventh chords
162-172	S,A,T,B	two pairs of thirds mirroring each other
173-177	S,A,T,B	parallel triads with a mirrored bass line
177-181	S,A	parallel thirds
183-196	S,A,T,B	parallel thirds doubled at the octave
202-204, 209-211, and 216-218	S,A,T,B	two pairs of parallel fifths mirroring each other
311-353	T,B,B	parallel sixths and parallel triads with changing inversions
456-463	T,B,B	parallel triads with changing inversions
527-534	B,B	parallel fifths

location (measures):	voices:	nature of the parallelism:
535-610	S,A	parallel thirds
535-550	S,T	melodic doubling at the
555-590, and		octave
595-610		
611-618	S,S,A,	similar melodic curves
	A,T	in all five lines
619-626	S,A,T	parallel sixths formed
		by soprano and tenor
		lines while the alto
		line is similar
634-642	S,S,A,	similar melodic curves
	A,T	in all five lines

While no particular harmonic interval seems more prominent than the others in the examples of parallelism, one specific device does prevail. In ten of the above nineteen passages, three or more lines move with the identical or similar melodic curves. Some of this parallelism is strict, occasionally some of the lines are slightly oblique, and a few of the passages contain melodic lines which are merely similar in the over-all melodic curve.

Rhythm

The rhythms and meters in this work have a balanced effect. They are stable and unified as well as varied. The various metric patterns are reinforced with long tones on

strong beats, ascending leaps to pitches on strong beats, melodic repetition, harmonic changes on strong beats, and accented syllables placed on strong beats. Devices which weaken metric patterns, such as ties across bar lines, misplaced textual accents, and extensive use of superimposed rhythms, are conspicuously absent in most passages.

This stability does not create rhythmic redundancy. Variations result from changing meters, changing tempos, and rhythmic alterations of established patterns. In some phrases the rhythms are unpredictable. Major changes in tempos and/or meters occur with each new formal division, and meter changes within sections are common.

Beginning in measure 109, the lower voices state a rhythmic pattern which is repeated several times. Rhythmic interest is sustained with free counterpoint in the upper lines.

One example of shifting meters can be observed in the passage from measure 135 through 154. Within these six phrases, tempo and note values remain constant, but the meter changes eleven times. The meter signatures include $\frac{5}{4}$, $\frac{4}{4}$, $\frac{3}{2}$, and $\frac{3}{4}$.

The rhythmic effect in the final formal division is much more symmetrical and predictable than in the previous sections. Most of the music is in the same meter, has phrases of equal length, and contains a great deal of rhythmic repetition.

Counterpoint

Most passages in this cantata are homophonic or monophonic, but some contrapuntal devices are employed to a limited extent. Beginning in measure 198, the bass and tenor lines form a canon and have a dialogue effect. The contrapuntal answer in the tenor line is real, a fifth above the bass, and the time interval is half a measure. This device never develops, because the texture often changes from polyphonic to homophonic. An exact repetition occurs in measures 205 through 208. Beginning in measure 212, the canon is transposed up a perfect fourth.

Three short stretto passages begin in measures 219, 227, and 235. The four lines enter in sequence, with a half-measure time interval. The alto line follows the soprano with a real answer at the fifth. The tenor and bass lines then repeat the process one octave lower. The first and second occurrences are identical. The third is transposed up a perfect fifth.

In measures 555 through 610, the tenor obligato moves in free counterpoint with the other lines. In most instances the solo melody and the choral parts cadence at the same points.

Source	Unifying Compositional Elements	Location of reuse	Variance
1-6(2) (S)	melody	22(3)-34(3) (S)	change of tonality, rhythm, and harmony; repetition of head
		78(2)-79 (T)	change of tonality, rhythm, harmony, register, and tempo; shortened
		109-134 (T)	change of tonality, rhythm, meter, harmony, register, and tempo; repetition of head; free counterpoint added
		135-142 (2) (S)	change of tonality, rhythm, meter, harmony, and tempo; repetition of head with ornamentation
		143-154 (S)	change of tonality, rhythm, meter, harmony; repetition of head
		155-162 (2) (S)	change of tonality, rhythm, meter, harmony, and melodic intervals; repetition of first three pitches
		162(3)-181 (S)	change of tonality, rhythm, meter, and harmony; repetition of head with ornamentation; change in melodic direction
		198-201, 205-208, 212-215, (TB)	change of tonality, rhythm, meter, tempo, harmony, melodic intervals, and register; repetition of head with ornamentation; contrapuntally treated

Source	Unifying compositional elements	Location of reuse	Variance
		202-204, 209-211, 216-218 (S)	change of tonality, rhythm, meter, tempo, harmony, and register; repetition of head; change in melodic direction
		219-223, 227-231, 235-239	change of tonality, rhythm, meter, tempo, harmony, melodic intervals, and register; repetition of head; partial change in melodic direction; contrapuntally treated
		224-226, 232-234, 241-243, 245-247, (S)	change of tonality, rhythm, meter, tempo, harmony, and register; repetition of head; change in melodic direction
		249-286 (2) (T)	change of tonality, rhythm, meter, tempo, register; melodic intervals, and melodic direction
		298-308 (S)	change of rhythm, meter and harmony; repetition of cadence
		354-359 (S)	change of mode, rhythm, meter, and harmony
		371(3)-383(3) (S)	change of tonality, rhythm, and harmony; repetition of head
		412-418 (S)	change of tonality, rhythm, harmony, melodic intervals, and register; repetition of head; partial change in melodic direction

Source	Unifying compositional elements	Location of reuse	Variance
		438(4)-444(S)	change of tonality, rhythm, meter, harmony, and melodic intervals; repetition of head; partial change in melodic direction
		475-480 (S)	change of tonality, rhythm, harmony, and melodic intervals; repetition of head; partial change in melodic direction
		481-495 (T)	change of tonality, rhythm, harmony, repetition of first three tones; rests added
		497(4)-513(3)	change of tonality, rhythm, and harmony; repetition of head; partial change of melodic direction; rests added
		513(4)-526(3) (ST)	change of tonality, rhythm, register, harmony, texture, and melodic intervals; partial change in melodic direction; repetition of head
		527-534 (3) (S)	change of tonality, rhythm, harmony, melodic intervals, melodic direction; repetition of head
		551-554 (S)	change of tonality, rhythm, harmony; and meter, reduction to head; repetition of tones
		591-594 (S)	change of tonality, rhythm; reduction to head, repetition of tones
		642-648	change of rhythm, meter, harmony, texture, and register; repetition of first three tones

Source	Unifying compositional elements	Location of reuse	Variance
3(1-2)	harmony	536(1-2)	third lowered
6(3)-10(2)	melody	10(3)-14(2)(S)	partial change in melodic intervals
		14(3)-18(2)	change in register, partial change in melodic intervals
		18(4)-22(2)(AB)	change in register, texture and tonality; reduction to head
		309-332(3)(T)	change in register and texture, partial change in melodic intervals and direction
		332(4)-339(2)	change in register, texture, rhythm, and tonality; partial change in melodic intervals direction
		340-353	change in register, texture, and rhythm; partial change in melodic intervals and direction; partial rhythmic augmentation
		360-361(3)(T)	change in rhythm, register, and harmony; reduction to head
		361(4)-367(3)(ST)	change in rhythm and harmony; partial change in register, melodic intervals, and melodic direction
		367(4)-371(3)(AB)	change in register, texture, and tonality; reduction to head

Source	Unifying compositional elements	Location of reuse	Variance
		456-465 (3)(T)	change in register, texture, meter, tonality, and rhythm; partial change in melodic intervals and direction; free counterpoint added
34(4)-44(3)	melody (T)	38(4)-44(3) (S)	first transformation of melody (change in register, rhythm, and harmony; partial melodic contour retained)
		52(4)-61(2) (S)	second transformation of melody (change of register, rhythm, and harmony; partial melodic contour retained)
		61(4)-65(2)	slight change in rhythm, melodic doubling at the octave
		383(4)-387(2) (T)	slight change in rhythm and pitch
		397(4)-401(2) (T)	change in rhythm, melodic doubling at the octave
38(4)-44(3)	melody (S)	65(3)-68(S)	change in rhythm and meter, shortened
		387(4)-391(2) (S)	change in rhythm and meter, shortened
		401(3)-403(2) (S)	change in rhythm and meter, shortened
52(4)-61(2)	melody (S)	391(3)-397(2) (S)	change in rhythm and meter, shortened

Source	Unifying compositional elements	Location of reuse	Variance
44(4)-52(2)	melody	69-72(2)(S)	change in rhythm and meter
		80-108 (B)	change in register, texture, rhythm, and meter; characteristic interval of a descending minor third retained, minored, inverted, and extended
		182-196 (2) (S)	change in tonality, rhythm, meter, and harmony; melodic contour of head retained and repeated; motif of "a" phrases interspersed
		287(3)-297(T)	change in tonality, rhythm, and meter; melodic contour of head retained and repeated
		404-411 (2)(S)	change in rhythm and meter, shortened slightly
		419-438 (3)(T)	change in rhythm and meter, melodic contour of head retained and repeated
		445-455 (3)(T)	change in rhythm and meter, melodic contour of head retained and repeated
		465-474	change in rhythm and meter, melodic contour of head retained and repeated
535-538 (S)	melody	539-542 (S)	change in rhythm and bass line
		555-562, 571-578 (S)	change in rhythm, tenor obligato added
		579-582 (S)	change in rhythm and tonality

Source	Unifying compositional elements	Location of reuse	Variance
		595-602 (S)	change in rhythm and tonality
		610(3)-618(S)	change in rhythm, tonality, harmony, and register; melodic contour partially retained
		619-626 (S)	change in rhythm, tonality, harmony, and register; melodic contour partially retained
		626(3)-634(2) (T)	change in rhythm, tonality, harmony, and register; melodic contour partially retained
		634(3)-638(2) (S)	change in rhythm, tonality, harmony, and register; melodic contour partially retained
		638(3)-642(2) (S)	change in register, rhythm, meter, and harmony; partial melodic contour retained
534-546	melody	547-550 (S)	change in rhythm, melodic contour and bass line
		563-565 (2)(S)	change in melodic contour and bass line
		566(3)-570(S)	change in rhythm, melodic contour and bass line
		583-586 (2)(S)	change in bass line, new tonality
		586(3)-590(S)	change in melodic contour

Source	Unifying compositional elements	Location of reuse	Variance
		603-606 (2)(S)	change in bass line, new tonality
		606(3)-610(2)(S)	change in melodic contour and bass line

Tension and Release

The elements in this composition, which create musical tension and release, are dynamics, harmonic dissonance, sustained tones, melodic leaps, texture, rests, melodic and vocal range, and accents. Each formal division contains at least one climax.

The first formal division contains four climaxes which occur in measures 18, 52, 69, and 77. The first is approached by a crescendo and rising melodic lines leading to a "ff" dynamic level and the highest pitches (to this point) in all four lines. The climax is followed immediately by a rest and a reduction in the number of lines, dynamics, and dissonance.

Occurring in measures 52 and 77, the two climaxes (the second and fourth) in the first formal division, are very much alike. They are created by the "ff" dynamics and crescendo, the high pitches in the tenor line, and rests which follow.

The greatest climax in the first formal division is in measure 69 which is preceded by a crescendo leading to the "ff" dynamics. The texture contains six voices, three of which are approached by ascending leaps. Dissonance is sustained for three beats in the bII^{7M} chord. In the next measure the tension is reduced by a thinning of the texture, descending lines, less dissonance, and a decrescendo.

Two climaxes occur in the first baritone recitative, the second formal division. In measure 90 a climax is created by a crescendo, the "ff" dynamics, a rest leading to the highest pitch in the solo passage and the descending line and diminuendo which follows.

A lesser climax is located in measure 107 in which each tone is accented. This climax point is also marked "ff," but the pitches are lower than in the previous climax.

Five climaxes occur in the third formal division. These are located in measures 134, 142, 162, 182, and 196. The first is created with a crescendo, a six-line texture, a polychord ($\frac{iio}{i}$), and ascending leaps in the upper voices. Tension is abruptly reduced to a one-line melody indicated "p subito."

The next climax occurs in measure 142. It is created with a crescendo, a dissonant chord (i add3M), ascending leaps in the two upper voices, and the silence which follows.

The third climax in the third formal division is in measure 162. Beginning in measure 155 the texture gradually thickens from two lines to five. At the climax point the chord is the IV^{9}_{7M} in close structure with all vocal lines in their upper registers. This chord is sustained for two and a half measures and is followed by silence and then a reduction in dissonance, range, and dynamics.

The climax in measure 182 has a surprising effect. In the preceding measure the dynamic level is "mp." At the climax point, the marking is "f subito" with written accents above each tone. All lines suddenly become much higher, especially the soprano line. At the climax point the tenor line is added to the texture.

The last climax in the third formal division occurs in measure 196 and is marked "ff" with written accents over the last two tones in the phrase. The climax is preceded with a crescendo; however, all vocal lines descend to a much lower register. A long silence follows the point of tension.

The fourth formal division contains three climaxes which are identical harmonically, melodically, and rhythmically. The first two are marked "f," and the last is marked "ff." The climaxes are three measures in length, 202 through 204, 209 through 211, and 216 through 218. The tones in the chords at the climax points are widely spaced

but are very dissonant. The repeated polychord is the $\frac{(b)II}{i}$. Each climax is preceded and followed by a reduction in dynamics.

The fifth formal division, measures 249 through 297, contains two climaxes. The first occurs in measures 268 and 269 where the solo line leaps to its high sustained pitch. This tone contains a crescendo and is followed by silence.

A lesser climax in the recitative is found in measure 296. This climax is created by an ascending compound diminished fifth to an altered tone in the key. The high tone is preceded by a crescendo and followed by a decrescendo and a descending line.

The next formal division, indicated "I^1," contains six climaxes. They appear in measures 339, 367, 404, 411, 492, and 525. The sixth is the strongest and most effective.

The climax in measure 339 is created by a crescendo and "ff" dynamic level, rising melodic lines, tones in the upper vocal registers, and silence which follows.

Measure 367 contains a climax which is almost identical to the one in measure 18. The same elements are used in the same ways, but the second of these two will not have the impact of the first. The climax in measure 18 is the first in the entire composition and is effective for this reason. The climax in measure 367 is located two thirds of the way through the composition and is considerably weaker than many of the preceding and following climaxes.

Climaxes in measures 404 and 411 are reminiscent of those in measures 69 and 77. The relative impact of the earlier and later pairs of climaxes is similar to the contrast discussed in the preceding paragraph.

The climax in measures 491 and 492 is created somewhat differently than the others in this composition. The combined elements contributing to the tension are unexpected rhythms, vocal accents, the "fff" dynamic level, and a dissonant tone cluster. The elements, which do not contribute to the climax in this particular instance, are vocal range, change in texture, melodic direction, and sustained tones.

The final and strongest climax in the "I^1" formal division is located in measures 525 and 526. Several devices are combined to create this high point in tension. The two chords in the climax, V^7 add3m and I add6m, are dissonant and widely spaced in seven lines. The tones in the climax are preceded and followed by rests and are sustained somewhat longer than the surrounding tones. The highest tone in the first chord, the "Ab," is the highest pitch in the formal section and is approached by an ascending leap. Following the climax is an abrupt reduction of tension.

The final formal division, measures 535 through 648, contains several changes in tension, but only one climax point. Slight variations in tension are effected by

terraced dynamics and changes in texture and register. The climax occurs in the final two measures. Beginning in measure 642, tension increases until the end. The texture thickens from two lines to eight, and the range widens considerably. The dynamic level gradually becomes louder, and the harmonic structures become progressively more dissonant. The highest pitch in the section, the "G" in the soprano, enters without melodic preparation. Each of the final three chords is sustained longer than any of the other tones within this final formal division. This composition is the only one in this study which ends with a high point in musical tension.

Total Balance

Within the total design of this cantata there are some features which give it a complete and balanced construction. Tonal centers and stylistic writing are the important elements which create the balanced effect.

The keys and scale bases change many times throughout the entire composition, but a large portion of the music is based upon three tonal centers, C, F, and Bb. Two other tonal centers, A and D, are used for an extended time as well as a number of transient tonal centers. Nonetheless the over-all tonal pattern is as follows: C, F, (A), Bb, (A), (D), C, F, Bb, and C. Three recitative solos contribute to another form of balance. They are approximately

the same length and divide the entire cantata into approximately four equal-length divisions.

Another unifying feature of the composition is the use, reuse, and modifications of the "a" phrases. The composition begins and ends with single statements of this melodic unit, and more than half of the rest of the composition is related in some way to this one phrase. Even though the "a" phrases are prevalent, they do not form any kind of a pattern. This feature contributes more to unity than balance.

The three elements discussed above, tonal centers, location of the recitatives, and the presence of "a" phrases, seem to work independently of one another. No over-all pattern is established when these elements are combined.

In the five previous compositions discussed in this study, the location and relative strength of musical climaxes contributes greatly to the total balance of the individual works. But in this sixth composition musical tension does not contribute to the same end. The locations of the four strongest climaxes, measures 162, 218, 525, and 647, seem to destroy rather than aid total balance.

Rehearsal Problems (With Some Suggested Solutions)

This composition should present more rehearsal and performance problems than the others included in this study.

Most of the difficulties would probably deal with pitch perception. These problems are the result of the melodic and harmonic cross relation, modal lines, chromaticism, certain chord types unusual or difficult melodic intervals, and melodic and harmonic variations of established patterns.

A partial list of melodic cross relations is given below.

measures:	vocal lines:	pitches:
1	S and B	"A" and "A^{b}"
9 and 10	B and S	"Gb" and "G♮"
9 and 10	T and A	"Db" and "D♮"
18	B and A	"D♮" and "Db"
148	B and A	"F♮" and "F#"
173	A and S	"F#" and "F♮"

Most of the other examples of cross relation are identical or similar to those listed above.

Harmonic (or vertical) cross relations are common in this composition. In all such instances, dissonant intervals such as diminished octaves, augmented octaves, or augmented unisions are formed. Representative harmonic cross relations are listed below.

measures:	vocal lines:	dissonant interval:
28	B and S	A8 "Gb"-"G♮"
31	T and S	A8 "Gb"-"G♮"
137	T and A	A1 "G♮"-"G#"

measures:	vocal lines:	dissonant interval:
139	T and A	A1 "Bb"-"B♮"
140	T and A	A1 "Db"-"D♮"
141	T and A	A1 "F♮"-"F#"
142	T and A	D8 "C#"-"C♮"
143	T and A	D8 "C#"-"C♮"
171	B and A	A8 "Eb"-"E♮"
173	B and A	A8 "Eb"-"E♮"
219	A and S	A1 "Eb"-"E♮"
220	B and T	A1 "Eb"-"E♮"
235	A and S	A1 "Ab"-"A♮"
236	B and T	A1 "Ab"-"A♮"
298	B, T and A	A1 "Db"-"D♮"
412	B and T	A1 "Gb"-"G♮"
414	B and A	D8 "E♮"-"Eb"
439	B and T	A1 "E♮"-"Eb"
440	B and A	D8 "Cb"-"C♮"
463	Solo and T	D8 "A♮"-"Ab"
504	T and A	D8 "A♮"-"Ab"

When two vocal lines combine to form a cross relation, each should be independent. Care should be taken so that neither pitch will be "pulled" to the other.

Since most of the melodic lines have a modal character, it is recommended that the characteristic modal scale degrees be identified. The following modal scale tones may be sung incorrectly, because they differ in pitch from the parallel major and minor scale degrees:

beginning measure:	vocal line:	mode or implied mode:	scale degree:
21	B	F phrygian	2, "Gb"
46	A	Gb lydian	4, "C♮"
79	B	F mixolydian	7, "Eb"
80	B	F lydian	4, "B♮"
100	B	Db minor	#7, "C♮"
103	B	Db minor	6, "A♮"(Bbb)
110	T	A dorian	6, "F#"
162	S	Bb lydian	4, "E♮"
198	B	A phrygian	2, "Bb"
212	B	D phrygian	2, "Eb"
272	T	F locrian	5, "Cb"
296	T	F phrygian	2, "Gb"

A number of chromatically altered tones appear throughout the composition. Many of these are a result of mixed modes, altered chords, and chromatic nonharmonic tones. Some of the altered tones which may be sung incorrectly include the following:

measure:	vocal lines:	pitch:	difficulty:
3	A	"Eb"	mixed mode
9	T	"Db"	altered chord
9	B	"Gb"	altered chord
141	T	"Eb"	altered chord
148	T	"C♮"	mixed mode
170	T	"B"	chromatic nonharmonic tone

measure:	vocal lines:	pitch:	difficulty:
194	SATB	"C#"	altered chord
318	B	"Db"	chromatic nonharmonic tone

The complexity of many of the vertical sonorities will contribute to the difficulties in singing correct pitches. Some of the problems may be prevented when the director understands the unusual features of the various chords and explains them briefly to the singers. The following chart lists several of the anticipated "problem" chords, explains the peculiar aspects of each, and gives some suggestions for singing the proper pitches:

measure:	chord:	problem tone(s):	unusual feature:	suggestions:
4	$\frac{I}{V}$	T, "C"	quartal construction	The tone may have the effect of a suspended fourth, but it should not be "resolved" downward to the third, "B."
13	7M bV11+	all tones	dissonance	On the third beat the two upper voices restate the pitches from the first beat, the two lower voices approach the pitches by descending whole steps.
23	III+7M	A, "E♮"	augmented fifth formed by root and fifth	The "E♮" is the leading tone.
39	iv^{9}_{7M}	A, "A♮"	major seventh formed by root and seventh, altered scale tone	Rehearse the sopranos and altos before adding the bass and tenor. The three upper tones form an F major triad in isolation.
117	$\frac{(VI)}{i}$	A, "F"	dissonance in polychord	Do not allow the pitch to drop to an "E."
142	i add3M	T, "C#" and A, "C♮"	mixed thirds	
157	I^{9}_{7M}	T, "D" and B, "Bb"	ninth chord in close structure, tenor and bass enter without preparation	The two tones may be perceived as being a whole-step above and below the soprano tone in measure 156.

measure:	chord:	problem tone(s):	unusual feature:	suggestions:
158	IV^{9}_{7M}	all tones	ninth chord in close structure, all lines leap upward	The chord is the same as the preceding measure. All lines ascend by a perfect fifth.
173	iv add3M	B, "Eb" and A, "E♮"	mixed thirds	
202	(b)II / i	A, "Bb" and S, "F"	quintal construction dissonance	The two tones may be related (half-step above) to the bass and tenor pitches in measure 201.
224	i / iv	B, "D" and S, "E"	quintal construction	Each tone in the chord is stated in the previous measure.
241	i / iv	B, "G" and S, "A"	quintal construction	The same harmonic effect is stated in measure 224.
354	$bvii^{o7}$	A, "Fb"	diminished fifth in the chord, diminished fourth scale degree	Approach the "Fb" by half step
414	vii^{o} add8d	B, "E♮" and S, "Eb"	diminished octave	
440	vii^{o} add8d	B, "A♮" and S, "Ab"	diminished octave	

measure:	chord:	problem tone(s):	unusual feature:	suggestions:
483	tone cluster	B, "B" and B, "Ab"	dissonance	Approach the "B" by half step. The "Ab" is the third of the scale.
500	bVI+7M	B, "Gb" and A, "D"	augmented fifth	
504	V add3m	S, "Ab"	mixed thirds	A similar harmonic effect is stated by the vii^{o} add8d chord
516	bVI 7M	A, "Gb"	major seventh	The "Gb" should not fall to an "F."
526	I add6m	T, "Gb"	added tone	
644	ii^{7} add4	S, "F" and S, "G"	no melodic preparation for either tone	The "G," the dominant tone, is an added tone in the chord. The "F" is doubled in the tenor.
646	V^{7} add2	A, "A"	added tone	The alto line in measures 645 and 646 should not be identical to the second tenor line.

In some passages the lines contain some unusual and often difficult melodic intervals. The following intervals should be identified, because their appearance may be deceiving or the harmonic context may cause a problem:

measures:	vocal line:	pitches:	interval:
82-83	B	"F"-"E"	M7
99-100	B	"Db"-"C♮"	M7
103	B	"Db"-"A♮"(Bbb)	M3
103-104	B	"A♮"(Bbb)-"C♮"	AZ
140-141	T	"B"-"Eb"	D4
271-272	T	"F#"(Gb)-"Ab"	M2
272-273	A	"Bb"-"F#"	A5
276-277	T	"F#"(Gb)-"Eb"	M6
277-278	T	"Eb"-"F"	m7
287-288	T	"C"-"Db"	m9
293-294	T	"C"-"Eb"	m10
295-296	T	"C"-"Gb"	D12
296	T	"Db"-"Bbb"	M3
317-318	B	"G"-"Db"	D5
360	B	"Ab"-"F#"	D3
419	T	"C"-"Gb"	D5
423	T	"F"-"Gb"	m9
431	T	"F"-"Ab"	m10
469	T	"A♮"-"Ab"	D8
481-482	B	"C"-"B"	m2
485-486	B	"B"-"Ab"	A2

measures:	vocal line:	pitches:	interval:
578-579	T	"A"-"B♮"	M2
578-579	A	"F"-"D#"	D3
578-579	S	"A"-"F#"	m3

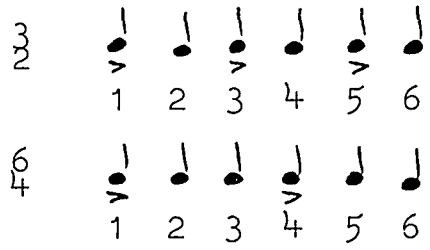
Because this composition contains much variance of musical ideas directors should know the sources and the variations of the musical units, and should identify these for the singers. The chart on unity and variety reveals the many variations incorporated in this composition.

Rhythmic difficulties will probably occur in many passages as a result of rhythmic variations of established patterns, changing meters, syncopation, unpredictable rests, and rhythms. Most of this composition is coordinated well with the text, but many passages are in a state of continuous rhythmic variation. The rhythms are not extremely difficult, yet care should be taken to observe all of the variations of the established patterns. This particular characteristic may be seen by comparing the first phrase with those which begin in measures 78, 298, and 354.

The meter changes many times throughout this composition, but in most of these instances the note values and tempos remain constant. The first meter change, which may need special attention, occurs in measure 45. Since the note values remain constant with the previous meters and since the measures divide into thirds, the $\frac{3}{2}$ measures may be conducted as $\frac{6}{4}$ with natural emphasis on the first, third, and fifth

beats. Similar transitions in meter occur beginning in measures 70, 76, 169, 173, 181, 405 and 416.

The $\frac{6}{4}$ meter in measure 410 should not be conducted in the same manner as the $\frac{3}{2}$ meter in the examples discussed above. For practical purposes the quarter note is the beat note for both meters, but the natural accents occur on different parts of the measure. A literal approach to the $\frac{6}{4}$ meter is best. The measures contain six quarter notes with natural accents on the first and fourth. The $\frac{3}{2}$ meter and the $\frac{6}{4}$ meter should be interpreted in the following manner:

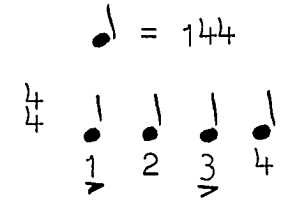


The rhythms in measures 76 and 410 contrast in the above manner.

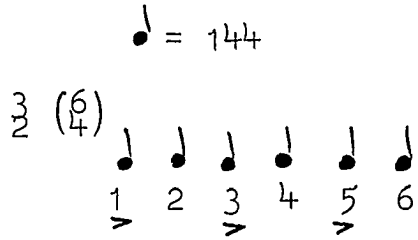
The $\frac{5}{4}$ meters, which appear occasionally, should be conducted in one of two ways, two beats plus three beats or three beats plus two beats. Accents in the text determine which is better. Those measures which contain the first pattern, two beats plus three beats, are 80, 135 through 138, and 172. The latter pattern is created in measures 145, 151, 154, 442, and 644.

The section which begins with the alla breve signature in measure 198 seems to have contradictory editing.

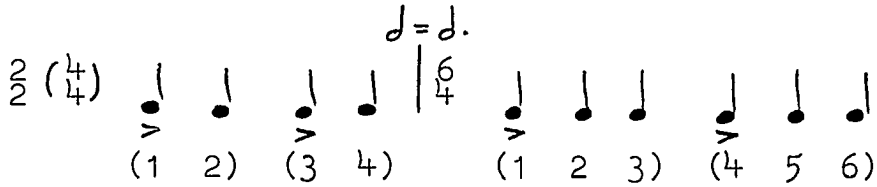
"Allegro" and " 𝅗𝅥 = 72" are not compatible. Directors may choose to interpret the meter in the following manner:



In order to be consistent, the $\frac{3}{2}$ meters in this section will also be reinterpreted.



Changes between compound and simple meters occur simultaneously with changes in the value of the written notes. Simple meter changes to compound meter in measure 249. At this point the common factor is the length of half of both measures. The half note or two quarter notes in the first meter is equal in length to a dotted half note or three quarter notes in the second meter.



A similar change occurs at measure 280. The opposite transition is created in measures 270 and 283.

Rhythmic difficulties may be encountered in a few passages which contain syncopation, unexpected rests, or

unpredictable rhythms. Directors may discover these problems in the following measures: 391, 399, 401, 413, 481 through 495, and 535.

Two-beat triplets are used sparingly, and they are not simultaneously mixed with the natural rhythms of the meter. They appear in measures 290, 351, 414, 416, 457, 459, and 461. Directors may choose to direct the triplets one of three ways: (1) all three with one longer beat, (2) each individually by conducting the rhythm instead of the steady beat, or (3) all three with two natural beats. The first method is recommended.

CHAPTER X

SUMMARY

The six choral compositions of Jean Berger, which have been analyzed and discussed in this study, should not be considered entirely representative of all of the composer's works now in print. However, it can be assumed that they are typical to some degree of all of the composer's music. Each of the six choral works has its own individuality, but there are several features which all seem to have in common. While no formal tabulation of various musical traits was made in this study, it is obvious that certain devices were preferred and repeatedly employed by the composer.

It may be concluded from this study that Berger is a "conservative contemporary" or "neoclassical" composer. While many of his compositional devices have their origin in the 20th Century, most of the elements (harmony and tonality, melody, rhythm, and counterpoint) relate quite naturally to the "common practice period." Traditional nomenclature and analytical techniques are effective with most of his music. But in some few instances conventional

analysis must be extended, and by doing so, the more contemporary features are revealed.

Harmony

Chord Types

Tertian harmony.--Perhaps the most characteristic feature of Berger's harmony is the presence and absence of certain vertical sonorities. While a wide variety of constructions is employed, most chords are tertian. Triads are certainly the most frequently used chord type, but extended tertian chords (sevenths, ninths, and elevenths) are common. An examination of the construction of seventh and ninth chords reveals that they are often of the more uncommon variety. Certain chords which are common with many composers, are conspicuously sparse or absent in Berger's music. The following chords are used sparingly: (1) major minor seventh, (2) fully diminished seventh, and (3) major minor major ninth. Contrasting with the above list, several of the less common chord types are frequently emphasized. They include the following: (1) augmented major seventh, (2) major major seventh, (3) minor major seventh, (4) half diminished seventh, (5) minor minor minor ninth, and (6) minor minor major ninth.

Added tone chords.--One of the prominent features in the music of Berger is the presence of added tones to major, minor, diminished triads as well as to seventh chords. The

conventional chords such as those with added major sixths or major seconds are employed, but several extraordinary added tone chords are also used. These include such chords as: (1) major triad with an added minor sixth, (2) minor triad with an added major sixth, (3) major triad with an added minor third, (4) diminished triad with an added diminished octave, (5) dominant seventh chord with an added minor third, (6) a minor minor seventh chord with an added fourth, and (7) a few chords with two added tones such as a major triad with an added major sixth and major second.

Quartal-quintal harmony.--Nontertian harmony, such as chords constructed in fourths or fifths, is employed to a limited degree, but it adds to the variety in the harmonic framework. The quartal and quintal chords are usually mixed freely with the tertian harmony, and this mixture of chord types gives the nontertian chords a character and function similar to that of the tertian chords. The bass tones in the quartal and quintal chords seem to determine the harmonic progression of the vertical structures.

Nonharmonic Tones

All of the definable nonharmonic tones are found throughout Berger's music. Most of them are an incidental result of the melodic lines; however, in many passages they help create special musical effects. Perhaps the most

prominently used nonharmonic device is the pedal point which is found frequently in five of the six choral works included in this study. The traditional tonic and dominant pedals in the bass are used by the composer, but several unusual variations of the pedal are also incorporated. They include the following: (1) inverted tonic, (2) inverted dominant, (3) double tonic-dominant, (4) subtonic, and (5) supertonic.

Cadence Harmony

One of the most interesting features of Berger's music is his cadence harmony. Most of the composer's cadences relate to the authentic, half, plagal, and deceptive formulas by root movement and/or voice leading. However, in many instances the harmony has some noteworthy characteristic which is purely twentieth century in origin. The unusual features, which alter the traditional formulas, include chord substitutes, tall tertian chords, and unusual inversions. The following list illustrates some of the characteristic phrase endings found in these six choral works.

Cadence harmony:	Traditional name:	Variations:
v^7-VI^{7M}	deceptive	minor dominant and seventh chord as the cadence chord

Cadence harmony:	Traditional name:	Variations:
v^7-#vi	deceptive	minor dominant and borrowed submediant from the parallel major
v^4_2-I^6_4	authentic	minor dominant and unusual inversions
$bVII^{7M}$-I add2	authentic	dominant substitute and added tone in the tonic chord
V^7 add3m-I add6m	authentic	added tones in both chords
iv^6_5-$\frac{I}{V}$	half	dominant substitute
iv-iii^6	half	dominant substitute
iv^7 -$^6_4$	plagal	inversion of the tonic chord
$bVII^6_4$ with inverted tonic pedal-I	plagal	subdominant substitute

Melody

Most of the vocal lines in Berger's music are conjunct, diatonic, and modal which result in no unusual singing difficulties. The total melodic effect is generally smooth which makes the lines quite singable. The one composition which is an obvious exception to those with conjunct lines is "The Fiery Furnace."

Scale Bases

Four of the six works in this study are predominantly modal in character resulting from the use of pure church modes, mixed modes, and some chromaticism. All six of the ancient modes (dorian, phrygian, lydian, mixolydian, aeolian, and locrian) are included to some degree in the music, but those which are used most frequently have the minor dominant chord (dorian, mixolydian, and aeolian).

The two remaining compositions, which are modal, are based on either the major scale or an artificial scale. "A Rose Touched by the Sun's Warm Rays" is based on a major scale, but the leading tone usually resolves downward. "Pater Noster" appears to be very chromatic, but it adheres closely to a ten-tone scale--a combination of the major and pure minor scales.

Phrase Lengths

Most of the phrases in these compositions have clearly defined cadences, and they average about four or five measures in length. Even though they are rather precise, they are often unpredictable. The features which contribute to this effect include: (1) unusual phrase lengths such as three or five measures, (2) changing meters, (3) rhythmic variation, and (4) phrase extensions.

Counterpoint

Polyphonic textures are not prevalent in the compositions analyzed in this study. The two extended works,

"Brazilian Psalm" and "The Fiery Furnace," are the only compositions which contain truly contrapuntal writing, yet even in these instances the counterpoint is used sparingly. In those passages which are polyphonic, the counterpoint is rarely extended and serves merely to separate the homophonic sections from each other. Even though several contrapuntal devices are employed, the counterpoint is often not harmonically oriented. The analysis in these passages is melodic and contrapuntal only.

The specific techniques which Berger employed in these two compositions are: (1) a canon at the ninth with a tonal answer, in which the first and second statements are three-voice parallel triads, (2) the inversion of the same canon with the answer at the seventh, (3) four-voice dialogue with real answers in a cycle of fifths, (4) stretto, (5) mirroring, (6) free counterpoint in an obligato, (7) two-voice dialogue with a real answer at the fifth, and (8) four-line canon in which the second pair of lines follows the first pair an octave lower.

Unity and Variety

One of the strongest characteristics discovered in Berger's music is his variation and transformation of musical units--melody, rhythm, and harmony. The degree of variation ranges from very slight changes in pitch and rhythm to a complete transformation. The degree and number of variations seems to be determined by the length of the

composition, because the shorter works such as "The Eyes of All Wait Upon Thee" contain very few changes in the established patterns while the longer works such as "Brazilian Psalm" evolve through a kind of metamorphosis. To achieve the diversity in the music Berger altered many of the elements: (1) key center, (2) scale basis, (3) melodic intervals, (4) melodic contour, (5) register, (6) rhythm, (7) tempo, (8) meter, and (9) harmony. In several sections the music is treated contrapuntally, is doubled melodically, is transposed, is stated in rhythmic augmentation, and is reduced or extended in length.

Tension and Release

High points in musical tension appear to be carefully prepared, because various elements usually combine in such a way as to reinforce each other at musical climaxes. It is also apparent that most of the climaxes are strategically located, allowing for a greater musical impact.

Berger uses almost every means available to a choral composer to build and sustain tension. The techniques, which are commonly employed to build climaxes, include the following: (1) ascending melodic lines, (2) ascending leaps, (3) crescendos and fortissimos, (4) dissonant chords, (5) vocal accents, (6) thick textures, (7) high tones, (8) faster rhythms, and (9) repeated climax tones.

A large majority of climaxes follow the same overall plan in their preparation and resolution. Several

elements, working together, increase tension for a number of measures until the climax is accomplished. After the climax is reached, there is a sudden and significant reduction in tension, or there is a period of silence. In retrospect each climax is reinforced by the low tension which follows it.

High points in tension are usually created by several simultaneous devices, all of which work toward the same end. However, in some few instances climax points occur when only one or two elements are contributing to the musical tension. In a very few climaxes, various elements actually work against one another. While the primary sources are building tension, one or two others may slightly relax tension. The partial relaxation of tension may be caused by a sudden reduction of vocal lines, a descending melodic curve, or a reduction in harmonic dissonance. These paradoxical situations create the most interesting climaxes of all.

Total Balance

The total musical effect, created by all of the combined elements, is usually a unified and balanced design. Whether or not the balanced is perceived, the theoretical design is present and appears to be carefully organized. All six works have some degree of balance, but the four shorter compositions seem to have a more precise organization than "Brazilian Psalm" and "The Fiery Furnace." Berger

combines musical tension and relaxation, tonalities, and stylistic writing in that order to achieve the desired degree of total balance.

Summation: Strongest Traits

After examining and reviewing the six choral compositions of Jean Berger, some noteworthy characteristics seem to prevail. The traditionally common extended tertian chords are infrequently used, while the more uncommon chords are plentiful. This characteristic is particularly apparent with the dominant chords, because the major minor seventh chord is rare. Common chord types contribute to two other peculiar traits of the harmony. A wide variety of sonorities are substituted for the dominant seventh chord, and this in turn contributes to the many variations of the traditional cadences.

The melodic traits, which seem especially memorable, are the special scale bases and the melodic variations. The major scale is generally avoided, while the church modes or other scale bases seem to be preferred by the composer. Regardless of the scale source, the lines generally avoid altered tones. The other strong linear characteristic is the modification of the melodic units. Variations range from slight pitch changes to complete transformations, but the lines remain singable and vocal in character.

BIBLIOGRAPHY

Berry, Wallace. Form in Music. New York: Prentice-Hall, Inc., 1965.

Dallin, Leon. Techniques of Twentieth Century Composition. Dubuque, Iowa: Wm. C. Brown Company, 1957.

Hindemith, Paul. Craft of Musical Composition, Vol. I. New York: Associated Music Publishers, Inc., 1937.

Ottman, Robert. Advanced Harmony. New York: Prentice-Hall, Inc., 1961.

Persichetti, Vincent. Twentieth Century Harmony. New York: W. W. Norton and Company, Inc., 1961.

Reti, Rudolph. Thematic Process in Music. Mystic, Connecticut: Verry, Lawrence, Inc., 1961.

Stein, Leon. Structure and Style. Evanston, Illinois: Summy-Birchard Company, 1962.

APPENDIX

CHORAL WORKS OF JEAN BERGER PUBLISHED IN THE UNITED STATES

Abingdon Press

HOW AMIABLE ARE THY TABERNACLES (Psalm 84)
(Double chorus & organ)

Associated Music Publ.

TWO PROVERBS (SATB)
All things that rise will fall
God help the poor

SIX MADRIGALS (SATB)
My true-love hath my heart
I find no peace
Art thou that she?
To Mistress Isabel
Lost is my quiet
Harvester's Song

DE PROFUNDIS (SATB)

HYMNS OF PRAISE (SATB)
Blessed art thou, o Lord
Thou hast given abundance to thy servant
In thy covenant does my heart rejoice

THREE ANTHEMS (SATB, 2 trumpets)
I will extol thee
Blessed is he
I will praise thee, o Lord

Augsburg Publ. House

I WILL GREATLY REJOICE IN THE LORD (SATB)

BEHOLD, GOD IS MY SALVATION (SATB)

WHO IS LIKE UNTO THEE, O LORD? (Double Choir)

THE EYES OF ALL WAIT UPON THEE (SATB)

WHOM SHALL I SEND? (SATB)

THEY THAT WAIT UPON THE LORD (SATB)

TRUST IN THE LORD (SATB)

SEEK YE THE LORD (SATB)

PRESERVE ME, O GOD (Psalm 16) (SATB)

PSALM 140 (SATB, String orchestra)

PSALM 146 (SATB, String orchestra)

WHY ART THOU CAST DOWN, O MY SOUL? (SATB)

HOW LOVELY ARE THY TABERNACLES (Double chorus, soloists)
(Psalm 84--three movements)

O SING, ALL YE LANDS (SATB)

AND IT SHALL COME TO PASS (SATB)

FROM ISAIAH (SATB)
All flesh is grass
When thou passest through the waters
Arise, shine

DEVOTIONAL SONGS (SATB)
Thy word with me shall always stay
To do God's will
A rose touched by the sun's warm rays
Speak to one another

Alexander Broude

FIVE CAZONETS (SATB)

SKELTON POEMS (SATB, Baritone solo, piano)

Broude Brothers

THREE TUDOR AYRES (SATB)
That was my woe
Pleasure it is
In youth, in age

AIRS AND ROUNDS
8 pieces for various combinations of voices, 2 to 6 parts

TAKE FROM US, LORD (SATB, div.)

THE LORD IS MY SHEPHERS (SATB)

THERE IS A GARDEN IN HER FACE (SATB)

O COME LET US SING UNTO THE LORD (SATB, div.)

VISION OF PEACE (SATB div., Alto solo)

PSALM 128 (SATB, piano)

THREE MORALITIES (SATB)
Begin, be bold
Now here, now there
Who shoots at the midday sun

Concordia Publ. House

CANTATE DOMINO (SATB)

BENEDIXEBUNT EAM (SATB)

QUAM PULGHRI SUPER MONTES (SATB)

LET THE PEOPLE PRAISE THEE (SATB div., 2 trumpets)

PSALM 86 (SATB)
Bow down, o Lord, thine ear
Amongst the gods, o Lord
O God, the proud rose 'gainst

Franco Colombo

THY LIGHT IS COME (SSA, Sop. solo, flute, tambourine)

PSALM 113 (SATB, brass quartet, timpani)

RING THE BELL (3 pieces for SSA, piano)

FIVE QUOTATIONS (SATB)

John Church

FOR THIS GOOD COMPANY (SATB, piano or organ)

Kjos Music Co.

O CLAP YOUR HANDS (SATB div.)

GLORY BE TO GOD (SATB)

O LORD, THOU GOD OF ISRAEL (SATB) Hymn & anthem)

O MORTAL MAN (SATB) Hymn & anthem)

THANK YE THE LORD (SATB)

MY DAYS ARE LIKE A SHADOW (SATB)

THREE EPIGRAMS (SATB)
- The bellman's song
- Grass of lovity
- Upon a passing bell

THREE CHORAL PIECES (SATB)
- Lord Heygate
- Lord Clive
- Three young rats

MY SOUL, O WHEREFORE DOST THOU BOS? (SATB)

LORD, FROM THE DEPTH I CRY TO THEE (SATB)

I TO THE HILLS LIFT UP MY EYES (SATB)

IT IS GOOD TO BE MERRY (SATB div.)

HAPPY ARE THEY THAT DWELL IN THY HOUSE (SATB)

THE LORD IS RIGHTEOUS IN ALL HIS WAYS (SATB)

FROM THE PROVERBS (SATB)
- For the Lord giveth wisdom
- Then shalt thou understand righteousness

BLESSING AND RIGHTEOUSNESS (SATB)

LET US GO INTO THE HOUSE OF THE LORD (SATB div.)

BEHOLD THE LORD HATH PROCLAIMED (SATB)

THE LORD IS RIGHTEOUS IN ALL HIS WAYS (SATB)

J. Fischer & Bro.

PSALM 113 (SATB)

PSALM 150 (SATB)

PSALMS OF PENITENCE (SATB div., organ or orchestra)

MR. FINNEY'S TURNIP (SSA)

MINNIE AND WINNIE (SSA)

FOUR VIGNETTES (SATB)
- If
- He and she
- Why
- Man is for woman made

SONGS OF WORSHIP (SATB)
- O magnify the Lord
- Create in me a clean heart
- We bow our heads in reverence
- It is a tree of life
- Extolled and hallowed be the name of the Lord
- May the Lord bless thee

A CHILD'S BOOK OF BEASTS (Treble voices, piano)

C. F. Peters

PSALM 100: SHOUT TO THE LORD (SATB div.)

PSALM 121: I LIFT UP MY EYES (SATB div.)

Shawnee Press

VILLANELLAS (SATB)
- Throughout the world
- When I admire the rose
- John and his father
- A face that should content me
- The sweet season
- New brooms

FROM THE BAY PSALM BOOK (SATB)
- Psalm 47: Clap hands, all people
- Psalm 23: The Lord to me a shepherd is
- Psalm 150: Praise ye the Lord

THREE ROUNDELAYS (Shakespeare) (SATB)
- For so it falls out
- The man that hath no music
- Jack shall have Jill

WAKE, PSALTERY AND HARP (SATB, SA, trumpet)

THREE CHORAL PIECES ON 17th CENTURY POEMS (SATB)
The burden
The mistake
My wishes

Theodore Presser Co.

NO MAN IS AN ISLAND (SATB div.)

THE GOOD OF CONTENTMENT (SATB div.)

THE FASHIONS CHANGE (SSA, piano)

DEAR AUNT PHOEBE (SSA, piano)

TWO CHORAL ELEGIES (SATB)
My prime of youth
O death, rock me asleep

PSALM 57 (SATB, brass quartet)
in three movements

THE MOCK TURTLE'S SONG--FACTS (Equal voices, piano)

R. D. Row

IN A TIME OF PESTILENCE (SATB, solo quartet)

IN DAYS TO COME (SSA)

THREE FANCIES (TTB, piano)

I'VE KNOWN RIVERS (TTBB)

G. Schirmer

BRAZILIAN PSALM (SATB div.)

ALLELUIA (from Brazilian Psalm) (SATB div.)

ALLELUIA (from Brazilian Psalm) (TTBB div.)

HEAR THE SINGING (CANTIGAS) (SATB div.)

THY KINGDOM COME (SATB)

THE MOUNTAIN AND THE SQUIRREL (SATB)

HAPPY IS THE MAN (SATB)

HOPE FOR TOMORROW (TTBB, piano)

THE PRAYER OF MANASSER (SATB, Tenor solo)

PARABLE OF THE SOWER (SATB)

THE FIERY FURNACE (Cantata for SATB, soloists)

Summy-Birchard Co.

O GIVE THANKS UNTO THE LORD (SATB)

LIFT UP YOUR HEADS (SATB)

WE SANCTIFY THY NAME (SATB)

WISDOM HATH BUILDED HER HOUSE (SATB div.)

PATER NOSTER (SATB)

TALE OF A DOG AND A BEE (SATB)

EVEN SUCH IS TIME (SATB)

MAN'S LIFE IS WELL COMPARED TO A FEAST (SATB)

John Sheppard Music Press

OF WISDOM AND FOLLY (SATB)
All the days of the afflicted
Better it is
Go to the ant, thou sluggard

HOW BEAUTIFUL UPON THE MOUNTAINS (SATB)

LIFT UP YOUR EYES ON HIGH (SATB)

MAGNIFICAT (SATB, Sop. solo, flute, tambourine)

O PRAISE THE LORD, ALL YE NATIONS (SATB, Baritone solo, percussion)

WHERE SHALL WISDOM BE FOUND? (SATB)

GLORIFY THE LORD WITH ME (SATB, optional percussion instr.)

THREE INTROITS (SATB)
Be glad in the Lord
Show me thy ways
The Lord is my strength

THE PATH OF THE JUST (SATB)

THE WAY OF CHARITY (SATB, incidental Alto solo)
(I Corinthians, 13)

YE SHALL GO OUT WITH JOY (SATB div.)

A FOUNTAIN OF LIFE (SATB)

REJOICE! (SATB Div.)

COUNTRY SONGS (SATB)
Tarpan and toad
Purple hen
Uncle Jakes
Pumpkin Song
Lonely woodpecker

A PENNYWORTH OF MIRTH (SATB)

BEHIND THE CLOUD (SATB)

THE TEST OF THE HEART (SATB)

PRECEPTS (SATB) Texts from Poor Richard's Almanac)
Nor trivial loss
In things of moment
What can be done

THEY ALL DANCE THE SAMBA (SATB, piano)

OF MIRTH AND MERRIMENT (SATB)
Peanut Song
Mirth and merriment
Help yourself
Four farthings and a thimble
Betty Betta

CANTIGA (Vocalise for SATB, piano)

A SONG OF SEASONS
(SATB, soloists, Melodica, percussion)

BITS OF WISDOM (SSA)
When you've got an elephant
Do all the good you can
Good to begin well

Transcontinental Music Publications

IT IS GOOD TO GIVE THANKS (SATB, optional organ)

Lawson-Gould

CHORAL EDITIONS

Ludwig Sonfl: (ca. 1520) ICH STUND AN EINEM MORGEN (4 settings)

M. Praetorius: (ca. 1610) WIE SCHOEN LEUCHTET DER MORGENSTERN (4 settings)

John Sheppard Music Press

SONG CYCLES FOR SOLO VOICE

FIVE SONGS (poems in French and Latin by Mary Stuart)
Mezzosoprano, flute, viola, 'cello

VILLANESCAS (four songs on Spanish poems)
Soprano or Tenor, piano

SIX RONDEAUX (poems in French by Charles d'Orleans)
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Mezzosoprano or Baritone, viola, 'cello (or piano)