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THE ROLE OF EXPANDED CHORDS IN THE SELECTED WORKS OF
CHARLES IVES

BY

THOMAS A. NAZZIOLA

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ABSTRACT OF THE DISSERTATION

The role of expanded chords in the selected works of Charles Ives

by THOMAS NAZZIOLA

Dissertation Director:

Christopher Doll

Expanded chords—those comprising five notes or more and a variety of intervals including thirds, fourths, fifths, seconds in diverse combinations—are at the center of Charles Ives's compositional and philosophical thought, functioning both as a byproduct and as a generator of other ideas. In addressing Ives's eclectic compositional techniques, other scholars have generally addressed the role of expanded harmony as a subtopic within other issues. This dissertation, in contrast, treats extended harmony as a ubiquitous presence in Ives's music and as a unifying factor for various ideas discussed by other scholars. After discussing Ives' harmonic influences, I trace the use of expanded chords in a variety of works—[Grantchester, Ann Street, The Things Our Fathers Loved, Central Park in the Dark, Psalm 67, Concord Sonata and others]—as they relate to issues of philosophy, programmaticism, and form.

Dedication

To Ray Cassarino—performer, teacher and friend

TABLE OF CONTENTS

ABSTRACT	ii
DEDICATION	iii
LIST OF ILLUSTRATIONS	vi
INTRODUCTION	1
Part I: Definitions and influences	
CHAPTER1: Definitions	8
CHAPTER 2: Influences	23
a) George Ives	23
b) Horatio Parker	32
c) Dr. John Cornelius Griggs	35
d) Debussy	37
e) Beethoven	43
f) Transcendentalists	45
g) War	46
h) Nationalism	51
i) Danbury, Ct.	52
Part II: Interpretive	
CHAPTER 3: Philosophies	55
a) Gender-coded harmony	55
b) Strengthening the ear	61
c) Substance versus manner	66
d) Transcendentalism	76

e) Vagueness	85
CHAPTER 4: Programmaticism	96
a) Nostalgia and memory versus reality	96
b) Remembering George Ives	101
c) National holidays	110
d) Fictitious events	117
e) Stream of consciousness	121
f) Temporal order	136
g) Geography and visual images	146
h) Notation as a source of imagery	153
Part III: Technique and forms	
CHAPTER 5: Technique	156
a) Word painting	156
b) Bitonality	175
c) Chromatic aggregate	180
d) Stylistic heterogeneity	188
e) Potentiality for multiple tonics	209
f) Systematic composition	221
g) Performance techniques	231
CHAPTER 6: Form	233
CONCLUSION	245
BIBLIOGRAPHY	252

LIST OF ILLUSTRATIONS

Chapter 1: Definitions	Page
Example 1–0: Ninth chord analysis.....	9
Example 1–1: Formation of ninth chords.....	9
Example 1–2: m. 11, Ninth chord in the piano part, <i>Ann Street</i>	10
Example 1–3: Eleventh chord formation.....	10
Example 1–4: Thirteenth chord formation.....	11
Example 1–5: Thirteenth and seventeenth chord formation.....	11
Example 1–6: Fifteenth, nineteenth and twenty-first chord.....	11
Example 1–7: Ives’s experimentation with fifteenth chords whereby Ives adds higher overtones to the original chords, <i>Nearer, My God, to Thee</i>	12
Example 1–8: Quartal chords.....	13
Example 1–9: m. 1, Quartal harmony/stacked perfect fourths, “The Cage”.....	13
Example 1–10: m. 1–4, Quintal harmony, “Remembrance”.....	14
Example 1–11: m. 7–12, Mixed harmony/Sounds of the evening, <i>Central Park in the Dark</i>	16
Example 1–12: mm. 1–2, Dissonant embellishment of a minor triad, <i>String Quartet No.2</i>	17
Example 1–13: m. 1, Polychords with dissonant embellishment of ic1 in each triad, <i>Waltz-Rondo for Piano</i>	17
Example 1–14: mm. 1–2, Cluster chords, “Majority”.....	18
Example 1–15: Cluster chords.....	18
Example 1–16: Thirteenth chord and polychord formation.....	20

Example 1–17: mm. 1–2, Polychords formed from different harmonic areas over a pedal tone C, <i>Variations on “America”</i> (“Interlude” after “Variation II”).....	20
Example 1–18: Triads occurring at great distances from the bottom chord.....	21
Example 1–19: Massive polychord structures.....	21
Example 1–20: m. 2, <i>On the Antipodes</i>	22
Chapter 2: Influences	
Example 2–0: p. 86 (system 4), “Afterglow”.....	25
Example 2–1: mm. 1–4, Bitonality and resultant tertian chords, “London Bridge”.....	27
Example 2–2: p mm. 5–9, Polychords formed from bitonality between the right and left hand, <i>Variations on “America”</i> (“Interlude” after “Variation II”).....	29
Example 2–3: mm. 1–2, Representation of drums through cluster chords, “General William Booth Enters Heaven”.....	30
Example 2–4: mm. 1–3, <i>Reflets dans l’eau</i>	38
Example 2–5: mm. 9–10, <i>Reflets dans l’eau</i>	39
Example 2–6: m. 20, <i>Reflets dans l’eau</i>	39
Example 2–7: mm. 1–4, Expanded ninth and eleventh chords, “Housatonic at Stockbridge”.....	41
Example 2–8: mm. 12–13, Expanded tertian chord (F#17) and a staggered polychord made up of the following chords: G#7, F# and Eb, “Housatonic at Stockbridge”.....	42
Example 2–9: mm. 1–5, “The ‘St. Gaudens’ in Boston Common” (Col. Shaw and his Colored Regiment), <i>Three Place in New England</i>	48

Example 2–10: mm. 105–106, Cluster chords and polyrhythms with select aspects of orchestration, “The Fourth of July,” <i>Holidays Symphony</i>	54
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Chapter 3: Philosophies

Example 3–0: mm. 1–4, Tonality obscured by expanded harmony, “Mists”.....	57
Example 3–1: p. 55, system 1, Unrelenting chromaticism and thick expanded chords, “Emerson,” <i>Concord Sonata</i>	59
Example 3–2: p. 55, systems 2 and 3, Short passage of expanded harmony which interrupts an otherwise simple harmonic progression serving as a transition to the section in Eb, “The Alcotts,” <i>Concord Sonata</i>	60
Example 3–3: mm. 1–8, Expanded chords used to show motion from consonance to dissonance and back to consonance, <i>Let There be Light, for chorus and organ</i>	63
Example 3–4: final measure, Complex chord, <i>Symphony No.2</i>	65
Example 3–5: mm. 132–135, Motion of complex/expanded chords with dissonance and cluster chords which conclude with a consonant C major triad, <i>Three-Page Sonata</i>	66
Example 3–6: mm. 6–7, Harmonic alteration of harmony, “Grantchester”.....	69
Example 3–7: p. 39, system 3 (end of) Expanded chord F11 with dissonant interval created by F-sharp insertion, “Grantchester”.....	72
Example 3–8: p. 39, mm. 1–2, Half diminished seventh chord resolving to a dominant with a raised eleventh, “Grantchester”.....	73
Example 3–9: p. 39, m. 5, Dominant seventh chord and its implication of V – I motion, “Grantchester”.....	74

Example 3–10: p. 5, system 5, final measure, Transitional polychords and the four-note Beethoven motive, “Emerson,” <i>Concord Sonata</i>	78
Example 3–11: p. 6, system 2 (middle) and system 3 (final phrase), Large tertian chords in support of Beethoven four-note motive and transitional material consisting of quartal / quintal harmony (right hand) with secundal clusters (left hand), “Emerson,” <i>Concord Sonata</i>	78
Example 3–12: p. 6, system 4, Beethoven motive (broken) followed by complex chords and quasi-tonal quartal/tertian harmonies, “Emerson,” <i>Concord Sonata</i>	79
Example 3–13: p. 7, systems 1–4, Impressionistic section with expanded chords to support Beethoven motive and transitional material theme resembling “Autumn in New York,” “Emerson,” <i>Concord Sonata</i>	80–81
Example 3–14: p. 8, system 1, m. 1, Theme resembling “Autumn in New York” supported by expanded harmony of C11, “Emerson,” <i>Concord Sonata</i>	82
Example 3–15: p. 9, system 1, Open triads supported by expanded harmony of C11 (with an augmented fifth), “Emerson,” <i>Concord Sonata</i>	82
Example 3–16: p. 9, system 4, Polychord formations between treble and bass clef, “Emerson,” <i>Concord Sonata</i>	84
Example 3–17: p. 19, system 4, Serene ending assisted by expanded harmony, “Emerson,” <i>Concord Sonata</i>	90
Example 3–18: p. 19, system 4, p. 103, system 4 (end of), Serene ending in support of the word “solitude” from the text (piano part only), “Thoreau”	91
Chapter 4: Programmaticism	
Example 4–0: mm. 1–2, Opening C major harmony, “The Things Our Fathers Loved”	100

Example 4–1: mm. 1–2, C major sonority, “At Sea”	100
Example 4–2: mm. 1–3, B major sonority, “Old Home Day”	101
Example 4–3: mm. 8–9, Expanded chords in contrast to simple harmony of the first few measures, “Remembrance”	103
Example 4–4: mm. 1–11, Expanded chords in recalling childhood memories, “The Things Our Fathers Loved”	107
Example 4–5: mm. 14–16, Expanded chords in recalling childhood memories, “The Things Our Fathers Loved”	108
Example 4–6: m. 15, Use of arpeggiated D13 to introduce a fragment from “In the Sweet Bye and Bye,” “The Things Our Fathers Loved”	110
Example 4–7: mm. 8–9, Use of quartal harmony and whole tone clusters as to represent a cloud of memory, “The Fourth of July,” <i>Holidays Symphony</i>	111
Example 4–8: m. 10, Use of quintal harmony to represent a cloud of memory, “The Fourth of July,” <i>Holidays Symphony</i>	112
Example 4–9: m. 76, Use of cluster to create an explosion of sound, “The Fourth of July,” <i>Holidays Symphony</i>	113
Example 4–10: m. 121, Use of D13 chord to convey the concept of a fleeting memory, “The Fourth of July” <i>Holidays Symphony</i>	114
Example 4–11: mm. 75–78, Expanded harmony with juxtaposed melodies used to convey the march back to town from the cemetery, “Decoration Day,” <i>Holidays Symphony</i>	116
Example 4–12: m. 2, War Song melody supported by expanded chords of F#11, “Tom Sails Away”	118

Example 4–13: mm. 21–22, Memories of a fictitious character conveyed through expanded harmony, “Tom Sails Away”	119
Example 4–14: mm. 24–25, Closing chords that reflect the beginning eleventh chords—a half step lower, “Tom Sails Away”	119
Example 4–15: m. 65, Introduction to multi-tempi section with expanded harmony at letter H, “Putnam’s Camp, Redding, Connecticut,” <i>Three Places in New England</i>	121
Example 4–16: letter G, Polytonality implied from separate keys, “From Hanover Square North (At the end of a Tragic Day, the voice of the People Again Rose),” <i>Orchestral Set No. 2</i>	125
Example 4–17: m. 10, D13 harmony on downbeat along with wavering F natural to F-sharp in French horn, “From Hanover Square North (At the end of a Tragic Day, the voice of the People Again Rose),” <i>Orchestral Set No. 2</i>	126
Example 4–18: m. 115, Serene setting assisted by harmonic cloud of polychords, “From Hanover Square North (At the end of a Tragic Day, the voice of the People Again Rose)”	129
Example 4–19: rehearsal 7, Piano chords as part of polychordal harmony with the strings, <i>Fourth Symphony</i> , II	130
Example 4–20: rehearsal 7, String chords as part of polychordal harmony with piano, <i>Fourth Symphony</i> , II	130
Example 4–21: mm. 113–114, Quoted tunes and polychordal harmony in the strings, “Fourth of July,” <i>Holidays Symphony</i>	132
Example 4–22: mm. 1–8, Psychological journey reflected through expanded chords, “Ann Street”	134

Example 4–23: mm. 14–15 and m. 20, Psychological journey reflected through expanded chords, “Ann Street”	135
Example 4–24: systems 3 and 4 (mm. 5 & 6 respectively), Crossing temporal borders through semi-tonal shifts, “Grantchester”	140
Example 4–25: p. 38, system 3, Departing from the urbanized world of Debussy through a Bb11 chord, “Grantchester”	141
Example 4–26: p. 39, system 3, Crossing temporal borders through semi-tonal shifts, “Grantchester”	142
Example 4–27: mm. 1–2, Crossing temporal borders through semi-tonal shifts, “Tom Sails Away”	145
Example 4–28: system 3, Crossing temporal borders through semi-tonal shifts, “Tom Sails Away”	145
Example 4–29: final measure, Mystical, other-worldly ending (imparting a whole-tone sonority), <i>Central Park in the Dark</i>	148
Example 4–30: mm. 1–2, Sounds of rustling leaves over the swirling river, “The Housatonic at Stockbridge,” <i>Three Places in New England</i>	151
Example 4–31: final measure, Serene coda, “The Housatonic at Stockbridge,” <i>Three Places in New England</i>	152
Example 4–32: mm. 1–5, <i>In the Cage</i>	155
Example 4–33: mm. 11–15, <i>In the Cage</i>	155
Chapter 5: Technique	
Example 5–0: p. 144, mm. 1–3, Word painting and expanded harmony, “The Cage”	157

Example 5–1: p. 144, mm. 4–5, Expanded harmony used to express the word “wonder,” “The Cage”	158
Example 5–2: mm. 7–8, Word painting with expanded harmony on the word “contended driver,” “The Housatonic at Stockbridge”	159
Example 5–2a: mm. 9–11, Word painting with expanded harmony, “The Housatonic at Stockbridge”	161
Example 5–3: mm. 12–13, Word painting with expanded harmony on the word “elm,” “The Housatonic at Stockbridge”	161
Example 5–4: mm. 31–32, Faster motion initiated by a D13 chord, “The Housatonic at Stockbridge”	162
Example 5–5: mm. 33–35, Faster motion assisted by a complex chords, quartal harmony, and a polychord of Bb / F minor, “The Housatonic at Stockbridge” ...	162
Example 5–6: m. 36, Whole tone activity and D#13 used to reflect the word “fear,” “The Housatonic at Stockbridge”	163
Example 5–7: p. 35, system 3 (final two measures), Expanded harmony used to reflect the word “sea,” “The Housatonic at Stockbridge”	164
Example 5–8: m. 6 (above left) and m. 20 (above right), Word painting with chords to support the words “lord” and “God” respectively, <i>Psalms 90</i>	165
Example 5–9: mm. 1–5. Word painting to show contrast within expression of text. Note: original text is written in an upward direction, <i>Psalms 90</i>	165
Example 5–10: m. 52, Dense harmony used to reflect intensity for the word “wrath,” <i>Psalms 90</i>	166
Example 5–11: m. 62, m. 62, Cluster chord used to reflect intensity for the word “wrath,” <i>Psalms 90</i>	166

Example 5–12: p. 54, system 2, m. 1, Cluster chords in contrary motion (piano part) to reflect the word “hell,” “Nov. 2 nd , 1920”	168
Example 5–13: p. 55, system 1, Polychord used to reflect the word “God” in a forceful context, “Nov. 2 nd , 1920”	168
Example 5–14: p. 84, system 2 (end of), F17 chord used to reinforce the word “weight,” “December”	169
Example 5–15: m. 1, Expanded harmony used to convey a different context for the word “God,” <i>Psalm 67</i>	169
Example 5–16: m. 1, Expanded harmony used to impart the sound of a bell, “Thoreau”	170
Example 5–17: m. 1, Expanded harmony used to reflect Ives’s prologue, “Thoreau”	172
Example 5–18: p. 60, system 3 (middle of), Expanded harmony used to reflect Thoreau’s moodiness, “Thoreau,” <i>Concord Sonata</i>	173
Example 5–19: p. 60, system 2 (measure following double bar), Expanded harmony used to reflect Thoreau’s moodiness, “Thoreau,” <i>Concord Sonata</i>	173
Example 5–20: Word painting using polychords, “Ann Street”	174
Example 5–21: p.58, systems 3 and 4, Word painting using triads and expanded harmony, “Premonitions”	175
Example 5–22: mm. 1–5, Bitonality as a technique to yield expanded harmony with multiple labels, <i>Psalm 67</i>	177
Example 5–23: p. 1, system 1, Chromatic aggregate, “Majority”	181
Example 5–24: p. 1, system 2, 10 pitches of chromatic aggregate, “Majority” ..	182
Example 5–25: p. 2, system 2, m. 1, Chromatic aggregate, “Majority”	182

Example 5–26: mm. 1–2, Complex chords approaching a chromatic aggregate, <i>Aeschylus and Sophocles</i>	184
Example 5–27: p. 86, system 1, Complex chords create a chromatic aggregate, “Afterglow”.....	185
Example 5–28: final chord, Chromatic aggregate in the final chord, “Rough and Ready” (from <i>Set of Five Take-offs</i>).....	185
Example 5–29: final measure, Chromatic aggregate in the penultimate chord measure with cluster chords, <i>Study No. 5</i>	186
Example 5–30: m. 94, Chromatic aggregate achieved through a polychord, <i>Study No. 20</i>	187
Example 5–31: m. 10, Juxtaposition of styles facilitated by expanded chords, “Ann Street”.....	192
Example 5–32: mm. 14–15, Juxtaposition of styles facilitated by expanded chords, “Ann Street,”.....	193
Example 5–33: m. 20, Juxtaposition of styles facilitated by expanded chords, “Ann Street”.....	194
Example 5–34: mm. 11–15, Stylistic diversity achieved through expanded harmony, “The Things Our Fathers Loved”.....	198
Example 5–35: mm. 20–22, Expanded chords facilitate change of style and atmosphere, “The Things Our Fathers Loved”.....	198
Example 5–36: p. 53, systems 1 and 2, Juxtaposition of styles facilitated by expanded chords, “The Alcotts”.....	200

Example 5–37: p. 55, systems 2 and 3, Juxtaposition of styles facilitated by expand- ed chords illustrated through a reduction of harmonic motion, “The Alcotts”	201
Example 5–38: p. 55, systems 2 and 3, Juxtaposition of styles facilitated by expanded chords, <i>The Housatonic at Stockbridge</i>	202
Example 5–39: mm. 41–43, <i>Holidays Symphony</i>	204
Example 5–40: mm. 45–47, Expanded harmony at letter H to signify a change of style, “Decoration Day,” <i>Holidays Symphony</i>	205
Example 5–41: mm. 49–50, Cluster chords inserted in the strings to mark a change of style, “Decoration Day”	206
Example 5–42: mm. 79–86, Transition using cluster chords and large tertian chords, “Decoration Day,” <i>Holidays Symphony</i>	207
Example 5–43: mm. 87–89, Continued transition using cluster chords and large tertian chords, “Decoration Day”	208
Example 5–44: system 1, ‘Mystery chords in <i>Afterglow</i> ,’ <i>Afterglow</i>	210
Example 5–45: p. 86, system 3, Support for C as the desired tonic is established in the middle of the third system with a motion from G7 to a C triad, “Afterglow”	211
Example 5–46: system 3 (middle of), ‘Tristanesque’ version of G7 -- C in <i>Afterglow</i> , “Afterglow”	212
Example 5–47: m. 7, Tri-tone substitution (C#), “Mists”	215
Example 5–48: p. 57, system 1, Multiple tonic signifiers, “Premonitions”	216
Example 5–49: p. 57, system 2, Dominant-tonic confirmation, “Premonitions”	217

Example 5–50: p. 58, systems 2 and 3, Prolonged dominant-tonic confirmation, “Premonitions”	218
Example 5–51A: mm. 1–5 Wedge examples, <i>The Celestial Country</i>	223
Example 5–51B: Wedge examples, <i>The Celestial Country</i>	223
Example 5–52: mm. 21–24, Cluster chords, <i>Study No. 20</i>	224
Example 5–53: mm. 60–62, Wedge example, <i>Psalm 90</i>	225
Example 5–54: m. 20, Wedge example, “The Fourth of July,” <i>Holidays</i> <i>Symphony</i>	226
Example 5–55: mm. 6–7, Wedge example, “Soliloquy”	227
Example 5–56: mm. 1–17, Diagram illustrates motion from consonance to dissonance and back to consonance, <i>Let There Be Light</i>	230

Chapter 6: Form

Example 6–0: mm. 14–16, Transition from Anglican chant style to imitative polyphony using expanded harmony, <i>Psalm 67</i>	238
Example 6–1: mm. 21–23, Transition from imitative polyphony to Anglican chant style using expanded harmony, <i>Psalm 67</i>	239
Example 6–2: p. 6, system 2, m. 4, Varied harmonic settings of Beethoven motive utilizing expanded chords of E9 and A9, “Emerson,” <i>Concord Sonata</i> ..	241
Example 6–3: p. 6, system 4, m. 1, Varied harmonic settings of Beethoven motive utilizing complex chords, “Emerson,” <i>Concord Sonata</i>	242
Example 6–4: p. 12, system 4, m. 4, Varied harmonic settings of Beethoven motive utilizing chords of F9/F# and Bb11, “Emerson,” <i>Concord Sonata</i>	242

Example 6–5: p. 51, system 5, Varied harmonic settings of Beethoven motive utilizing cluster chords, “Hawthorne,” <i>Concord Sonata</i>	243
Example 6–6: mm. 1–11, Tonic dominant outline adapted from original example, <i>Psalms 67</i>	244

Introduction

The music of Charles Ives not only represents compositional practices of the early twentieth century, it also anticipates techniques that flourished well into the twenty first century. From modern film scores to contemporary classical composition, many composers have employed Ives's compositional techniques—particularly his use of complex harmonic language. At the heart of this language is *expanded harmony*—chords made up of a variety of intervals including seconds, thirds, fourths, fifths, and diverse combinations. While the employment of such chords is not specific to Ives, its use to reflect personal, psychological, philosophical, political, societal, programmatic, structural, and technical ideas is a uniquely Ivesian quality. Even though its presence is felt in many areas, Ives' expanded harmony has only been discussed by scholars as a subcategory under the umbrella of larger topics such as quodlibet, formal structure, or temporality. It is rarely seen as a catalyst for developing other aspects of Ives's music, and is more commonly seen as a residual or supporting factor for a different concept. As I will explore in this dissertation, expanded harmony functions as an essential ingredient in Ives' compositional recipes.

In the following paragraphs I will provide an overview of the topics to be discussed in subsequent chapters. In order to understand the importance of expanded harmony in Ives's music, it is helpful to begin by reviewing his early influences and education. Ives's great admiration for his father led to an interest in exploring harmonies beyond the commonly used seventh and ninth chords. But Ives's curiosity was also tempered with traditional training from not only his father (George Ives) but also Horatio Parker (his composition teacher while

attending Yale University), with an emphasis on Beethoven and the harmonically creative impressionism of Debussy. These influences, as well as the general musical culture of his hometown of Danbury, Connecticut, all combined to form Ives' unique harmonic vocabulary.

In addition to important people, events, and places, Ives's philosophies concerning the use of harmony were directly impacted by society's view of gender roles. A discussion of harmonic associations with feminine and masculine qualities will shed light on Ives's choices regarding specific chord types and the presence of dissonance (or lack thereof). These associations are part of Ives's larger view of music as being a vehicle of substance or manner. The difference between the two has to do with aesthetic judgments on whether the use of expanded harmony is spiritually meaningful or merely functional. Ives's aesthetic concepts are the partly the result of his acquaintance with the Transcendentalist writings of Hawthorne, Emerson, and Thoreau. These New England bards provide philosophical concepts used by Ives to pursue his creative choices, especially with regard to harmony. For example, a sense of vagueness in harmonic direction is shown to be parallel to the same approach used in the writings of Emerson.

Perhaps the most significant use of expanded harmony in Ives's music exists in the area of programmaticism. The bulk of Ives's music is autobiographical—recounting early memories of childhood, conveying borrowed memories about the civil war, and sharing fictional stories (all of which point to a general penchant for nostalgia). Expanded chords accompany the narrative in each of these areas, many times through the use of borrowed tunes. It is quite

common to hear borrowed tunes coupled with mention of Ives's father or a childhood memory of attending a parade, both ushered in by expanded harmony. The very active of reminiscing is reflected in specific chords such as an eleventh with a raised eleventh (also referred to as raised fourth)—a harmony used in traveling to another dimension or recalling the past.

Along with assisting in the motion between different tenses (past, present, and future), expanded chords also serve obscure the sense of a key or tonic. Specifically, the abundance of overtones (generated from expanded chords) can affect the clarity of a resolution with a gravitational pull in several directions. Besides blurring time and harmonic direction, Ives employs expanded chords to represent visual images, sometimes by mirroring the physical size of a structure with the appearance of the chord itself on paper as with *In the Cage*. Even actual street scenes and topography are communicated directly through expanded chords, marking the change of events or depicting a landscape (e.g. a swirling river or bustling city).

Ives also incorporates expanded harmony into compositional techniques such as word painting. In doing so, he employs certain chord types in conjunction with recurring words to strengthen meaning—creating harmonic leitmotifs. In contrast, the same word may be presented with different chords to change the context and emotion of a word as it reappears within a song. Another technique, bitonality, serves as a vehicle for creating expanded harmony. As Ives himself agrees, bitonality does not result in the hearing of two keys simultaneously, but rather the formation of a composite sound—that of the polychord (or other categories of expanded chords to be discussed later). Just as bitonality may yield

expanded harmony, expanded harmony has the ability to achieve chromatic aggregates. These large structures are rarely continued throughout a piece; Ives usually creates chromatic structures in service of a programmatic concept without the intention of pursuing serialism¹ for its own sake.

Accompanying the use of expanded chords, Ives employs a myriad of styles within his compositions. Diversity of style is a trademark of Ives's music—an area explored in detail by Larry Starr in *A Union of Diversities*. Quite often, a change of style will be initiated by a polychord or expanded tertian chord in both instrumental and vocal/piano works. These chords serve as a pivotal change in direction, often accompanied by a significant change in the text. This chameleon-like quality of expanded harmony is perhaps most effective in suggesting multidirectional harmonic motion. In *The Tonic Chord and Lacan's Object a in Selected Songs by Charles Ives*, Kenneth M. Smith illustrates the ability of expanded chords to disperse in several directions, revealing a multiplicity of resolutions based on the intervallic structure of a chord. Through a series of examples in Ives's music, Smith shows how the desire for a certain resolution can be delayed through several tangential resolutions before reaching its intended goal. This works in conjunction with other concepts utilized by Ives such as an intentional sense of vagueness and a borderless sense of the past, present and future. To that end, programmatic concepts (e.g. invoking childhood memories in the context of current events) are reflected by the use of expanded

¹ Serialism is mentioned as a frame of reference since many of Ives's contemporaries were employing this method. It is included here as a comparative topic and referenced by several authors in connection with Ives's music.

harmony through implying numerous resolutions—creating a sense of vague harmonic direction (which assists in creating a blurred sense of time).

While the formation of expanded chords is not consistently grounded in technique, there are instances whereby a systematic construction of intervals results in chords that are often difficult to identify due to the mixture of intervals. Concepts such as the use of a palindromic wedge, standard wedge or omnibus are all systematic techniques discussed in Philip Lambert's *The Music of Charles Ives*. Even though this area accounts for a smaller segment of discussion, it is an important contribution in showing methods utilized by Ives to achieve expanded chord structures. Similar concepts are pointed out by J. Peter Burkholder to show how Ives uses systematic approaches with the expansion and contraction of intervals. A final element of technique is explored in the area of performance in which Ives uses expanded chords on a given instrument to represent an image or idea.

Lastly, expanded harmony is used to facilitate both form and structure in Ives's music. From the use of "formless form"² (in which the music moves freely from section to section) to more conventional designs (e.g. arch form) sections are frequently marked by expanded chords to signify a change of direction or return of a previous section. Many times a specific type of expanded chord will be used in conjunction with returning material to provide a deeper thematic connection. Although a tendency to link Ives's use of form with more conventional European practices is put forth by Burkholder, a more flexible

² Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 116. Note: The term is used by Wolfgang Rathert.

perception of form is shown by Lloyd Whitesell who perceives Ives's use of form as being anything but conventional. In fact, Whitesell presents the lack of form as a purposeful approach. This notion helps to support many instances where Ives changes direction without regard for continuity. This freewheeling sensibility is in line with other concepts in Ives's music such as stylistic heterogeneity, multidirectional harmonic motion, and intentional vagueness.

Along with form, the development of Ives's works is often approached in contradistinction to what one finds in a conventional setting (such as sonata form). Instead of stating a full idea at the onset of a piece, Ives builds his themes in fragments with a full realization occurring towards the end. This process of working with fragments and building towards a complete whole is known as cumulative setting and is a direct reflection of the approach used in transcendentalist writings (in particular, the works of Emerson). In the case of Ives, the development of fragments occurs in a shroud of expanded chords. For instance, as we will see in the *Concord Sonata*, the fragmented theme of Beethoven's 5th Symphony is presented in numerous chordal settings along with fragmented borrowed tunes, each building towards a more complete statement as the piece develops. Aside from the development of ideas, perception of harmonic structure can change when considering both the analysis of the score and the actual sound of the music. For instance, Burkholder's analysis of *Psalms* 67 illustrates how expanded chords are used to support a conventional tonic-dominant structure based on the spelling of each chord. However, upon playing the excerpt on piano, I am able to hear the same chords as projecting an entirely different harmonic analysis. I will discuss and compare this discrepancy in the

chapter six (form). Before embarking on a journey through the role of expanded chords in Ives's music, I will address certain terms and concepts in the following section as relates to chord construction and established labels.³

³ Except where noted, there is no intentional sense of function concerning chord labels. Chords can be identified in relation to a root without imparting a sense of function. Part of the intention in much of the harmonic trajectory of Ives's music is to suggest many possibilities— a topic to be explored in chapter five.

Chapter 1

Definitions

In order to discuss the role of expanded chords in Ives's music, it is important to establish a chord-labeling approach; in this case, the approach is based on concepts illustrated in Vincent Persichetti's *Early Twentieth Century Harmony: Creative Aspects and Practice*. In addition to Persichetti's illustrations, examples of corresponding chords in the music of Ives will be provided to support the use of such chords. For clarity, the term "expanded chords"⁴ is used to represent chord types of five notes or larger from the following categories: tertian chords, quartal/quintal chords, complex chords, and polychords.

In the first area (tertian chords) the smallest chord consisting of five notes is that of the ninth. Expanded tertian chords are built using thirds ranging in size from a ninth chord to a twenty-first chord. In particular, ninths are chords built of "two triads, the top anchored to the uppermost note of the bottom triad."⁵ This concept is also applied by J. Peter Burkholder in his analysis of *Psalms 67* (ca.1894)(Ex. 1–0). Although the original chords are voiced differently in the music itself, Burkholder's spelling of the chords above each example demonstrates how each chord can be interpreted and assembled as a ninth chord. Ex. 1–1 illustrates several types of ninth chords, containing altered notes of all but the tonic.

⁴ Note: Throughout the course of this paper the term "expanded harmony" may be used as a substitute for "expanded chords."

⁵ Vincent Persichetti, *Twentieth-Century Harmony: Creative Aspects and Practice*, (New York, W.W. Norton, 1969), 77.

Example 3. *Psalm 67*, mm.1 - 11

Example 3. *Psalm 67*, mm.1 - 11

Intervals: M3, m3, M, m

Chord labels: C⁹, G⁹

Note in common

Lyrics: God be mer - ci - ful un - to

Ex. 1–0. J. Peter Burkholder, *The Critique of Tonality in the Music of Charles Ives*, Ex. 3, *Psalm 67*, mm.1–2 (excerpt adapted from original example with the addition of chord labels, brackets, boxes, and arrows), Ninth chord analysis.

Ex. 3-21

ma. mi. dim. aug. ma. mi. dim. aug.

ma. mi. dim. aug.

ma. dim. mi. dim. dim. dim. min. aug.

ma. dim. mi. dim. dim. dim. min. aug.

x = contains enharmonic duplications

Ex. 1–1. Vincent Persichetti, *Twentieth Century Harmony: Creative Aspects and Practice*, Ex. 3–21, Formation of ninth chords.

In Ex. 1–0, ninth chords are not labeled with symbols commonly found in jazz and popular music (e.g. C7b9, C9+5)⁶ as the specific alterations to the ninth chord are not necessarily important to a chord's function within a progression—especially in the music of Ives where chords often move freely without regard for

⁶ Throughout the course of this paper, chord symbols will utilize numbers (e.g. A7); pitches and keys will utilize spellings (e.g. F-sharp). For natural keys, only letters will be used (e.g. key of D).

a key or tonal center. However, when seventh chords are mentioned, traditional symbols will be used such as Gmin7, Fmaj7, or A7. An example of a ninth chord can be found in the first system of “Ann Street” (1921)⁷ (Ex. 1–2). Using a closed voicing, B9 is formed by the notes B natural (tonic), D-sharp (third), A natural (seventh), E-flat (enharmonic spelling of the third), G (augmented fifth) and C natural (ninth).



Ex. 1–2. “Ann Street,” m. 11, Ninth chord in the piano part.

The next expanded tertian chord is that of the eleventh (Ex. 1–3), which may be considered as the construction of two triads a major or minor third apart.⁸



Ex. 1–3. Vincent Persichetti, *Twentieth Century Harmony*, Ex. 3–32, Eleventh chord formation.

This is followed by the thirteenth chord (Ex. 1–4), which may be identified as the simultaneous formation of three triads with tones in common at two points.⁹

⁷ Dating Ives’s compositions is a subject of great scholarly research and debate. For all compositions, entries listed by J. Peter Burkholder (as found in the Grove Music Online) will serve as the source of dates.

⁸ Persichetti, *Twentieth-Century Harmony*, (New York, W.W. Norton, 1969), 82.

⁹ *Ibid.*, 82.

Ex. 3-33

ma.
ma.
ma.

mi.
mi.
mi.

aug.
ma.
mi.

etc.

Ex. 1–4. Vincent Persichetti, *Early Twentieth Century Harmony*, Ex. 3–33, Thirteenth chord formation.

As thirds are added to the thirteenth, the size of tertian chords increases to a fifteenth, seventeenth, nineteenth and lastly, a twenty-first chord (consisting of all twelve notes of the chromatic scale) as seen in Ex. 1–5 and Ex. 1–6.

Ex. 3-40

17th

13th
with doubling

Ex. 1–5. Vincent Persichetti, *Twentieth Century Harmony*, Ex. 3–40, Thirteenth and seventeenth chord formation. Note: Chords are presented in the order given in Persichetti's example and not necessarily in numerical order. Also, doubled pitches do not affect the size of a chord; they are included here to reflect Persichetti's original example.

Ex. 3-41

19th

19th

21st

15th

+ = duplicated pitches

Ex. 1–6. Vincent Persichetti, *Twentieth Century Harmony*, Ex. 3–41, Fifteenth, nineteenth and twenty-first chord formation. Note: Chords are presented in the order given in Persichetti's example and not necessarily in numerical order.

While there are multiple examples of each of the chords above in Ives's music, the following organ interlude from "Nearer, My God, to Thee" (ca. 1898–1902) will suffice in demonstrating larger expanded tertian chords—in this case, that of the fifteenth (Ex. 1–7).

Ex. 2 Organ interlude adding higher overtones to chords in 'Nearer My God to Thee.'

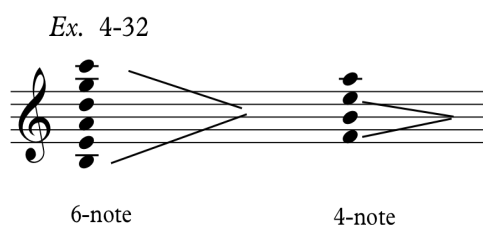
The musical score for Ex. 2 is in 6/4 time. The right hand (r.h.) plays a series of complex chords, each consisting of many notes, while the left hand (l.h.) plays simpler chords. The chords are labeled below the staff: D¹⁵, E¹⁵, D¹⁵, D¹⁵, B¹⁵, D¹⁵, D¹⁵, G¹⁵, F^{#15}, A¹⁵, G¹⁵. The score is marked with a mezzo-forte (mf) dynamic.

Ex. 1–7. Henry Cowell, Charles Ives and His Music, Ex. 2, Organ interlude adding higher overtones to chords in 'Nearer My God to Thee,' *Nearer, My God, to Thee*, Ives's experimentation with fifteenth chords (excerpt adapted from original example to include addition of chord labels). Note: in Cowell's book, commas are omitted from the middle of the song title.

Many of the above chords are used throughout Ives's works—from solo organ to large orchestral works. Although shown in previous examples, expanded chords are not always stacked neatly in thirds; there may be larger distances between the chord members as well as omitted pitches. What ultimately defines a chord's size (e.g. D¹⁵) is the distance between the bottom note rising up in thirds to the top note, utilizing unique pitch-classes. Repeated pitches have no bearing on the size of a chord.

The next chord category includes expanded quartal/quintal chords, which are formed by stacking a series of fourth or fifth intervals respectively, including alterations to those intervals (e.g. a perfect fourth combined with an augmented

fourth). Expanded quartal harmony is demonstrated in Ex. 1–8 and includes both dissonant and consonant intervals.



Ex. 1–8. Vincent Persichetti, *Twentieth Century Harmony*, Ex. 4–32, Quartal chords.

Quartal harmony (utilizing perfect fourths) can also be found in the first measure of Ives's "The Cage" (1906—piano/vocal version) as seen in Ex. 1–9.

*evenly and mechanically,
no ritard., decresc., accel. etc.*

(repeat 2 or 3 times) Quartal harmony / stacked 4ths:

The image shows the first measure of the piano/vocal version of "The Cage" by John Cage. It features a piano part with a forte (f) dynamic and a vocal part. The piano part consists of a series of stacked perfect fourths in the right hand and a series of perfect fourths in the left hand. The vocal part consists of a single note. The measure is marked with a repeat sign and a fermata.

Ex. 1–9. "The Cage," m. 1, Quartal harmony/stacked perfect fourths.

Note that "chords by fourths may be arranged in fifths as easily as chords by thirds are arranged in sixths"¹⁰ as seen in the opening arpeggiation of "Remembrance" (1921) in Ex. 1–10.

¹⁰ Ibid., 104.

The musical score is for the first four measures of the piece "Remembrance". It is written for voice and piano. The tempo is marked "Slowly". The key signature has one sharp (F#), and the time signature is common time (C). The vocal line begins with a piano (*p*) dynamic and the lyrics "A sound of a dis - tant horn,". The piano accompaniment features arpeggiated 5ths, marked with a piano-piano (*pp*) dynamic. A box labeled "Arpeggiated 5ths:" highlights the first two measures of the piano part. A note at the bottom of the piano part says "use both pedals".

Ex. 1–10. "Remembrance," mm. 1–4, Quintal harmony (arpeggiated).

The penultimate category is that of complex chords, consisting of 1.) different combinations of previous categories as well as 2.) chords that include dissonant intervals not originally found in a chord (e.g. adding a semitone above the dominant seventh of a ninth chord). The function of such added dissonance is explained by Persichetti as follows: "The added tone or tones are modifying elements attached to a chord of clear directional powers and, as color modifications, change the texture rather than the function of the basic structure."¹¹ This supports Ives's approach in many instances whereby he provides a clear tertian chord, such as an eleventh (e.g. C11 = C natural, E natural, G natural, B natural, D natural, and F-sharp), and injects a dissonant interval (created by adding a pitch such as C-sharp) for the purposes of color and sometimes as a means of obscuring tonal function (which departs from

¹¹ Ibid., 109.

Persichetti's definition whereby added tones function as color modifications). In other instances, dissonance is inserted to impart what Ives considers to be a more masculine sound, intended to both challenge and strengthen the ear of the listener.¹²

An example of description number one (combining different chord types) is found in *Central Park in the Dark* (ca. 1906). Specifically, this approach is utilized at rehearsal 10 in Ex. 1–11, whereby quartal harmony and a minor third interval are superimposed onto a first inversion C minor triad towards the end of the measure; the same scenario is found on the downbeat of m. 8 with an E-flat minor triad in the low strings (spelled enharmonically) coupled with stacked fourths and fifths in the upper strings (Ex. 1–11). In addressing the second definition, using added tones to create dissonance, Philip Lambert refers to this as an “Ivesian practice [in which] a single triad occur[s] as a prominent subset within a larger sonority that includes additional notes lying in half step (ic-1) relationships to triad tones.”¹³ This concept is found in Ex. 1–12 where a C minor triad is outlined in m.1 of Ives's *String Quartet No.2* (ca. 1911–13) in all but the viola (F-sharp). The F-sharp in the viola obscures the triadic harmony due to the dissonant friction between G natural and F-sharp. In another example, dissonance is found in the left hand chord between C-sharp and C natural (ic-1) as well as in the right hand between B-natural and B-flat in m. 1 of *Waltz-Rondo for Piano* (ca. 1911), forming a polychord of two triads (G in the right hand and A

¹² To be discussed further under the subcategory of gender-coded tonality in chapter three (Philosophies).

¹³ Lambert, Philip. “Toward a Theory of Chord Structure for the Music of Ives,” *Journal of Music Theory* 37, no. 1 (Spring, 1993): 56.

Bb Clarinet

Quintal harmony over $E\flat m$
(the third, $F\sharp$, is spelled
enharmonically)

Quintal harmony over
C minor triad in cello and bass
with a minor third added in violin I

Ex. 1–11. *Central Park in the Dark*, mm. 7–12, Mixed harmony/Sounds of the evening.

in the left hand) (Ex. 1–13). Without these inserted pitches, a clear tertian polychord of G over A would remain. While Ives certainly composes with pure polychords, his tendency leans towards chromatic embellishments of a chord, adding to the mystery contained within his tonality.

Andante moderato

Example 2. String Quartet No. 2, first movement, mm. 1-2

Ex. 1–12. Philip Lambert, *Toward a Theory of Chord Structure*, *String Quartet No. 2*, Movement 1, Ex. 2, Movement 1, mm. 1–2, Dissonant embellishment of a minor triad.

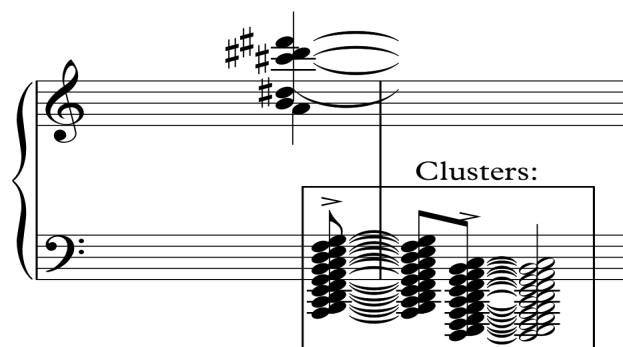
Example 6. Waltz-Rondo for Piano, m. 1

Ex. 1–13. Philip Lambert, *Toward a Theory of Chord Structure*, Ex. 6, *Waltz-Rondo for Piano*, m. 1, Polychords with dissonant embellishment of ic1 in each triad (adapted from original example).

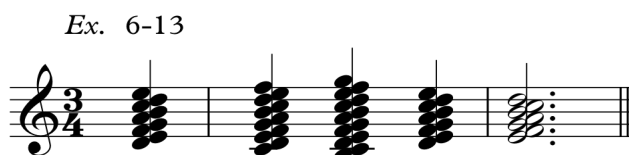
Complex chords also include a third category known as cluster chords—constructed purely of major and/or minor seconds such as those found in the bass clef of Ives’s piano/vocal work “Majority” (originally written for unison voices and orchestra ca. 1915 and arranged as a song in 1921)¹⁴ (Ex. 1–14). The

¹⁴ J. Peter Burkholder, *All Made of Tunes: Charles Ives and the Uses of Musical Borrowing* (New Haven: Yale University Press, 1995), 294.

chords in Ex. 1–14 are similar to examples found in Persichetti’s book whereby secundal chords “arranged in predominantly uninverted forms so that most of the voices are a second apart”¹⁵ are referred to as clusters (illustrated in Ex. 1–15). It is important to note that, in the course of analysis, the labeling of certain chords will involve a creative approach due to the complex nature of harmony in Ives’s music. The difficulty in identifying such chords is observed by Larry Starr who states, “chords based on thirds can be plain triads, seventh chords of innumerable varieties, lush or highly dissonant ninth chords, and many other constructions for which we have no convenient names.”¹⁶ In the cases where there are no convenient names, the most appropriate label will be used along with alterations and/or added tones indicated in parenthesis.



Ex. 1–14. “Majority,” p. 1, system 2, mm. 1–2 (partial measures), Cluster chords.



Ex. 1–15. Vincent Persichetti, *Twentieth Century Harmony: Creative Aspects and Practice*, Ex. 6–13, Cluster chords.

¹⁵ Persichetti, *Twentieth-Century Harmony* (New York, W.W. Norton, 1969), 126.

¹⁶ Larry Starr, *A Union of Diversities: Style in the Music of Charles Ives* (New York; Schirmer Books, 1992), 65.

The final category, polychords, is perhaps the most controversial in terms of a universal definition. Persichetti describes a polychord as “the simultaneous combination of two or more chords from different harmonic areas.”¹⁷ However, without a significant distance between each of the chords, it may become unclear as to whether the chord is simply a large tertian chord (governed by a single root note) or a grouping of many chords superimposed onto one another, implying multiple roots. For that reason, when the term polychord is applied, it will refer to chords consisting of triads (or greater), having the spacing of at least a perfect fourth between them so that each chord is distinguishable as a visible, separate entity. In Ex. 1–16 (center chord), a polychord is shown to consist of three triads from bottom to top: F major, G major and E minor—each separated by the interval of a fourth (note also that the lower chord has a more resonant spacing, which is common). In contrast, the thirteenth chord (first chord of Ex. 1–16) consists of closely spaced thirds without the spacing required between triads to perceive it as a polychord.

Returning to Persichetti’s description of polychord formation (formed from different harmonic areas), an example is found in the second measure of the Interlude of Ives’s *Variations on “America”* (Johann Christian Heinrich Rinck) (1891) whereby polychords are formed from the simultaneous keys of F major and G-flat major as seen in m. 2 of Ex. 1–17 (note: the pedal tones of the lower bass clef are not included as part of the analysis).

¹⁷ Persichetti, *Twentieth-Century Harmony*, (New York, W.W. Norton, 1969), 135.

Ex. 3-37

The image shows a musical score for two staves, treble and bass. The first measure contains a triad of three notes (F, C, G) in the treble staff and a single note (F) in the bass staff. The second measure contains a triad of three notes (C, G, D) in the treble staff and a triad of three notes (F, C, G) in the bass staff. The third measure contains a triad of three notes (G, D, A) in the treble staff and a single note (G) in the bass staff. The triads are separated by the interval of a fourth. A box labeled 'polychord' is drawn around the second measure. Below the staves, the text '13th' is written under the first measure, 'polychord' under the second measure, and 'chord by 4ths' under the third measure. An arrow points to the second measure with the text 'Note that each triad is separated by the interval of a fourth'.

13th

polychord

chord by 4ths

Note that each triad is separated by the interval of a fourth

Ex. 1–16. Vincent Persichetti, *Twentieth Century Harmony*, Ex. 3–37, Thirteenth chord and polychord formation (adapted from original example to include box, arrow, and description of polychord).

Interlude (ad lib. till *)

The musical score is written for guitar and strings. The guitar part is in the treble clef, key of B-flat major (two flats), and 3/4 time. It begins with a forte (*ff*) dynamic and features a series of chords: B-flat major, A-flat major, and G major. The strings are in the bass clef, also in B-flat major and 3/4 time. They enter with a piano (*pp*) dynamic, playing a series of chords: G-flat major (Gbm), F major (F), and E-flat major (Ebm). The score includes a repeat sign for the guitar part and a first ending bracket for the strings. The key signature changes to C major (no flats) for the strings, indicated by the notation C/Db and Ebm.

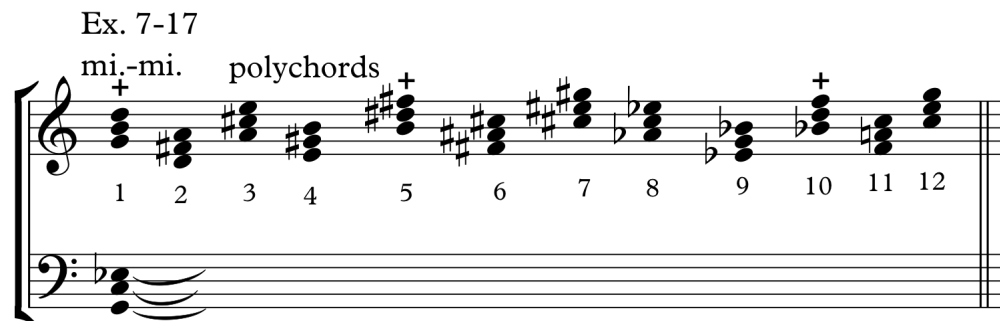
Gt. *ff*

Sw. *pp*

C/D_b G_bm / E_bm

Ex. 1–17. *Variations on “America”* (“Interlude” after “Variation II”), mm. 1–2, Polychords formed from different harmonic areas over a pedal tone C.

Other polychords consist of close voicings in the lower chord with triads occurring at a great distance from the bottom chord (see Ex. 1–18), thus obscuring the sense of tonic that governs the harmony.



Ex. 1–18. Vincent Persichetti, *Twentieth Century Harmony*, Ex. 7–16, Triads occurring at great distances from the bottom chord.

Polychords can also be massive in nature, consisting of several triadic units as in Ex. 1–19.



Ex. 1–19. Vincent Persichetti, *Twentieth Century Harmony*, Ex. 7–33 (partial illustration), Massive polychord structures.

An illustration of several larger chords (sevenths, ninths) sounding simultaneously to form a massive polychord can be found in the second measure of Ives's *Antipodes* (ca. 1915–23)—specifically, first and second piano parts. Each chord (from top to bottom: B9, Amaj7, Gmaj7, Fmaj7) has been labeled in the various staves of m. 2 (Ex. 1–20). Such lush, combined harmony blurs the sense of a tonic. While some of the chords listed in this example are less than a fourth apart, their positioning as block chords within different parts of the music

creates a closer impression of polychordal harmony than of an extended tertian chord governed by a single lower pitch. Even though all categories of expanded chords will be referenced throughout various chapters, focus will be placed on tertian chords since “the core of many Ivesian sound combinations remains the tertian triad.”¹⁸

Polychord formation:

Primo

Secondo

B⁹

A^{maj7}

G^{maj7}

F^{maj7}

Ex. 1–20. *On the Antipodes*, m. 2 (piano part only).

¹⁸ Lambert, Philip. “Toward a Theory of Chord Structure,” *Journal of Music Theory* 37, no. 1 (Spring, 1993): 56.

Chapter 2

Influences

a) George Ives

The use of expanded chords in Ives's music is in no small part attributable to early instruction from his father, George Ives. Even though he encouraged experimentation with harmony, George had a very traditional, European musical education; he studied theory and counterpoint with a German musician (Charles Foeppel) in New York.¹⁹ He also believed strongly in learning rules and traditional technique before going on to experiment with breaking the rules. As young Charles recounts, "Father used to say, 'If you know how to write a fugue the right way *well*, then I'm willing to have you write it the wrong way—*well*. But you've got to know what [you're doing] and why you're doing it.'"²⁰ In support of that, George passed on his conventional training by assigning exercises in harmony and counterpoint to his son.²¹ In addition to drilling Charles in sight-reading exercises,²² George Ives was unusually forward-looking in his approach to music and shared his ideas with his son through practical application. One such exercise included singing in one key while playing accompaniment in another.²³ As Ives recalls,

I couldn't have been more than ten years old when he [father] would occasionally have us sing, for instance, a tune like *The Swanee River* in the key of Eb flat, but play the accompaniment in the key of C. This was to

¹⁹ J. Peter Burkholder, *Charles Ives: The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 45.

²⁰ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 47.

²¹ J. Peter Burkholder, *Ideas Behind the Music* (New Haven: Yale University Press, 1985), p.45.

²² Stuart Feder, *The Life of Charles Ives* (Cambridge University Press, 1999), 47.

²³ *Ibid.*, 48.

stretch our ears and to strengthen our musical minds ... [and] to not be too dependent upon customs and habits.²⁴

This early experience set the stage for Ives's unrelenting desire to experiment and break with tradition, ultimately leading to an exploration of expanded harmony.

The act of singing and playing in different keys simultaneously is clearly an early expression of bitonality, a concept that is shown to yield expanded chords and one that captures the interest of Charles Ives as seen in his formative works and early exercises. Supplementing these experiments, Ives's father also encouraged him to practice singing quartertones.²⁵ Although quarter tone pitches played a significant role in young Ives's harmonic pursuits, they posed a problem for expression on the modern-day piano which, of course, utilizes equal tempered tuning. However, employing expanded tertian chords offers a solution to approximating the sound of quartertones. In discussing the composers of Scriabin and Ives, J. Peter Burkholder writes that both

are especially fond of supplementing triadic chords with both major and minor thirds of the chord superimposed, one on top of the other in complex chords of the seventh, ninth, and even thirteenth. This creates a blended sound, implying quarter tones that the conventional piano does not offer.²⁶

Beyond quartertones, George Ives also imparted concepts that didn't fit within the established rules of theory and harmony. Specifically, in *Memos* Ives

²⁴ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 115.

²⁵ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 48.

²⁶ J. Peter Burkholder, *Charles Ives and His World* (Princeton: Princeton University Press, 1996), 111. Note: Essentially, Ives is creating a complex resonance, creating the illusion of quartal tone harmony by blurring major and minor thirds.

Along with departing from conventional theory, George noticed and encouraged his son's natural penchant for experimentation—a tendency rooted largely in childhood experiences. One particular experience can be said to contribute toward his work in polytonality and, more specifically, bitonality ... that of attending a baseball game. As Henry Cowell explains:

The germ of Ives's complicated concept of polyphony seems to lie in an experience he had as a boy, when his father invited a neighborhood band to parade with its team at a baseball game ... the two bands started at opposite ends of town and were assigned pieces in different meters and keys ... Ives has reproduced the collision of musical events in several ways [e.g. combining groups of players, sections of the orchestra] to create simultaneous masses of sound that move in different rhythms, meters, and keys.²⁸

Ives applied this concept to many later works, reflecting the approach of two or more sections playing different music simultaneously (e.g., “Putnam’s Camp,” *Central Park in the Dark*, “The Fourth of July”). However, an early application of bitonality (prior to 1898) can be seen in a re-working of the nursery rhyme “London Bridge”—an example of two different harmonic sections occurring at the same time. Ives’s natural curiosity in bitonality is expressed in *Memos* when he asks, “if you can play a tune in one key, why can’t a feller, if he feels like [it], play one in two keys?”²⁹ To that end, Ives sets “London Bridge” to the keys of F major and G-flat major in the right and left hand respectively. “The right hand plays the tune ‘London Bridge,’ in parallel thirds, while the left hand plays the bass notes and chords in a traditional oom-pah pattern.”³⁰

²⁸ Henry Cowell and Sydney Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 144–45.

²⁹ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 47.

³⁰ J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990): 206.

Of interest in the handling of “London Bridge” is not just the new set of rules that Ives establishes for playing the song, but rather the composite sound that results from this approach—chords that can be defined as polychords under the original definition provided by Persichetti (simultaneous combination of two or more chords from different harmonic areas). In Ex. 2–1, the polychords are apparent in mm. 2–3 with F (consisting of two dyads) over Gb in m. 2 and Eb (consisting of two dyads) over Db in m. 3. However, since we are not able to hear both keys independently (and since the chords are spaced relatively close to one

The image shows a musical score for piano, measures 2 and 3 of "London Bridge". The score is written in G-flat major (three flats) and features bitonality. In measure 2, the right hand plays a chord labeled 'F' (F major) over a bass line chord labeled 'Gb11' (G-flat major 11th). In measure 3, the right hand plays a chord labeled 'Eb°' (E-flat diminished) over a bass line chord labeled 'Db13' (D-flat major 13th). Arrows point from the labels to the corresponding chords in the score. The notation includes various intervals and accidentals, illustrating the complex harmonic structure.

Ex. 2–1. “London Bridge,” mm. 1–4, Bitonality and resultant tertian chords.

another), the listener perceives a single harmony, consisting of a six-note-chord in m. 2 with the pitches: G-flat, B-flat, D-flat, F natural, A natural, C natural (or Gb11) and D-flat, F natural, A-flat, E natural, G natural and B-flat (or Db13) in m. 3. In short, the technique of bitonality yields expanded tertian chords, which are experienced as a “complex sonority that might be treated as a single chord and used as a tonic analogue.”³¹ In other words, the nursery rhyme is now perceived

³¹ Ibid.

as being in the key of G-flat with an expanded tonic (Gb11) and expanded V chord (Db13) throughout.

This simple exercise also demonstrates one of the many ways in which Ives “strengthens the listener’s ears”³² through expanded harmony. That said, it is important to mention that experiments such as “London Bridge” were done with purpose and not a mere display of technique. As Burkholder explains,

Ives cared about [his] audience for his experimental music ... He saw the experience of unfamiliar sounds and procedures as good in itself, and he made the unfamiliar as palatable as possible by placing it in a humorous context or using it as a special effect to convey a textural or programmatic meaning.³³

“London Bridge” is a perfect example of this humorous context in conveying an unfamiliar and challenging idea. A similar example would be the earlier excerpt from *Variations on “America”* (Ex. 1–17) as well as another excerpt of the same piece (Ex. 2–2)³⁴ whereby the simultaneous keys of F major and Db major produce polychords. In this approach, Ives not only combines two keys (and resultant polychords) to “produce a style of radically novel character”³⁵ but also conveys “new ways to hear traditional works ... emphasiz[ing] their own continuity with the strikingly new musical visions of Ives.”³⁶

³² A task Ives takes seriously and implements throughout his career.

³³ J. Peter Burkholder, *Charles Ives and His World* (Princeton: Princeton University Press, 1996), 19.

³⁴ Polychords are analyzed separately from the bass.

³⁵ Larry Starr, *A Union of Diversities* (New York: Schirmer Books, 1992), 52–53.

³⁶ *Ibid.*, 54.

*Harmony of C⁷ is based on surrounding chords and implied missing third of E natural

Ex. 2–2. *Variations on “America”* (“Interlude” after “Variation II”), mm. 5–9, Polychords formed from bitonality between the right and left hand (bottom pedal tones are omitted from analysis).

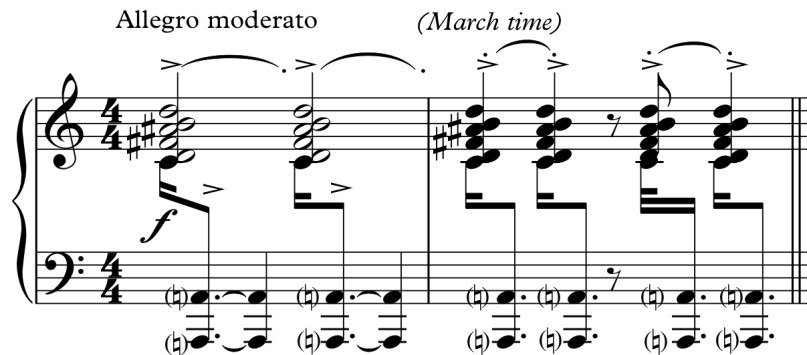
Beyond his interest in challenging tradition, George Ives expressed a natural curiosity concerning sounds, something that was transmitted to Charlie,³⁷ leading to experimentation in other areas. The impact of this influence is best expressed by Burkholder who exclaims, “Perhaps the single most important contribution George Ives made to his son’s development was his fascination with sound, leading to ... attempts to reproduce extramusical sounds through new musical means.”³⁸ Part of this new musical means involves applying unique approaches to conventional instruments. In *Memos*, “Ives recounted how, as a young boy, he would thump out snare and bass drum parts on the piano, using clusters of notes played by the fist or flat of the hand.”³⁹ This practice would not only lead to the use of cluster chords to realize this sound concept but would become a driving philosophy in Ives’s compositional approach in reflecting the

³⁷ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 16.

³⁸ J. Peter Burkholder, *Ideas Behind the Music* (New Haven: Yale University Press, 1985), 55.

³⁹ David C. Paul, *Charles Ives in the Mirror: American Histories of an Iconic Composer* (Chicago: Illinois Press, 2013), 35.

world around him. As Burkholder confirms, “the attempt to evoke in music the natural and musical sounds he heard was fundamental to Ives’s idea of a music that represents life experiences.”⁴⁰ An example of implementing his boyhood experiment of thumping on the piano using cluster chords (mixed with thirds) can be seen in “General William Booth Enters into Heaven” (1914)—a work in which “the whack of snare drums and the thud of a bass drum limping a bit behind are embodied in dissonant clusters of a sort Ives had invented when, as a boy, he practised on a piano the drum parts he was to play in his father’s band.”⁴¹ In this approach, Ives uses acoustic instruments to convey the sound of a street beat. The snare drum and echo of the bass drum can be seen in the excerpt below with cluster chords and thirds in the right hand mirroring the snare drum (Ex. 2–3).



Ex. 2–3. “General William Booth Enters Heaven,” mm. 1–2, Representation of drums through a mixture of cluster chords and thirds (piano part only).

The decision to use a mixture of seconds and thirds in representing the sound of drums is a result of experimentation as expressed in Ives’s own words:

⁴⁰ J. Peter Burkholder, *Ideas Behind the Music* (New Haven: Yale University Press, 1985), 54.

⁴¹ H. Wiley Hitchcock, *Ives* (London: Oxford University Press), 24–25.

“[I] got to trying out sets of notes to go with or take-off the drums.”⁴² He continues saying,

A popular chord in the right hand was [C-sharp, E natural, G natural, C natural] ... and one with two white notes with the thumb, having the little finger run into a 7th or octave-and-semitone over the lower thumb note.⁴³

In short, both Ives and his father appear to share a natural curiosity, leading them to experiment with sounds and break with tradition.

Apart from experimentation, George Ives influenced his son in another significant way that would affect his entire creative output—especially concerning his choice of outside material or what Burkholder refers to as “borrowed tunes” coming from the world of vernacular music. Although George “never mix[ed] cultivated and vernacular music within the same context, [he] provided a model for his son of a musician who could move comfortably in both musical worlds.”⁴⁴ As a result, Ives was able to bridge the gap between these two worlds “by incorporating the substance and character of vernacular music into works that in form, instrumentation, and aspiration were fully within the cultivated tradition.”⁴⁵ In enhancing this cultivated flexibility, Ives actually employs “four influential traditions in [his] music: popular music, protestant church music, European classical music, and experimental music.”⁴⁶ This diverse background and ability to merge several worlds of music is assisted by the use of both borrowed tunes

⁴² Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 42.

⁴³ *Ibid.*, 43.

⁴⁴ J. Peter Burkholder, *Ideas Behind the Music* (New Haven: Yale University Press, 1985), 65.

⁴⁵ *Ibid.*, 56.

⁴⁶ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 71.

and expanded chords—especially when moving from one style to another in pieces such as “Ann Street” where a total of nine distinct styles are held together largely through transitional expanded harmony (to be analyzed at length in chapter five).

b) Horatio Parker

Albeit initiated by George, Charles Ives’s musical education continued following his entrance to Yale in which he studied with Horatio Parker⁴⁷ who was from the Austro-German tradition. Parker was firmly grounded in a conventional approach to composition and less interested in the experimental instincts expressed by Charles. For example, when Ives presented Parker with a fugue in four different keys (resulting in dissonant sounding counterpoint), Parker would glance at a measure or so, and hand it back with a smile, or joke about “hogging all the keys at one meal.”⁴⁸ In fact, contrary to this individual expression encouraged by George Ives, Parker engaged in a more pedagogical practice—having aspiring composers imitate the songs of the masters.⁴⁹ Parker tended to resist Ives’s experimental side, encouraging him to pursue what he deemed to be “correct” compositions. In that spirit it can be said that “he [Ives] owed to Parker a complete grounding in traditional compositional techniques, building on what he had learned prior to Yale, but owed to his father the more radical and experimental side of his music ...”⁵⁰ An example of the difference between both

⁴⁷ Ibid., 6.

⁴⁸ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 49.

⁴⁹ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 74.

⁵⁰ J. Peter Burkholder, “Ives and Yale: The Enduring Influence of a College Experience,” *College Music Symposium* 39, no. 39 (1999): 36.

men can be found in their attitude towards an unresolved dissonance⁵¹ as alluded to earlier. While George feels this is a perfectly acceptable notion, Parker can be heard “calling an unresolved dissonance ‘inexcusable.’”⁵²

Many scholars disagree on the notion that Ives’s music is firmly grounded in the European tradition as a result of lessons with Parker. Some even feel that Ives’s entire musical education (traditional and experimental) can be attributed more strongly to his father’s influence and teaching, a view that Ives himself has expressed in *Memos*: “I should say that father was by far the greater man. Parker was a bright man, a good technician, but apparently willing to be limited by what Rheinberger et al and the German tradition had taught him.”⁵³ However, Burkholder feels that Ives owes more to Parker than he realizes stating, “When one becomes familiar with the music Ives wrote during his studies at Yale and follows the evolution of his music in traditional genre ... it becomes clear that this music lies squarely within the European tradition.”⁵⁴ Contrary to this perceived

⁵¹ The discussion of unresolved dissonance actually derives from Ives’s initial meeting with Parker to review his compositions as told in *Memos* as follows: “In the beginning of Freshman year, and getting assigned to classes, Parker asked me to bring him whatever manuscripts I had written (pieces, etc.). Among them, a song, *At Parting*—in it, some unresolved dissonances, one ending on a [high] Eb [in the] key [of] G major), and stops there unresolved. Parker said, “There’s no excuse for that—an Eb way up there and stopping, and the nearest D natural way down two octaves.”— etc. I told Father what Parker said, and Father said, “Tell Parker that every dissonance doesn’t have to resolve, if it doesn’t happen to feel like it, any more than every horse should have to have its tail bobbed just because it’s the prevailing fashion.” (*Memos*, p. 116)

⁵² J. Peter Burkholder, *Ideas Behind the Music* (New Haven: Yale University Press, 1985), 61.

⁵³ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 115–116.

⁵⁴ J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990): 222.

connection between Ives and the tradition bestowed upon him by Parker, Philip

Lambert posits:

Ives no longer felt obliged to follow classical and romantic compositional theory, with its reliance on the paradigm of major-minor tonality, tempered tuning ... He is struggling to liberate his music from historical dependence, and from the normative dictates of European music theory.⁵⁵

The significance of including differing perceptions among scholars is not to suggest that one presents a stronger argument than the other, but rather to show that multiple viewpoints can exist while still reflecting the significance of expanded chords (examples to be discussed in the respective analysis of both Lambert and Burkholder in later chapters). Specifically, chapter five reveals contrasting presentations of form as well as tonal structure, demonstrating how expanded chords both accommodate and contribute to differing viewpoints.

Whether the credit for Ives's education can be attributed more to Parker or George Ives is irrelevant. What remains is a composer consistent in his implementation of expanded harmony as reflected by his early infatuation with chords. These expanded chords have a place in works that were created under the tutelage of Parker (such as *Harvest Season* [1894]—an experiment in polytonality that “progresses toward a texture in which the individual parts blend together harmonically”⁵⁶) as well as the mentorship of Ives's father, who encouraged experimentation in the form of reharmonization of hymns, polytonal fugues, and expanded harmonies (e.g. stacking of thirds).

In company with his teachers, it can be said that the environment of Yale

⁵⁵ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 109.

⁵⁶ J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990), 207.

contributed greatly towards the attitudes that inform Ives's music—especially breaking with tradition and the desire to experiment. Burkholder states that Ives owes to Yale “this attitude of innocent rebellion and play, learned in his undergraduate life. It allowed him to produce these experimental works and ultimately to pull together his different influences.”⁵⁷ The environment of Yale also contributed to certain views regarding the role of masculinity/femininity in music to be explored in chapter three.

c) Dr. John Cornelius Griggs

Beyond the ambit of school and early teachers, there were many influential personalities that helped to shape Ives's early pieces—in particular, Dr. John Cornelius Griggs, who worked at the center church where Ives was an organist as a young man. As conveyed earlier, “Ives has always had a strong interest in harmony ... making new ones of his own freely if tired of the old ones.”⁵⁸ One such instance, where Ives pursued the application of expanded chords to a simple church hymn, occurred during an encounter with Dr. Griggs as told by Henry Cowell:

It was while he was the organist at Centre Church that Ives got so tired of playing the same old hymns the same old way, with nothing but the tonic, dominant, and subdominant triads, that his fingers would occasionally balk in spite of his best intentions, inserting a dissonant note of their own here and there. This was understandably complained of, but Dr. Griggs stood by him: ‘Never you mind what the ladies’ committee says,’ he told Charlie, ‘my opinion is that God must get tired of hearing the same thing over and

⁵⁷ J. Peter Burkholder, “Ives and Yale,” *College Music Symposium* 39, no. 39 (1999), 41.

⁵⁸ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 155.

over again, and in His all-embracing wisdom he could certainly embrace a dissonance—might even positively enjoy one now and then.⁵⁹

Dr. Griggs' view also mirrored Ives's own curiosity about expanded chords as expressed in *Memos*: "If you can have two 3rds, major or minor, in a chord, why can't you have another one or two on top of it, etc.—"⁶⁰ An example of both Griggs's and Ives's philosophies can be found in an exercise of applying fifteenth chords to a given melody as shown earlier in "Nearer, My God, to Thee" (Ex. 1–7). Many such compositional studies were written for organ or piano with some composed before 1902 for choir; these "may have been tried out by the choirs in the churches where he served as organist."⁶¹

Encouragement by supporters such as Dr. Griggs (and George Ives who passed away in 1894) was crucial in exploring the world of expanded harmony—not only in early church pieces but also in later Ives works. The purpose of these early exercises is acknowledged by Burkholder who states, "John Rinehart has shown these pieces often served as workshops in which Ives first experimented with methods that he later used in larger, more ambitious compositions."⁶²

⁵⁹ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 34–35. Note: Comments such as those of Dr. Griggs also serve to represent the topic of gender association in the context of tonality. Specifically, they convey a prevailing attitude of associating accessibly harmonies with femininity and dissonance with masculinity—a topic to be explored later in this paper.

⁶⁰ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 120.

⁶¹ J. Peter Burkholder, "The Critique of Tonality," *Music Theory Spectrum*, 12, no. 2 (Autumn, 1990), 203.

⁶² Ibid.

d) Debussy

Besides the figures of George Ives, Horatio Parker, and Dr. Griggs, composers Debussy and Beethoven have provided significant influence in both musical approach and outlook respectively. The impact of Debussy is more evident in the actual music as expressed by Burkholder:

Perhaps the strongest link between Ives and a European contemporary is with Debussy ... [He] was a direct influence on several of Ives' works and on some of his characteristic procedures, such as superimposition of independent layers, the creation of impressionistic washes of sound, and the composition of music that seeks to create real-life experience.⁶³

In particular, both composers share an impressionistic quality in their work and occasionally choose similar subjects in nature as a source of inspiration. Both utilize expanded chords (Debussy less so in terms of size) and lush harmonies that propel the music forward and, at times, impede its motion (e.g. long arpeggiated phrases in the music of both composers). However, they also part ways in their impressionistic styles and choice of subjects. With Ives his, "... subject matter is primarily people, their thoughts, feelings, and actions, whereas Debussy's people usually fade into the landscape or the medieval story of the blur of the carnival."⁶⁴ These differences are often the cause of intense criticism from Ives as many of his comments suggest that Debussy lacks a depth in the way that he represents his subjects musically. There tends to be an admittedly beautiful surface appeal in Debussy's writing, which, although enjoyable, refrains

⁶³ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 6.

⁶⁴ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 420.

from pushing harmonic boundaries (something that Ives does almost regularly with expanded chords)—even within the context of representing a simple image.

A demonstration of depicting such an image can be seen in the composers' respective works about or involving water. The following examples provide an occasion to observe the influence of Debussy on Ives as well as the point of departure in their harmonic and aesthetic trajectory. In the opening measures of Debussy's *Reflets dans l'eau* (1905), the music provides a picturesque soundscape using various triads and secundal clusters comprised of notes of the D-flat major scale (see Ex. 2–4).

Triads and secundal groupings derived from the Db major scale

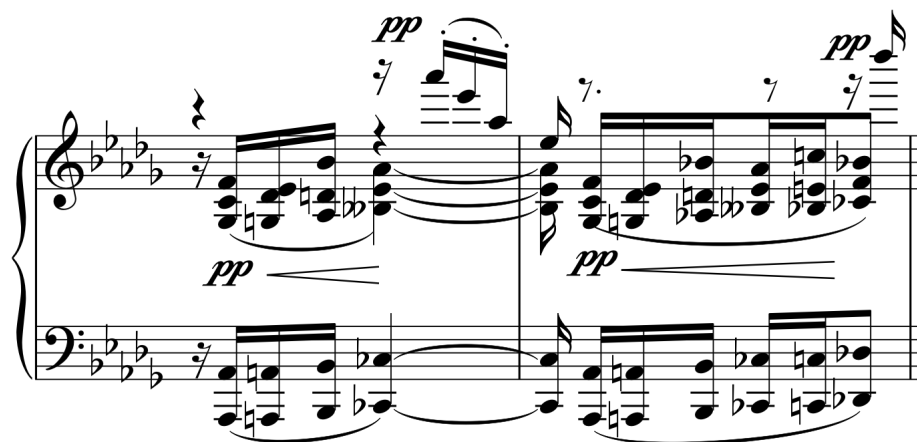
Andantino molto
(Tempo rubato)

pp

Db

Ex. 2–4. Debussy, *Reflets dans l'eau*, mm. 1–3.

The gestures convey a sense of wordpainting as relates to the title (translation: Reflections on the Water) and remain somewhat tame harmonically, appealing to an immediate sense of beauty and palatable harmony. The piece moves forward with slightly varied parallel seventh chords in mm. 9–10 of Ex. 2–5 (suggesting further impressions of the water) as well as a series of arpeggiated ninth chords in m. 20 (Ex. 2–6).



Ex. 2-5. Debussy, *Reflets dans l'eau*, mm. 9-10.

Arpeggiated 9th chords:

20

Quasi cadenza

pp *poco a poco cresc. e stringendo*

Ex. 2-6. Debussy, *Reflets dans l'eau*, m. 20.

Reflets dans l'eau focuses on technique⁶⁵ or what Ives refers to as “manner” by moving in and out of various modes (e.g. pentatonic, whole tone, etc.) and employing parallel chord motion. In comparison, Ives’s piece “Housatonic at Stockbridge” (1921) (from *114 songs*—privately printed in 1922), which represents an experience of watching the water on an evening during his

⁶⁵ This is not to say that there is no substance. However, given Ives’s comments about Debussy, it is reasonable to assume he may view such gestures as lacking in substance.

honeymoon with a choir sounding in the distance, also imparts a sense of impressionism with obvious influence from Debussy. However, even though both pieces communicate a swirling effect with sensitive gestures in their respective openings, Ives pushes the harmonic envelope immediately, perhaps communicating a deeper and more personal expression. In Ex. 2–7 the bass clef part of the first two measures resembles something more in alignment with Debussy—stacked open fifths and occasional ninths. Yet, the simultaneous eight note pattern of dyads in the treble clef appear as if in a separate key. Whether a second key is implied or not, the combination of both staves produces expanded harmony, imparting an “other-worldly” quality (Ex. 2–7). In this short passage, Ives expands color beyond what one might expect with Debussy. He also communicates a mystical, dream-like quality, transcending the immediate appeal of Debussy’s brand of impressionism. In fact, this quality is what Ives may be referring to when he addresses Debussy’s music as “weak and effeminate,”⁶⁶ its attractions only surface-deep.”⁶⁷

⁶⁶ Specific details as to the nature of this attack and the discussion of harmony/gender will be addressed in chapter three.

⁶⁷ Matthew McDonald, *Breaking Time’s Arrow: Experiment and Expression in the Music of Charles Ives* (Bloomington: Indiana University Press, 2014), 87.

musical score for piano, measures 1-4 of "Housatonic at Stockbridge". The score is in G major (one sharp). The right hand (treble clef) has a melody with a star marking the first measure. The left hand (bass clef) has a bass line with a *mp* dynamic. Chord symbols are written below the bass line: C^{#13}, C^{#9}, C^{#11}, C^{#11}, C^{#11}, and C^{#11}**.

**Note: A[#] can be viewed as an added 6th. The foundation of this chord comes from the downbeat of the measure.

*

NOTE:—The small notes in the right hand may be omitted, but if played should be scarcely audible. This song was originally written as a movement in a set of pieces for orchestra, in which it was intended that the upper strings, muted, be listened to separately or sub-consciously as a kind of distant background of mists seen through the trees over a river valley, their parts bearing little or no relation to the tonality, etc. of the tune. It is difficult to reproduce this effect with piano.

Ex. 2–7. "Housatonic at Stockbridge," mm.1–4, Expanded ninth and eleventh chords (vocal part is omitted). Note: Even though Ives references the small notes as "bearing little or not relation to the tonality," this doesn't negate the fact that the upper piano part will still be heard—even if the intention is to perceive it as a subconscious, distant element. The sounding of all pitches on the same instrument will affect the perception of the composite harmony.

Further along in the piece Ives provides increasingly lush harmonies with expanded chords the size of a seventeenth, followed by a staggered polychord made up of triads: G-sharp, F-sharp and E-flat (Ex. 2–8). While Debussy's influence can be heard, Ives generally employs a more complex harmonic language. Of course, another distinction is that Debussy's piece does not contain a vocal part; however, this does not change the essence of each composer's use of harmony and pianistic gestures to communicate the impression of water.

plu - my elm:.....

ppp

mf *r.h.*

f *l.h.*

Polychord: *pp* *r.h.*

pp

F#17

G#7 F# Eb

Eb⁹
(5th in the bass)

Ex. 2–8. “Housatonic at Stockbridge,” mm. 12–13, Expanded tertian chord (F#17) and a staggered polychord made up of the following chords: G#7, F# and Eb.

While there is perhaps a bit more flare, along with a series of rapid changes in Debussy’s textures, Ives piece achieves interest through embellished harmony against a simple folk melody, projecting a surreal experience of a distant choir over the sounds of a swirling river. Statements by others scholars suggest there exists a greater depth in Ives’s impressionism as compared to Debussy. This viewpoint may have developed from the general perception of Ives’s music as “show[ing] a harder-edged tonal vocabulary than Debussy.”⁶⁸

In spite of the perceived differences, Ives “clearly adopt[s] the French composer’s characteristic textures and procedures in several works while rejecting much of his aesthetic stance.”⁶⁹ As a personal observation, artists

⁶⁸ J. Peter Burkholder, *Charles Ives and His World* (Princeton: Princeton University Press, 1996), 110.

⁶⁹ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 277–78. It should be noted that Debussy’s aesthetics are assumed and

frequently find fault or wrestle with the presence of those who have served as a great influence, perhaps in a quest for identity and individuality. Another way to frame this is to say that “Ives uses Debussy as a foil, defining himself in part through a critique of the composer Gibbens has called ‘The last contemporary musician to be of major impact on Ives.’”⁷⁰

e) Beethoven

A second composer who looms large for Charles Ives is Beethoven. An early Ives statement provides a glimpse into his compositional aspirations and goals, which are rooted in the great German master. Ives, at a concert of Beethoven, was heard to say, “I remember feeling towards Beethoven [that he’s] a great man—but Oh for just one big strong chord not tied to any key.”⁷¹ In this single statement one can sense that Ives admires Beethoven and acknowledges his greatness, yet also recognizes his own desires in pursuing the element of surprise in the form of one big chord (perhaps a polychord?). For Ives, the difference involves employing concepts previously mentioned—experimentalism, bitonality, polytonality, and a general harmonic freedom. Be that as it may, Ives’s compositional trajectory is not that of rejection but rather a continuation and development of that which he admires in Beethoven. Block and Burkholder point out Ives’s “desire to continue the spirit of Beethoven, extending the common musical language and giving expression to ideas never before expressed in

interpreted by Ives. Ives’s comments about Debussy’s are based on the music solely, without receiving written or verbal confirmation directly from Debussy about the spiritual or metaphysical qualities of his music.

⁷⁰ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 278.

⁷¹ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 44.

music.”⁷² It is reasonable to assume that part of the idea “never before expressed” has to do with Ives’s treatment of harmony and his expansion of tonality into uncharted territories.

An example of Beethoven’s impact can be seen in what is arguably considered Ives’ most famous piano work, *Concord Sonata* (1947—second publication)⁷³—a piece openly based on and reflective of Beethoven’s music (specifically, the four-note motive of the Fifth Symphony). While Debussy was a great influence musically for many artists, “no other classical composer is used as frequently or as extensively [as Beethoven].”⁷⁴ Aside from the use of expanded chords and programmatic elements of this piece, perhaps the most significant influence here is the philosophy of Beethoven, which is shared intensely with Ives in both his music and outlook—in particular, “[his] desire to ‘express profound truths and deep sentiment,’”⁷⁵ In the *Concord Sonata*, “Ives provides the central statement of his aesthetic position and devotes considerable attention to what Beethoven meant to him. For Ives ... Beethoven represented the summit of musical achievement.”⁷⁶ Ives’s use of Beethoven as the musical catalyst for the *Concord Sonata* reflects his choice to allow “Beethoven to speak musically for the Transcendentalists.”⁷⁷ The notion of transcendentalism (a concept associated with Immanuel Kant, Emerson, Bronson Alcott and Thoreau)

⁷² Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 7.

⁷³ Also referred to as *Piano Sonata No. 2*.

⁷⁴ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 37.

⁷⁵ *Ibid.*, 7.

⁷⁶ *Ibid.*, 37.

⁷⁷ *Ibid.*, 37–38.

embodies “a romantic belief in the divinity immanent in man and nature, a hunger to transcend the finite self and aspire to the sublime, and a faith in humanity’s inevitable progression toward a better existence ...”⁷⁸ This central philosophy (especially transcending the self and aspiring towards the sublime) is reflected in the musical treatment of Beethoven’s themes, which are handled with great creativity and couched in expanded harmony—especially complex chords. Lastly, and most importantly, Beethoven’s influence on Ives comes primarily from Beethoven’s “uncompromising approach to music”⁷⁹—an aesthetic at the heart of Ives entire oeuvre and reflected in his unwavering pursuit of pieces that were initially met with opposition due to performance difficulty.

f) Transcendentalists

Beyond the influence of Beethoven and Debussy, the impact of the Transcendentalist authors (in particular Emerson and Thoreau) can be seen not only in Ives’s music but also in his narrative writings—specifically, *Essays Before a Sonata*. While the influence exists, scholars disagree on when exactly the Transcendentalists were introduced to Ives. Burkholder claims there is no evidence of their presence in the early stages of Ives’s development. Some posit that it was Harmony Ives who actually introduced Charles to the work of the New England bards. Since their involvement cannot be confirmed in the early stages of his development, attention to their role in Ives’s musical output will be addressed in chapter three (Philosophies). Suffice it to say, Ives became a great admirer of the transcendentalist writers and the philosophies to which they

⁷⁸ Ibid., 53.

⁷⁹ Ibid., 39.

subscribed. Their influence can be seen not only in specific pieces, such as the *Concord Sonata* (with each movement reflecting a specific writer), but in the compositional parameters of many works—especially regarding topics dealing with time, substance and mysticism, all of which are discussed through the lens of expanded harmony.

g) War

In conjunction with the category of people, historical events bore a great influence on Ives—especially the Civil War. As Budiansky writes, “War reminiscence had already become a national ‘industry,’ if not a national obsession.”⁸⁰ To that end, one could see the influence of the Civil War on the reminiscent quality of Ives’s music. Many of the songs interwoven into his repertoire were directly from or about the war. Part of the reason is due to the popularity of patriotic songs from the revolutionary and Civil War even in the early part of the twentieth century with titles such as: “America” and “Battle Cry of Freedom.” These songs were contained in a book of extremely popular songs in 1915 entitled *Songs the Whole World Sings* (also included is Stephen Foster’s “Massa’s in the Cold Ground”—a song featured in the Thoreau movement of Ives’s *Concord Sonata*. Along with incorporating borrowed tunes from this period, Ives created major works centering on the theme of war—using expanded harmony as an expression of this influence. While this topic crosses over into the area of programmaticism, there are a few examples worth mentioning to show

⁸⁰ Stephen Budiansky, *Mad Charles Ives: The Nostalgic Rebel* “Down East Yankee Town” (New Hampshire: University Press of New England, 2014), 7.

the impact of the war on Ives's composing. One such example is the first movement of *Three Places in New England* entitled "The 'St. Gaudens' in Boston Common (Col. Shaw and his Colored Regiment)" (composed between ca. 1915 and ca. 1923 and revised in 1929 and referred to as the "Black March" by Ives). This piece is considered to be

a tribute to the Civil War monument by Augustus Saint-Gaudens at the northeast corner of Boston Common and to the people depicted there, the first regiment of black soldiers in the Union Army and their white commander, Col. Robert Gould Shaw.⁸¹

James B. Sinclair refers to it as "an homage to the Black volunteers themselves, and occasionally he [Ives] called it 'Boston Common.'"⁸²

While the war was an influence in terms of compositional topics, it was reflected in Ives's music beyond borrowed tunes ... but not always in a purely programmatic way. As Burkholder explains when discussing "The 'St. Gaudens,'" "Ives captures the slow pace of their march south to battle, yet is more descriptive than programmatic ... It builds to a dynamic point and then recedes."⁸³ In support of this, expanded harmonies are used to describe the march itself along with the insertion of borrowed melodies such as "Old Black Joe," "Massa's in the Cold Ground," and the Civil War song "Marching Through Georgia." Ives presents these borrowed tunes through rich expanded chords, reflecting "a brooding 'Black March'" (as Ives often called it) with extremely subtle

⁸¹ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 317.

⁸² Charles, Ives, Program notes for "The St. Gaudens" from *Three Places in New England*. Edited by James B. Sinclair (Pennsylvania: Mercury Music Corporation, 1935 and 1976), vi.

⁸³ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 317.

In Ex. 2–9, the brooding quality of the march is communicated not only through the chords themselves, as labeled in the string section, but also through the use of specific inversions and unique bass notes. For instance, the Bb11 chord in m. 3 (beat three) played by violins I, II, viola and cello is first heard over a C in the bass (ninth of the chord) immediately followed by a voicing with the seventh (A) of the chord in the contrabass, which creates a dissonant rub against the Bb tonic in the cello (held over from the second quarter note triplet of beat one) and the G-sharp in the viola, imparting a sluggish and strained sonority.⁸⁶ These voicings are interrupted by restful chords (such as the G13⁸⁷ on beat two of m. 2), providing a quick respite followed by arduous forward motion; these restful chords are frequently interrupted by harmonies with dark voicings and added dissonance. The melodies “Old Black Joe” as labeled in mm. 2–5 and “Marching Through Georgia” in m. 2 (as well as mm. 3–4) in the contrabass “are bound together by a strong harmonic feeling, rather than being deliberately separated so as to be heard contrapuntally”⁸⁸ (Ex. 2–9). This harmonic feeling is, of course, comprised largely of expanded chords.

⁸⁶ This chord represents an example of dissonant sonorities that arise from including both a major and minor seventh within the same chord. Although voiced differently in the score, the Bb11 chord itself can be spelled as follows: B-flat, D natural, F natural, G-sharp, C natural, and E natural (with an added A natural which clashes against the G-sharp as well as the tonic of B flat).

⁸⁷ The restful quality is communicated by the type of thirteenth chord utilized. G13 contains a major seventh (as opposed to the dominant seventh chord of action), which is followed quickly by a C11 chord containing a rather dark quality.

⁸⁸ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 155.

Many of the continuing harmonies in this movement contain expanded chords of elevenths and thirteenthths with added dissonance—similar to what is found in “Afterglow” and other pieces. The occasional added dissonance is reflective of Ives’s practice of providing an unadulterated chord (e.g. purely tertian) followed by subsequent chords with dissonant embellishment. The harmonic progression in “The St. Gaudens” also includes a satisfying mixture of essentially tertian chords (already mentioned) alongside polychords such as A7/B diminished on the downbeat of m. 2 as well as Fmaj7/F7 on the downbeat of m. 4, (Ex. 2–9). Both approaches of expanded tertian chords (in various inversions) and polychords help to depict the feeling of a slow, dreary march.

Although a footnote to the influence of the war itself, an interesting observation is made by Dr. Griggs who felt “the explosion of interest in music after the Civil War had become too centered on the piano.”⁸⁹ This is worth acknowledging as so much of Ives’s music was written for solo piano (e.g. *Concord Sonata*, *Study No. 21*) or piano/organ with vocal (e.g. *114 Songs*, *Psalm 67*, *Psalm 90*). Furthermore, many pieces were initially written for piano but later expanded to orchestral works such as: *In the Cage*, *In the Inn*, *In the Night* and *The Housatonic at Stockbridge*. In each of these instances it is possible that using the piano as a vehicle for composition may have facilitated Ives’s use of expanded chords—especially considering his experimentation with such harmonies while at the organ and piano in his early days along with the general accessibility of playing such chords on the instrument. With so many post-war

⁸⁹ J. Peter Burkholder, *Charles Ives and His World* (Princeton: Princeton University Press, 1996), 37.

influences, it can be said that, “throughout his life, the Civil War would remain a highly personal touchstone and reference point for Ives.”⁹⁰

h) Nationalism

Parallel to the ongoing nostalgia associated with the war is also a feeling of nationalism—a byproduct of the war itself. Nicolas Slominsky (who gave the New York premiere of *Three Places in New England* in 1931) is quoted as saying that “Ives is perhaps, the only one among the American composers whose art is truly national—in this he has something in common with Walt Whitman.”⁹¹ J. Peter Burkholder describes Ives’s Americanism as “an instance of nationalism as it was understood in the realm of European classical music: an attempt to give voice to the distinctive culture of one’s own region and people ...”⁹² It is perhaps this feeling of nationalism that also reflects the musical language of early twentieth century composers in America beyond the European tradition, as in the case of Ives with the use of expanded chords, which coincidentally shares a history with the early development of jazz music. Specifically, thirteenth and eleventh chords are quite prevalent in jazz and also common in Ives’s music (not to mention, the music of later contemporaries—Roy Harris, William Schuman, Aaron Copland, and Vincent Persichetti). Burkholder’s description is meant to connect Ives to his European musical education. However, the more significant element associated with Americanism in Ives is the use of expanded harmony itself. While expanded chords may have their origins in European composers,

⁹⁰ Stephen Budiansky, *Mad Charles Ives: The Nostalgic Rebel* “Down East Yankee Town” (New Hampshire: University Press of New England, 2014), 7.

⁹¹ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 53.

⁹² Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), p. 7.

such as Debussy (e.g. ninths), they certainly developed into the fabric of American composition in the early twentieth century—especially in the music of Charles Ives.

i) Danbury, Ct.

A final influence to be discussed is Ives's hometown of Danbury, Ct., which played a significant role in creating fond, early memories.⁹³ These memories became part of a driving programmatic element in his music. Interestingly enough, Danbury itself was undergoing industrialization (a source of oppression for Ives along with technological advancement) not long after Ives was born. Therefore, the nostalgia of Ives's music reflects the early days of rural Danbury depicted by the "idyllic New England farm village, elms arching over quiet streets ... the fields and orchards stretching off toward the winding sylvan paths of Wooster Cemetery...."⁹⁴ Activities of this early period were etched in Ives's mind and became a part of the nostalgic element of his later compositions. These activities included:

a place of circus parades and camp meetings, a place where rough-hewn farmers sang the hymns in church off key but from the heart; where his father's brass band led the march to the cemetery each year to honor the war dead ... where even the burned shins and fingers blown off each Fourth of July somehow seemed to be just a part of the innocent high spirits of the national holiday, celebrated on summer days that filled a boy's mind with anticipation the whole year through.⁹⁵

Most of the above-mentioned memories are reflected in the sound world belonging to a young Charles Ives. Two compositions demonstrate Ives's

⁹³ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 11.

⁹⁴ Stephen Budiansky, *Mad Charles Ives: The Nostalgic Rebel* "Down East Yankee Town" (New Hampshire: University Press of New England, 2014), 1.

⁹⁵ *Ibid.*, 2.

recreation of the New England soundworld of his youth. The first is “Putnam’s Camp” in which Ives depicts multiple amateur bands playing simultaneously, but not in synchronicity. The second is “The Fourth of July” (written ca. 1913–19 and scored and revised in the 1920s) from the *Holidays Symphony*. This movement is considered to be a “tribute to the celebrations of Independence Day, marked by parades, dancing, and fireworks ... over the course of the movement we hear patriotic songs and dance tunes and, near the end, fireworks.”⁹⁶ One can hear the musical translation of the sonic element of this holiday, which has been captured with incredible detail. This speaks to a talent Ives possesses with regard to an impeccable memory for the way sounds form around him.

Budiansky reinforces this saying, “Ives seemed almost to lack any such ability to discriminate—or, conversely, he ‘may have had a special ability to listen inclusively, to register all the sounds his ears picked up.’”⁹⁷ Upon viewing a portion of the score in Ex. 2–10, one can see from the polyrhythms layered upon one another (triplets in the snare/half-note triplets in the bells and cello at m. 105, seven groupings in m. 106,) as well as the cacophony of thick cluster chords from the strings and piano (mm. 105–106), that Ives is providing a glimpse into his impeccable memory of the Fourth of July. Beyond the amazing detail of the score itself, Ives is still able to explain the music in a somewhat humble manner as in the conversation with his engraver (Langinger) in which Ives states: “This

⁹⁶ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 31.

⁹⁷ Stephen Budiansky, *Mad Charles Ives: The Nostalgic Rebel* “Down East Yankee Town” (New Hampshire: University Press of New England, 2014), 10.

sounds like the Fourth of July—a bunch of noise.”⁹⁸ As evidenced in the excerpt below, cluster chords are a major source of the “noise” reflected in the orchestration. In short, “The Fourth of July” reflects “a man approaching middle age, remembering the Fourth of July celebrations of his boyhood.”⁹⁹

Seven groupings:

Fl. 1

Ob. 1

Cl. (Bb)

S.D.

Vln. I div. in 7

Vln. 2 div. in 7

Vla. div. in 7

Vlc. div

Cb. div. in 3

Triplets:

Sixteenths:

Half note triplets:

Ex. 2–10. “The Fourth of July,” *Holidays Symphony*, mm. 105–106, Cluster chords and polyrhythms with select aspects of orchestration—conveying “a bunch of noise.”

⁹⁸ Stephen Budiansky, *Mad Charles Ives: The Nostalgic Rebel* “Dissonance is Like a Man” (New Hampshire: University Press of New England, 2014), 2.

⁹⁹ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 32.

Chapter 3

Philosophies

a) Gender-coded harmony

As a result of significant influences during his education and childhood experiences, Ives developed strong philosophies about composition and harmony. Perhaps the most provocative topic is the role of gender in musical expression, and what I call “gender-coded harmony.” Frank Rossiter argues that Ives’ general views on masculinity and femininity were formed partly by his fraternity experience as a student at Yale, accepting “the connotations of sociosexual effeminacy that American males attached to all cultivated-tradition music and thus allowed an emotional barrier to form between himself and such music.”¹⁰⁰ Judith Tick sees Ives’s use of certain words such as “sissies” and “lillypads” not as a statement in support of gender-coded music but as a way of

deploying a ‘grammar of prejudice’ to attack those who occupied positions of power in the musical world ... articulating the frustration of an American composer who felt the oppressive weight of the European classical-music tradition.¹⁰¹

Whether a result of his environment or an expression of rebellion against the oppressive European tradition, I see Ives’ use of dissonance and expanded chords—both of which have the ability to obscure any overt sense of sentimentality or even romantic expression—as an extension of the distinction between masculine and feminine sounds that Ives inherited.

¹⁰⁰ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 130.

¹⁰¹ *Ibid.*, 202.

With the exception of one piece, “Grantchester” (1920)(to be discussed later), it is difficult to identify each instance of Ives’s deliberate projection of gender association with harmony; however, a general approach can be seen in his music represented by the insertion of dissonance in an otherwise tonal harmony. In fact, Ives’s obsession with the perception of his music as an expression of gender was strong enough to perhaps influence his revision of certain pieces, inserting dissonance into the initial version. In particular, the chamber version of “Putnam’s Camp” and the second publication of the *Concord Sonata* were both revised with added dissonance. Some have claimed that Ives’ added dissonance was an effort to appear ahead of his time (or ahead of his contemporaries), but it makes as much sense to suggest it represents his concern for sounding too effeminate in his musical expression, since his childhood environment reflected a preoccupation with this topic. As a result, Ives achieves the communication of a more masculine sounding music through both added dissonance and expanded harmony.

One such example of added dissonance and expanded harmony is found in “Mists” (1910) (for solo vocal and piano). The piece begins with a simple progression implying the motion of I – V¹⁰² / V – iii – IV – V (mm. 1–2 of Ex. 3–0) before pivoting on the tonic chord in m. 3 with expanded chords up to the size of a fifteenth, including an altered chord tone in m. 4 (that of the third or B-flat) and an underpinning whole-tone sonority. The melody itself could be described as sweet and gentle—appealing to sentiment and definitely within the scope of being considered effeminate based on the views of early twentieth-century

¹⁰² Third inversion.

Charles Ives and his peers. Two important observations can be made concerning these opening measures: First, mm. 3–4 reflect a strengthening of harmony following an otherwise “feminine” harmonic context. Ives’s trajectory of a simple harmony followed by or mixed with a response of dense chords is done extensively throughout his oeuvre. Second, mm. 3 and 4 reflect the influence of Debussy with the presence of whole tone activity. However, this sound is embellished by expanded chords appearing in the treble clef, including a flat nine dissonance (enharmonically spelled as G-sharp) following the downbeat of m. 4.

Largo sostenuto *p*

Low lie the mists; they—

Whole tone sonority (both measures):

Expanded chords: G^{11*} (with a raised 5th) G^{15*} (with a lowered 3rd and natural 3rd)

*Note: Chord size indicates the largest chord found within a measure. Chords which are smaller than an 11th or 15th automatically fall into the category of a 7th or 9th.

Ex. 3–0. “Mists,” mm. 1–4, Tonality obscured by expanded harmony. Note: Chords in mm. 3–4 can also be seen as polychords of augmented triads. The collective dissonant sound of mm. 3–4 creates a stark contrast to the tonal simplicity of mm. 1–2; the contrast is underscored by the subtle change from piano to pianissimo.

Since his view of Debussy has been expressed using words such as “weak and effeminate,” it is quite possible that Ives feels the need to obscure any

such associations with Debussy by affecting the harmony in this manner. In fact, upon looking at the melody and bass line alone, the first two measures impart the sound of an added sixth chord—a sonority that is synonymous with the music of Debussy (e.g. *Prélude to the Afternoon of a Fawn*). Perhaps the use of expanded chords helps to distract from that association. After all, Ives has critiqued the musical output of past composers (including Debussy and Wagner) on the subject of cultivating a masculine harmonic language stating that “even those considered the greatest (Bach, Beethoven, Brahms, etc.) have too much of it [emasculat¹⁰³ion] ... Life with them was such that they had to live at least part of the time by the ladies’ smiles—they had to please the ladies or die.”¹⁰³ It is reasonable to assert that he remains conscious of this balance throughout his musical career. It is also fitting to note the paradoxical effect of utilizing a shared manner (such as the whole tone sonority) while attempting to convey a more substantial end result—an action reflective of both a deep admiration and disdain for Debussy’s approach.

For a more broad contrast of balancing “femininity” with “masculinity” in terms of consonance and dissonance, a striking difference can be seen within the *Concord Sonata* where the “Emerson” movement (almost entirely dissonant and strident in its language) is contrasted with the serene and generally accessible harmony of “The Alcotts” movement. The “Emerson” movement adheres to its “masculine” tone with unrelenting chromaticism and expanded harmony as seen at the end of the fourth system (Ex. 3–1).

¹⁰³ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 30.



Ex. 3–1. “Emerson,” *Concord Sonata*, Unrelenting chromaticism and thick expanded chords, p. 55, system 4 (end of).

To offset this display of dissonance, Ives presents a largely tonal and accessible harmonic palette in “The Alcotts,” which is only interrupted by a few short passages of tertian chords and clusters that, combined, impart a sense of dissonant harmony. Included in this passage is a short interlude of whole-tone activity supported by extended chords (much in the manner heard in “Mists”) (Ex. 3–2, system 2). Even though the gentle nature of the tonality in this piece is meant to “catch something of an old man Alcott’s—the great talker’s—sonorous thought,”¹⁰⁴ Ives’s still feels the need to inject dissonance in the form of expanded chords to counter the accessible tonality of this movement using chords such as Bb11 (containing both a natural and raised eleventh) and Bb7 (with an added F-sharp dissonance)—both found in the third system of p. 55 (Ex. 3–2). After doing so, Ives returns quickly to the world of classical, European

¹⁰⁴ Ibid., 199.

harmony in the key of E-flat in the next section of this movement, continuing with a more consonant harmonic palette (system 3, final measure of Ex. 3–2).

Throughout both movements, Ives is mindful of his use of consonance and dissonance on both a macro and micro level: On a macro level, he provides a broad presentation of the dissonance/consonance duality by contrasting an essentially dissonant movement (“Emerson”) with one that is mostly consonant (“The Alcotts”). On a micro level, even though “The Alcotts” is very consonant (and “effeminate” in nature), balance is achieved through the use of expanded chords and any resulting (or added) dissonance.

p Transition: →

Bb (whole tone and triadic harmony)

Bb¹¹ Bb¹¹* (with raised 9th)

* C# does not exist in the earlier version of this movement.

rit.

pp

slower and quietly

p

Bb⁷ (with added F# dissonance)

Bb¹¹ (with both natural and raised 11th)

Bb pedal serves as the foundation for all harmonies in this measure.

Ex. 3–2. “The Alcotts,” *Concord Sonata*, p. 55, systems 2 and 3, Short passage of expanded harmony which interrupts an otherwise simple harmonic progression, serving as a transition to the section in Eb.

b) Strengthening the ear

Mirroring the concept of gender-coded harmony is the subcategory of consonance versus dissonance. Ives's views on the usage of both, which, although guided by his perception of the world through a masculine versus feminine lens, include his philosophy concerning a composer's responsibility to the listening audience. As mentioned earlier, Ives felt an obligation to strengthen the listener's ear through his specific presentation of harmony. He was convinced that "the human ear...will learn to digest and handle sounds, the more they are heard and then understood."¹⁰⁵ This, of course, refers to his use of dissonance and large, complex chords. In his *Three-Page Sonata for Piano* (ca. 1910–11/rev. ca. 1925–6), a piece less about expanded chords and more reflective of his views on dissonance itself, Ives wrote down a memo to go at its head which reads "made mostly as a joke to knock the mollycoddles out of their boxes and to kick out the softy ears!"¹⁰⁶ This statement is important as it directly reflects Ives's thoughts in one of his pieces about dissonance and his view of those not accustomed to hearing it. Coinciding with this is an additional philosophy regarding dissonance and its role in expanded harmony, reflected in Ives "feel[ing] that music, like other truths, should never be immediately understood; there must always remain some element yet to be disclosed."¹⁰⁷

In the above statements, Ives shows an interest in promoting an increased capacity to handle a more complex musical language. An example of this

¹⁰⁵ J. Peter Burkholder, "The Critique of Tonality," *Music Theory Spectrum*, 12, no. 2 (Autumn, 1990), 205.

¹⁰⁶ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 155.

¹⁰⁷ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 142.

intention is demonstrated in *Processional: Let There be Light, for chorus and organ*, (first sketched in 1902) which, almost in the form of an exercise, coordinates a flow of increasing tension followed by release. Specifically, Ives

presents over a pedal C point a series of chords, each a stack of one or two harmonic intervals in a gradually expanding sequence: from a unison to major and minor seconds, then thirds, then fourth, fourths mixed with tritones, fifths, minor sixths, mixed minor and major sixths, major sixths, minor sevenths, mixed minor and major sevenths, and major sevenths, increasing in size and dissonance level until it resolves in octaves at the end of the phrase.¹⁰⁸

Of significance here is the motion from consonance to dissonance and back again through a catalog of different interval combinations,¹⁰⁹ that can also be labeled as a series of expanded chords (Ex. 3–3). If seen as such, the music reveals a motion from an open C in octaves to a D11 over a C root in m. 2, followed by C7 in m. 3 and moving towards a C13 in mm. 4 and 5. A subsequent C augmented triad occurs in m. 6 with a release to a C major triad followed by tension again in m. 8 with pure quartal harmony (Ex. 3–3). Hence, the expanded chords coincide with a motion “from pure consonance in the first through a peak of dissonance in the fifth and back to consonance in the seventh chord in the series, a major triad.”¹¹⁰

¹⁰⁸ J. Peter Burkholder, *Charles Ives and His World* (Princeton: Princeton University Press, 1996), 15–16.

¹⁰⁹ J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990), 219.

¹¹⁰ *Ibid.*

Example 7. Processional, chord series for organ (from first sketch)

Oct 8 2nd MAJ & MIN MIN 3r MAJ 3r MIN 3 ALL MIN 3rd MAJ 3rd MIN 3rd " " " ALL MAJ 3rd MAJ 3rd MIN 3rd 1 - 4 ALL - 4ths

Sw[ell] 2' 4'

4' 8' G[reat]

Ped[al] 8' 16'

Rising chromatic dissonance in top voice (except for Db) [b ?]

Interpretation using expanded chords: D11/C** Cm7 C13 C13 C+ C+ Quartal harmony

*D11 employs a minor triad foundation: however, in the context of this paper, expanded chords are generally labeled to indicate size and not altered harmonies.

** C refers to the bass note and not a triad.

Ex. 3–3. J. Peter Burkholder, *The Critique of Tonality, Processional: Let There be Light, for chorus and organ*, mm. 1–8, Expanded chords used to show motion from consonance to dissonance and back to consonance (adapted from original example—a description of rising dissonance and interpretation using chords have been added to original diagram).

The gradual building of dissonance and retreat back to consonance serves as an exercise for the very act of not only strengthening the listener's ear but also as a frame of reference in understanding the effect of moving from consonance to dissonance. Even though the formation of these chords is the result of a technique (to be referenced again in chapter five), they are nonetheless part of a particular aesthetic concerning the handling of consonance and dissonance. The intention of this piece is also conveyed by Henry Cowell who, in speaking about a key and tonal center, states "He [Ives] is more likely to retain the feeling of the key by keeping constantly before the ear the relation of each chromatic tone to its tonal center."¹¹¹ This relationship of chromatic tones to

¹¹¹ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 156.

a key center definitely applies in *Let There be Light* where Ives shows the effect of moving from dissonance to consonance against a pedal tone of C.

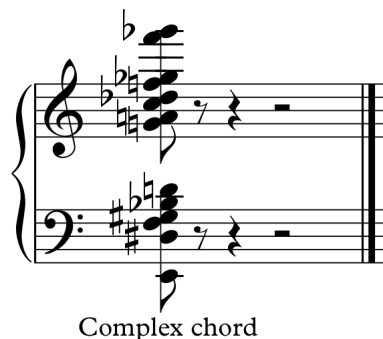
In addition to concern for the audience listening experience, Ives also uses dissonance and consonance to facilitate musical expression at any given moment. He has no aversion to the use of either and would use consonance “whenever it seemed to belong to his musical intention.”¹¹² The same, of course, could be said for dissonance. In contrast to the resolution of dissonance as seen in *Let There be Light*, Ives regularly presents unresolved dissonances in his pieces, especially in the final measure of a work. As confirmed by Cowell, “Except where he wished to recall older practice, the dissonant tones do not resolve downward stepwise, nor is there any feeling of expectation that they should.”¹¹³ A classic example of inserting an unresolved dissonance is the final chord of the *Symphony No. 2* (final movement: ca. 1907–1909). The harmonic activity of the final movement is most decidedly tonal and very consonant. One could hardly anticipate the final “mystic chord,” which provides a “delicious sense of unresolved dissonance”¹¹⁴ yielding a complex chord consisting of eleven pitches ... nearly a chromatic aggregate (Ex. 3–4).¹¹⁵ Ives actually communicates his intention in a letter to Henry Cowell and “describes this last beat of dissonance among an otherwise ubiquitous consonance as ‘the formula for signifying the very end of the last dance of all: the players play any old note,

¹¹² Ibid., 155.

¹¹³ Ibid., 156.

¹¹⁴ Audrey Davidson, “Transcendental Unity in the Works of Charles Ives”, *American Quarterly* 22, no. 1 (Spring, 1970): p. 37.

¹¹⁵ Note: Woodwinds have been excluded from the reduction as pitches are simply duplicated.



Ex. 3–4. *Symphony No. 2*, final movement, final measure, Complex chord (reduction).

good and loud, for the last chord.”¹¹⁶ As a point of contrast, *Three-Page Sonata* displays the inverse of *Symphony No. 2* where the entire piece is drenched in dissonance except for the final two chords, consisting of a quasi plagal cadence (F7 to C). The cadence follows several measures of complex chords, clusters and chromatic saturation, which continue from the first measure onward (Ex. 3–5). The effect is quite comical. This contrast of consonance and dissonance also reflects Ives’s philosophy of seeking dualities in all aspects of life, but especially in music. “He believes that full expression of the opposing aspects of any idea whatever is a necessary step on the way to perfect truth, since only this way can the common basis for the integration of the opposites be found.”¹¹⁷

¹¹⁶ Henry Cowell, review from “Current Chronicle,” *The Music Quarterly* 37 (July 1951): 402.

¹¹⁷ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 142.

† Includes a major and minor 3rd

Cluster chords

*Includes an augmented 5th and flat 9 (although spelled as F#, the pitch functions in sound as a flat 9)

Ex. 3–5. *Three-Page Sonata*, mm. 132–135, Motion of complex/expanded chords with dissonance and cluster chords which conclude with a consonant C major triad.

c) Substance versus manner

Connected to the area of consonance versus dissonance is a topic that has great importance for Ives, informing his philosophy of both music and spirituality—that of “substance versus manner” (another set of dualities). The word “manner” refers to the actual tools used to convey a message or sentiment; in the case of music, it indicates the technique of using chords, scales, melodies, etc. All composers share the concept of manner. Substance, on the other hand, refers to the expressive quality of that which is conveyed through manner; it is subjective and therefore varies from composer to composer. The source of this duality of substance and manner is Ives’s great literary hero, Ralph Waldo Emerson—one of the New England bard poets and known Transcendentalist. Emerson is considered a “man of substance over manner in search of truth.”¹¹⁸ Ives emulates Emerson in this regard and also approaches his art in search of truth. Furthermore, “each of Ives’s dichotomies [including substance versus

¹¹⁸ Geoffrey Block, *Concord Sonata* (Cambridge: Cambridge University Press, 1996), 69.

manner] is laid out to make a moral point: that this is good and that is weak ... that the lesser ideal must always serve the greater.”¹¹⁹ In other words, Ives’s theory considers ideal music (that which is good) “to be that in which the manner does not exceed the substance, in which there is more spiritual purpose than amusement, entertainment ... or the display of craft.”¹²⁰ It is from this standpoint that Ives evaluates both the music of others as well as his own compositions; the role of expanded harmony plays into this directly as seen in the case of “Grantchester”—a piece which provides an aesthetic commentary on the work of Debussy, including the role of consonance and dissonance within the veil of expanded harmony. In discussing this commentary, it is important to point out that Debussy’s music has been the subject of much criticism from Ives, who has freely used adjectives such as “weak and effeminate” to describe his work. Such comments refer to the substance of Wagner’s music as well. Specifically, Ives “liken[s] Wagner’s ‘sensual’ harmonic vocabulary to Debussy’s: ‘Those once transcendent progressions, luxuriant suggestions of Debussy chords of the ninth, eleventh, etc., were becoming slimy.’”¹²¹

Given Ives’s criticism of Debussy and Wagner, it becomes easier to understand how the concept of substance versus manner applies to his viewpoints concerning harmony in the vocal/piano work “Grantchester.” In this work, which quotes passages from Debussy’s *Prélude to the Afternoon of a*

¹¹⁹ J. Peter Burkholder, *Charles Ives: The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 9.

¹²⁰ Ibid., 10.

¹²¹ Matthew McDonald, *Breaking Time’s Arrow* (Bloomington: Indiana University Press, 2014), 90. Note: the quote within is taken from *Essays Before a Sonata*, p. 73 (Epilogue).

Fawn, Ives uses the text of Rupert Brooke to convey the experience of someone who has been displaced from the world of nature into an urbanized setting.¹²² To highlight this distinction of different settings, Ives quotes Debussy's *Prélude to the Afternoon of a Faun* (transposed from C# in the flute) coinciding with a portion of the text that makes the Debussy reference clear—"a faun a peeping through the green." However, Ives alters the original harmony, arousing provocative implications concerning gender-coded harmony and the notion of substance versus manner. In light of the perception of Debussy's harmony as weak and effeminate, Ives provides several changes to the original chords as a commentary on the superficial quality of not only Debussy, but Wagner as well.¹²³ An example can be seen in m. 7 of Ex. 3–6 as pointed out by Matthew McDonald:

It is perhaps no coincidence that Ives added an eleventh, G#, above Debussy's/Wagner's half diminished seventh chord in "Grantchester" (p. 38/2) and continued to emphasize this pitch class above the following dominant seventh [i.e. D7 with an added eleventh].¹²⁴

To elaborate on McDonald's quote, the half diminished seventh chord occurring on the first beat of m. 7 (Ex. 3–6) is also a reference to the half diminished seventh chord used in Wagner's *Tristan und Isolde* and happens to coincide with the word "dead," which "can be understood as a commentary on the substance of this music"¹²⁵ (note that the inclusion of G# at the top of the piano arpeggio can

¹²² This has an autobiographical overtone in that Ives grew up in the rural setting of Danbury yet worked in the urban setting of New York City.

¹²³ It is also a commentary on the topic of masculinity vs. femininity in the area of tonality. The move towards an added dissonance in an otherwise conventional harmony can be viewed as an insertion of masculinity.

¹²⁴ Matthew McDonald, *Breaking Time's Arrow*. (Bloomington: Indiana University Press, 2014), 90–91.

¹²⁵ *Ibid.*, 91.

be seen as an element of substance). This particular word and harmony association is admittedly cynical, but Ives was known to move from “enthusiasm in his twenties to annoyance and cynicism in middle age.”¹²⁶

Prelude quotation:

m.6

Faun a-peep-ing through the green, and felt the Clas-sics were not

Another possible label is F#°7 in inversion.

G#m (under F melody in piano)
Note: This can be viewed as a transformation of Debussy's original E major tirad under a C# melody note.

A⁹ (with added dissonance of C natural) (I chord)

G#°7

m.7

dead, to glimpse a Nai-ad's reed-y head or

Added 11th l.h.

Passing tone

D#°7 disrupted by G# (11th) and therefore recalling sonority of the previous measure.

* D⁷

D¹¹

(Ives continues to emphasize G# pitch... this time within a D⁷ chord, forming an 11th)

Ex. 3–6. “Grantchester,” mm. 6–7, Harmonic alteration of harmony found in *Prélude to the Afternoon of a Faun*. Note: the material in example 3-6 resembles the *Prélude* all the way through the end of m. 7. Also, the D# half diminished seventh to D7 of m. 7 replaces the A minor to G minor of Wagner’s *Prelude Tristan*.

¹²⁶ Ibid.

While Ives's harmonies in "Grantchester" continue to serve the purpose of strengthening the listener's ear, they function moreso as a treatise on the use of harmony in the hands of Debussy (and to an extent Wagner). In "Grantchester," Brooke's poem reflects the genuine longing to return to a home where "spring is in full bloom"¹²⁷ and is depicted as "Eden in luscious detail."¹²⁸ In contrast to this natural, beautiful setting, Ives sees Debussy's connection with nature as a "city man with his week-end flights into the country aesthetics."¹²⁹ Thus, Debussy is portrayed as the "modern men" described in "Grantchester" "whose relationship to nature is superficial and intellectual."¹³⁰ The implication here is also that Debussy's representation of nature through music is not felt from within but, in a sense, captured from a distance. In turn, his musical expression mirrors this relationship, imparting a surface appeal.

Opposite this shallow relationship between composer and subject, Ives identifies more with the persona of the vocals in "Grantchester" who only knows of Grantchester (the place) in terms of the "spiritual experience of nature evoked musically by the coda, solitary contemplation of one's natural environment ..."¹³¹ This solitary contemplation culminates in the final measure of the coda in the form of F11 with an inserted dissonance of F-sharp (Ex. 3–7). The harmony itself is unresolved, conveying a continuation of thought together with a sense of

¹²⁷ Ibid., 86.

¹²⁸ Ibid.

¹²⁹ Charles Ives, *Essays Before a Sonata* (New York: W.W. Norton, Inc., 1961), p.82.

¹³⁰ Matthew McDonald, *Breaking Time's Arrow* (Bloomington: Indiana University Press, 2014), 96.

¹³¹ Ibid., 88.

distance from those qualities of the actual place (Grantchester)—a place alive in the author’s mind but separated by physical distance.

Returning to harmonic language in this work, Ives alters the harmony of the opening quotation of the *Prélude*, which consists of a half diminished seventh chord in m. 4 followed by a dominant seventh chord on the downbeat of m 5. In “Grantchester”, “Ives recasts the opening of the *Prélude* as a tonally warped version of the original”¹³²—especially with regard to mm. 4–5. Debussy’s original chords of a half diminished to dominant seventh are replaced in “Grantchester” with a half diminished seventh followed by a dominant ninth chord (A9 with an added dissonance of C natural). Ives essentially replaces the repeated bass note from the *Prélude* (A-sharp to B flat in mm. 4–5) with not only a semi-tonal shift but an alteration to the harmony itself. The dominant seventh harmony on the downbeat of m. 5 (*Prélude*) is replaced with a dominant ninth chord along with embellished dissonance (Ex. 3–6, m. 6, beat three). Additionally, this semi-tonal shift (and harmony) references Wagner’s Prelude *Tristan und Solde*. As seen in m. 7 of Ex. 3–6,

Ives progression, a D# half-diminished seventh chord resolving to a D dominant seventh, both chords in root position, transposes the famous first two chords from Wagner’s Prelude, the *Tristan* chord and its resolution, down a whole step from A minor (the implied key at the opening of the Prelude) to G minor.¹³³

By altering the original harmony of Debussy’s work (and Wagner’s), Ives provides what he considered to be a more “substantial” delivery of this material.

¹³² Ibid., 90.

¹³³ Ibid.

cen - tur-ies blend and blur in Grant-chest-ter, in Grant-ches ter.....

pp *ppp*

pp *decresc. e ritard.* *ppp l.h.* *l.h.* *ppp l.h.*

(heard briefly as a C11 sonority prior to F natural on the following downbeat) F¹¹ (with inserted dissonance of F#)

Ex. 3–7. “Grantchester,” p. 39, system 3 (end of), Expanded chord F¹¹ with dissonant interval created by F-sharp insertion.

Another example of how Ives critiques the original harmony of Debussy in the *Prélude* can be found in m. 2 whereby he provides Debussy’s half diminished seventh chord (E in this case) on the first beat and, after a descending bass line of E natural to D natural to C natural, motions towards a complete C¹¹ chord on the last beat of m. 2 (Ex. 3–8). The C¹¹ chord comes about as a gradual alteration of Debussy’s original harmony as if to suggest that the dominant seventh chord with a sharp eleventh is more substantial than the half diminished seventh used by Debussy. The use of C¹¹ (with added dissonance) also helps to obscure a traditional dominant tonic resolution by turning away from what would have been an otherwise F tonality following the motion of a standard dominant seventh chord of C⁷ (note that the chord that follows in m. 3 is not an F but E minor as seen in Ex. 3–8).

Blurred texture invokes the realm of memory

Adagio non tanto

mp

..... would I were in Grant-ches-ter,

Chord returns at the end

l.h.

slower

pp *più rit.*

mp

l.h.

A¹¹
(with an augmented 5th)

F¹³
I

E (half diminished seventh)

C¹¹ (with an augmented 6th providing the dominant seventh sonority)

in Grant-ches ter!

Em⁷

Ex. 3–8. “Grantchester,” p. 39, mm. 1–3, Half diminished seventh chord resolving to a dominant with a raised eleventh (note: the chord that follows C11 is not F, but E minor).

Finally, Ives provides a change in harmony that serves as a surprise not only in its substitution, but also in its representation of how he parts with tradition. Preceding the G# minor chord with an F natural in m. 6 of Ex. 3–9 is an E7 chord—end of m. 5. In traditional harmony, an E dominant seventh chord suggests a resolution to A major (implied V – I motion) or even A minor. Instead, Ives provides a “non-sequitur” of G# minor in m. 6, “which is one semitone too low [from the expected chord of A major]; transposing it upward would create a

reasonable satisfying resolution of the strongly articulated E dominant seventh that precedes it.”¹³⁴ Here again, Ives provides the element of substance in his use of harmony by avoiding a traditional progression, which communicates only a surface value/appeal in his view.

m.5

Na-ture there___ or Earth or such. And clev-er mod- ern men have seen a

B¹³
(with a major seventh sonority conveyed through B^b in the melody)
V/V

E⁷ (second inversion/root is in the melody)
V/A

Prelude quotation:

m.6

Faun___ a-peep - ing through the green, and felt the Clas-sics were not___

Another possible label is F^{#o7} in inversion.

G^{#m} (under F melody in piano)
Note: This can be viewed as a transformation of Debussy's original E major triad under a C[#] melody note.

A⁹
(with added dissonance of C natural)
(I chord)

G^{#o7}

Ex. 3–9. “Grantchester,” p. 39, m. 5–6, Dominant seventh chord and its implication of V – I motion.

¹³⁴ Ibid., 96.

In considering all of the harmonic substitutions applied in relationship to Debussy's *Prélude*, it becomes clear "Ives was looking not to assimilate but to differentiate"¹³⁵ through the framework of expanded harmony and the insertion of dissonance. He is also calling attention to the perception of substance and manner using his own musical choices against those of his predecessors, "proving, perhaps primarily to himself, that his use of these materials was substantial and masculine ..."¹³⁶ The implication here is that music more concerned with manner is regarded as effeminate.

A final element on the topic of substance and manner, that may illuminate the discussion of harmony and intention, is the notion that music of substance should "share a closeness to life."¹³⁷ Movements such as "The Fourth of July" (ca. 1914–18, rev. ca. 1930–31), "Decoration Day" (ca. 1915–20, rev. ca. 1923), and "From Hanover Square North, At the End of a Tragic Day, the Voice of the People Again Arose" (last movement of the *Second Orchestral Set*: composed between 1915–1919) all reflect on personal experience. In "From Hanover Square North, At the End of a Tragic Day, the Voice of the People Again Arose," Ives shares the "experience on a commuter train platform the day of the sinking of the *Lusitania* (May 7th, 1915), when everyone spontaneously joined in singing the gospel funeral hymn *In the Sweet Bye and Bye* over the noise and pulsation of New York."¹³⁸ It is the spirit of this work (people coming together in song) that lends substance to all other aspects of the piece—including its harmonic

¹³⁵ Ibid., 88.

¹³⁶ Ibid., 98.

¹³⁷ J. Peter Burkholder, *The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 13.

¹³⁸ Ibid.

progressions. Ives represents these experiences directly in his music, usually assisted by borrowed tunes. While the relationship between substance and manner may contain a blurred line for the prospective listener (it is, after all, subjective), clarification of Ives's philosophy is contained in the following statement: "The song's manner reflects values of substance both because it has artistic beauty and because it appeals to the scrutinizing intellect."¹³⁹

d) Transcendentalism

As alluded to in previous paragraphs, transcendentalism and the writers associated with it play a driving role in Ives's philosophy towards music—specifically in the areas of composition and harmonic function. Even though the principles of transcendentalism are expressed in the form of writing, they mirror concepts applied by Ives in his compositions—especially in relation to the writers Emerson and Thoreau. Among these concepts is the philosophy of stressing independent self-realization.¹⁴⁰ For Ives, this translates into pursuing a "vast eclectic approach,"¹⁴¹ consisting of an expression of his art, rooted in substance. This eclectic approach can also be found in the writings of Emerson, who conveys "a large unity of a series of particular aspects of a subject rather than on continuity of expression."¹⁴² Part of Ives's "vast eclectic approach" consists of the use of expanded chords to journey from one borrowed tune to another and to also move between contrasting sections of original material. The latter is

¹³⁹ Philip Lambert, *The Music of Charles Ives* (New Haven: Yale University Press, 1997), 13.

¹⁴⁰ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 73.

¹⁴¹ J. Peter Burkholder, *The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 109.

¹⁴² Charles Ives, *Essays Before a Sonata* (New York: W.W. Norton, Inc., 1961), p. 22.

demonstrated in the “Emerson” movement (conceived of first as a piece for large orchestra or a concerto for piano and orchestra) of the *Concord Sonata*, which contains sections that connect the pervasive four-note motive of Beethoven’s Fifth Symphony through a transition of expanded chords. In Ex. 3–10, the lyrically dissonant section (Slowly and Quietly) is interrupted by the four-note motive accompanied by forceful polychords in which the last note of the phrase begins the next section. To further obscure the motive, Ives inserts a quarter note rest between the third and fourth note of the motive, emphasizing the contrast in harmony between the polychords and the arrival on C6 on the last note of the motive (C natural). After a few measures of dense texture and development of the four-note motive, Ives returns to the original Beethoven motive using large tertian chords consisting of E9 (first and second eighth note of “very fast”—Ex. 3–11), followed by an A11 chord on the fourth note of the phrase. He develops this motive for a short period in the context of expanded harmony, continuing with a cascading texture of secundal clusters over combined quartal/quintal harmony in the left hand at “Slightly slower” (Ex. 3–11).¹⁴³

¹⁴³ These brief four-note gestures, with similar chord types, also reappear throughout the movement, such as in systems 1 and 2 of p. 18. In the instance of p. 18, complex chords of a dense nature serve as interruption rather than transitional material from one theme to another.

Last note of four-note Beethoven motive is the first note of the next phrase.

Polychords (transition)

Four-note Beethoven motive

ff a tempo

Ex. 3–10. “Emerson,” *Concord Sonata*, p. 5, system 5, final measure, Transitional polychords and the four-note Beethoven motive. Note: this excerpt is from the original version composed in 1907 (the only difference pertains to the last five eighth notes in the bass which are played in octaves in the revised version).

Four-note Beethoven motive:

very fast
r.h.
ff

Secundal clusters:
slightly slower

f

Quartal / quintal harmony:
loco

E⁹ A¹¹

Ex. 3–11: “Emerson,” *Concord Sonata* (revised version—1947), p. 6, system 2 (middle) and system 3 (final phrase), Expanded tertian chords in support of Beethoven four-note motive and transitional material consisting of quartal/quintal harmony (right hand) with secundal clusters (left hand).

In yet another instance, Ives inserts the Beethoven motive (although broken between the third and fourth note of the motive) accompanied by a series of complex chords and followed by a series of sixth chords as seen in Ex. 3–12.

Beethoven motive / complex chords:

faster

ff

moderately slowly

Skip to last four beats (beyond fermata)

6th chords in inversion (excluding lower half notes of D and G in bass)

p

faster

ff

Bm6

Bb6 faster

Ab6

Eb6

pp slowly

Ex. 3-12. “Emerson,” *Concord Sonata* (revised version—1947), p. 6, system 4 (beginning phrase and end phrase respectively). Beethoven motive (broken and re-organized rhythmically) followed by a series of sixth chords in inversion.

The combination of chord types reflects the eclectic vocabulary Ives uses to navigate the “Emerson” movement with Beethoven’s four-note motive as the driving force. Expanded chords serve not only to provide a varied presentation of Beethoven’s four-note motive but also to function as the basis for transitional material as well as impressionistic gestures, such as the section labeled “quite fast” (Ex. 3-13 / system 1). While Ives might very well consider the manner of expanded chords to support a purely substantive approach in his music, Ex. 3-13 (systems 2, 3, and 4) reveals a strong influence of the much-debated Debussy—especially in reference to pianistic gestures and harmony. However, this Debussy-like passage beginning in system 2 (with thirty-second note flurries) is preceded by expanded chords, consisting of three consecutive secundal clusters built on the lower pitches of D natural, C natural, and B natural (with stems pointing up) as shown in system 1 of Ex. 3-13; these clusters are supported by minor seventh chords in third inversion (beginning on the third beat

of the bass clef with stems pointing down as follows: G# minor 7, G minor 7, and F minor 7).¹⁴⁴ Systems 1 and 2 are followed by a subsequent section of arpeggiated polychords (Ex. 3–13: systems 3 and 4) consisting of A11 and an overlapping D#9. These harmonies serve as a transition to a lyrical section that begins with a quote resembling “Autumn in New York”¹⁴⁵ as seen in Ex. 3–14.

System 1:
 Staggered four-note Beethoven motive
 embellished by complex expanded harmony:
 Open clusters (top chords)/
 First three notes of Beethoven motive
 Final note of Beethoven motive

mf *quite fast* *p* *rit.* *f*

l.h.

G#m⁷ Gm⁷ Fm⁷

Minor seventh chords

System 2:
 Debussy-like gestures:

ff *very fast*

¹⁴⁴ Here again, Ives appears to balance the impressionistic influence of Debussy with the insertion of expanded harmony, often yielding greater dissonance.

¹⁴⁵ Since the nature of this melody cannot be identified, “Autumn in New York” is used only as a means of referring to the fragment itself. The well-known standard

System 3 (end of):

very fast

r.h.

l.h.

17

Ped.

A^{11}

$D^{\#9}$

Note: Both chords overlap.

System 4 (beginning of):

Continued transitional material
using A^{11} and $D^{\#9}$:

r.h.

l.h.

17

A^{11}

$D^{\#9}$

Note: Both chords overlap.

*

Ex. 3–13. “Emerson,” *Concord Sonata* (revised version—1947), p. 7, systems 1–4 (selected excerpts), Impressionistic section with expanded chords to support Beethoven motive and transitional material into theme resembling “Autumn in New York.”

was written by Vernon Duke following the initial version of the *Concord Sonata* and was, therefore, not available to Ives at the time this piece was composed.

Theme resembling
"Autumn in New York"

mp quite fast but slower than preceding passage

C¹¹ (with augmented fifth) —————
(continues for several measures)

Ex. 3-14: "Emerson," *Concord Sonata* (revised version—1947), p. 8, system 1 (first measure), Theme resembling "Autumn in New York" supported by expanded harmony of C¹¹.

In returning to the theme resembling "Autumn in New York" (beginning on p. 8, first system of the score as seen in Ex. 3-13), Ives develops this melody fragment with polychordal activity consisting of a basic outlining of C¹¹, including an augmented fifth arpeggiated in the left hand followed by open triads in the right hand (Ex. 3-15).

Open triads:

quite fast again

mf

Arpeggiated material of C¹¹ —————

Ex. 3-15. "Emerson," *Concord Sonata* (revised version—1947), p. 9, system 1, Open triads supported by expanded harmony of C¹¹ (with an augmented fifth). Certain chord members are altered throughout the measure (e.g. B natural and B-flat, etc.).

The first measure of Ex. 3–16 provides another clear example of a polychordal application in which the “Autumn in New York” melody is harmonized with major and minor triads over a C pedal, supported by arpeggiated chords such as C major and G7 along with a descending whole tone fragment. Incidentally, the style of the composing for the piano in this example also points directly to the influence of Debussy—especially pertaining to the right hand chords, which ring like church bells over a pedal tone, not unlike the sound of Debussy’s *La Cathédrale Engloutie*. References to Debussy in the *Concord Sonata* are supported by Hertz who “links Ives’s *Concord Sonata* to the textures and formal devices of nineteenth- and early twentieth-century piano masterworks ... [including] the piano works of Debussy and the sonatas of Scriabin.”¹⁴⁶ Although Ives may have issues with Debussy’s intent musically, his admiration for the “manner” of his art is clearly present in his solo piano works.¹⁴⁷

¹⁴⁶ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 278.

¹⁴⁷ The use of Debussy-like gestures against passages of complex expanded harmony demonstrates not only Ives’s eclectic vocabulary but also his attempt at balancing what can be termed as the struggle between substance and manner as well as masculinity vs. femininity (or dissonance versus consonance).

Whole note chords reference Debussy's style of bell-like chords as in *La cathédrale engloutie*

Theme resembling "Autumn in New York" in right hand (top voice):

Major / minor triads also form polychords over C and G7 sonority in the bass clef.

f faster

C G⁷ C

Passing whole tone fragment (C, B^b, A^b, G^b)

The image shows a musical score for the 'Emerson' movement of John Cage's Concord Sonata. It features a treble and bass staff. The treble staff has four whole-note chords, each with a slur above it. The bass staff has a complex melodic line with many beamed sixteenth notes. Annotations include: 'Whole note chords reference Debussy's style of bell-like chords as in La cathédrale engloutie' pointing to the treble staff; 'Theme resembling "Autumn in New York" in right hand (top voice):' pointing to the first chord; 'Major / minor triads also form polychords over C and G7 sonority in the bass clef.' pointing to the bass staff; '*f* faster' below the first chord; 'C G⁷ C' below the bass staff; and 'Passing whole tone fragment (C, B^b, A^b, G^b)' pointing to a specific melodic phrase in the bass staff.

Ex. 3–16. "Emerson," *Concord Sonata* (revised version—1947), p. 9, system 4, Polychord formations between treble and bass clef.

In summary, the whole of the "Emerson" movement consists of varied treatment of the Beethoven four-note motive, including transitional sections and borrowed tunes—all of which are held together by an eclectic vocabulary of expanded harmony, triads, and minor seventh chords. More importantly, it mirrors the approach of Emerson whereby a large series of statements is favored over continuity of expression. What Emerson achieves in his arrangement of words to impart aspects of a subject, Ives accomplishes with his use of expanded chords. However, these chords contribute to another quality that Ives shares with the Transcendentalists—that of vagueness in one's work.

e) Vagueness:

Vagueness is a quality perceived as “an indication of nearness to a perfect truth.”¹⁴⁸ In *Essays* Ives’s uses vagueness to describe feelings and thoughts involved in programmatic music when remembering and reflecting upon the experience of nature; he compares this to the conviction of immortality that Thoreau experienced as communicated in *Walden*.¹⁴⁹ In its musical application, vagueness is assisted by the technique of polyphonic textures.¹⁵⁰ There is a sense of flow communicated in the approach of vagueness that, although it has no ultimate goal or arrival point, consists of a patchwork of thoughts and experiences on a particular subject. This “stream of thoughts” approach is reinforced by Bruhn who explains,

Like the path of the bird in flight, the path of the stream of thought has no specific goal. Each perching is temporary, before the bird next takes flight; similarly, each substantive thought is provisional, susceptible to the effects of the changing world around it that will send it racing through the next mental transition.¹⁵¹

For Ives, the analogy of a bird in flight is represented by expanded chords with each subsequent chord affected by any number of elements at any given point in the music. Likewise, each “transition” can be seen as the chords themselves.

The concept of vagueness can often result in fragmented writing. This is observed in Emerson’s approach of “writing by sentence or phrases rather than

¹⁴⁸ Charles Ives, *Essays Before a Sonata* (New York: W.W. Norton, Inc., 1961), p. 22.

¹⁴⁹ Christopher Bruhn, “The Transitive Multiverse,” *The Journal of Musicology* 20, no. 2 (Spring, 2011): 173.

¹⁵⁰ *Ibid.*, 178.

¹⁵¹ *Ibid.*, 172.

by logical sequence.”¹⁵² For Ives, the approach is mirrored by employing phrases of borrowed tunes. What guides both artists in their vast eclectic approach to art is a sincere expression of the voice of the soul, reaching for the truth even if by way of a circuitous route. However, the route is not a product of artifice but the result of allowing a sense of vagueness to influence their respective journeys. Vagueness is not used as a substitute for organized thought; rather it is an aesthetic expression of how each artist desires his/her creation to be experienced.

Assisting in the vagueness of direction is the specific effect of using expanded chords to impart multiple meanings—similar to Emerson’s use of words. In the case of Emerson, he pays “particular attention to the multivalent relations among words, whose significations are always in flux and often imprecise.”¹⁵³ Writers such as Emerson “recognize that language, if it is to represent the flow of individual experience, ceases to be an instrument of clarification or of clarity and, instead, becomes the instrument of ... uncertainty and vagueness.”¹⁵⁴ Similarly, expanded chords (often containing numerous pitches) have the same potential for vagueness due to the inherent ability to resolve in many different directions as well as remain unresolved.¹⁵⁵ Every decision in terms of how to resolve these tones (or not to resolve) can affect the

¹⁵² Charles Ives, *Essays Before a Sonata* (New York: W.W. Norton, Inc., 1961), p. 22.

¹⁵³ Christopher Bruhn, “The Transitive Multiverse,” *The Journal of Musicology* 20, no. 2 (Spring, 2011): 167.

¹⁵⁴ Richard Poirier, *Poetry & Pragmatism* (Cambridge: Harvard University Press, 1992), 3–4.

¹⁵⁵ Further exploration of potentiality of harmonic motion is covered in chapter five.

emotional trajectory of subsequent chords. In a sense, expanded chords, like words in their multiple meanings, can suggest more than one resolution, thus affecting the listening experience. This is communicated in the earlier example of “Grantchester,” where Ives moves from E half diminished seventh to C11 and, instead of resolving to F (implying a tonic resolution from the “V” chord of C11), he moves towards Emin7. The result is unsettling and changes the perspective of the progression. In this instance, the motivation for this unexpected resolution to Emin7 is the text itself (“would I were in Grantchester, in Grantchester”), which implies geographical estrangement, reflected in the distant motion of C11 to Emin7.

In order for an unexpected resolution such as this to occur, an artist must be open to the notion of vagueness. To allow vagueness to influence one’s art, “the artist must become immersed in passivity to reach a state where inspiration is possible.”¹⁵⁶ Ives openly expresses his willingness to participate in this passive role as expressed in *Essays Before a Sonata* stating, “I’m thinking of the sun’s glory today and I’ll let his light shine through me. I’ll say any damn thing this inspires me with.”¹⁵⁷ This consent to be influenced by another source is also contained within Emerson’s philosophy whose theory of art states that the “‘flowing’ transitory character of the artwork preserves the transition from diffuse perception to molded form in a *statu nascendi* and becomes actualized in the

¹⁵⁶ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 112.

¹⁵⁷ Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 23.

perceiver.”¹⁵⁸ In this passive approach, the originality of ideas is not as important as the ability to absorb and amalgamate the ideas of others. Furthermore, the ideas or actual thoughts are emphasized over technical expression as indicated by Ives in recalling Emerson’s philosophy:

Emerson is more interested in what he perceives than in his expression of it ... To think hard and deeply and to say what is thought regardless of consequences may produce a first impression either of great translucence or of great muddiness— ...¹⁵⁹

Indeed Ives communicates both qualities within the *Concord Sonata*, imparting moments of translucence (as in “The Alcotts”) as well as muddiness and dense texture (as in “Emerson”). To further expand on the way in which vagueness and passivity function in the work of Emerson, Ives describes the experience in the following excerpt from *Essays*:

As thoughts surge to his mind, he fills the heavens with them, crowds them in, if necessary, ... His habit, often, in lecturing was to compile his ideas as they came to him on a general subject in scattered notes, and, when on the platform, to trust the mood of the occasion to assemble them.¹⁶⁰

In this passage, Ives appears to be voicing his own approach or at least setting the stage for his compositional aesthetics and technique. This is supported by Bruhn who refers to expanded harmony saying, “techniques that contribute to this musical vagueness include fragmentation, polyphonic textures ... harmonic distortion of melodies with dissonant accompaniments, and the additions of

¹⁵⁸ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 112.

¹⁵⁹ Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 21–22.

¹⁶⁰ *Ibid.*, 22.

overtones.”¹⁶¹ Ives’s use of harmony, along with other elements mentioned by Bruhn, contributes to a natural sense of flow, allowing for free associations and many possible connections.

In addition to this mysterious quality of vagueness, the works of Ives and Emerson tend to favor a serene conclusion. Ives acknowledges this in the work of Emerson stating, “Of a truth, his codas often seem to crystallize in a dramatic though serene and sustained way the truths of his subject.”¹⁶² Ives applies this concept to many of his own pieces, usually to reflect upon a message or driving sentiment expressed earlier in a work; It can also serve to balance the chaotic middle sections of many pieces (e.g. Housatonic, Fourth of July, Central Park in the Dark). An example can be seen once again in “Grantchester” where, like in Emerson’s writings, the coda consists of a serene and quiet setting, assisted by expanded harmony in the form of an arpeggiated final chord of F11 (Ex. 3–7). Similarly, the “Emerson” movement of the *Concord Sonata* also concludes with a very reflective, restful passage as heard in the penultimate measure with an F# minor seventh chord (beginning on beat three) and an added F natural for dissonant embellishment (Ex. 3–17).¹⁶³ This is followed by the final chord of the piece—F major seventh with an augmented fifth. Both chords contribute to a serene, calm atmosphere. Ives’s performance notes, (“to be heard as a kind of overtone”)¹⁶⁴ concerning the top notes of C-sharp and E natural in the last four

¹⁶¹ Christopher Bruhn, “The Transitive Multiverse,” *The Journal of Musicology* 20, no. 2 (Spring, 2011): 178.

¹⁶² Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 25.

¹⁶³ The last few measures of harmony are also an example of difficulties in categorization/labeling.

¹⁶⁴ This is indicated in the original score just below the left hand part.

measures, support the use of expanded harmony as a subtle coloration as seen in so many of his tranquil conclusions.

Beethoven motive
l.h.*
pp

Reflects second half of Beethoven motive, which consists of a minor third.
ppp l.h.*

Final interval is the initial interval of the Beethoven motive.
pppp

Scarcely audible
pppp

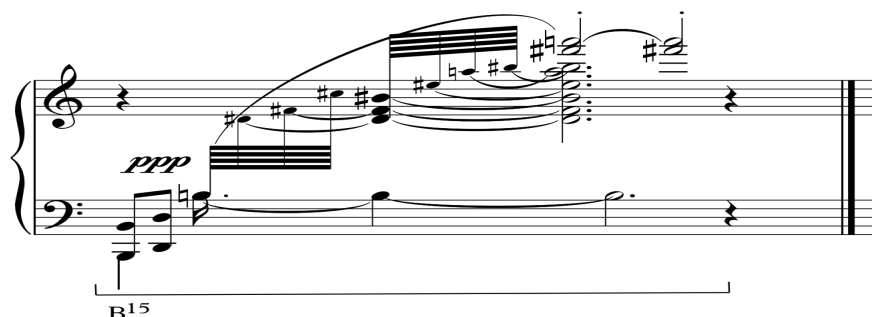
* To be heard as a kind of overtone
(built on a minor triad with the minor seventh [E] occurring in the treble clef and an added major seventh [F] in the tenor voice. The pitch "A" is considered part of the composite harmony due to its appearance preceding F# in the bass.)
F#m7

(with an augmented 5th)
The pitch "A" is considered part of the harmony for the same reasons as the previous F#minor seventh chord.
Fmaj7

Ex. 3–17. “Emerson,” *Concord Sonata* (revised version—1947), p. 19, system 4, Serene ending assisted by expanded harmony.

Similar to the “Emerson” ending, “Thoreau” (from *114 Songs*) concludes with a peaceful ending captured in a mystical-sounding B15 chord—rich with overtones (Ex. 3–18). Combined with pianissimo dynamics, this chord also conveys the meaning of the final words “undisturbed solitude” (vocal part not shown).

The topics of vagueness and passivity contribute to other shared interests for both Emerson and Ives—specifically the concept of the infinite and the role of spirituality. Ives’s aspiration towards spirituality in all aspects of his life is a theme



Ex. 3–18. “Thoreau,” p. 103, system 4 (end of), Serene ending in support of the word “solitude” from the text (piano part only).

common to Emerson—especially in Emerson’s understanding of music. In fact, it may be said that Emerson’s “inability to understand musical form or compositional technique may have led him to see music purely in evocative and spiritual terms,”¹⁶⁵ which likely had an impact on Ives, even though he was more than equipped to view music in an theoretical manner. While J. Peter Burkholder asserts that many of the ideals and philosophies important to Ives were present before discovering the Transcendentalist writers (Emerson in particular), Ives does make clear his admiration for Emerson’s approach to both spirituality and other areas mentioned thus far (e.g. substance over manner, vagueness, etc.). That being said, “Whatever Ives’s earlier contact with Emerson’s writings, he returned to them in earnest around the time of his engagement to Harmony [his wife], and their influence grew to affect every aspect of his life.”¹⁶⁶ In short, Emerson helped engender a heightened awareness of philosophies and topics that were possibly a part of Ives’s past.

¹⁶⁵ J. Peter Burkholder, *Ideas Behind the Music* (New Haven: Yale University Press, 1985), 28.

¹⁶⁶ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 181.

In exploring the theme of spirituality, it is important to recognize its role within transcendentalism, which supports “a reliance on intuition over experience ... referring to knowledge that is inaccessible to the senses.”¹⁶⁷ This unattainable knowledge on the surface is achieved through the passivity described earlier, allowing the artist to channel the indescribable and unreachable in the material world. Ives demonstrates this ability in his musical and spiritual connection with Beethoven, whose music serves as a common thread through all movements of the *Concord Sonata*. This highly significant work reflects the influence of Beethoven “as the epitome of a ‘metaphysical’ work of art.”¹⁶⁸ “As a monumental homage to Beethoven, the sonata looks for a naïve and direct communication with his spirit and the musical past.”¹⁶⁹ An example of this communication is grounded in Ives’s use of the four-note motive from Beethoven’s Fifth Symphony, which permeates the sonata. Ives himself draws a parallel between this four-note motive and the message of Emerson saying that both represent “the soul of humanity knocking at the door of the divine mysteries, radiant in the faith that it *will* be opened—and the human become the divine!”¹⁷⁰ It is an attempt to connect with both Beethoven and the spiritual nature of his music. While the element of spirituality is perhaps rejuvenated by Ives’s discovery of Emerson, it was certainly active in Ives’s music before the *Concord Sonata*. In the earlier work “Grantchester,” Ives expresses a spiritual connection with nature, which is

¹⁶⁷ J. Peter Burkholder, *The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 24.

¹⁶⁸ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 114.

¹⁶⁹ *Ibid.*

¹⁷⁰ Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 36.

contrasted with the “insincere, urbanized experience” alluded to in Brooke’s poem.¹⁷¹ Even the harmony he uses (consisting largely of expanded chords) from the middle to the coda is a commentary on the Debussy/French musical tongue versus the mindset of the vocal persona whose knowledge of Grantchester consists only of “the spiritual experience of nature evoked musically by the coda, solitary contemplation of one’s natural environment as encouraged by Emerson and Thoreau.”¹⁷² Ives also recognizes the absence of this spirituality in music when he refers to Debussy as preferring “spiritually vacuous qualities over values of substance.”¹⁷³

In addition to the presence of spirituality in Ives music and personal life, both Emerson and Ives share a desire to express the sublime and aspire towards the infinite in their creative output. Specifically, in his essay on Emerson, Ives describes Emerson’s work as exhibiting “flashes of transcendent beauty.”¹⁷⁴ In discussing the “Emerson” movement, Burkholder addresses this influence in striving towards the sublime and the infinite when he mentions the incoherence of Emerson’s writings which, at the same time, reaches for and expresses something beautiful. In connecting this with Emerson’s effect on Ives he states, “Indeed, if the music [speaking of the “Emerson” movement] represents anything specific, it would be ‘Emerson in his unshackled search for the infinite’; it apes his

¹⁷¹ Matthew McDonald, *Breaking Time’s Arrow* (Bloomington: Indiana University Press, 2014), 97.

¹⁷² *Ibid.*, 88.

¹⁷³ Philip Lambert, *The Music of Charles Ives* (New Haven: Yale University Press, 1997), 7.

¹⁷⁴ Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 30.

prose style in order to achieve a comparable breathlessness and directness.”¹⁷⁵

In a sense, both Ives and Emerson are reaching for something that ultimately cannot be communicated by the tools of their respective crafts. However, both strive to achieve art that searches beyond the boundaries of logic, theory, and conventional rhetoric (pertaining to the Western European classical tradition, in the case of Ives). Instead of an attempt at controlling the language of their respective crafts, both submit to becoming a passive vessel for “expression of the moment” with a desire to create something beyond their own comprehension of what art should do or be.

A final influence of the Transcendentalists is apparent in the area of temporal concepts. Specifically, Ives’s grasp of time can be seen as influenced by both Emerson and Thoreau. While these concepts will be explored with examples under the heading of programmaticism, the specific philosophies are outlined here to understand the basis for Ives’s approach throughout his music. The transcendentalist approach towards temporal ideas is best illustrated by the phrase, “The spirit sports with time,—‘Can crowd eternity into an hour, Or stretch an hour to eternity,’ wrote Emerson (quoting Byron) in ‘The Oversoul.’”¹⁷⁶ This suggests that borders between past, present, and future are undefined and can be compressed or expanded, affecting the perspective of the creative process. It also suggests that the artist can manipulate a sense of time in his or her work. Emerson’s “notion of time understands past, present, and future as Earth-bound

¹⁷⁵ J. Peter Burkholder, *The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 14. Note: The quote within is from *Essays* (p. 18).

¹⁷⁶ Matthew McDonald, *Breaking Time’s Arrow* (Bloomington: Indiana University Press, 2014), 86.

elements of a more fundamental, and atemporal, state: eternity. For Emerson, the experience of eternity could be achieved in the present, what he referred to as the 'everlasting now' (Emerson 1902: 399).¹⁷⁷ This perspective affected Ives deeply in his musical expression. It also helped him to embrace the apparent paradox of "simultaneous orientation towards the past and future."¹⁷⁸ Ives's music often contains a juxtaposition of temporal orders in the expression of a borderless experience of time. Like Emerson, Ives addresses the opposition between eternity and time in his work. He also acknowledges that his music is suggestive of different time continuums in which actual chords, similar to temporal order, do not need to continue in any one direction. As Ives explains, "I am suggesting not only that some passages can progress in more than one progression at once but also that their continuations need not follow them directly."¹⁷⁹

Essentially, Ives sets the stage for his music to continue with a sense of flexible temporality. The past is not necessarily followed by the present nor is the present followed by the future. Time can exist and traverse in any direction and also exist simultaneously ... all of which will be illustrated in the following section, since the realization of these ideas (as influenced by the Transcendentalists) is considered a programmatic concept.

¹⁷⁷ Ibid. 7.

¹⁷⁸ Ibid.

¹⁷⁹ Jonathan D. Kramer, *The Time of Music: new meanings, new temporalities, new listening strategies* (Schirmer/Mosel Verlag GmbH, 1988), 46.

Chapter 4

Programmaticism

a) Nostalgia and memory versus reality

Programmaticism is a term applied to music that attempts to express or depict one or more nonmusical ideas, images, or events.¹⁸⁰ It is perhaps the most significant element in the work of Charles Ives serving as “a site of joyful reconnection with the past.”¹⁸¹ This is in no small part due to Ives’s nostalgic nature, which reflects heavily on his obsession with his father and own childhood.¹⁸² Part of what assisted in capturing the nostalgic details of his youth is Ives’s ability to remember sounds impeccably. As Stephen Budiansky explains, “his [Ives’s] highly selective conscious memories of his boyhood days in Danbury were matched by an almost phonographic, encompassing, and ineradicable memory of the sounds of those days.”¹⁸³ “Extraordinary musical and even extra-musical details that are the most latent in the subconscious aural memories of most people”¹⁸⁴ are recalled explicitly by Ives, including sounds such as “bells clanging out of phase with one another”¹⁸⁵ and “the subtle alterations in the tone and timbre of music heard outdoors from a distance.”¹⁸⁶

¹⁸⁰ *The Harvard Concise Dictionary of Music and Musicians*, ed. Don Michael Randel, (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1999), s.v. “Program Music.”

¹⁸¹ Matthew McDonald, *Breaking Time’s Arrow*: (Bloomington: Indiana University Press, 2014), 14.

¹⁸² J. Peter Burkholder, *The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 98.

¹⁸³ Stephen Budiansky, *Mad Charles Ives: The Nostalgic Rebel* “Down East Yankee Town” (New Hampshire: University Press of New England, 2014), 31.

¹⁸⁴ *Ibid.*

¹⁸⁵ *Ibid.*

¹⁸⁶ *Ibid.*

In contrast to this heightened sensitivity in recalling sounds, there is also a somewhat purposeful joining of the topics “memory” and “vagueness.” While Ives routinely acquaints the listener with past memories, they are often veiled in a shroud of vagueness, consisting of a reconstruction of past events “as [he] makes sense of it in [his mind].”¹⁸⁷ Even within this context of vagueness, Ives feels that the exploration of memory is “omnipresent in our personalities and necessary for defining who we are and want to be.”¹⁸⁸ Since expanded harmony is used to express the duality of memory and vagueness, which is at the core of his material, it can be said that it indirectly defines Ives’s personality, thought process, and the experiences he creates for the listener. And since, as Larry Starr writes, memory is considered a “tool for forging a meaningfully *active* life,”¹⁸⁹ it makes sense that the language for tapping into the past is the modern and harmonically forward-thinking language of expanded chords which, for Ives, is a thing of the “active” present.

This active pursuit of working with memory creates an added benefit—the effect it has on the development of the artist. As Ives puts it, “the most memory can do is to inspire us to continually renew and reinvent ourselves in accordance with what we have most valued and achieved in our past.”¹⁹⁰ In this process of reinventing himself, Ives does not limit his compositions to the original harmonic language of the borrowed songs and time period that houses these memories, but rather delivers them through a vessel enshrined in fresh chords the size of an

¹⁸⁷ Matthew McDonald, *Breaking Time’s Arrow* (Bloomington: Indiana University Press, 2014), 127.

¹⁸⁸ Larry Starr, *A Union of Diversities* (New York: Schirmer Books, 1992), 57.

¹⁸⁹ *Ibid.*, 58.

¹⁹⁰ *Ibid.*, 57–58.

eleventh, fifteenth or massive polychord. The reason for the choice of these chords seems clear in that, as the chords grow in size, the number of overtones increase, responding to each other in a naturally acoustical manner. As a result, fundamentals and partials collectively create a blurred harmony, obscuring a clear tonic and assisting in the delivery of mystical textures which, “as in the openings of so many of Ives’s songs, invokes the realm of memory.”¹⁹¹ An example of this blurred texture is the opening of the aforementioned “Grantchester,” a setting for the displaced persona of Brooke’s poem, who is looking to reconnect with memories of a rural environment amidst the insincere, urbanized experience of the present (Ex. 3–8).

Beyond the obvious penchant for recalling and expressing memories, there exists an internal conflict for Ives between memory and reality. Ives’s early days as a child in the rural setting of Danbury was challenged by the rapid industrialization of the world around him. The struggle to reconcile the dichotomy of nature and industry may contribute towards a condition that is lesser known but, nonetheless, may help to explain his predisposition towards nostalgia—a condition known as neurasthenia. Ives apparently suffered from this mental affliction, which has been described as “a fear of modernization ... in the social, economic, and industrial spheres.”¹⁹² The reasons for this condition are posited by McDonald as follows: “When viewed through the lens of neurasthenia, Ives’s relationship to the modern world is redefined as one of anxiety, a fear of change

¹⁹¹ Matthew McDonald, *Breaking Time’s Arrow*: (Bloomington: Indiana University Press, 2014), 93.

¹⁹² *Ibid.*, 8.

and upheaval.”¹⁹³ With such anxiety presumably brought on by the industrial world of the early twentieth century, a retreat to earlier times seems like a logical remedy ... even if temporary. This is supported by McDonald who suggests, “One easily might hear in the music ... the clash between an idealized world and culture associated with an embattled rural landscape of the past and the urban, industrial, and technological facts of modern times.”¹⁹⁴ The conflict of Ives’s fondness for the past and his contempt for modern, urban culture is facilitated through expanded harmony as demonstrated in “Grantchester.”

Excluding the possibility of Neurasthenia, Ives also pursues memory without any reference to the modern world, providing a pure retreat to earlier times as in “The Things Our Fathers Loved (and the greatest of these was liberty)” (1917). Of significance in this piece is not only the expanded chords that assist in a journey through the memories of both father and son, but the way in which Ives sets up the journey—through opening with a C major triad (Ex. 4–0). As McDonald explains,

C major is often an emblem of truth in Ives’s music ... The bald C-major triad of m. 1 prepares the opening lyric as a statement of utmost sincerity, while additionally providing an initial glimpse of ‘the soul’ and the idealized images of the past within it.¹⁹⁵

Such an approach of beginning a piece with a major chord is seen in many other compositions (especially ones for piano and voice) in which a major triad with one or two diatonic extensions initiate the piece, followed by a journey of memories.

¹⁹³ Ibid., 142.

¹⁹⁴ Ibid., 8.

¹⁹⁵ Ibid., 131.

Slowly and sustained

"My Old Kentucky Home"

p I think there must be a

pp

pp

C

C¹¹ (with augmented fifth)

Ex. 4-0. "The Things Our Fathers Loved," mm. 1-2, Opening C major harmony.

Examples of this approach include: "At sea" (1921) which opens with a C6 chord (Ex. 4-1); "Mists" (1910) which opens with G major triad (Ex. 3-0); "Old Home Day" (1920) which opens with B major and an added ninth (Ex. 4-2) and "Duty" (1921) which opens with a C major triad and an added natural eleventh (example not provided).

p Some things are un - divined ex - cept by love—

pp

Slowly

mp

p

ppp

C⁶ D⁶ E¹³ Bbm (w/ maj7)/Gm⁷ E^{b9}★ F¹¹ E¹¹ G C

(implies a resolution to A; seventh is in the bass)

(implies a resolution to C due to lower chord of Gmin7)

★ Chord includes pitches G, F and Bb from dotted half note on downbeat of measure.

Ex. 4-1. "At Sea," mm. 1-4, C major sonority.

Slowly
mp

Go my songs!

Slowly
p

l.h.

B (add 9)
(first inversion)

Expanded harmony
(whole-tone sonority)

(continued)

Ex. 4–2. “Old Home Day,” mm. 1–3, B major sonority.

In all of these compositions, a major chord is the first color on a canvas that is further saturated by the colors of expanded harmony, representing the journey through memory within the context of the present. It is the blurred, mysterious, and unclear nature of these expanded chords that represents the purposeful insertion of vagueness into memory.

b) Remembering George Ives

A contributing factor to his tendency to compose much of this nostalgic music for the piano (or piano and voice) is the fact that the piano itself was abundant during the days of his youth. As one historian sardonically remarked, “The prodigious frequency of pianos found in the American homes of this era ... might easily deceive unwary travelers into the unwarranted belief that we were a musical people.”¹⁹⁶ Consequently, many people (including Ives) were acquainted

¹⁹⁶ Stephen Budiansky, *Mad Charles Ives: The Nostalgic Rebel* “Down East Yankee Town” (New Hampshire: University Press of New England, 2014), 37.

with the songbook for piano entitled *Songs the Whole World Sings* (published in 1915). The contents of this book represented the “clashing, musical worlds that Charles Ives experienced growing up in the Danbury of the 1880s and 1890s”¹⁹⁷ that would eventually make their way into his compositions in the form of fragments and quoted melodies.

With so many factors in place, Ives was equipped to musically recall memories of his childhood and his father—two areas that are intricately woven together. Part of the nostalgic drive to represent his father musically is due to his passing when Ives was just twenty years of age (following his freshman year at Yale). His early memories were strong and seemed to grow in intensity beyond his father’s death. One such piece, “Remembrance” (1921), opens with a text from Wordsworth that reads, “The music in my heart I bore Long after it was heard no more.” In this pithy phrase, the word “music” can be seen as representing the musical influence and direction from his father George, eloquently captured in this brief, yet moving song. What is significant here is not just the memory of George Ives, who is represented by the phrase “a sound of a distant horn” (possibly referring to his role as bandleader), but the conclusion of the piece, which consists of a stark change in harmony accompanying the words “my father’s song.” In the penultimate measure, Ives departs from the I to IV harmony of the first seven measures (G13¹⁹⁸ to Cmaj7), shifting abruptly to the chords of F11, E9, and G11 (with an added dissonance achieved from the final

¹⁹⁷ Ibid., 14.

¹⁹⁸ Contains a major seventh.

eighth note of F-sharp, which can be perceived as an added major seventh)¹⁹⁹

(Ex. 4–3).

The image shows a musical score for a piano piece. It features three staves: a single treble staff at the top, and a grand staff (treble and bass) below it. The music is in 3/4 time. The first measure shows a left-hand (l.h.) chord with notes F, A, C, and E, labeled 'F11 (with augmented fifth)'. The second measure shows a left-hand chord with notes G, B, D, and F, labeled 'E9'. The third measure shows a left-hand chord with notes A, C, E, and G, labeled 'G11 (with added dissonance of F# on final eighth note. Root is implied through chord voicing)'. The right hand (r.h.) plays a melody in the first two measures, marked 'l.h.' and 'ppp'. The third measure is marked 'rallend.' and shows a final chord with notes F, A, C, and E, labeled 'F11 (with augmented fifth)'.

Ex. 4–3. “Remembrance,” mm. 8–9, Expanded chords in contrast to simple harmony of the first few measures.

There are two levels of programmaticism at work in this short piece. One is the sudden switch to expanded chords on the words “my father’s song” as if to communicate a moment of reflection and a blurred sense of nostalgia. The other, subtler level has to do with Ives’s acknowledgement of the encouragement and permission that George gave his son to experiment with expanded chords (especially tertian). Inserting these chords, following the traditional progression of G to C in the opening measures, can be seen as an homage to George Ives and his teachings—a brief nod to the father he admired so greatly.

¹⁹⁹ Note that the chord symbol G11 in Ex. 4–3 is an inversion consisting of the fifth in the bass and the eleventh occurring just before the final F-sharp. Even though the tonic G is not present, this particular voicing implies a strong feeling of G as the tonic. Further support of this chord as G comes from the beginning

An even greater level of subtlety can be found in the final two notes of C-sharp and F-sharp, which not only color the “experimental” harmony associated with his father’s support, but also echo the motion of G13 to Cmaj7 from the opening (Ex. 4–3). Furthermore, in keeping with the idea that Ives is journeying back in time, the relationship of the final two pitches of C-sharp/F-sharp to the chords of G13 to Cmaj7 can be reorganized as C-sharp/Cmaj7 to F-sharp/G13, revealing a half step relationship between both sets. This is significant as Ives uses ic1 as a portal into the past. This notion is heightened by the local relationship of the concluding pitch (F-sharp) to the implied G11 chord (see Ex. 4–3 for voicing). Lastly, there exists an open-ended quality to the final two measures, which conveys the continued musical memory of his father and also reflects on the phrase from opening text, “The music in my heart I bore.” The word “music” refers to his father and is represented in the final expanded chords of the song. In other words, Ives is carrying the memory of his father through the musical expression of expanded harmony. However, the opening text also reflects literally on the music of his father’s repertoire (the material George listened to during his young adult life) and its connection to Charles. As Stuart Feder asserts, “the hymns and marches of his father’s repertoire, became ineluctably bound to his mental representation of George ... and through George, to Danbury and its environs.”²⁰⁰

The use of songs from the repertoire of George can be seen quite literally in “The Things Our Fathers Loved,” which functions as an enumeration of the

measures six of the song which support a motion of I – IV – I in G. Hence, the ending refers to the initial harmony and implied key.

²⁰⁰ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 189.

songs, images, and experiences that were loved by both father and son. The opening line conveys the nostalgic nature of the song itself: “I think there must be a place in the soul all made of tunes of long ago.” The presentation of images and songs is done in the manner of incomplete sentences, similar to the fragmented thoughts of Emerson’s writing. The fragmented thoughts in Ives’s piece consist of “bits of six American popular songs”²⁰¹ (among them: “Old Kentucky Home,” “Sweet by and by,” and “Battle Cry of Freedom”) presented in an alteration of marches and hymns. And while the harmony is somewhat static throughout, there are places where expanded chords assist in a programmatic message. The first consists of an A11 (or A minor 11 in jazz/pop parlance) chord at m. 6, which, due to its minor seventh foundation and natural ninth (B) and eleventh (D), imparts a sense of nostalgia in the mind (or “soul” as indicated in m. 3) of the author who is remembering “the organ on the main street corner” (see Ex. 4–4); this particular chord also contains melancholic overtones. Another significant chord occurs at m. 10 with extended tertian harmony (A11) accompanying the words “summer evenings,” offering a reflective quality in a late romantic style.²⁰² The eleventh chord²⁰³ (with the eleventh raised by a semitone)²⁰⁴ typically imparts the feeling of a dream state associated with reminiscing. It is therefore fitting that Ives uses it here in recalling memories associated with this father. The A11 chord is followed by a passing A13 (full

²⁰¹ H. Wiley Hitchcock, *Ives* (London: Oxford University Press), 10.

²⁰² Lloyd Whitesell, “Reckless Form, Uncertain Audiences: Responding to Ives,” *American Music* 12, no. 3 (Autumn, 1994): 307.

²⁰³ This is an eleventh chord in which the ninth of B-natural is not included.

²⁰⁴ A11 consists of A-natural, C-sharp, E natural, G-sharp, B natural, and D-sharp.

second beat of m. 10, including the eighth note of F-sharp and omitting the passing tone) and then G9 (or G minor 9 with a raised seventh), which is considerably darker than A11 and conveys that of a haunting memory—perhaps dark in its sonority to reflect the word “evening.”

The chords of A11 and A13 also function as a transition in moving from one memory to another—that of “Sarah humming gospels” to “the village concert band” in the subsequent tune of “The Battle Cry of Freedom” (another likely reference to his father as bandleader) (Ex. 4–4). The A11 chord (m. 10) also functions to replace what should be a resolution to F Major following an implied dominant of C9 (beginning with the C above F in the bass on the downbeat of m. 9—including an added sixth of A natural). By employing A11 he avoids the traditional expectation of classical harmonic motion.²⁰⁵ Support of this notion comes from Lambert who asserts that Ives “manipulates conventions of the European past”²⁰⁶ such as those displayed in traditional chord progressions (e.g. motion from I to IV to V, etc.)

²⁰⁵ The substitution of A minor for F major is a common substitution in tonal music. In a major key, the vi and iii chord can substitute for the I chord.

²⁰⁶ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 26.

Slowly and sustained

"My Old Kentucky Home"

p
I think there must be a place in the soul all made of tunes, of—

pp
pp
ten.

5 *C* (V) *C*¹¹ (with augmented fifth) *F* (I) *F*¹³

"On the Banks of the Wabash Far Away"

tunes of long a-go; I hear the or-gan on the main street cor-ner, Aunt

E^b9 *A*¹¹ (minor triad foundation with minor seventh) *F*¹³ (I) *C*¹³ (no 3rd) (V) *a little*

8 **"The Battle Cry of Freedom"**

Sa-rah hum-ming Gos-pels; Sum-mer eve-nings, The

Passing tone *mf*

*F*¹³ *A*¹¹ *A*¹³ *G*⁹ (first inversion / minor triad foundation)

Ex. 4–4. "The Things Our Fathers Loved," mm. 1–10, Expanded chords in recalling childhood memories. Additionally, this example reflects the concept of "crossing temporal borders through semi-tonal shifts" as referenced in chapter five.

In summary, the effect of expanded harmonies in this song provides a dream state for both composer and listener—as if both are journeying back to the things their fathers loved. After a series of memories reflected in mm. 1–19, the song concludes with an ambivalent, open harmony offering a final reflection on

both the father's (and son's) favorite songs/images. Before arriving at this final harmony (D#11), two chords assist in its preparation, beginning with a D#maj.7 on beats one and two of the penultimate measure and continuing with a C# diminished triad on beat three (embellished by a half step dissonance of B natural) (Ex. 4–5). Specifically, The D# major seventh chord on the downbeat of the penultimate measure has a reflective quality brought about by the major seventh, emphasizing the actual “things” (songs and images heard at the beginning of the song) which are subjects of nostalgia. The C# diminished chord harkens back to the ending of m. 5, reflecting elements of Eb9 with enharmonically equivalent pitches of C-sharp, G natural and A-sharp}.

The musical score is divided into two systems, measures 19 and 20.
 System 19: The vocal line begins with the word "sing" and continues with "in my". The piano accompaniment features a melodic line with sixteenth-note runs and a bass line with sustained notes. Chords are labeled as G₃⁶, D⁷/G, D¹¹ (5th in bass), and D¹¹/G. Annotations include "poco rall.", "l.h.", "Major triad implied by scalar material of 16th notes", "rit.", and "Bass note".
 System 20: The vocal line continues with "soul of the things our fathers loved". The piano accompaniment includes a sustained chord (Em) and a final sequence of chords: D#maj7, C#° (labeled "dissonant embellishment"), and D#11* (labeled "minor triad foundation"). Dynamics include *p*, *much slower*, *very slowly and sustained*, *pp*, *rit.*, and *ppp*. A footnote states: "* (this chord can also be perceived as G#⁹ in inversion)".

Ex. 4–5. “The Things Our Fathers Loved,” mm. 19–22, Expanded chords in recalling childhood memories. Note: What is of significance is not just the C# bass note but the accompanying harmony for the entire phrase “things our fathers loved.” The final three chords contribute to the recalling of earlier times.

This method of referring back to the beginning (during a piece's conclusion) is "characteristic of Ives's compositions in that they often end with references to their opening gestures."²⁰⁷ In the present case ("Things Our Fathers Loved") the reference is not to the absolute beginning of the song, however, but to the end of its opening phrase—to the moment where the sequence of memories is about to rush in at m. 5 with the phrase "I hear the organ ... " (Ex. 4–4). Subsequently, an open feeling is imparted by the final chord of D#11 (minor triad foundation of D-sharp, F-sharp and A-sharp with an added sixth of B-sharp), which assists the final three chords in creating "a distant harmonic area of no certain tonal orientation."²⁰⁸ In short, the last three chords of mm. 20–22 contribute to a feeling of reflection, as if these thoughts continue beyond the scope of the tune itself. Furthermore, an open quality is supported by the dual perspective of the final chord as not only D#11 but also G#9²⁰⁹ (in inversion).²¹⁰

Expanded harmony in the final two chords of this work conveys not only the nostalgia of cherished songs and images, but memories of George Ives himself as he is intricately connected to the use of such harmony—not to mention the fact that Charles employs these chords surrounding the word "father" (similar to the ending of "Remembrance"). Beyond memories of George Ives, Charles

²⁰⁷ Ibid., 24.

²⁰⁸ Lloyd Whitesell, "Reckless Form," *American Music* 12, no. 3 (Autumn, 1994): 307.

²⁰⁹ The nature of this chord is a dominant ninth chord to be specific. While the label of G#9 might offset its nostalgic effect, one must consider the voicing; with the particular voicing of D-sharp, A-sharp, and F-sharp there exists a stronger sense of a chord built upon D# minor, thus, imparting a visceral sense of nostalgia.

²¹⁰ On p. 307 of "Reckless Form," Lloyd Whitesell indicates both D# and G# as a possible chord label for the final harmony, supporting the perception of the conclusion as uncertain (harmonically speaking).

also uses expanded harmony to introduce quoted songs from his father's period such as the A9 chord at m. 6, which coincides with a quotation of "On the Banks of the Wabash Far Away" (Ex. 4-4) as well as the C13 and F13, which usher in "Nettleton" at mm. 7-8 (Ex. 4-4) and D13 for the setting of "In the Sweet Bye and Bye" (Ex. 4-6).

***ff* "In the Sweet Bye and Bye"**

Now! Hear the

l.h.

ff

ff

D¹³

Ex. 4-6. "The Things Our Fathers Loved," m. 15, Use of arpeggiated D13 to introduce a fragment from "In the Sweet Bye and Bye."

c) National Holidays

Another source of programmaticism includes national holidays, which are connected to his father's background in the civil war. Programmatic pieces, such as "The Fourth of July" and "Decoration Day," "show that music depends to a great extent on experience (the 'substance' of the music) remembered from childhood."²¹¹ Two life experiences in particular are conveyed in these pieces.

²¹¹ Audrey Davidson, "Transcendental Unity in the Works of Charles Ives," *American Quarterly* 22, no. 1 (Spring, 1970): 41.

The first, “The Fourth of July” (Movement 3 of *Holidays Symphony*: ca. 1917–19), is something described earlier by Ives who explains that the piece represents a bunch of noise. Burkholder describes this movement suggesting, “there is a background hum ... It is the cloud of memory, as each remembered event, person, or thing recalls others aroused involuntarily by their association with or resemblance to the first.”²¹² This “hum” (or cloud of memory) is introduced through vague, floating chords of an expanded nature. The harmony is used as a vehicle to transition back in time—to the memory of the sound and feeling of the Fourth of July as experienced by young Ives. The sound consists of a cloud of memory heard in the strings at m. 8 (quartal harmony) and tone clusters of a whole tone nature in m. 9 (Ex. 4–7).

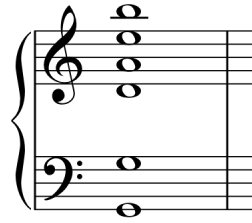
Cloud of memory:

The musical notation shows two measures of music in 4/4 time. The first measure, labeled 'Quartal harmony', features a treble clef with a key signature of two flats (B-flat and E-flat) and a bass clef with a key signature of one flat (B-flat). The treble staff contains a cluster of four notes: B-flat, E-flat, A-flat, and D-flat. The bass staff contains a cluster of four notes: B-flat, E-flat, A-flat, and D-flat. The second measure, labeled 'Whole tone', features a treble clef with a key signature of two sharps (F-sharp and C-sharp) and a bass clef with a key signature of two sharps (F-sharp and C-sharp). The treble staff contains a cluster of four notes: F-sharp, C-sharp, G-sharp, and D-sharp. The bass staff contains a cluster of four notes: F-sharp, C-sharp, G-sharp, and D-sharp.

Ex. 4–7. “The Fourth of July,” *Holidays Symphony* (string reduction), mm. 8–9, Use of quartal harmony and whole tone clusters as to represent a cloud of memory.

Similar harmonic activity is continued at m. 10 with quintal harmony (Ex. 4–8). Hints of the fireworks (and noise to come) are contained in places such as m. 39 with the indication “like a gunshot,” assisted by a cluster chord made up of five notes, including the violin melody (score not shown).

²¹² J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 380.



Ex. 4–8. “The Fourth of July,” *Holidays Symphony* (string reduction), m. 10, Use of quintal harmony to represent a cloud of memory.

Borrowed tunes (12 in total) are found throughout this movement (e.g. “Columbia,” “The Gem of the Ocean,” and “Battle Hymn of the Republic”) revealing further examples of nostalgia. However, the more descriptive instance of programmaticism is found in the explosive section at m. 76. Here, Ex. 4–9, a series of cluster chords in the strings with complex chords in the upper section of the score shared among the woodwinds and brass creates the cacophony that Ives refers to as a bunch of noise. While there is no discernible key, a sense of the experience is conveyed effectively through combinations of expanded harmony (even though the harmony itself is not obvious and moves too quickly for the ear to comprehend at any given point).

Violin 1

Remainder div.

4 solos

Violin 2

Remainder div.

Vla div.

Vlc. div.

Cb div.

Ex. 4–9. “The Fourth of July,” *Holidays Symphony* (string excerpt), m. 76. Use of cluster to create an explosion of sound (note: two extra violins and four solo violins (I) have been omitted from string excerpt. Woodwinds and brass are also excluded). Complex harmonies and polyrhythms are found in the rest of the orchestra (not shown here).

As in other pieces discussed earlier, the main activity of the movement concludes with a few measures of reflection. This reflection consists of a codetta at m. 121, beginning with a D13²¹³ chord on the second beat of m. 121 in the strings (Ex. 4–10). Through its specific make-up (minor triad base with a natural eleventh), the chord of D13 effectively suggests that the prior activity was a fleeting memory from a childhood Fourth of July. The chord quality is, again, melancholy and reflective. Furthermore, the brief appearance of D13²¹⁴ implies that both harmony and memory are both ephemeral in nature—quickly vanishing after the loud explosions of the Fourth of July heard earlier.

A contrasting example from *Holidays Symphony* is the second movement known as “Decoration Day.” The holiday, now known as “Memorial Day,” is commemorated to the memory of the dead of the civil war and is “among other things, a meditation about death.”²¹⁵



Ex. 4–10. “The Fourth of July” *Holidays Symphony* (string reduction of sustained pitches), m. 121 (codetta), Use of D13 chord to convey the concept of a fleeting memory.

²¹³ Another possible label for this chord is D9 with accompanying clusters formed by the insertion of G and B into the middle of the chord.

²¹⁴ D13 chord is confirmed by the final contrabass note in the third beat of the last measure of the score.

²¹⁵ Larry Starr, *A Union of Diversities* (New York; Schirmer Books, 1992), 109.

In the middle of this movement, the combination of the “Taps” melody in the B-flat trumpet against Lowell’s “Nearer, My God, to Thee” (heard in violin I) represents the march back to town from the cemetery with an eerie, dreamy quality delivered through the harmonic treatment of these two quoted tunes. A murky, vague tonality is imparted by not only the juxtaposition of both tunes, but by a supporting harmony, further obscuring any sense of a tonal center. This indistinct harmony occurs in m. 75 where an F# diminished triad (F-sharp, A natural, C natural and an added ninth of G-sharp) in the strings is colored by a semitone trill in the bass (between F-sharp and E-sharp)²¹⁶ (Ex. 4–11). The diminished triad morphs into a G#9 (seventh in the bass) in m. 76, with G-sharp and A in the bells/extra violin along with continued friction of semitones in the bass. The G-sharp and A natural of the bells/extra violin convey the tonic and lowered ninth of G#9. The mysterious quality of this section is also reinforced by the tremolo texture of the string section.

²¹⁶ The appearance of five notes qualifies this as an expanded chord.

75 **Very Slowly** "Taps" melody

I Bb Trpts.

II

Timp.

(or on F#, or C through mes. 80) Bell part imparts the 3rd and 9th of G#9 in mm. 75 - 76.

Bells & Ex. Vln.

Very Slowly → Passing tone "Nearer, My God to Thee" (violin I melody)

Vlns. I A B

Vlns. II A B

Viola A B

Vlcs. A B

Cbs. A B

div.

[ppp] tr

F#9 (with added 9th) G#9 (with 7th in contrabass / root in bells)

*The higher octave string parts here may not be needed if the Trumpet can be off-stage.

Ex. 4–11. “Decoration Day,” *Holidays Symphony*, mm. 75–78, Expanded harmony with juxtaposed melodies used to convey the march back to town from the cemetery. Note: G#9 reflects the first two beats and consists of a minor triad foundation.

“Decoration Day” concludes in the same manner as “The Fourth of July”—with a quiet air of reflection upon a fleeting memory in much the same manner as the beginning of the piece. And, also like the other pieces that follow this format,

the sound of an eleventh chord (D11 in this instance) completes the journey through memories with the nostalgic overtone of the raised eleventh (G-sharp) and major seventh (C-sharp) in the context of a D major triad foundation at m. 146 in the string section (not shown).

As demonstrated in “Fourth of July” and “Decoration Day,” much of the programmaticism of Ives’s youth consists of songs that reflect a nation’s history—especially in reference to the Civil War. The memorial services and celebratory fireworks are all ushered in by harmonies that have the power of conjuring nostalgia and sending each piece into the ether at the conclusion of each movement.

d) Fictitious events

Coupled with remembered events from childhood, Ives also created fictitious events in which he asks the listener to indulge and imagine stories. In “Tom Sails Away” (1917), the character telling the story is provided with the same vehicle of reflection as Ives with regard to childhood memories assisted by expanded chords. This is heard in the opening line, “Scenes from my childhood are with me” whereby the nostalgic phrase is supported by a piano gesture of F#11 (minor triad foundation) in m. 2 (Ex. 4–12); once again, the chord sonority conveys melancholic reflection.

slowly and quietly
pp

Scenes from my child-hood are with me, I'm

F#11 (minor triad foundation) F#11 (minor triad foundation)

Ex. 4–12. “Tom Sails Away,” m. 2, War Song melody supported by expanded harmony of F#11.

As with movements of the *Holidays Symphony*, a war song (“Over there”) is included in “Tom Sails Away.” In this instance, “Over there” is used in the context of a son who leaves his mother and heads to war.²¹⁷ Of significance here is the fact that the words “over there” are supported by a motion of expanded harmony from Gb9 to Gb11²¹⁸—both of which impart a sense of distance and, thus, serve as a form of word painting (Ex. 4–13). The closing of this song includes a return to the opening eleventh chord of m. 2—only now as an F11 (half step lower) with a dissonance of G-sharp against the ninth of G natural (Ex. 4–14).²¹⁹

²¹⁷ Presumably told from the perspective of another sibling.

²¹⁸ The chords are spelled enharmonically. The bottom notes are spelled as a G-flat harmony while the treble clef is spelled as F-sharp; the composite sound is that of a ninth chord.

²¹⁹ The eleventh in this case is spelled enharmonically as A-sharp (equivalent to the eleventh of B-flat).

way for o - ver there, o - ver there, o - ver

mp *slower*

mp

$G\flat^9$ $G\flat^9$ $G\flat^9$ $G\flat^{11}$

(11th occurs with resolution to B natural)

Ex. 4-13. "Tom Sails Away," mm. 21-22, Memories of a fictitious character conveyed through expanded harmony. Note that $G\flat^{11}$ can also be perceived as a polychord of E over G on beat three of m. 22.

The specific type of eleventh chord used in this song (minor triad foundation, minor seventh and natural eleventh) supports nostalgia and also provides the sense of a fleeting memory (even if imagined), as in the final measure—enabling

od are float ing be-fore my eyes.

rall.

ppp *rall.* *pppp*

F^{11} F^{11}

Ex. 4-14. "Tom Sails Away," mm. 24-25, Closing chords that reflect the beginning eleventh chords—only a half step lower (F^{11}).

the listener to experience a moment of reflection from the perspective of the storyteller.

Another fictional piece, “Putnam’s Camp, Redding, Connecticut” from *Three Places in New England* (ca. 1914), employs not only complex chords but also a collage approach where “the intended effect ... is to convey the sense of an event, not actually as it might have happened, as in *Central Park in the Dark* ... but as it is remembered or envisioned.”²²⁰ In this scenario, “the audience is asked to imagine itself outdoors, listening to two bands playing different music in different tempi march towards each other, pass, and separate again.”²²¹ The effect is the result of

a boy’s fantasies as he surveys a Revolutionary War memorial at an old campsite; he combines the gay, brassy music of a Fourth of July picnic (with mixups and mistakes of the village band in music adapted from ‘*Country Band March*’ and ‘1776’) and the boy’s hallucinatory vision of ghostly military musicians. In the middle section, the marchbeat ... goes along at two different speeds...²²²

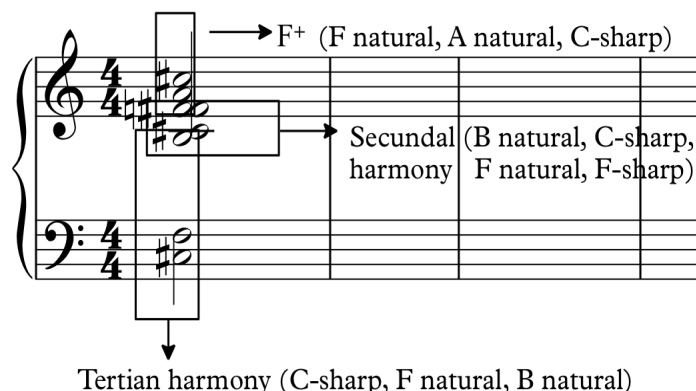
This section, beginning at letter H, is accompanied by expanded harmony and includes a separate tempo marking for the bassoon, horns, trumpet, trombone, snare and piano. The harmony, which initiates letter H, consists of an F augmented triad (violin I & II), secundal clusters (between violin II and viola) and a tertian sonority between bass, cello and viola (outlining the skeleton of C#7 with the pitches: C-sharp, F natural, and B natural) (Ex. 4–15). In this story,

²²⁰ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 369–370.

²²¹ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 93.

²²² H. Wiley Hitchcock, *Ives* (London: Oxford University Press), 86.

expanded harmony is a contributing element to reminiscence and a supporting factor in the use of separate tempi throughout sections of the orchestra.



Ex. 4–15. “Putnam’s Camp, Redding, Connecticut,” *Three Places in New England* (string reduction of harmony on downbeat), m. 65, Introduction to multi-tempi section with expanded harmony at letter H.

e) Stream of consciousness

A concept associated with many of the topics covered under programmaticism is that of “stream of consciousness” in which a person's thoughts and conscious reactions to events are perceived as a continuous flow. William James (pioneer in the field of experimental psychology), who uses the alternate term “stream of thought”, “describes consciousness as constantly in motion, flowing like a stream.”²²³ Within this flow, each subsequent thought is affected by the aura or stimuli of the previous thought, or as William James wrote, “our thoughts are constituted not only of ‘definite images’ but of the ‘consciousness that flows around [them].’”²²⁴ James expands upon this idea suggesting that the remnants or dying away of the first thought creates a halo

²²³ Christopher Bruhn, “The Transitive Multiverse” *The Journal of Musicology* 20, no. 2 (Spring, 2011): 168.

²²⁴ *Ibid.*, 170.

that both surrounds and escorts it.²²⁵ In these brief descriptions, a parallel arises between the way thoughts affect each other and the way chords affect one another as explained in the following paragraph.

Similar to the process of moving from one thought to another under the influence of new stimuli, chords move from one to another in the same way. What James refers to as a “halo” surrounding each thought translates into overtones in harmony. Since each note of a chord comes with its own set of harmonics, the collective sound influences the choices of subsequent chords. Naturally, expanded chords containing anywhere between five to twelve pitches will produce a rich spectrum of harmonics, affecting both the hearing and perception of the current chord while influencing choices to follow.²²⁶ With regard to images, James uses the word “psychic overtones” (or fringe) to refer to that which “causes [images] to shade into one another, thus creating the uninterrupted flow of the stream of thought.”²²⁷ This same phrase aptly describes the fringe created by the overtones of a chord. Psychic overtones, in a musical sense, can be perceived as the upper extensions of chords, which are bound to repeat overtones from the lower members, affecting the perception of subsequent chords and the accompanying images and/or text (where present) as in the case of Ives’s music.

With Ives, psychic overtones, combined with text and images, function as a unit to facilitate a stream of consciousness approach inherent in many of his

²²⁵ Ibid., 170.

²²⁶ Note that the strength and presence of various overtones affect these decisions.

²²⁷ Christopher Bruhn, “The Transitive Multiverse” *The Journal of Musicology* 20, no. 2 (Spring, 2011): p. 171.

pieces, such as “From Hanover Square North (At the end of a Tragic Day, the voice of the People Again Rose).” In this hauntingly beautiful work (one of Ives’s favorite movements from *Orchestral Set No. 2*), stream of consciousness is employed through an experience Ives had on an elevated platform in New York on the day of the sinking of the *Lusitania*. Upon hearing the news, everyone spontaneously joined on singing the gospel funeral hymn “In the Sweet Bye and Bye” over the noise and pulsation of New York. Ives depicts the unfolding of this experience by presenting hymn “In the Sweet Bye and Bye” as being sung by one part of the crowd and picked up by the others. Through polytonality and metrical displacement, the piece evokes the effect of many voices singing from many directions, joining first in the verse and then in the refrain.

While the music obviously conveys an element of programmaticism through the portrayal of a day in the life of Ives, it also projects “an all-embracing universe of sounds that is to be experienced as a ‘stream of consciousness.’”²²⁸ Part of the experience of an all-embracing universe of sounds is the actual sound of expanded chords, all of which are formed in several ways. One such formation is through polytonality, yielding polychords as a result of “fragments and variants of the hymn verse [which] return in four contrasting timbres and keys (reh. 7,²²⁹ cello in Bb, piano in Ab and D, violins in D, and horns in F) [and bring] this section to a close”²³⁰ (Ex. 4–16). Since all of this activity takes place in the main

²²⁸ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 116.

²²⁹ Note: Within the score used for this paper, letter G is used for the section described by Burkholder as rehearsal 7.

²³⁰ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 264.

orchestra over an A pedal in the double bass, we get the sensation of a large polychord projected from the outlining of separate major keys (even if partially outlined) consisting of: F, B-flat, A-flat, and D. And although each part does not form a vertical chord, the ear perceives the collective sound of each key/phrase over the pedal tone of A (Ex. 4–16).

Prior to this section (back at letter A), the sense of a ninth chord is projected when

a horn, also part of the distant choir, joins in as the chorus begins its second phrase and continues after they are silent, playing a mournful tune in D Major spiced with a raised second degree that suggests an alternation of D major with D minor.²³¹

The presence of both F-natural and F-sharp in this section (horn part), even though part of a chromatic ostinato, imparts the sound of a raised ninth (F natural) dueling with the third of a D major chord (or what Burkholder describes as the raised second degree). Here, too, there is more of a suggestion of expanded harmony (through scattered pitches) rather than the vertical presentation of a chord.²³² In contrast to these loose interpretations of expanded harmony via exploration of keys, the first beat of m. 10 provides an example of the wavering third (horn part) against elements of a vertically-occurring D13th chord (D in the double bass);²³³ D natural, F-sharp, D natural and A natural in the

²³¹ Ibid.

²³² Polychord is implied from collective keys: F major triad is implied by the first three notes of the French horn (upper part); Ab major triad is implied from the first three melody note in the piano with an additional D in the left hand in support of the D major triad found in other parts of the orchestra; D major triad exists in the outline of the first three notes of the violin scale plus the tonic in the cello II and fifth in the bass; Bb major triad is outlined in cello I with the first, third, and fifth sounding within m.63.

²³³ Occurring on the second eighth note of the measure.

harp, B natural in the chimes and G natural in the choir; note that F-sharp appears frequently in the violins throughout this measure) (Ex. 4–17).

Key: F Hn. in F

m. 62

"In the Sweet Bye and Bye" melody outlining F major scale (when transposed)

mf 3

chromatic embellishment

Horn in F

mp 6

Residual notes from previous phrase

"In the Sweet Bye and Bye" melody outlining Ab major scale

Key: Ab (top part)

Piano

[f] 3

Fifth of the D chord as heard in the strings

mp

[]

"In the Sweet Bye and Bye" melody outlining D major scale

Key: D Vln. I

f 5

"In the Sweet Bye and Bye" melody outlining D major scale

Key: D Vln. II

f 5

chromatic embellishment

6

6

Viola

scalar melody outlining Bb major (except for raised fourth - E natural)

[trem. ad lib.]

Key: Bb I

f 5

Vc.

Harmonic outline of D major

pizz. 6

6

Key: D II

5

5

Fifth of the D chord (pedal tone doubling bass clef in piano part)

Db.

Ex. 4–16. "From Hanover Square North (At the end of a Tragic Day, the voice of the People Again Rose)," *Orchestral Set No. 2*, mm. 62–63 (letter G/select orchestration), Polychord implied from separate keys (keys are shown to the left of the score)

m.10

The musical score for measures 10-17 is written for the following instruments:

- Horn in C:** Treble clef, 3/4 time. Measures 10-11 show a melodic line with a sharp sign above the staff and a '2' above a slur.
- Chimes:** Treble clef, 3/4 time. Measures 10-11 show a melodic line with a sharp sign above the staff.
- Harp:** Treble and Bass clefs, 3/4 time. Measures 10-11 show a complex harmonic texture with various accidentals and a sharp sign above the staff.
- Piano:** Treble and Bass clefs, 3/4 time. Measures 10-11 show a complex harmonic texture with various accidentals and a sharp sign above the staff.
- Choir:** Treble clef, 3/4 time. Measures 10-11 show a vocal line with the lyrics "wor - ship thee".
- Violin 1:** Treble clef, 3/4 time. Measures 10-11 show a melodic line with various accidentals and a sharp sign above the staff.
- Viola:** Treble clef, 3/4 time. Measures 10-11 show a melodic line with various accidentals and a sharp sign above the staff.
- Double Bass:** Bass clef, 3/4 time. Measures 10-11 show a melodic line with various accidentals and a sharp sign above the staff.

Ex. 4–17. “From Hanover Square North (At the end of a Tragic Day, the voice of the People Again Rose),” *Orchestral Set No. 2*, m. 10, D13 harmony on downbeat along with wavering F natural to F-sharp in French horn (and the inclusion of both a natural and lowered fifth for harp and violin I respectively).

Instances of expanded harmony permeate this work, providing a musical backdrop to the stream of consciousness used to describe the events of this particular day.

Along with simultaneous keys and the obscuring of harmony, the “stream of thoughts” concept is also assisted by the refrain of a hymn tune, “In the Sweet Bye and Bye,” which is performed with “a faster, metrically displaced statement in F in an accordion or soprano concertino, and a triple-time variant in B major in the flute and clarinets.”²³⁴ Both keys collectively convey a sense of a polychord consisting of B over F. Although the concept of bi and polytonality is the subject of a future discussion on the formation of expanded chords (chapter five), it is an effective part of representing a flow of thoughts resulting from a profound experience of not one, but many passive bystanders. Even one of the quoted tunes has a programmatic connotation for Ives specifically. As Burkholder notes, “Massa’s in de Cold Ground ... is so common in Ives’s music that its appearance here may be interpreted programmatically as a musical symbol for his presence among the crowd.”²³⁵ What is unique about this and other tunes performed throughout the movement is not the discreet presentation of thoughts and happenings but the overlaying and simultaneous projection of many thoughts and occurrences in real life experiences—including “the hum of rush hour traffic and machinery”²³⁶ and the spontaneous singing from different directions. Accompanied by expanded chords, “this movement directly represents a series

²³⁴ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 265.

²³⁵ *Ibid.*

²³⁶ *Ibid.*, 380.

of events and evokes in both sound and structure the way in which the hymn was actually performed.”²³⁷ It represents a stream of thoughts in that each occurrence affects the arrival of another, mirroring the manner in which expanded chords (and their halo of overtones) affect the motion of subsequent chords. And, similar to the occurrence of many events at once, expanded harmony derives from the simultaneous presentation of keys and melodies (even if only suggestive in nature).

Referring back to an earlier concept (from chapter three), it is also worth noting that the collage of sounds that occupies the end of this movement (around m. 115) soon moves towards the serene setting that began the piece, represented by a harmonic cloud consisting of an F major tonality in the low strings and solo piano (including a repeated raised fifth in the harp) with a layered D9 chord in the harp (oscillating between D9 and a polychord of Bb/G7 as well as A9) (Ex. 4–18). Together, these chords communicate a sustained instance of expanded harmony with a reference to the fluctuating F natural to F-sharp of the earlier horn part, now heard in the friction between F major in the low strings and D9 in the harp (containing an F#). In this case, the D9²³⁸ chord of the harp (D natural, F-sharp, A natural, C natural and F natural—raised ninth) provides a vertical display of expanded harmony, which was loosely addressed through the moving horn parts earlier.

²³⁷ Ibid., 266.

²³⁸ Harmony is decorated with C-sharp—inserted between chords.

The musical score for Ex. 4-18 is arranged in four staves. The top staff is for Harp, showing a sequence of four chords: D⁹, B^b/G^{major}7, D⁹, and A⁹, grouped by a bracket with a '4' above it. The second staff is for Solo Piano, showing a sequence of three chords: F, grouped by a bracket with a '3' above it. The third and fourth staves are for Violoncello and Double Bass, both marked '(a few players)' and showing a sustained F chord.

Ex. 4–18, “From Hanover Square North (At the end of a Tragic Day, the voice of the People Again Rose),” *Orchestral Set No. 2*, m. 115, Serene setting assisted by harmonic cloud of polychords.

Contrasting the depiction of real life experiences, the stream of thoughts concept is applied to another fictional work, *The Celestial Railroad* (ca. 1924—modeled after his teacher’s piece, *Hora Novissima*), through a collage of tunes. The collage is used to “convey an impression, not of memory, but of mystical experience.”²³⁹ There are two versions of this piece; one is for solo piano and the other is the basis for the second movement of the *Fourth Symphony* (being referenced here). While there is no clear narrative, *The Celestial Railroad* is considered “an allegory fantasy, a representation of a dream.”²⁴⁰ In this work (as realized in the second movement of the *Fourth Symphony*), one can hear and feel the experience of fleeting thoughts as conveyed through the quality of

²³⁹ Ibid., 389.

²⁴⁰ Ibid., 401.

A third example of stream of consciousness can be found in “The Fourth of July” (referenced earlier), which includes 20 or so borrowed tunes reflecting a “tribute to the celebrations of Independence Day that Ives remembered from his youth, marked by parades, dancing, and fireworks.”²⁴² Similar to the method of presentation in “From Hanover Square North,” Ives employs collage technique but with the simultaneity of two or more themes. In recalling the memories of a boy’s Fourth of July, a stream of tunes (as well as activities) flow forth assisted by “waves of parallel diatonic clusters in A, Bb, and B Major in the upper strings, like a wash of sound around the principle key of Bb; ...”²⁴³ This particular section of mm. 113–114 at letter W (Ex. 4–21) features the melodies of “Columbia, the Gem of the Ocean” (trumpets, trombones and cello) combined with “The Battle Hymn of the Republic” (flutes, oboes, clarinets and cornets) along with the triads and seventh chords in the keys of the string sections mentioned previously. Even though the chords exist as a series of thirds in each string part, the varying keys, juxtaposed chords, and rhythmic speed (polychordal clusters) create a blurred effect—assisting the stream of consciousness concept.

Along with the purely instrumental support of stream of thought is that of songs for piano and voice in which Ives provides several examples of flowing thoughts and images accompanied by harmony. In the song “Ann Street” (1924), Ives depicts a physical and psychological progression, which can be described

²⁴² Ibid., 376.

²⁴³ Ibid., 377.

The image displays a page from a musical score for a concert band or orchestra. The score is divided into two main sections: "Battle Hymn of the Republic" and "Columbia Gem of the Ocean".

Section 1: "Battle Hymn of the Republic"

- Flute 2:** Measures 113-114. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.
- Oboe 1:** Measures 113-114. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.
- Cl. (Bb) 1:** Measures 113-114. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.

Section 2: "Columbia Gem of the Ocean"

- Trumpet in C 1:** Measures 115-116. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.
- Trombone 1:** Measures 115-116. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.
- Violin I (div. in 7):** Measures 115-116. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.
- Violin II (div. in 7):** Measures 115-116. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.
- Viola (div. in 7):** Measures 115-116. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.
- Violoncello (div. in 2):** Measures 115-116. The melody is in 4/4 time, starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4 and a quarter note A4.

The score includes various musical notations such as notes, rests, and dynamic markings (e.g., *ff*, *sf*). The key signature is one sharp (F#), and the time signature is 4/4.

Ex. 4–21. “Fourth of July,” *Holidays Symphony*, mm. 113–114, Quoted tunes and polychordal harmony in the strings (m. 113 / letter W). Note: this is a partial representation of the orchestration. Also, original score includes bowings with spaces inserted in the middle of the slurs, which are not included here.

as a “journey piece.”²⁴⁴ The song’s brief duration is a physical representation of the street itself, which is very short. The listener experiences the changing

²⁴⁴ Larry Starr, *A Union of Diversities* (New York; Schirmer Books, 1992), 33.

impressions of someone taking a stroll down Ann Street. Since Ann Street runs from Broadway to Gold Street (east to west), the song's journey begins at Broadway with a tongue-in-cheek harmony of A9 (dominant quality) implying the introduction to perhaps a Broadway play based on the shouted text and arpeggiated chord (with dissonant embellishment) (Ex. 4–22). The next part of the journey includes a description of the physical street itself, assisted by essentially quartal harmony in mm. 3–6. This is followed by a scene described as “Barnum’s mob” in mm. 7–8 (referring to the crowds that would gather to see the curiosities of the museum exhibit known as Barnum’s American Museum), accompanied by a complex chord of Bb11,²⁴⁵ including several added dissonances in support of this image.

Another sudden experience occurs around the time that Nassau crosses Ann Street (mm. 12–13), both of which meet at uneven angles. The intersection of these two streets results in a sudden explosion of pedestrian traffic, shops and lights along with the facade of the business district. The latter image is ushered in by a series of polychords in m. 12; although for the purposes of demonstration, these repeated chords are shown beginning with m. 14 (Ex. 4–23). The next encounter is that of the sun appearing briefly on the street—an image coordinated with a G11 chord (m. 15), imparting the dreamy sound of the Lydian mode. This harmony is continued in m. 20 with an Eb11 (also of the Lydian mode) to indicate the end of the journey with the line “rather short, Ann Street” while also imparting an open quality. In this quaint piece, stream of

²⁴⁵ An 11th chord, when using a raised fourth, would typically impart a dream-like, reflective quality. However, in this instance, the natural fourth of Eb (along with added dissonance) supports the mob gathering referenced in the lyrics.

consciousness reveals a sequence of thoughts, conveying the images as they occur—with virtually each one supported by an expanded chord.

Fast and noisily slower

Broadway

ff *r.h.* *r.h.* *l.h.* *l.h.* *ten.* *slower*

m.3 *A⁹* *A⁹* *A¹¹* (with natural and augmented 5th) *A^{maj7}*

Various extended chords as a transition to a more atonal section. →

Bar - nums mob Ann

f *faster* *B^b11* (with major 7th) *B^b13*

m.8 Continued mix of chromatic gestures with interspersed expanded chords:

street, *l.h.* far from ob - so-lete. *B^b11* (with major 7th)

The musical score is presented in three systems. The first system (mm. 1-6) features a piano accompaniment with a treble and bass staff. The right hand (r.h.) plays a melodic line with triplets and slurs, while the left hand (l.h.) provides harmonic support with chords. The tempo is marked 'Fast and noisily' and the dynamics include 'ff' and 'slower'. The second system (mm. 3-6) shows a transition with various extended chords (A9, A11, Amaj7) and a vocal line for 'Bar - nums mob' and 'Ann'. The third system (mm. 8-13) continues the piano accompaniment with chromatic gestures and interspersed expanded chords (Bb11, Bb13), with a vocal line for 'street, far from ob - so-lete.' The tempo is marked 'faster' and the dynamics include 'f'.

Ex. 4–22. “Ann Street,” mm. 1–8 (initial C in bass is a pick-up measure), Psychological journey reflected through expanded chords (note: music from mm. 3–6 and mm. 9–13 were purposely omitted to acknowledge fair use practices).

m.14

p *slower*

Sun just hits

m.20

p

Rath - er short, Ann street

Transition:

l.h. *r.h.*

slowly

p

A¹³ G¹¹ G¹¹ (collective sound) Eb¹¹ (dreamy texture and open quality)

Ex. 4–23. “Ann Street,” mm. 14–15 and m. 20, Psychological journey reflected through expanded chords.

A second piece conveying stream of consciousness is the previously referenced song for piano and voice—“The Things Our Fathers Loved.” This song, a collection of memories, is an example of stream of consciousness in that each of these memories flows from one to another—not as a logical series of events but as a random collection. As Lloyd Whitesell explains, “both music and text evoke the stream of the narrator’s consciousness as she moves in quick associative leaps from one image to another.”²⁴⁶ In this particular piece, stream of consciousness is presented as a scrapbook of treasured memories²⁴⁷ (for reference, see Ex. 4–4). Within the listed examples, it is important to recognize that a quality discussed earlier is infused into these works purposefully—that of vagueness. Since Ives is not concerned with the primal source of his artistic inspiration or the source of ensuing stream of thoughts in a given work (as expressed in *Essays*), it seems more likely that he supports the “re-instatement

²⁴⁶ Lloyd Whitesell, “Reckless Form,” *American Music* 12, no. 3 (Autumn, 1994): 308.

²⁴⁷ *Ibid.*

of the vague to its proper place in our mental life”²⁴⁸ and, consequently, musical expression.

f) Temporal order

Other examples of programmaticism include the concept of temporal order. Of interest is the way in which Ives conceives of and communicates his perception of time as observed within the following pieces: “From Hanover Square North, At the End of a Tragic Day, The Voice of the People Again Arose,” “Grantchester,” and “The Things Our Fathers Loved.” The concept of combining the past, present, and future simultaneously is communicated effectively in “From Hanover Square North.” Beyond the given narrative of this work, expanded harmony creates a dream state from the very beginning, conveying the sounds of the city, the darkness of the hour and, at the same time, revealing an “interconnectivity of the present and an idealized past and future.”²⁴⁹ This interconnectivity is accomplished through the simultaneous sounding of the melody in the strings, intoning the hymn “In the Sweet Bye and Bye” (representing the people in Ives’s midst) and the polytonality (and resultant chords) suggested in the rest of the orchestra as seen at letter G (Ex. 4–16); harmony, chromaticism, and the tubular bells in the distant choir represent the present as experienced in the active sounds of the city. By including the hymn amidst these sounds, Ives is suggesting that “generations had been united, and

²⁴⁸ Christopher Bruhn, “The Transitive Multiverse” *The Journal of Musicology* 20, no. 2 (Spring, 2011): 173.

²⁴⁹ Matthew McDonald, *Breaking Time’s Arrow* (Bloomington: Indiana University Press, 2014), 23.

temporal distinctions erased, in a single moment by a timeless tune.”²⁵⁰ However, the sense of temporal distinctions being erased occurs prior to the juxtapositioning of the tune over complex harmonies as seen in the distant choir of m. 10 at the end of the choir’s final line—“worship Thee” (Ex. 4–17). The simultaneous combination of the hymn (representing the past) and the sounds of the city/crowd (from the present) is an expression of an idealized future—one in which, “the idea of the individual finding strength through community is essential to the program [programmatic concept] and ... grow[s] naturally from the hymn.”²⁵¹ The feeling of despair that has existed in past generations, as well as present, is combined with a sense of an optimistic future represented by the singing of the gospel funeral hymn over the “noise and pulsation of New York.”²⁵² In this case, Ives is projecting a future where the community gains strength through mutual support. However, the hymn tune cannot convey a sense of crossing temporal boundaries on its own. It is the support of expanded harmony that helps to blur temporal distinctions. Thus, the listener experiences a multidirectional flow into the past, present, and future simultaneously which, as expressed in the philosophy of Ives and the Transcendentalist writers, all reach together towards eternity. The harmony itself can be described as “static textures built on one or more layers of ostinati.”²⁵³ An important detail regarding the sequence of events in this piece is the fact that the crowd reacted in song as a

²⁵⁰ Ibid., 23.

²⁵¹ Ibid., 20.

²⁵² J. Peter Burkholder, *The Ideas Behind the Music* (New Haven: Yale University Press, 1985), 13.

²⁵³ Matthew McDonald, *Breaking Time’s Arrow* (Bloomington: Indiana University Press, 2014), 9.

result of hearing the melody of “In the Sweet Bye and Bye,” which was being played on a barrel organ on the street below.²⁵⁴ This is yet another example of a concept outlined earlier—the subject of stream of consciousness, whereby one event (in this case the playing of an organ melody) can affect subsequent events (crowd singing in response) much in the way a chord of expanded harmony can influence the chords to follow.

Temporal direction can also move strictly between the present and the past as in “Grantchester.” Although discussed earlier in terms of substance versus manner, this piece also reveals Ives’s approach of using expanded harmony to travel between different temporal orders. In the opening chord of A11 (with an augmented fifth), also viewed as “an angular *forte* sonority built from minor sevenths stacked over an A in the bass,”²⁵⁵ the harmony represents “a silence-breaking musical shock on par with the culture shock endured by Brooke’s persona, ...”²⁵⁶ initiating a journey back in time (Ex. 3–8).

The actual transition to the world of nature begins with the arrival of F13, creating a blurred texture, invoking the realm of memory while still in the present. Hence, the opening chord serves as a catalyst in moving from the present into the past which, following the transitional F13 chord, is ultimately realized at the end of the phrase “Would that I were in Grantchester” (supported by an E minor seventh chord on beat three of m. 3) (Ex. 3–8).

²⁵⁴ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 92–93.

²⁵⁵ Matthew McDonald, *Breaking Time’s Arrow* (Bloomington: Indiana University Press, 2014), 92.

²⁵⁶ *Ibid.*

The half step interval from F13 to Emin7 is consistent with Ives's use of ic1 as a portal into another dimension, reflected in the accompanying text. This harmonic shift also expresses a longing for a spiritual connection with nature as experienced by the subject of Brooke's poem. However, this desire is interrupted by the modern, urbanized world described in the middle of this song, which is saturated with musical references to Debussy and Wagner. The shift to the present comes following an E7 at the end of m. 5 (Ex. 4–24), occurring during the quotation of Debussy's *Prélude* with the words "clever modern men have seen." Following E7, we expect to hear a major triad (or A minor), conveying a V – I motion after the V/V (B13) to V (E7) (Ex. 4–25). Instead, a high F natural occurs in the piano part (reflecting a semitone between E7 and the pitch of F) harmonized by a G# minor chord²⁵⁷ (unlike the original harmony consisting of a high C-sharp harmonized by an E major triad). The effect is a shift to the present (represented by Debussy). But without a semitone shift in the harmony as well, motion towards present is not yet complete. This comes immediately following G# minor, whereby Ives provides the resolution to A9, completing the semitonal shift in harmony (Ex. 4–24). Thus, Ives avoids the expected resolution to the expanded harmony of A9 (from E7) by first employing a semi-tonal shift to F in the upper piano part as a means of crossing temporal borders in moving from the past to the present, reinforced by a subsequent resolution from G# minor to A9. As McDonald explains, "Ives often uses sudden semitonal shifts such as this one [G# minor to A9] to suggest portals in time—pathways between the present and

²⁵⁷ This chord may also be considered an F half diminished seventh chord in inversion.

remembered past ...²⁵⁸ In short, the point of entry into another portal is assisted by two expanded chords—E9 (with a ninth, F-sharp, and an added augmented fifth of C natural occurring on the word “seen”) and the A9 to which G# minor resolves on the word “through” (Ex. 4–24).

m.5

Na-ture there___ or Earth or such. And clever mod- ern men have seen a

l.h.

p

B¹³
(with a major seventh sonority conveyed through Bb in the melody)
V/V

E⁷ (second inversion/root is in the melody)
V/A

Prelude quotation:

m.6

Faun___ a-peep - ing through the green, and felt the Clas-sics were not___

Another possible label is F#^{ø7} in inversion.

G#m (under F melody in piano)
Note: This can be viewed as a transformation of Debussy's original E major triad under a C# melody note.

A⁹
(with added dissonance of C natural)
(I chord)

G#^{ø7}

Ex. 4–24. “Grantchester,” systems 3 and 4 (mm. 5–6), Crossing temporal borders through semi-tonal shifts.

²⁵⁸ Matthew McDonald, *Breaking Time's Arrow* (Bloomington: Indiana University Press, 2014), 96.

After fully leaving the modern, urbanized world of Debussy, referenced by the words “but these are things I do not know” (spoken over a Bb11 chord ... perhaps signaling a farewell to both Debussy and modern times/Ex. 4–25), Ives begins a gradual descent of blurred harmonies (generally the size of four notes in the last two systems of the piece), which finally arrive at the words “Grantchester,” supported by a return to the tonic of F (Ex. 4–26), initially heard as a simple triad in the bass clef on the fourth beat of m. 1. With the advent of F (specifically F11), Ives returns again to the past supported by the dream-like quality of this chord. However, F11 is presented with a displaced semitone of F-sharp in the right hand adding dissonance. The inclusion of this semitone relationship (F natural/F-sharp) also represents Ives’s musical commentary—acknowledging the present while longing for the past (even if only in the memory of the main character of the poem).

(spoken)

hear the Goat foot pi - ping low..... But these are things I do not know

l.h.

pp

Bb11
(whole tone quality - reference to Debussy)
(5th is augmented: enharmonically spelled as Gb)

Ex. 4–25. “Grantchester,” p. 38, system 3, Departing from the urbanized world of Debussy through a Bb11 chord.

cen - tur-ies blend and blur in Grant-chest-ter, in Grant ches ter.....

pp *ppp*

ppp l.h. *l.h.* *ppp l.h.*

decresc. e ritard.

(heard briefly as a C11 sonority prior to F natural on the following downbeat) F¹¹ (with inserted dissonance of F#)

Ex. 4-26. "Grantchester," p. 39, system 3, Crossing temporal borders through semi-tonal shifts.

A final element of Ex. 4–26 includes the top two notes of E natural and G natural in the right hand against F# (final system), which are described by McDonald as “several hushed minor-third chimes ... sustained in the right hand, dissonant with the bass as though distant overtones.”²⁵⁹ McDonald also makes reference to the actual chimes, which emanate from the bell tower of the Grantchester church as the hour reaches three (as found in the poem),²⁶⁰ reinforcing another programmatic element (Ex. 4–26, towards the end of the system). McDonald’s use of the word “overtones” refers not only to the overtones represented in each pitch of the chord (e.g. F-sharp as a distant overtone of the fundamental F) but also the naturally occurring overtones that result from the combined vocal and piano part: F-sharp, E natural, G natural, C natural, F natural, and B-flat. Heard as a chord, these pitches and their respective overtones help create the blurred quality referred to previously in the line, “The centuries blend and blur.”

²⁵⁹ Ibid., 87.

²⁶⁰ Ibid.

Consequently, the expanded chord of F11, together with the added semitone dissonance of F-sharp, function not only to traverse temporal borders but also to blur the sense of these borders, couching the whole experience in that of a dream state. Both the F11 chord and semitone addition of F-sharp suggest the back and forth journey between past and present. Lastly, Ives uses this final tri-chord of the right hand (F-sharp, E natural and G natural) to also refer back to the initial presentation of these pitches heard earlier in the song at the word “Grantchester” (m. 2, fifth beat)—reappearing in the final system accompanying C11 as well as F11 (Ex. 4–26).

The crossing of temporal borders through semitonal shifts is also found in the recurring example “The Things Our Fathers Loved.” Discussed earlier as a reflection of childhood memories, the opening line of this song suggests a longing to connect with the past: “I think there must be a place in the soul all made of tunes, of tunes long ago.” Ives achieves this journey to the past through a semitonal shift from the established key of F major (confirmed in mm. 7–8 with a V7 – I cadence) to the tonal center of F-sharp on the downbeat of m. 4 in which the F11 chord from m. 3 transitions by half step to F#13 (major seventh sonority) (Ex. 4–4). The jarring shift from F major to F# major (with extended chord members) helps to facilitate that which is expressed in the text—the longing for a place made of tunes from the past, suggesting a desire to travel through time to the memories of both a child and his father. This very desire is confirmed a second time beginning in m. 5 where another semitonal shift occurs from an Eb9 to an A9 chord (downbeat of m. 6) by way of a semitone bass motion from B-flat at the end of the measure to A natural at the downbeat of m. 6. Moving from the

dominant ninth chord to the sound of a minor ninth chord creates a transition to a place in the past where Ives can “hear the organ on the main street corner” (m. 6). In short, the semitonal shift connects the expanded chords of Eb9 and A9 which both assist in journeying into the past.²⁶¹ It also serves to introduce the first memory after the motion of F to F# in mm. 3–4. In a sense, each semitonal shift conveys a deeper journey into the memory of the storyteller.²⁶² In the song “Tom Sails Away,” Ives crosses temporal borders in reverse direction, moving from the past (set at the beginning of the piece in m. 2) to the present (as seen in the final two measures). The effect is achieved though a semitonal shift over the course of the piece and is separated by other harmonies. The first indication of a shift in temporal order comes following the mystical introduction of D15 and A#7 in m. 1 (Ex. 4–27) with the arrival of F#11²⁶³ in m.2. The harmony of F#11, together with the opening line “Scenes from my childhood are with me,” suggest that the main character is already connected to the past, experiencing it as active (Ex. 4–28). Much later, the final text of “scenes from my childhood are floating before my eyes” conveys a crossing over into the present (“floating before my eyes” is synonymous with fading into the distance) assisted by a semitonal shift from the chord at the beginning of the piece (F#11 in m. 2) to the new chord of F11 in the penultimate measure, thus crossing temporal borders from the past to the

²⁶¹ Shift in time is determined by the motion of the bass and not from Eb9 to A9, which is obviously a tritone. However, a transition to the past is highlighted by the minor seventh quality of A9—the arrival chord.

²⁶² While it may seem arbitrary as to which direction in time and space the author is moving through chord motion, the text assists in our understanding.

²⁶³ Made up of a minor triad, minor seventh, and natural eleventh—imparts a dream-like backdrop (perfect for recalling memories). Note: the sound of a natural eleventh, within a minor seventh chord, imparts a similar effect as a raised eleventh within a major seventh chord.

present (Ex. 4–28). In contrast to its use in “The Things Our Fathers Loved” (with adjacent chord motion) semi-tonal shifts occur over the course of the song.

slowly and quietly **pp** 3 3

Scenes from my childhood are with me, I'm

ppp *slowly* *ten.* 3 2 3

D¹⁵ (with added major seventh of C# to create dissonance) **A#7** (7th is the lowest note; top pitches suggest a foreign key atop A#7. The combination creates a brief sense of bitonality) **F#11** (minor triad foundation) **F#11** (minor triad foundation)

Ex. 4–27. “Tom Sails Away,” mm. 1–2, Crossing temporal borders through semi-tonal shifts. Note: A#7 is voiced with the seventh (G#) as the lowest note of the chord.

Very slowly, as in beginning **pp** **ppp** 3

there! Scenes from my childhood are float ing be-fore my eyes.

ppp **ppp** **ppp** **ppp** **pppp** *rall.* *rall.*

F¹¹ **F¹¹**

Ex. 4–28. “Tom Sails Away,” p. 114, system 3, Crossing temporal borders through semi-tonal shifts.

g) Geography and visual images

While notions of temporality demonstrate programmatic intent, there is perhaps no greater exploration of programmaticism than in pieces depicting geography and visual images (especially as experienced by Ives directly). In one such piece, *Central Park in the Dark*, Ives presents “the sounds of nature one might hear from a bench at night in Central Park through a soft, dissonant series of experimental chords in the strings, over which the tunes and noises of the city are heard.”²⁶⁴ The ten-measure string ostinato (which repeats throughout) sets the stage for “night sounds and silent darkness,”²⁶⁵ represented by a mixture of expanded chords made up of fourths, fifths, whole tones, and tertian elements as was seen in Ex. 1–11. What makes the ostinato sound fresh and constantly in motion is the changing bass line that Ives provides throughout the ostinato, creating a series of unique harmonies in relation to the bass. As Hitchcock observes,

The ten bar span is divided into four segments ... but the division is one of an unpredictable 2 + 3 + 3 + 2 bars; the harmonic structure confirms the division (but also the unpredictability) by shifting from augmented triads (bars 1–2) to fourth-chords (bars 3–5) to chords built of alternating augmented fourths and perfect fifths (bars 6–8) to fifth chords (bars 9–10).²⁶⁶

As the piece progresses, impressions of the city creep in with “... sounds from the Casino over the pond ... —of newsboys crying ‘uxtries’—of pianolas having a

²⁶⁴ J. Peter Burkholder, *Charles Ives and His World* (Princeton: Princeton University Press, 1996), 19.

²⁶⁵ Philip Lambert, *The Music of Charles* (New Haven: Yale University Press, 1997), 174.

²⁶⁶ H. Wiley Hitchcock, *Ives* (London: Oxford University Press), 80.

ragtime war in the apartment house 'over the garden wall,' a street car and a street band join in the chorus, etc."²⁶⁷

While the "background noises are usually soft,"²⁶⁸ the combination of events in and around New York City (represented musically) creates a sense of cacophony which, when heard against the string ostinato and moving bass line, generates many fleeting instances of expanded chords (most occurring too quickly for the ear to settle on any one harmony ... especially once the piano, clarinet, and other woodwinds enter in support of the tune "Hello My Baby"). Two obvious melodies jump out of this murky and bombastic texture in the way of borrowed tunes—the aforementioned "Hello My Baby" and "Washington Post March," both of which add to the experience of songs that might emanate from various nightclubs or pianos in apartments. Hearing these songs over complex harmonies made up of "parallel dissonant chords"²⁶⁹ (as Burkholder calls them) creates a visceral experience of sitting in the park at night, listening to the city rush by.

The parallel dissonant chords that Burkholder describes are of a quartal, quintal, and/or tertian nature²⁷⁰ as seen in Ex. 1–11. While the use of such harmony helps convey the imagery and direct sense of the park at night, Burkholder attributes the choice of these chords to Ives's background in playing

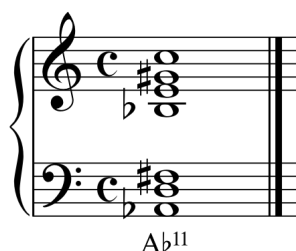
²⁶⁷ Ives's "Note," in *Central Park in the Dark*, ed. Jacques-Louis Monod with notes by John Kirkpatrick (Hillsdale, N.Y.: Boelke-Bomart, 1973), 31.

²⁶⁸ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 32.

²⁶⁹ J. Peter Burkholder, "The Organist in Ives," *Journal of the American Musicological Society* 55, no. 2 (Summer 2002): 283.

²⁷⁰ Tertian harmonies occur in violin I at mm. 10–12 as well as mm. 11–12 in the viola.

the organ in which stacks of chords are assigned different dynamics. Included in this background is experience with the use of pedal points (also employed in *Central Park in the Dark*/Ex. 1–11), mutation stops and mixtures.²⁷¹ The insertion of Ives's background with organ is especially relevant to the use of expanded chords in *Central Park in the Dark* and other works as Ives's frequently assigns softer dynamic to the overtones, which sit atop thick, foundational chords (the conclusion of "Emerson" from the *Concord Sonata* is another example—see Ex. 3–17). In *Central Park in the Dark* Ives concludes with a soft and ephemeral response (Ex. 4–29) following the raucous middle section; the effect is mystical and otherworldly, especially due to the dynamic change of the loud section to the quiet floating chords of the final measures "evok[ing] the soft sounds of nature after a buildup of urban noises."²⁷²



Ex. 4–29, *Central Park in the Dark*, Final measure (reduction), Mystical, other-worldly ending (imparting a whole-tone sonority).

A more intimate example of imagery is contained in the orchestral version of "The Housatonic at Stockbridge" (begun in 1908 and completed in 1910 as the third movement of *Three Places in New England*),²⁷³ for which two simultaneous

²⁷¹ J. Peter Burkholder, "The Organist in Ives," *Journal of the American Musicological Society* 55, no. 2 (Summer 2002): 283.

²⁷² *Ibid.*, 277.

²⁷³ Composed to capture an experience from his honeymoon.

layers of music move about in a mystical fashion with expanded harmony and swirling chromatic gestures supporting a hymn melody in the English horn.²⁷⁴ In this work, “Ives sought to capture the colors and notion of the mist, the waters, and the trees in dissonant, irregular ostinatos in the upper strings, and the sound of singing from a church across the river.”²⁷⁵ The feeling of a mystical memory is conveyed by the use of an essentially grounded harmony (C# major) in the lower strings of the first few measures, with passing harmonies in violins II and III, imparting the sound of whole tone activity through the dyads of G natural/B natural and F natural/A natural in mm. 1–2 of violin II –III (Ex. 4–31). Against the C# triad of the bass and cello, these dyads can also be heard as elements of a thirteenth chord, accompanied by chromatic activity in violin I, IV, and violas as well as a lyrical hymn in the piano (harp) and, later, in the bassoon (Ex. 4–30). The expanded harmonies in the first few measures of the strings also include a pedal point (C-sharp), which helps to strengthen the sense of a tonic, highlighting the contrasting tonalities between the sections of the orchestra.²⁷⁶ In *All Made of Tunes*, Burkholder describes the visual aspects of this piece in terms of layers—all of which can be assigned to harmonic qualities spread throughout the orchestra. What he terms as the foreground, representing the events themselves,²⁷⁷ can be seen as the act of watching the water of the Housatonic on

²⁷⁴ The principal melody is from Isaac B. Woodbury’s hymn tune “Talmar and Chester.”

²⁷⁵ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 327.

²⁷⁶ It is interesting to compare this version to the piano version in understanding how Ives uses the upper extensions of a chord on piano to simulate layers used for similar imagery in the orchestral version.

²⁷⁷ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 380.

the day of Ives's honeymoon with a choir singing in the background. Musically, this aspect of foreground is represented by the open voicings of the major chords in the low to mid strings (as described earlier) as well as the lyrical English horn, representing "the distant singing from the Church across the River."²⁷⁸ These are the most prominent musical aspects of the first section of this piece and correlate with the foreground. The background is, as labeled by Burkholder, "often in many layers of varying audibility, evok[ing] the noises of environment that one may notice or ignore but are nonetheless always there."²⁷⁹ These elements consist of the actual rippling and swirling river as well as the rustling leaves—both conveyed through the complex rhythmic groupings and chromaticism of violin I (Ex. 4–30). These rhythmic gestures are accompanied by dyads in violin II & III (Ex. 4–30), which contribute elements of the C#13 chord. The chromatic material of violas and violins I and IV, and the floating dyads of violins II and III (along with occasional punctuation by the piano) provide the piece with the feeling of a mystical memory, depicting a swirling river and distant choir.

The use of these different strata is an example of Ives's approach to music about life experiences where he "develop[s] the convention of music sounding in at least two simultaneous layers."²⁸⁰ The result, as described earlier, is the formation of expanded chords that, along with decorative material of chromatic ostinati, provide a convincing sense of the trees and leaves rustling in the

²⁷⁸ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 65.

²⁷⁹ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995), 380.

²⁸⁰ Ibid.

Piano - Celesta

Harps (one or two)

Harp (one only)

pppp

Adagio molto (Very slowly) (about 50 = ♩)

similar chromatic material (repeated 10 groupings)

10

3rd and raised 5th

11th and 13th

7th and 11th

sordini div.

pppp

chromatic decoration:

5

sordini

ppp

sordini

pp 3 3 3 3 3 3 3 3

Violas

div.

p-mp

Cello

Bass and Organ Pedal (16;32' ad lib.)

p-mp

C#¹³ (between bass, organ pedal, cello and violins II and III)

Ex. 4–30. “The Housatonic at Stockbridge,” *Three Places in New England*, mm. 1–2, Sounds of rustling leaves over the swirling river.

background of the swirling river in *Housatonic*. By the second measure of letter G (predominantly in the woodwinds and brass) the chromatic gestures from the beginning move towards the forefront along with the marching of thick expanded chords, creating a cacophony of sound (not shown, but found in mm. 2–3 of the score). Although this section seems out of character from the general tone of the piece, its contrast enhances the beautiful, haunting effect of the second to last chord (a soft, open voicing of C#min7 in the strings with a slight dissonant rub

due to the passing note of F natural in the viola).²⁸¹ The chord, serving as a reflection of the beautiful river and choir, is followed by an expanded chord of F#9—the final chord (Ex. 4–31). The F#9 chord (of a dominant seventh nature) possesses a strong desire to resolve, yet does not. Here again, Ives employs the technique of a brief and gentle coda-like ending with an unresolved harmony. Both chords present an effective way to conclude the recalling of a personal memory in a manner that is both reflective and continuous (in line with the transcendentalist concept of eternity existing in the present tense). In the spirit of other pieces mentioned, Ives continues the practice of inserting a dissonance of ic1 within an otherwise simple tertian chord (e.g. C#min7) as found in the second to last chord of the final measure between violin I (E natural) and viola (F natural)²⁸²—a decidedly Ivesian trademark.



Ex. 4–31. “The Housatonic at Stockbridge,” *Three Places in New England*, final measure, Serene coda (string reduction). Note: The pitches F natural and E natural of the downbeat are typical of the semitone clash Ives’s includes in an otherwise tertian harmony.

²⁸¹ Technically, the downbeat can be viewed as an expanded chord if F natural (in the viola) is considered part of the harmony, in which case the chord would be labeled as C#9 with E natural serving as a raised ninth. However, since F natural functions more as a passing tone, the harmony that sounds is effectively labeled C#min7.

²⁸² The seventh occurs in the viola on the second eighth note of the downbeat. The pitch F natural is regarded as a passing major third (downbeat in viola) which moves to B natural while E natural in violin I is considered the third of C#min7. Although F natural is heard only briefly, it still reflects Ives’s penchant for employing dissonance of a semitone.

h) Notation as a source of imagery

Similar to “The Housatonic at Stockbridge,” Ives conceived of two versions for another work, which employs two titles. The first, *In the Cage* (1906), is an orchestral chamber arrangement and part of *A Set of Pieces for Theater or Chamber Orchestra*. The second, “The Cage” (1911), is an arrangement for piano and voice. While both versions contain programmatic elements that refer to the physical structure of a cage supported by harmony/voicing, the chamber version will be the focus here as the vocal/piano version more effectively conveys meaning through word painting (a technique to be explored in chapter five). That said, the first example of programmaticism is conveyed through the use of quartal and quintal chords in mm. 1–4 (voiced in the string section), to represent the pacing of the leopard (Ex. 4–32). The choice of quartal and quintal harmony over other types of harmony is purposeful. As Ives states,

Technically this piece is but a study of how chords of 4ths and 5ths may throw melodies away from a set tonality [The] principal thing in this movement is to show that a song does not necessarily have to be in any one key to make musical sense.²⁸³

In using the undefined tonality of quartal/quintal chords, Ives accomplishes the notion of a leopard pacing endlessly and impatiently, assisted by a timpani ostinato, which halts slightly in m. 4 at the appearance of a hexachord.²⁸⁴ This hexachord symbolizes the point where the leopard stops for food (as revealed in the piano/vocal version); the halted timpani rhythm in the middle of m. 5 helps to convey this image (Ex. 4–32). The hexachord also represents the physical bars

²⁸³ H. Wiley Hitchcock, *Ives* (London: Oxford University Press), 16.

²⁸⁴ Hexachord consists of two sets of perfect fifths (violas and cellos) and one instance of a perfect fourth (vln. I) as well as the interval of a sixth (or third as an inversion) between the viola and violin (E natural, C-sharp).

of a cage in its appearance on the score. This concept is supported by McDonald who states, “Ives often used notation evocatively or symbolically, more concerned with the appearance of notes on the page than with communicating unambiguous instructions to the performer.”²⁸⁵ Close to the end of the movement (m. 12), a rolled piano chord interrupts the ensemble bearing some resemblance to m. 4 in which the leopard stops for meat²⁸⁶ (Ex. 4–33). The nature of the rolled chord is more accurately labeled a polychord which, again, serves to represent a halt in the leopard’s pacing. Beyond the major seventh interval in the bass (A natural and G-sharp), three chords can be identified in this rolled polychord consisting of: D9,²⁸⁷ A+ (A natural, C-sharp, F natural) and a G major triad appearing at the very top of the structure—all of which collectively represents the pause of the leopard (Ex. 4–33).²⁸⁸

²⁸⁵ Matthew McDonald, *Breaking Time’s Arrow* “Introduction” (Bloomington: Indiana University Press, 2014), 1.

²⁸⁶ The assumption is made due to the information revealed in the piano/vocal version.

²⁸⁷ Within this chord, D-sharp functions as a lowered ninth.

²⁸⁸ It is worth pointing out that the chord itself is of a different pitch construction than found in the piano/vocal version.

Andante (♩ = about 80)

Repeat 2 or 3 times

Flute

English Horn

Tympani D_A

Represents leopard pacing

Piano (*leader*)

Violin I

Viola

Violoncello

Evenly and listlessly with no change in tempo or volume throughout. *pp* throughout

f throughout

pp > > simile

Repeat 2 or 3 times

Andante (♩ = about 80)

Repeat 2 or 3 times

Quartal harmony

Hexachord: quartal, quintal, and tertian

Ex. 4-32. *In the Cage*, mm. 1-5.

Represents leopard pausing for meat:

Piano

R.H.

L.H.

R.L.

L.H.

p

p

G

A⁺

D⁹
(D, F#, C, D#, A)

Major 7th (A, G#)

Ex. 4-33. *In the Cage*, mm. 11-15 (piano only)

Chapter 5

Technique

a) Word painting

While it is clear that expanded harmony is utilized to represent many aspects of Ives's music and life, there are a number of actual techniques employed in chord construction to achieve such representation. Perhaps the most relevant to the previous chapter is the topic of word painting. Although programmatic in nature, word painting is a centuries-old technique, used with extreme creativity in the hands of Ives. In the chamber version of *In the Cage*, programmatic details are conveyed strictly through music. However, in the piano version (known as "The Cage"), lyrics are added, providing a direct connection to musical expression. As in the orchestral version, stacked quartal harmonies are presented in the piano introduction (m. 1) with a mixture of quartal, quintal, and tertian harmonies on the whole note chord at the end of the first phrase; the notation itself represents the visual image of a cage (itches from bottom to top are: F natural, D natural, A natural, E natural, C-sharp, and F-sharp) (Ex. 5–0).

After the introduction, the lyrics make clear that the music is used as a source of word painting, especially with the line, "A leopard went around in his cage from one side back to the other side; he stopped only when the keeper came around with meat." The repeated stacked harmonies of m. 1 represent the act of pacing, and the halted chord at the end of the phrase is the point of stopping for food (meat) (Ex. 5–0).²⁸⁹

²⁸⁹ Although the text comes after the introduction, it can be seen as an explanation of what is taking place in the first repeated measure.

Quartal harmony / stacked 4ths:

*evenly and mechanically,
no ritard., descrec., accel. etc.
(repeat 2 or 3 times)*

f A leap-ard went a-round his cage from one side

3
back to the oth - er side; he stopped on - ly when the keep-er came a-round with meat;

Mixed chord (reflecting side of cage)

Ex. 5–0. “The Cage,” p. 144, mm. 1–3, Word painting and expanded harmony.

Even the rhythm of the opening phrase, which becomes faster through a decrease in rhythmic value, works together with the harmony to convey the restlessness of pacing in a confined cage.

Another example of word painting exists between the word “side” (m. 3/system 2) and its accompanying chord, whereby the harmony changes from quartal to a combination of quartal/quintal and tertian (Ex. 5–0). The interval from B-flat to G natural is considered tertian by its inversion and the other intervals consist of a fifth, third (inverted), and fourth. Just as with the last chord of the first measure, the mixture of sonorities is combined with a halting rhythm (dotted

quarter note) to represent the side of a cage in contrast to the open space (quartal/quintal harmonies) in which the leopard paces.

A third example of word painting, which helps to clarify the same spot in the orchestral version, is the chord that occurs on the word “wonder” (Ex. 5–1). The surprise appearance of this expanded chord contains more meaning when tied with the text. This complex harmony, which differs in pitch content from the

4

A boy who had been there three hours be- gan to won der, ___ "Is ___ life an - y thing like that?"

F11 (inversion)

F7 (inversion)

p

Note: All notes not marked with sharp or flat are natural.

Polychord

Ex. 5–1. “The Cage,” p. 144, mm. 4–5. Expanded harmony used to express the word “wonder.” Note: The version from *114 songs* has different pitches for this chord.

orchestral version, conveys a sense of wonder through its polychordal approach consisting of an F7 chord in a 6/5 position (lower four pitches consisting of: C natural, D-sharp, F natural, and A natural)²⁹⁰ with an F11 chord occupying the right hand part (upper pitches consisting of D-sharp, A natural, C-sharp, F natural, B natural, D-sharp, and G natural)(Ex. 5–1). Similar to the orchestral version, the use of an augmented fifth helps to communicate a sense of the word

²⁹⁰ Chord is spelled enharmonically (e.g. D-sharp in place of E-flat).

“wonder,” projecting a mysterious, dream-like atmosphere (due to the inherent qualities of whole tone chords/scales). Since the vocal/piano version was done at a later time, perhaps Ives reconsidered adjusting the harmony to convey a more convincing portrayal of the word “wonder.” Along with rhythmic values and chord construction, Ives also uses the absence of bar lines between the first and last measure to represent the endless pacing of the leopard heard throughout the heart of the song.

Parallel to the piano version of “The Cage,” the piano vocal version of “The Housatonic at Stockbridge” contains lyrics that come to life through the technique of word painting. This occurs at the first phrase “contended river,” which is supported by ninth and eleventh chords carried over from the introduction (Ex. 5–2). The open voicings of the base triad (C-sharp, G-sharp, E-sharp) on the downbeat of m. 7 reflect the feeling of the word “contended,” assisted by the upper dyads, forming the eleventh and ninth chords.

C#11 +5 A#9* A#13
*5th in bass
(added to create a dissonant rub with the natural 5th of G-sharp in the preceding half note chord of C-sharp)

* NOTE:—The small notes in the right hand may be omitted, but if played should be scarcely audible. This song was originally written as a movement in a set of pieces for orchestra, in which it was intended that the upper strings, muted, be listened to separately or sub-consciously as a kind of distant background of mists seen through the trees over a river valley, their parts bearing little or no relation to the tonality, etc. of the tune. It is difficult to reproduce this effect with piano.

Ex. 5–2. “The Housatonic at Stockbridge,” mm. 5–8, Word painting with expanded harmony on the word “contended driver.”

Even without the chromatic ostinati of the strings in the orchestral version, Ives still manages to convey the sound of the rustling leaves and swirling river through the dyads of the right hand of the piano part, which contain the dreamy, mystical quality (used here as upper extensions of expanded chords). The large, parallel voicings used for harmony (as in m. 7) harkens back to Ives's background as a church organist. As Burkholder observes, "the piano postlude can be heard as a direct reference to the hand organist."²⁹¹ This aspect of the piece produces a link between Ives's musical background, as discussed earlier, and the chord types (and voicings) used throughout his oeuvre. In addition to reflecting the words "dreamy realm" and cloudy willow" with expanded harmony (Ex. 5–2a), word painting is also used to highlight pivotal points, such as m. 12 where an F#17 chord is used in conjunction with the words "plumy elm"; these words receive further enhancement from the polychordal structure in m. 13 (Ex. 5–3). In arpeggiating a chord of F#17, the representation of an elm decorated with feathers is sonically depicted, along with the broken polychord of m. 13. A direct relationship between harmony and text can also be seen in m. 32 whereby Ives employs an arpeggiated D13 (or quintal harmony with an added major second interval) to mirror the word "ripple" (Ex. 5–4). Similarly, activity of the colored leaves of the fall, which "faster drift," are supported by complex chords, quartal harmony and a polychord of Bb/F minor in mm. 33–34 as seen in Ex. 5–5—all of which move quickly, conveying a feeling of restlessness.

²⁹¹ J. Peter Burkholder, "Quotation: and Emulation: Charles Ives's Use of His Models," *The Music Quarterly* 71, no. 1 (1985): 24.

dream y realm The cloud-y wil - low and the

mp *ppp* *mp*

C#maj7 (I) F#13 (IV) F13* (iii) F#13 (IV) F#13** (IV) (with both an augmented and natural 5th) C#11 (I)

+5***

*Minor triad foundation with the third (enharmonically spelled as G#) in the bass
 ** Harmony is an extension of the F# triad (whole notes) found in the beginning of the measure. If considered as its own harmony, the label would change to Bb6 (in inversion).

*** (applies to same pitch throughout measure)

Ex. 5–2a. “The Housatonic at Stockbridge,” mm. 9–11, Word painting with expanded harmony. Example also serves to demonstrate juxtaposition of harmonic styles (simple triads with expanded harmony).

plu - my elm:.....

ppp *mf* *f* *pp*

F#17 G#m7 F# Eb Eb9 (5th in the bass)

Polychord: *pp* r.h.

l.h.

Ex. 5–3. “The Housatonic at Stockbridge,” mm. 12–13, Word painting with expanded harmony on the word “elm” (more specifically, plummy elm). This example also serves to demonstrate Juxtaposition of harmonic styles (simple triads with expanded harmony).

m.31 *a little faster*

.....Ah! there's a res - tive rip - ple, and the swift red leaves Sep - tem - ber's

in a gradually animated way

D¹³

Ex. 5-4. "The Housatonic at Stockbridge," mm. 31-32, Faster motion initiated by a D13 chord. Note: The chord of D13 can also be viewed as a quintal chord with added secundal dissonance.

m.33

first-lings fast - er drift;Wouldst thou a - way, dear stream? Come, whis-per near! I al-so of much

mf

cresc.

Complex chords

Quartal harmony / B^b (single pitch)

Polychord

B^b(add 9) *

F_m

*This can also be referred to as B^b(add 2). The chord itself is technically not a 9th chord ... hence the indication "add 2." The chord itself is an inversion based on the third (D).

Ex. 5-5. "The Housatonic at Stockbridge," mm. 33-35, Faster motion assisted by a complex chords, quartal harmony, and a polychord of Bb/F minor.

Finally, the word "fear" is depicted by a fast-paced, whole-tone gesture initiated by a D#13²⁹² chord in m. 36 followed by whole tone scalar activity (Ex. 5-6). The combination of increased dense harmonic material and whole-tone gestures (working together) reflect the physical experience of hearing the hymn tune (from

²⁹² This chord includes E natural, functioning as a lowered ninth within a minor seventh setting, as found in the vocal line. (Ex. 5-6).

m.36

fear:

8^{va}

Gesture continues

ff

Whole tone activity

D#13

Ex. 5–6: “The Housatonic at Stockbridge,” m. 36, Whole tone activity and D#13 used to reflect the word “fear.”

the choir of the church), which has been “drowned out by the rushing river and the roar of the sea.”²⁹³ Word painting continues with the chord on the downbeat of the penultimate measure, marking the arrival of the word “sea” and assisting in painting the image of a large body of water through a massively voiced Bb13 chord—a harmony whose voicing is both expansive and reflective (Ex. 5–7). This chord is followed by an extremely soft C# minor chord and finally the unresolved harmony of F#9, whose open voicing reflects back on the open voicing of the C# major triad from m. 1 as well as the serene, gentle quality of the opening measures.

²⁹³ J. Peter Burkholder, “The Organist in Ives,” *Journal of the American Musicological Society* 55, no. 2 (Summer 2002): 277.

m.39 *fff* *non decresc.*

sea! _____

ppp *very slowly* *piu ten.*

forte *Ped.* *Piano* *Ped.*

Bb13 *C#m* *F#9*

Ex. 5–7. “The Housatonic at Stockbridge,” p. 35, system 3 (final two measures), Expanded harmony used to reflect the word “sea.” Note: One can take liberty in viewing the first chord of m. 39 as Bb13 with stacked triads of A minor and D minor, rendering this a polychord (an exception to the rule whereby polychords require a separation of a fourth between chords).

The technique of word painting can also employ chords to express the multivalence of a word throughout the course of a piece. In *Psalm 90* (first version ca. 1894–1901; final version 1923–1924) Ives uses a simple and soothing harmony to represent the word “God” (e.g. C major triad with an added ninth for the word “Lord” (substitute for “God”) in m. 6 and C6 for the word “God” in m. 20—see Ex. 5–8 for both chords). In contrast to this, Ives refers to “God’s wrath” and the word “wrath” using expanded chords of a more dissonant nature. In m. 2, C13²⁹⁴ is used to accompany the words “God’s Wrath against sin,” which “suddenly appears to interrupt the serene, diatonic ‘Eternities’ style”²⁹⁵ of m. 1 as

²⁹⁴ Note that the C13 chord includes a major seventh (B) and raised eleventh (F-sharp).

²⁹⁵ Larry Starr, *A Union of Diversities* (New York; Schirmer Books, 1992), 83.

represented by C (add9) and the subsequent open quality of a quintal chord in Ex. 5–9.

m. 6 m. 20
"lord" "God"
C(add9) Amin

Ex. 5–8. *Psalm 90* (reduction), m. 6 (above left) and m. 20 (above right), Word painting with chords to support the words “lord” and “God” respectively. Note: A minor is in first inversion.

The Eternities Creation God's wrath against sin
C(add 9) Quintal chord C¹³

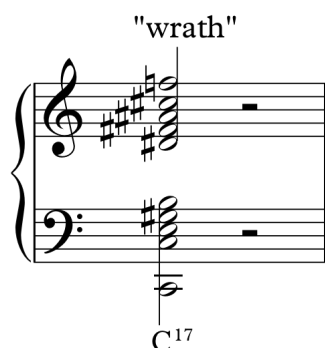
Ex. 5–9. *Psalm 90* (reduction), mm. 1–2, Word painting to show contrast within expression of text (original text is written in an upward direction).

Use of chords such as C13 with this particular construction helps “to tint the various verse settings ...”²⁹⁶ underscoring the meaning of select words. Since “God” is mentioned along with the word “wrath,” the slightly more dense harmony of C13 is employed. In another instance, a highly complex C17 chord is used in conjunction with the word “wrath”²⁹⁷ on the third beat of m. 52, providing another

²⁹⁶ H. Wiley Hitchcock, *Ives* (London: Oxford University Press), 34.

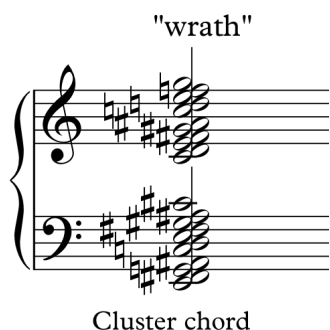
²⁹⁷ The assumption here is that the text is referring to God’s wrath as previously indicated.

level of intensity (Ex. 5–10). Effectively, each harmony serves as a varied leitmotif for the word “God.”²⁹⁸



Ex. 5–10. *Psalm 90* (reduction), m. 52, Dense harmony used to reflect intensity for the word “wrath.” While this chord could be labeled as a polychord (F#maj7/C9), the voicing imparts the sense of an extended C harmony (especially due to the octave C in the bass).

A third instance of the word “wrath” is found supported by a cluster chord in m. 62 (final eighth note) against a C pedal (Ex. 5–11). In this case, the pitches project a different intensity for the word “wrath,” conveying an even darker and angrier emotion.



Ex. 5–11. *Psalm 90* (reduction), m. 62, Cluster chord used to reflect intensity for the word “wrath” (final eighth note).

²⁹⁸ Note that the word “wrath” is interchangeable for the word “God” as it portrays one particular emotional state of God. Thus, each harmony conveys a unique expression of “God.”

Another effective means of highlighting the sense of word painting and the meaning of selected harmonies is by maintaining a sustained pedal, which Ives does throughout this piece. By employing a C pedal, the listener can experience the different meanings (and emotions) inherent in the text and harmony against a grounded pitch; the stable pedal tone serves as a means of comparison between the chords. In fact, the use of varied chord types against a pedal tone is a favored approach in Ives's music. This is perhaps why Harmony Ives "remembered her husband citing [Psalm 90] as the only one of his works which satisfied him."²⁹⁹ The pairing of specific harmonies with repeated words is also significant. "As Donald Graham explains, Ives continues throughout the piece to associate chords with the concepts as they arrive in the text, so that the chords become 'harmonic leitmotifs.'"³⁰⁰ Therefore, chords can sound without text at a later point, conjuring an association with the text.

Additional examples of word painting appear, if only briefly, in "Nov. 2, 1920" (1921). In this song, the word "hell" is accompanied by ascending cluster chords in the piano's register as well as descending dyads in contrary motion in the treble clef (Ex. 5–12: second system, m. 1, p. 54). As with *Psalm 90*, the word God is used and associated with an expanded chord, but the meaning changes based on the quality of the chord type. In the case of Ex. 5–13, "God" is seen as a force of action that will drive the hog heart back to his hole. To represent "God" in a powerful context, the word is accompanied by a

²⁹⁹ David Nichols, "Unanswerable questions/Questionable Answers," *Music & Letters* 75, no. 2 (May, 1994): 251–252.

³⁰⁰ Philip Lambert, *The Music of Charles* (New Haven: Yale University Press, 1997), 66.

polychord³⁰¹ of B minor over F# major. A strong dissonant quality emerges between these chords and the chosen voicing—especially between the sound of A-sharp in the left hand and B natural in the right hand. The composite sound is certainly forceful, effectively contributing to the technique of word painting.

Ascending cluster chords with descending dyad clusters:

The image shows a musical score for piano. The title above the staff is "Ascending cluster chords with descending dyad clusters:". The score is in B-flat major (two flats). The piano part consists of two staves. The right hand (treble clef) plays ascending cluster chords (groups of three or four notes) and descending dyad clusters (pairs of notes). The left hand (bass clef) plays descending dyad clusters. The lyrics "hell with i deals!" are written below the right hand staff. The dynamic marking *ff* (fortissimo) is present at the beginning of both staves.

Ex. 5–12. "Nov. 2nd, 1920," p. 54, system 2, m. 1, Cluster chords in contrary motion (piano part) to reflect the word "hell."

The image shows a musical score for piano. The title above the staff is "Polychord used to reflect the word 'God'". The score is in B-flat major (two flats). The piano part consists of two staves. The right hand (treble clef) plays ascending cluster chords and descending dyad clusters. The left hand (bass clef) plays descending dyad clusters. The lyrics "But he won't stay out long, God al-ways drives him back!" are written below the right hand staff. The dynamic marking *ff* (fortissimo) is present at the beginning of both staves. The tempo marking "l.h." (lento) is present below the right hand staff. The key signature "Bm / F#major" is written below the left hand staff.

Ex. 5–13. "Nov. 2nd, 1920," p. 55, system 1, Polychord used to reflect the word "God" in a forceful context.

³⁰¹ The two chords of B minor and F# major are less than a fourth away. However, this is an instance where the grouping of the two chords is very distinct; in such instances the term polychord or expanded tertian chord may be used.

In the song “December” (1920), an F17 chord (closed voicing) is heard over an A-flat pitch in the bass (the 17th of the chord) to emphasize the word “weight.” The sheer size and voicing of the chord is a musically graphic display of word painting (Ex. 5–14).

F 17 / Ab (single pitch)

Ex. 5–14. “December” p. 84, system 2 (end of), F17 chord used to reinforce the word “weight.”

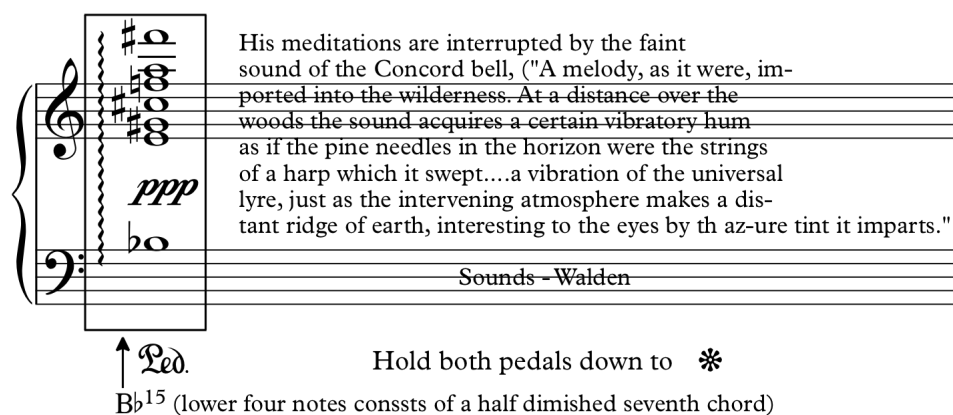
In *Psalms* 67, the word “God” appears in the opening Anglican chant in the context of a request for his mercy by the congregation. To represent the use of God in this passage in a plea for mercy, an expanded chord is used which can be viewed as a polychord of C major over G minor 7, but actually sounds more like a C9 with the fifth in the bass (Ex. 5–15); the sonority conveys that of a positive, hopeful quality.

G¹³
(can also be perceived as C⁹ with
the fifth in the bass)

Ex. 5–15. *Psalms* 67, m. 1, Expanded harmony used to convey a different context for the word “God.”

Regardless of the label, the chord used in Ex. 5–15 is quite different in sound than the thirteenth or cluster chords used to accompany God in previous examples. In this instance, the chord of C9 (or G13) conveys the concept of God as merciful—one who blesses his people. This is achieved through the open sound of an expanded chord that also lacks an overt sense of dissonance (the major second interval between B-flat and C natural is the extent of dissonance). As these examples show, Ives chooses expanded chords with attention to the meaning and/or the feeling associated with the word, which is also affected by the context of surrounding words.

In another example, word painting is used to set up the imagery of the text (unaccompanied by a melody) as in “Thoreau” (1915—song #48 of *114 Songs* adapted from themes used in *Second Pianoforte Sonata*). The first chord of the piece (Bb15—including a dissonant F# at the top of the chord) imparts the sound of a bell or chime due to its expanded nature and numerous overtones (Ex. 5–16).



His meditations are interrupted by the faint sound of the Concord bell, ("A melody, as it were, imported into the wilderness. At a distance over the woods the sound acquires a certain vibratory hum as if the pine needles in the horizon were the strings of a harp which it swept....a vibration of the universal lyre, just as the intervening atmosphere makes a distant ridge of earth, interesting to the eyes by th az-ure tint it imparts."

ppp

Sounds - Walden

↑ Ped. Hold both pedals down to *

Bb15 (lower four notes conssts of a half diminished seventh chord)

Ex. 5–16. “Thoreau,” m. 1, Expanded harmony used to impart the sound of a bell.

This chord is used to depict the first line of narration from Thoreau's *Walden*: "His meditations are interrupted only by the faint sound of the Concord bell, ..." The opening line of the text reflects the sound that has just occurred. Expanded chords continue in the manner of the "Concord bell" further employing the use of word painting. The dissonance emanating from such chords also represents the numerous overtones that are projected in the clanging of a bell or chime.

A related example of word painting utilizing expanded harmony occurs in Movement 4 (*Thoreau*) of the *Concord Sonata*. In this instance, the term "word painting" is used more loosely as the actual words are not included within the context of the music but are provided by Ives in a prologue as follows:

And if there shall be a program for our music, let it follow his thought on an autumn day of Indian summer at Walden—a shadow of a thought at first, colored by the mist and haze over the pond ... As the mists rise, there comes a clearer thought, more traditional than the first—a meditation more calm ... he seems to move with the slow, almost monotonous swaying beat of this autumnal day.³⁰²

In m. 1, an arpeggiated polychord of A9 followed by a D# major triad³⁰³ reflects Thoreau's "thought on an autumn day of Indian summer at Walden—a shadow of a thought at first, colored by the mist and haze over the pond:" (Ex. 5–17). The word "haze" can also be associated with the arpeggiated cluster chord in the middle of the first system (F-sharp, E-sharp and G natural) in the bass clef (left hand). Another phrase, "as the mist rises," is colorfully realized in the last arpeggiated chord of the first system, consisting of a C#15 containing a

³⁰² Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 67–68.

³⁰³ Both chords shown in the score can be heard as a polychord due to the sustained quality of the arpeggio.

dissonant rub between the major and minor third sonority (i.e. E natural versus F natural)³⁰⁴ of the basic triad of C# (Ex. 5–17).

[illegible]

Ex. 5–17. “Thoreau,” *Concord Sonata* (revised 1947 version), m. 1, Expanded harmony used to reflect Ives’s prologue.

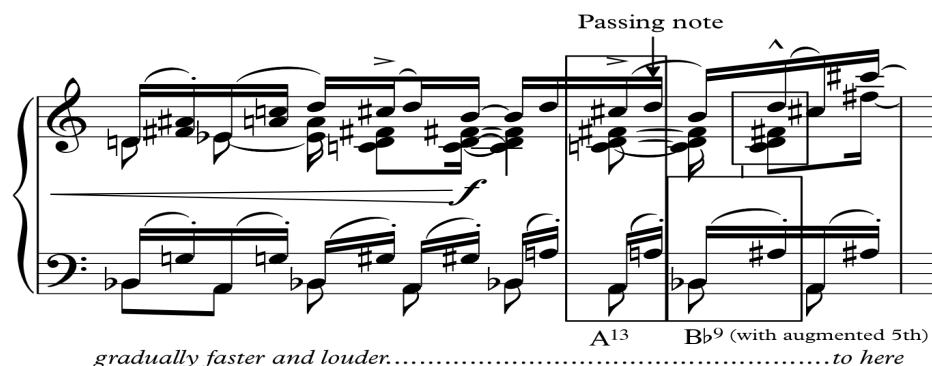
In short, Ives uses two types of expanded harmonies to convey the imagery of the text—that of the cluster chord and expanded tertian chord.

More complex and dissonance chords surface in the form of “severely rhythmically restless and dynamically turbulent passages that reveal Thoreau’s moodiness and unwillingness to submit to Nature’s call,”³⁰⁵ such as the chords found in Ex. 5–18, which feature expanded chords formed with every pair of eighth notes (A13 and Bb9 are examples). While this last example is more aptly an expression of programmaticism over the technique of word painting, it is included here to portray the description of Thoreau’s unwillingness to accept nature as described by Ives’s in the introductory text. In contrast, the more serene passages (such as the recurring theme beginning on the second system

³⁰⁴ As with many of Ives's harmonies, the dissonant rub between E natural and F natural serves to color what is a basically tertian chord.

³⁰⁵ Geoffrey Block, *Ives: Concord Sonata* (Cambridge: Cambridge University Press, 1996), 76.

of p. 60, last measure) are used to reflect his acceptance of nature³⁰⁶ and also embody serenity using expanded chords of a mixed nature such as the second chord, which is quartal, quintal, and tertian in nature. The unique pitch-classes from bottom to top are: C natural, F natural, B-flat, D natural, and G natural, which moves to A natural (Ex. 5–19); the sound is somewhat neutral and certainly less dissonant than the chords of Ex. 5–18.³⁰⁷



Ex. 5–18. “Thoreau,” *Concord Sonata*, p. 60, system 3 (middle of), Expanded harmony used to reflect Thoreau’s moodiness.

To summarize, Ives’s use of the technique of word painting can assist with an overall programmatic intention together with its local application for a particular measure or word.



Ex. 5–19. “Thoreau,” *Concord Sonata*, p. 60, system 2 (measure following double bar), Expanded harmony used to reflect Thoreau’s moodiness.

³⁰⁶ Ibid.

³⁰⁷ In addressing Thoreau’s resistance and acceptance of nature, Ives alludes to the concept of duality as discussed earlier.

Another brief example of word painting can be found in m. 11 of “Ann Street” where a B9 chord and polychord of Bb minor over C major appear in conjunction with the words “both feet.” The effect is that of a rhythmic dovetailing between chords and text (Ex. 5–20). The chords not only anticipate the actual words but also subtly reflect meaning through the use of both hands playing expanded chords simultaneously (a tongue-in-cheek gesture). Immediately following the text, two more polychords (Bb7/Bb and G7/F#) echo the text “Both feet” using the same two eighth note rhythms and articulation.

Both feet

B⁹ B^bm/C⁺ B⁷/B^b G⁷/F[#] Mixed tertian and quartal

Ex. 5–20. “Ann Street,” m. 11, Word painting using polychords.

Lastly, Ives uses word painting in combination with expanded harmony to highlight the contrast between opposites as found in the song “Premonitions” (1921). In the third and fourth systems of p. 58, the text of the song speaks of life lacking something, assisted by simple triads in an open voicing as if to suggest that simple harmony reflects that which is lacking in life (Ex. 5–21). This is followed immediately by a series of extended tertian chords and polychords assisting the words “Forward! Forward!” implying that expanded harmony is

representative of a motion toward the “new horizons” of the future and away from the simple life of the past.

mf *faster*
Yet what - ev - er life may lack, not a blown leaf beck - ons back,
mf
C D Eb F C¹³ C¹⁵ G⁷/C
f *accel.* *ff* *fff*
For ward! For ward! is the sum-mons. For- ward! Where new hor - i-zons wait
f *accel.* *ff* *fff*
C¹¹ A¹³ Eb/Fm Em^{*}(added 4th)/Bm G[#]/Gb⁺ Cluster A/G B/F F/Eb
*Addition of a fourth creates a cluster sonority

Ex. 5–21. “Premonitions,” p. 58, systems 3 and 4, Word painting using triads and expanded harmony. Note: The fourth beat of the penultimate measure (right hand) may contain a mistake in the original manuscript due to a discrepancy between the half note chord and quarter note chord shown side by side (C natural exists in one and not the other).

b) Bitonality

While expanded chords are used regularly as a source of word painting, the formation of such chords can be a result of the technique of bitonality. As shown in earlier examples (e.g. “London Bridge” Ex. 2–1), Ives uses bitonality to create expanded chords, designed to be heard not as part of separate keys but

as a new, combined entity. In returning to the work *Psalm 67*, bitonality is evident due to the different key signatures between the top three and bottom three voices in which soprano/Alto I and II are in the key of C major and Tenor I and II/Bass are in the key of B-flat major. If the two sections are played separately (i.e. soprano and alti), one can hear the establishment of a key and tonal center, functioning as an independent song. In fact, playing through the parts in each of the respective keys of C major and B-flat major yields a greater understanding of how bitonality affects the perspective of the original keys, combining them into a new sound. Many of the composite chords in this piece can be analyzed as either a polychord or tertian chord (even though a system of distinction has been presented in the introduction). This is especially true when applied to the piano reduction provided at the bottom of the score for each system (Ex. 5–22). The separation of parts in different staves is more supportive of a polychordal approach from a visual standpoint. However, the composite sound of these two staves can be perceived in different ways depending on how the listener identifies the tonic of the chord (if there is one). To accommodate differences in perception, mm. 1–5 are categorized with chord symbols to reflect both a polychord and extended tertian chord analysis (Ex. 5–22).

In the first measure of *Psalm 67*, it is possible to hear the original sound of G minor in the lower voices as combining with the other pitches (C major in the upper voices) to form a composite sound of C9 in inversion (fifth in the bass).³⁰⁸

³⁰⁸ With the combination of the C7 as a 4/2 voicing (with an added ninth below), as well as the closed voicing of the C chord versus the open voicing of the G minor triad below, the ear is driven towards C as a grounding element. The closed voicing of C7 dominates the harmonic projection of this chord; G natural, Bb, and D natural become lower remnants of the main chord above.

The argument of function in this opening chord is a battle of theory over perceived sound. In *Memos* Ives claims that, in this instance, it is not a ninth chord in sound or function, rather the opening chord “has a dignity and a sense

Comparable to dominant answering tonic

Example 3. *Psalm 67*, mm.1 - 11

Arrangement of chords to show inversive symmetry with one note in common:

The image shows a musical score for a hymn. At the top, a single melodic line is shown with intervals labeled 'M' (Major) and 'm' (minor). Below this, the full score is presented for voice, treble, and bass staves. The lyrics are: "1. God be mer - ci - ful un - to us and bless us and cause his face to shine upon us". The score includes a polychord section at the bottom with the following information:

Polychord:	C/Gm	Gm/Dm	Dm/C	E♭/B♭m	C/G	Am/D
Tertian chord:	C ⁹ (5th in the bass) or G ¹³	C ⁹ (5th in the bass)	F ⁹ (5th in the bass)	E♭ ⁹ (7th in the bass)	C ⁹ (9th in the bass)	D ⁹
	(Tonic - G)		(Subdominant - C)			(Dominant - D7)

6

shin e on us;

Bm/E G#m7 A⁹

(half cadence)

Ex. 5–22: J. Peter Burkholder, *The Critique of Tonality in the Music of Charles Ives*, Ex. 3, *Psalm 67*, mm. 1–6, Bitonality as a technique to yield expanded harmony with multiple labels (adapted from original diagram created with added chord labels provided below notation). Note: Additional information is included to illustrate other topics referenced throughout this paper.

of finality—quite a different effect from the dominant ninth³⁰⁹ (in this quote, Ives recounts his father’s reference to the opening chord). Perhaps Ives is bound more by loyalty to his father (and his influence) than by the sound of the chord itself which, to my ears, is undoubtedly the sound of a dominant ninth—ignoring regard for intended function. There are theoretical reasons for viewing the opening chord as an expanded G minor chord (to be discussed in the chapter on Form/Structure). However, suffice it to say, this is an instance where a surface hearing of the material weighs in just as heavily as any theoretical explanation. In fact, the chart at the top of Burkholder’s example from *The Critique of Tonality in the Music of Charles Ives*, which is meant to itemize a condensed arrangement of the chords from both staves to show inversional symmetry, actually serves as a good example of an alternate hearing of this example as a series of ninth chords. With that in place, alternate chord descriptions as ninth chords are given below the polychord labels.

In considering options for labeling, a third label can be applied to first chord of the first measure—that of G13 (distinct pitches from bottom to top are: G natural, B-flat, D natural, C natural, and E natural ... note that the seventh and ninth are omitted). But here again, the sound itself conveys something different—that of the dominant ninth. Burkholder’s appears to acknowledge the discrepancy between appearance and resultant sound when he states that, “the partial key signature of course implies two keys, C major and G minor, and this seems to have been Ives’s initial conception, although what develops is quite different from

³⁰⁹ J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990), 213.

bitonality.”³¹⁰ And while Burkholder is not referring to my specific issue with this chord as a C9 versus G13 (with a minor triad foundation), it does open the discussion for harmonic interpretations that may differ from Ives’s intention.

Beyond the creation of new chords, the technique of bitonality can also offer a new perspective on a given melody by changing the original chords “substituting bitonal chords for the usual tonal ones.”³¹¹ In the process, chords created can also serve the purpose of projecting a certain character or mood. One such example is the “Interlude” following “Variation IV” from *Variations* on “America,” where the keys of A-flat and F are employed simultaneously as well as the “Interlude” after “Variation II” cited earlier in the introductory section (see Ex. 2–2 for chord labels). The results are “two hilarious bitonal interludes in the *Variations* ... which hint at the way in which Ives would come to use layering to produce new, composite styles.”³¹² As the material discussed under bitonality includes mostly the works of other composers, Ives provides the listener with “new ways to hear traditional works, which would emphasize their own continuity with the strikingly new musical visions of Ives.”³¹³

Recognizing that bitonality yields expanded chords, expanded chords themselves have the ability to form chromatic aggregates, which can be used to satisfy both musical and programmatic goals. However, Ives did not pursue chromatic pitch collections as a result of any specific methodology as in the case of Schoenberg. For Ives, chromatic structures were employed and formed at any

³¹⁰ Ibid., 211.

³¹¹ J. Peter Burkholder, *All Made of Tunes* (New Haven: Yale University Press, 1995) 274.

³¹² Larry Starr, *A Union of Diversities* (New York: Schirmer Books, 1992), 52.

³¹³ Ibid., 54.

given moment to serve a specific purpose. The existence of an aggregate in a measure of music did not guarantee a continuation in subsequent measures and such aggregates were not used to fulfill a requirement of engaging all pitches in a certain order before moving forward with other pitches as in the case of Schoenberg. In Ives's case, aggregates were used as part of a palette of expression within tonality and were not necessarily achieved in full. "Ives looked on twelve-tone structures not as musical processes but as musical metaphors ... He describes them as experiments in sound."³¹⁴ Ives was eventually aware of Schoenberg's 12-tone process³¹⁵ but referred to it as an "artificial process without strength."³¹⁶ Common to both composers, however, was the response to "the increasing chromaticism and attenuated tonality of late nineteenth-century music,"³¹⁷ which was often expressed in the use of aggregates.

c) Chromatic aggregates

In returning to the goals of utilizing chords comprised of twelve tones as a technique to achieve programmatic goals, a composition demonstrating a direct connection is "Majority" (1921). In this song for piano and voice (originally titled "The Masses"), Ives reflects his "strong feelings and beliefs of a social, economic, and political nature ... [which also occupy] portions of the *Essays*, in

³¹⁴ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 92.

³¹⁵ For those who question the originality of Ives's work with in this area, it is interesting to point out that his work with 12-tone structures predates the dissemination of Schoenberg's 12-tone method (which Schoenberg first described to his associates in 1923).

³¹⁶ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 164.

³¹⁷ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 91.

particular *Emerson*.”³¹⁸ In “Majority,” the massive complex chords consist of up to 14 in one hand, which “are best played with fist, forearm, or stick.”³¹⁹ These chords are representative of the voice of the people (referred to as the masses in the vocal line entrance) and involve a schemata bordering on a 12-tone system, such as seen in the first five beats of the first measure (Ex. 5–23). From the first chord through the second chord on beat four (left hand), Ives achieves a collection of 10 pitches sounding simultaneously.

Slowly

f

10 pitches sounding simultaneously

Ex. 5–23. “Majority,” p. 1, system 1, Chromatic aggregate.

Within the first system, a chromatic aggregate is achieved by the middle of the system (although not all at once vertically). Other instances include chord structures, which are only two notes shy of a chromatic aggregate as in the second system, fourth beat (Ex. 5–24). In another section, the aggregate is achieved within two chords (sixth system, first two half notes) (Ex. 5–25). As is clear throughout this piece, much of the approach towards an aggregate is due to the musical choice of using massive cluster chords, encompassing many pitches and moving towards a fully chromatic collection.

³¹⁸ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 152.

³¹⁹ *Ibid.*, 161.

The image shows a musical score for piano, system 2, page 1 of 'Majority.' It features a grand staff with treble and bass clefs. The right hand (r.h.) is in the treble clef, and the left hand (l.h.) is in the bass clef. A box highlights a section of the score where the combined chords from both hands produce 10 pitches simultaneously. An arrow points to this box with the text 'Combined chords produced 10 pitches sounding simultaneously'. Another box is labeled 'Box is from original score'.

Ex. 5–24. “Majority,” p. 1, system 2, 10 pitches of chromatic aggregate.

The image shows a musical score for piano, system 2, page 2 of 'Majority,' measure 1. It features a grand staff with treble and bass clefs. The right hand (r.h.) is in the treble clef, and the left hand (l.h.) is in the bass clef. A box highlights a section of the score where the combined chords from both hands produce a full chromatic aggregate. An arrow points to this box with the text 'Full chromatic aggregate (achieved through a combination of expanded chords in both clefs)'. Above the treble clef, the text 'Be - hold' is written with a long horizontal line following it.

Ex. 5–25: “Majority,” p. 2, system 2, m. 1, Chromatic aggregate.

“These enormous tone clusters serve as a virtually literal portrayal of ‘masses.’”³²⁰ Here again, it is the intention of the music (representing a political voice) that guides Ives in his choice of such a dissonant and saturated sound,

³²⁰ Larry Starr, *A Union of Diversities* (New York; Schirmer Books, 1992), 133.

rather than a methodology as the one used by Schoenberg.

Chromatic saturation, approaching a chromatic aggregate, is also achieved in the previously mentioned *Psalms* 67. Even though the work consists largely of superimposed triads (creating a very tonal atmosphere), all but two pitches are represented in the first five measures. Specifically, five notes of the total chromatic enter in m. 1 and then five more before the first phrase is finished, leaving only F-sharp and G-sharp. The pitch F-sharp arrives in m. 5 and G-sharp arrives on the downbeat of m. 6, coordinated with the completion of the first verse³²¹ (Ex. 5–22). As a point of interest, the practice of chromatic saturation can also be found in late nineteenth-century tonal music in which chromatic saturation was coordinated with the ends of phrase or section marked off by tonal resolution,³²² similar to this first six measures of *Psalms* 67. This lesser known phenomenon is an important element as it speaks to the multiplicity of influences and factors in Ives's decisions without adhering to any one practice such as that of serialism.

Another piece that approaches a chromatic aggregate is *Aeschylus and Sophocles* (1922) for voice, piano, and string quartet. In this work, Ives employs a pitch series of 11 notes in the first violin part, accompanied by dissonant complex expanded harmony in the piano achieving whereby 11 pitches of the chromatic aggregate (Ex. 5–26).

³²¹ J. Peter Burkholder, "The Critique of Tonality," *Music Theory Spectrum* 12, no. 2 (Autumn, 1990), 214.

³²² Ibid.

Complex chords:

(11 pitches of the chromatic aggregate)

Ex. 5–26. *Aeschylus and Sophocles* (piano part only), mm. 1–2, Complex chords approaching a chromatic aggregate.

In the previously discussed song “Afterglow,” a chromatic aggregate is achieved within the first three expanded chords as indicated in Ex. 5–27. The effect creates a mystical, eerie quality especially in conjunction with the composer’s instructions at the bottom of the page: “The piano should be played as indistinctly as possible, and both pedals used almost constantly.” Once again, Ives’s choices are made to support musical and emotional aspects of the music. Chromatic aggregates are also achieved through the technique of using quartal harmony as seen in “The Cage.” In the first measure of Ex. 1–9, a series of quartal chords reaches the full aggregate before the resolution chord of D9. Ives acknowledges the sound achieved through this approach when he comments on this piece saying: “To make music in no particular key has a nice name nowadays—‘atonality’.”³²³

Two piano works remain as a topic for discussion of chromatic aggregates. One is “Rough and Ready” (from *Set of Five Take-offs* / ca. 1909)—a piece which employs aggregates in the opening measures, consisting of

³²³ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 56.

11 pitches of full chromatic aggregate:

Slowly and very quietly

**ppp*

legato throughout

Complex chords

$E\flat^{17}$

$E\flat^9$

Ex. 5–27. “Afterglow,” p. 86, system 1 (beginning), Complex chords create a chromatic aggregate. Note: Asterisk is found in the original manuscript and does apply to new information provided in this example.

broken chords of an expanded nature as well as a chordal expression consisting of major and minor triads in the final measure (see Ex. 5–28). The bass clef consists of a D11 chord (in inversion) and the treble clef includes a complex chord of mixed tertian, secundal, and quartal elements. The entire movement is unrelenting in its dissonance.

Complex chord

Chromatic aggregate:

D^{11}
(5th in the bass)

Ex. 5–28. “Rough and Ready” (from *Set of Five Take-offs*) (reduction), final measure, Chromatic aggregate in the final chord.

Another such work is *Study No. 5*—a piece reflecting Ives’s “interests [which] often sway toward full chromatic completion.”³²⁴ As with “Rough and Ready,” a chromatic aggregate is achieved through expanded harmony (Ex. 5-29).

Chromatic aggregate:

Cluster chords

A/Ab

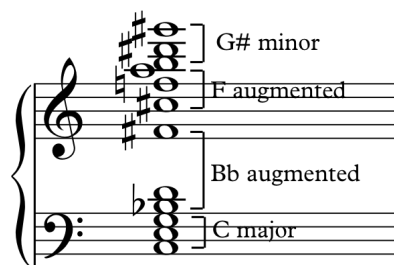
Ex. 5–29. *Study No. 5*, final measure, Chromatic aggregate in the penultimate measure with cluster chords.

Also in *Study No. 5*, cluster chords are followed immediately by a polychord, made up of two major triads (A in the treble clef over Ab in the bass clef) producing a dissonant response (Ex. 5–29).

A final example of Ives’s use of expanded harmony to achieve a chromatic aggregate is presented in *Study No. 20* (1908?) where a chord from m. 94 consists of all 12 tones. While this chord could be conceived of as a polychord of

³²⁴ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 117.

C17 with a G# minor triad on top, Philip Lambert offers an alternate view of this structure as a polychord made up of four separate chords as seen in Ex. 5–30.³²⁵



Ex. 5–30. Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition*, Ex. 6.9a, Ives, *Study No. 20*, chord from m. 94, *Study No. 20*, m. 94, chromatic aggregate achieved through a polychord. Note: If A5 is displaced an octave lower, this could be considered a polychord of C17 with a G# minor triad on top.

As evidenced in several pieces, Ives certainly explored the dissonant quality of chromatic music; however it was never conceived of as a replacement of tonality. To the contrary, J. Peter Burkholder, “observes that Ives rejected the view that the tonal system was more natural or desirable than any other logical system that one might develop; apparently, any newly conceived alternatives could readily step in as replacements.”³²⁶ Recognizing his views on the subject, it is important to consider that Ives’s motion towards dissonance in achieving near (or complete) chromatic aggregates may also be related to his personality changes later in life; these are reflected in his strong viewpoints—especially concerning politics and society in general (as seen in a piece such as “Majority.”)

³²⁵ Lambert’s example of a polychord is shown even though it conflicts with the original parameters established for the label of polychord. The qualifying distance of a fourth between chords is a parameter I have created as a guideline in labeling chords within this paper. Since this is Lambert’s original example, it has been presented without alterations to chord labels.

³²⁶ Geoffrey Block and J. Peter Burkholder, *Charles Ives and the Classical Tradition* (New Haven: Yale University Press, 1996), 106.

Stuart Feder observes this piece to be an example of self-reflection resulting in personal mood-swings (agitation) and “a feeling for those less fortunate.”³²⁷ The piece also reveals “the degree of mental deterioration Ives was beginning to experience.”³²⁸

d) Stylistic heterogeneity

Parallel with Ives’s diverse harmonic language is the quality of stylistic pluralism or what may be termed stylistic heterogeneity. Whereas some may look to discover how the divergence of style unifies a piece (particularly in a traditional or conventional way), many scholars view the practice of employing constant change in stylistic approach as a technique unto itself. As Larry Starr points out, “In Ives ... the point of stylistic divergence is: stylistic divergence.”³²⁹ To support this statement, he uses the scenario of Mozart’s compositions explaining, “what in Mozart disrupts the discourse of a piece for Ives *becomes* the discourse of a piece.”³³⁰ The use of stylistic diversity within a single piece is something that Ives began to explore only after he had resigned from his post at the Central Presbyterian Church in New York.³³¹ What started as an exploration became a consistent element in his music between 1890 and 1925—especially with regard to “constant fluctuation among expressive extremes and diverse compositional structures.”³³² Ives’s own remarks suggest his departure from conventional

³²⁷ Stuart Feder, *The Life of Charles Ives* (Cambridge: University Press, 1999), 154.

³²⁸ Ibid.

³²⁹ Larry Starr, *A Union of Diversities* (New York: Schirmer Books, 1992), 10.

³³⁰ Ibid., 11.

³³¹ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 175.

³³² Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 106.

thinking in terms of techniques and structure, leaving an open path for the diversity of style—a trademark of his music. As he states in *Memos*: “Orderly reason does not always have to be a visible part of all great things”³³³ ... “Initial coherence today may be dullness tomorrow probably, because formal or outward unity depends so much on repetition, sequences, antithesis, paragraphs with inductions and summaries.”³³⁴ Even when Ives does employ elements of form that involve the return of a theme or section, perception of a returning segment is altered through extended harmonies. However, when moving away from such repetition and sequences, Ives utilizes a combination of elements (including but not limited to musical quotations/borrowings, shifts in rhythm, expanded harmony, programmatic settings, and layering) to achieve an eclectic style.

An example of a quick succession of musical styles within a short span of time can be found in the song “Ann Street,” revealing a total of “nine stylistically coherent sections.”³³⁵ Before exploring the chords that assist in these many shifts, it is important to recall the nature of the composition “Ann Street” (text by Maurice Morris), which is essentially a psychological journey of someone literally walking down a short street in lower Manhattan and expressing all of the thoughts and physical aspects that accompany the journey. The experience of this piece utilizes a common approach found in Ives’s music—“the juxtaposition of styles to evoke a physical or mental journey.”³³⁶ While “Ann Street” has been briefly analyzed for word painting and its representation of stream of

³³³ Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 22.

³³⁴ *Ibid.*, 23.

³³⁵ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 175.

³³⁶ *Ibid.*, 176.

consciousness assisted by expanded harmony, these same chords help to facilitate different styles of music.

In the first section, A9 of mm. 1–2 (separated by brief chromatic, chordal interruptions) evokes not only the sound of a Broadway theater, as mentioned earlier, but also the sound of fanfare³³⁷ and noise to mark the first street that crosses Ann street, which is Broadway (Ex. 4–22). Hence, chordal support for the word “Broadway” provides a double meaning. Mm. 3–6 (section two) changes style again with a sense of strolling or walking as reflected in the piano part (however, without expanded chords). The next section (three) of mm. 7–8 utilizes the basic foundational chord of Bb11 (constructed mainly of broken dyads), introduced by four arpeggiated grace notes. In m. 7, Bb11 continues to unfold by the upbeat of beat one in which the eleventh (E-flat) is not raised (as in most cases of an eleventh chord) and the seventh (A) is of a major quality. This harmony becomes slightly more aggressive on beat four of m. 7 as a Bb13 chord with the sound of G-sharp (enharmonic equivalent to A-flat) providing a dominant seventh quality and C-sharp providing the sound of a raised ninth (Ex. 4–22). In using both Bb11 and Bb13, along with other dyads in the measure, Ives creates a style that depicts the hectic scene of “Barnum’s mob” (showmen or entrepreneurs). The music possesses a wild sensibility, accurately reflected in this brief moment on Ann Street. Additionally, the expanded harmony and

³³⁷ Lloyd Whitesell, “Reckless Form,” *American Music* 12 no. 3 (Autumn, 1994): 312.

chromaticism call into question the tonality of this section—a stark difference from the largely diatonic backdrop of the mm. 3–6 (not shown).³³⁸

Continuing with transitions, m. 9 consists of a brief transition (section four) made up of quarter-note chords (quartal, quintal, and tertian) and chromatically descending eighth notes, perhaps implying the sense of walking down the street (Ex. 4–22). Section five begins at m. 10, embracing a more dissonant sound—again assisted by complex chords of a quartal, tertian, and secundal nature (Ex. 5–31). These complex chords abandon the largely triadic foundation of mm. 7–8 and continue towards m. 11 with the assistance of four sustained grace notes per chord. The close proximity of the notes in the chords of m. 10 (for all but the last chord) seems to mirror the text and use of the word “narrow.”³³⁹

Another change of style (section six) is introduced at the end of m. 10 with the appearance of a loud polychord chord (F# half diminished seventh/A major) along with a sudden octave leap on the vocal line (Ex. 5–31), introducing the word “business” and preparing for further polychords at m. 11. The chords employed at m. 11 (Ex. 5–20) are dense and serious in sound, representing the activity of “business” for which Ann Street is most known. After the unison rhythms of m. 11, Ives returns to the A13 sonority for mm. 12–14 (seventh section), imparting a sense of urgency in the musical texture—largely

³³⁸ Measures have been excluded in an effort to avoid recreating the entire score in acknowledgement of fair use.

³³⁹ This also serves as an example of word painting.

m.10

Nar - row, yes. Ann street, But Busi-ness,

l.h. Complex chords (throughout measure)

Abrupt change of texture → $F^{\#}\circ 7/A$

Ex. 5–31. “Ann Street,” p. 60, m. 10, Juxtaposition of styles facilitated by expanded chords.

communicated by the altered notes of the A13 chord, shown at the end of this section—m. 14 (Ex. 5–32). The next section (eight) is ushered in by an arpeggiated G11 chord at m. 15 (Ex. 5–32), continuing the dreamy sound of a raised eleventh in the broken, lullaby piano part from mm. 16–19, while simultaneously abandoning the atonal feeling of earlier material. Even though there are no five-note chords, the collective sound of the eighth notes in section eight imparts the quality of a G11 chord (specifically, G natural, B natural, D natural, F natural, and C-sharp).

m. 14

p *slower*

Sun just hits

Transition:

l.h. *r.h.*

p

A¹³ G¹¹ G¹¹ (collective sound)

Ex. 5–32. “Ann Street,” mm. 14–15, Stylistic transition facilitated by expanded chords.

Finally, section nine (m. 20) is rather similar in style to the previous section of mm. 16–19 except for a change in harmony, which is the point of distinction. It also serves as both a closed and open section through use of the popular eleventh chord (this time with a raised eleventh)—used to conclude so many Ives’s pieces (Ex. 5–33). Support of this dual function in the conclusion is provided by Larry Starr who observes, “perhaps the most striking example of multiple perspective in ‘Ann Street’ is the way in which its ending appears to be ‘closed’ and ‘open’ at the same time.”³⁴⁰

³⁴⁰ Larry Starr, *A Union of Diversities* (New York; Schirmer Books, 1992), 27.

m.20

p

Rath - er short, Ann street

slowly

p

E^b11 (dreamy texture and open quality)

Ex. 5–33. “Ann Street,” m. 20, Juxtaposition of styles facilitated by expanded chords.

In elaborating on Starr’s observation, the concluding chord (along with dynamics and piano style) gives the listener a sense of completing a very short journey, one that has the ability to continue (or be re-experienced on another day), even though the physical aspect of the street has come to an end. This also supports a previously discussed idea in Ives’s music whereby pieces are never really completed and, therefore, continue on in eternity. Ives himself has made clear that he enjoys working on pieces in perpetuity in that the works themselves are constantly evolving—not only compositionally but also in the hands of the performer from concert to concert. And while many scholars are determined to find a coherent thread in stylistically complex works such as “Ann Street,” a more convincing explanation reveals that the very purpose of the radical and abrupt changes within is to avoid a sense of conventional structure. As Whitesell explains, “the character conveyed by ‘Ann Street’ is not one of meticulous organization, but of reckless self-confidence, which freely bypasses rules and

conventions of proper form.”³⁴¹ The perception of a composer who is freely moving from style to style without concern for a cohesive arc is in line with the transcendentalist Ives described earlier. The sense of unity in “Ann Street” is achieved through the open and natural expression of an experience, much like that found in the writings of Emerson.

Adherence to this directness of expression and the dedication to establishing a relation to “‘life and art straight from within’ has resulted in some of the inconsistencies in his [Ives’s] output,”³⁴² which could explain the absence of a formal structure or plan in many of his works.³⁴³ As Henry Cowell posits,

most of his [Ives’s] music was made in a state of fine creative excitement and satisfaction, for he believes that ‘to speak adequately, he must speak wildly, with the flower of the mind, as Emerson has it, ‘abandoning himself to the nature of things and letting the tides roll through him.’³⁴⁴

Through such a method, multiple styles are bound to emerge within the context of a single piece. In this eclectic approach (assisted by expanded harmony),

the ‘problem of unity’ within a particular piece could be solved, not ‘by a consistent adherence to one compositional approach or even one musical style, but by a consistent attitude toward the use of different approaches and styles.’³⁴⁵

This is not to say that form is not present in Ives’s music but, like the nature of his diverse styles and harmonies, use of form is something that is employed as

³⁴¹ Lloyd Whitesell, “Reckless Form,” *American Music* 12, no. 3 (Autumn, 1994): 313.

³⁴² David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 87.

³⁴³ Many scholars strongly disagree on this point. Some assert that there is absolute structure in Ives’s music, reflecting the conventional training he received from teachers like Horatio Parker.

³⁴⁴ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 87.

³⁴⁵ *Ibid.*, 169.

needed; likewise, formal structure is not a prerequisite for every composition (to be discussed in chapter six).

Another piece that, like “Ann Street,” takes the listener down a psychological journey is the previously mentioned work “The Things Our Fathers Loved.” Although both are alike in the use of abrupt changes to delineate sections, this piece combines expanded harmony with quoted tunes to move in and out of various styles assisted by short transitions. As Larry Starr points out, “The transitions ... operate in a way that also helps to indicate the stylistic differences between adjacent main sections of the song.”³⁴⁶ Even though Ives uses expanded harmony to mark the changes in quoted songs, attention here is given only to a change in style initiated by an expanded harmony. Thus, not every quoted melody will signal a different musical setting. For example, while there is a change from the opening quote of “My Old Home Kentucky” to the following melodic fragments of “On the Banks of the Wabash” (mm. 6–7) and “Nettleton,” expanded chords do not present a change in style, but rather continue the mood of the first theme, established in mm. 1–5. That said, the first significant change in style is facilitated by a transitional section of expanded chords between “My Old Home Kentucky” (imparting a surface style of a hymn or parlor song)³⁴⁷ and “The Battle Cry of Freedom” in m. 10 (Ex. 4–4). Beginning with the phrase “Summer evenings,” this transition consists of the following chords: A11, A13 and G9 in m. 10—all of which help to create a dreamy segue

³⁴⁶ Larry Starr, *A Union of Diversities* (New York: Schirmer Books, 1992) 62.

³⁴⁷ Lloyd Whitesell, “Reckless Form,” *American Music* 12, no. 3 (Autumn, 1994): 307.

(with a surface style of late romantic)³⁴⁸ from the lyrical and flowing first section of the songs “My Old Home Kentucky,” “On the Banks of the Wabash,” and “Nettleton,” to the upbeat march of “The Battle Cry of Freedom” in m. 11. The march, which itself does not begin with expanded harmony, concludes at m. 14 followed by another style at m. 15 consisting of a musical fanfare, supported by sustained pedal tones and arpeggiated gestures—a style initiated by the harmony of D13 under the tune “In the Sweet Bye and Bye” (Ex. 5–34).

Finally, the loud arpeggiated section ending at m. 20 is followed by a slightly somber and soft reflective passage (mm. 21–22) which, although begins with a D# major seventh chord on the downbeat of m. 21, quickly moves from C# diminished seventh (m. 21, third beat) to D#11 on the last beat of m. 21, reflecting the surface style of a hymn³⁴⁹ (Ex. 5–35). While the change of style on the downbeat of m. 21 does not occur with an expanded chord (as it is only a seventh chord), the final chord is related in feel and is therefore a significant part of this stylistic change. Whitesell aptly describes the experience of the listener when encountering these changes of styles as follows: “When Ives brings these styles into confrontation, he is complicating the role of the listener, who must negotiate leaps and clashes that are not only formal but cognitive as well.”³⁵⁰ Both “The Things Our Fathers Loved” and “Ann Street” are part of a collection (*114 Songs*) that, in and of itself, represents an eclectic compilation of styles ... “the contents of which contain something to suit all tastes.”³⁵¹

³⁴⁸ Ibid.

³⁴⁹ Ibid.

³⁵⁰ Ibid., 308.

³⁵¹ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 31.

"The Battle Cry of Freedom"
faster and with more emphasis *in a graduated excited way*

11 vil-lage cor-net band, play - ing in the square. the town's Red, White and blue, *cresc.*

14 *ff* **"In the Sweet Bye and Bye"**
 all Red, White and Blue Now! *l.h.* Hear the *piu accel.*

ff *ff* *ff* *D¹³*

Ex. 5-34. "The Things Our Fathers Loved," mm. 11-15, Stylistic diversity achieved through expanded harmony. D13 is arpeggiated over the first two beats of m. 15.

p *much slower*
 soul of the things our fath-ers loved

very slowly and sustained *pp* *rit.* *ppp* *ppp*

D[#]maj7 *C[#]dim.7* *D[#]11 (minor triad foundation)*

Ex. 5-35. "The Things Our Fathers Loved," mm. 20-22, Expanded chords facilitate change of style and atmosphere.

In as much as change can take place within a single piece, it can also function within movements of a larger work, such as in the case of "The Alcotts"

from *Concord Sonata*. Unlike the dense harmonic texture of the surrounding movements, “The Alcotts” represents a serene and contemplative setting, using expanded chords to transition between styles—even within this decidedly prayer-like setting. It is also an example of

Ives’s tendency to distinguish sections, phrases, or smaller elements of a work’s form from each other ... by changing harmonic language. These contrasts between adjacent phrases are often so strong that they are heard as changes of style, which listeners can experience as disruptive interruptions in musical continuity.³⁵²

An example of such an adjacent phrase occurs early in “The Alcotts” whereby a very tonal, triadic introduction (utilizing the opening motives of Beethoven’s Fifth Symphony and the hymn tune “Missionary Chant”) is used as a transitional device along with expanded chords. The end of the first system (p. 53 of the score) includes a pedal tone made up of a repeated Ab triad ushering in the key of B-flat (treble clef), creating a segue to the next musical style which begins in the second system. Three upper notes of the initial Bb7 (B-flat, F natural, A-flat) of the second system treble clef, together with the Ab triad in the left hand, form an expanded Ab13 chord—marking the distant and dreamy character of this second musical section³⁵³ (Ex. 5–36, second system).

³⁵² Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 267–68.

³⁵³ It is also important to note that bitonality is used in this movement simply as a technique to yield the sound of expanded harmony. What comes across to the ear is not the key of Bb as a separate entity (which can be heard more clearly by simply playing the treble clef part separately on the piano) but the collective sound of both keys.

Ex. 5–36. “The Alcotts,” p. 53, systems 1 and 2, Juxtaposition of styles facilitated by expanded chords.

In another passage, layered C minor triads move from a loud exclamatory section (with gestures from Beethoven’s Fifth Symphony in the original key of C minor—p. 55, beginning of the first system (not shown here)—to a lyrical and flowing segue which forms at the end of the first system of p. 55, continuing into the second, and ending towards the end of the third system with the arrival of a Bb7 chord (accompanied by a fermata). The segue itself begins with whole tone and triadic harmony built on Bb in the beginning of system 2 and ending on Bb7 (with an F-sharp added dissonance occurring as an echo) in system 3, conveying the style of a dream-like sequence (Ex. 5–37). Both the expanded harmony and pianistic style, which utilizes the symphony’s rhythmic motive as material, are reflective in nature and help transition to the simple triadic setting of the Eb major section (third system, last measure) (Ex. 5–37). The transition is achieved through a Bb pedal tone combined with eleventh chords (near the end of the

second system in Ex. 5–37), serving to wash away any previous harmonies and clearing the palette for the style and section to follow.

p Transition: →

B \flat (whole tone and triadic harmony)

B \flat 11 B \flat 11* (with a raised 9th)

* Note: C \sharp does not exist in the earlier version of this movement.

rit. *pp* *slower and quietly* *p*

B \flat 7 (with added F \sharp dissonance)

B \flat 11 (with both natural and raised 11th)

B \flat pedal serves as the foundation for all harmonies in this measure.

Ex. 5–37. “The Alcotts,” p. 55, systems 2 and 3, Juxtaposition of styles facilitated by expanded chords illustrated through a reduction of harmonic motion.

A slightly different example of stylistic heterogeneity can be found in the piano version of “The Housatonic at Stockbridge” where, instead of various segues assisted by expanded chords, two contrasting styles operate concurrently throughout the work. The vocal line reflects the sound of the traditional hymn tune “Talmar and Chester,” suggesting the sound of a simple progression with a motion from I to IV to iii to IV and back to I (Ex. 5–38). At the same time, a very

different style and sound exists underneath the melody consisting of a series of thirteenth chords (Ex. 5–38).

dream y realm The cloud-y wil - low and the

mp *ppp* *mp*

C#maj7 (I) F#13 (IV) F13* (iii) F#13 (IV) F#13** (IV) C#11 (I)

(with both an augmented and natural 5th)

*Minor triad foundation with the third (enharmonically spelled as G#) in the bass
 ** Harmony is an extension of the F# triad (whole notes) found in the beginning of the measure. If considered as it own harmony, the label would change to Bb6 (in inversion).
 *** (applies to same pitch throughout measure)

Ex. 5–38. “The Housatonic at Stockbridge,” mm. 9–11, Juxtaposition of styles facilitated by expanded chords.

However, even with the use of expanded chords, Ives creates another layer of complexity in that the upper notes are to be played so that they are scarcely audible (if played at all) as per Ives’s direct instructions (found in Ex. 5–2). This performance note calls attention to the main notes of the left hand—consisting largely of triads in support of the harmony implied by the melody. Therefore, the composite style is created by not only the juxtaposition of expanded chords over a simple hymn melody, but by the suggestive sound of overtones (at the top of expanded chords) in the right hand. It is a great example of the use of subtlety within expanded harmony to achieve a simultaneous presentation of styles.

Apart from the settings of piano or piano and voice, Ives incorporates stylistic pluralism³⁵⁴ with expanded harmony in his orchestral works as well. Harmonic content is often more complex due to the larger instrumental palette. Ives's "Decoration Day" (from the *Holidays Symphony*) includes several examples of stylistic shifts, connecting sections of contrasting emotions. Much of the beginning of this work includes lush string harmonies with a sense of angst and post romanticism typical of many early twentieth century composers. This style comes to an abrupt change at m. 43 (*Piu Mosso*) at which point the lyrical string writing is interrupted by pulsing eighth notes at fortissimo volume (Ex. 5–39). While this section does not contain clear expanded chords, the change in style immediately following this includes a complex chord on the first two beats of letter H, consisting of A9 with a minor triad foundation and several alterations (including a raised seventh, a natural and lowered ninth and a lowered and natural fifth) (Ex. 5–40). This harmony marks a quick change back to the quasi-romantic and strained texture of the first 42 measures of the piece. Interrupting this style is a transition inserted at the *Poco meno mosso* (m. 50), defined by a murky tonality and ominous quality assisted by cluster chords in the strings (Ex. 5–41).

³⁵⁴ Alternate term for stylistic heterogeneity.

Piu mosso

Ex. Vln.

Vlins. I

Vlins. II

A

B

Vlas.

A

B

Vlcs.

A

B

Cbs.

A

B

p

mf

ff

mp

[mf]

[ff]

[senza sord.]

unis.

Ex. 5-39. "Decoration Day," *Holidays Symphony*, mm. 41-43.

H Poco meno mosso (a little slower)

Picc. ad lib.

Fls. I II

Oboe I II

Eng. Hn.

Clars. I II

Bassoon

Bassoon

F. Hns. I II III IV

B♭ Trpts. I II

Trbs. I II III

Bells

Ex. Vln.

Vlins. I A B

Vlins. II A B

Vlas. A B

Vics. A B

Cbs. A B

H Poco meno mosso (a little slower)

mp arco A^9 (includes a natural ninth as well as a lowered ninth)

Ex. 5–40. “Decoration Day,” *Holidays Symphony*, mm. 45–47, Expanded harmony at letter H to signify a change of style.

Meno mosso

Strings(arco) slide gradually down through "a 1/4 tone," just touching the semi-tone below, at the end of the phrases.

*I-II Vlns and Vlas. divided into 3 parts, each 1/2 arco and 1/2 pizz. Vlcs. A - B both arco and both divided. Cb. A 1/2 arco, 1/2 pizz., B the same.

Ex. 5-41. "Decoration Day," *Holidays Symphony*, mm. 49-50, Cluster chords inserted in the strings to mark a change of style.

Another stylistic change occurs following the end "taps" in Bb trumpet I at mm. 79-80 (supported by undulating lower strings) at letter K which consists of scattered dyad clusters in the lower strings that become fully formed expanded chords in most of the string section at m. 86-88 with G9 on the downbeat of m. 86 followed by A13 (beat two), Bb11 (beat three) and E13 (beat four) (Ex. 5-42). These chords are followed by mixed tertian and cluster harmonies continue in mm. 87-88 (Ex. 5-43). Essentially, all of letter K serves as an extended

K¹ Allegro [Quick-time step]

m. 87  of 6/8

In the absence of Eb Clar., both Flutes play the 2nd Fl. part and Piccolo plays written.
(With Eb Clar. playing, the Piccolo does not play until measure 129)

Picc. (ad lib.)

I Fls.

II Fls.

Oboe II

E♭ Clar. I

II

Clars. I

II

I Bsns.

II

I F. Hns.

II

III

IV

I Trbs.

II

III

Tuba

Timp.

Bells

Sn. Dr. and Timp. [a small drum - on one high pitch throughout]

Bass Dr. (High bell & Ex. Vln.)

Cymb. 3

Continued expanded harmony:

Low bell (ad lib)

K¹ Allegro [Quick-time step]

unis.

div.

Vlns. I A

B

Vlns. II

Ex. 2 Vlns.

Ex. 1 Vla.

Vlas. A

B

Vlcs. A

B

Cbs. A

B

*[Parts appear in equivalent 6/8]

Ex. 5-43. "Decoration Day," *Holidays Symphony*, mm. 87-89, Continued transition using a mixed sonority of cluster chords and tertian chords.

e) Potentiality for multiple tonics

Similar to the ability to facilitate diverse styles, expanded chords also create the potentiality for multiple tonics in moving from one chord to another. While potentiality exists on other levels as discussed earlier (e.g. exploration of temporal order), it can function strictly within harmonic activity, suggesting various directions in the ear of the listener. One of the obvious results of multidirectional harmony is obscuring tonality in addition to signifying multiple tonics. Even great muddiness (as experienced in some of the massive, low register chords in “Majority”) may contain hidden possibilities.³⁵⁵ A theory supporting the potential direction of Ives’s expanded chords is put forth by Kenneth Smith who suggests that delayed gratification is pursued through avoiding a sense of arrival on the tonic.³⁵⁶ To explain this process, Smith refers to the work of Jacques Lacan and his concept of music and desire whereby an arrival chord (the tonic) is often delayed through a series of other resolutions. Any harmonic suggestion of multiple tonics (through what is called “tonic signifiers”) represents the desire for a delayed resolution to the tonic—a technique found in the music of Wagner as well as Ives in the radical expansion of tonal language. In Ives’s work “Afterglow,” Smith demonstrates how “each of the elements [of a chord] holds potential to ‘discharge’ its own local ‘tonic.’”³⁵⁷ Smith’s coverage of Lacanian philosophies focuses on the “interrogation of the

³⁵⁵ Charles Ives, *Essays Before A Sonata* (New York: W.W. Norton & Company, 1961), 22.

³⁵⁶ Kenneth M. Smith, “The Tonic Chord and Lacan’s Object a in Selected Songs by Charles Ives,” *Journal of the Royal Musical Association* 136, no. 2 (2011): 357.

³⁵⁷ *Ibid.*, 370.

relations between human subjects and object(s) they desire³⁵⁸ as applied to music in general. Of greater significance here is the multidirectional nature of expanded chords and the elements that signify possible resolutions beyond what is presented in the music itself.

The first example of a chord seeking various resolutions is found in m. 1 of “Afterglow” where the second chord of the first measure contains “multiple tri-tone-based tensions that indicate various incomplete seventh chords pulling in several directions, thereby constituting a mystery chord.”³⁵⁹ (Ex. 5–44. Note: refer back to Ex. 5–27 for original score).

Example 2. 'Mystery' chlds in *Afterglow*.

Potential (incomplete) dominant functions

Analytically significant (G7 as V of I (C))

F7 E7 D7 → G7

Atonal cluster

Mystery chord

V⁷_{#4} in C major

Ex. 5–44. Kenneth M. Smith, *The Tonic Chord and Lacan’s Object a in Selected Songs by Charles Ives*, Ex. 2, ‘Mystery chords in *Afterglow*,’ “Afterglow,” system 1 (adapted from diagram of mystery chord and resolution with added text/boxes).

³⁵⁸ Ibid., 356.

³⁵⁹ Ibid., 367.

This “mystery chord,”³⁶⁰ (difficult to label with any subcategory of expanded harmony) contains several tri-tone relationships. As seen in Smith’s chart, each tritone (E-flat to A natural, G-sharp to D natural, and F-sharp to C natural) is part of three possible seventh chords (identified within Ex. 5–44); all three all are implied within the mystery chord and, therefore, signify multiple tonic resolutions (F7 resolving to Bb, E7 to A, and D7 to G). The final chord of Ex. 5–44, G7,³⁶¹ “indicates a C triad as a potential means of (partially) releasing its tension.”³⁶² Support for C as the tonic is also seen in system 3 of the original score from the middle to the end of the measure (Ex. 5–45), with the use of G7 drawing a direct parallel to Wagner’s *Tristan*; in this instance, “the rising chromatic line from the *b*” to the upper *d*” leaves the distinct impression of a dominant seventh lingering in the air—like the afterglow”³⁶³ as seen in Smith’s diagram in Ex. 5–46.

The image shows a musical score for a piano and voice. The piano part is in the lower staves, and the voice part is in the upper staff. The piano part starts with a G7 chord, which is noted as having Eb serving as an augmented 5th. This is followed by a tritone interruption of F#, and then a C triad. The voice part has lyrics '- glow;' and 'Beau-ty' with dynamic markings *p* and *piu moto*. The score is labeled 'Ex. 5–45. "Afterglow," p. 86, system 3, Support for C as the desired tonic is established with a motion from G7 to a C triad.'

Ex. 5–45. “Afterglow,” p. 86, system 3, Support for C as the desired tonic is established with a motion from G7 to a C triad.

³⁶⁰ Ibid., 368.

³⁶¹ This is an unusual inversion containing a raised eleventh on the bottom.

³⁶² Kenneth M. Smith, “The Tonic Chord,” *Journal of the Royal Musical Association* 136, no. 2 (2011): 368.

³⁶³ Ibid., 371.

This G7, of course, is resolved with an unadulterated C major triad (confirmed in both hands), even though it follows the “Ivesian distorting tritone-related F# in

The musical notation shows a piano arrangement. The treble staff begins with a G7 chord (G, B, D, F#) with a 'gliss.' (glissando) marking over the F# and C notes. A bracket labeled 'Tristanesque' spans the first two measures. The bass staff starts with a G7 chord (G, B, D, F#) and a dashed line indicates a glissando for the F# and C notes. The resolution to C major is marked with a triangle (^) above the treble staff and 'I' below the bass staff. Roman numerals V 7 and I are placed below the respective chords.

Ex. 5–46. Kenneth M. Smith, *The Tonic Chord*, Ex. 4, ‘Tristanesque’ version of G7 -- C in *Afterglow*, “Afterglow,” system 3 (middle of).

the bass.”³⁶⁴ Coinciding with this proposed tonic is the word “beauty,” confirming the arrival of the desired resolution that was delayed throughout the piece (Ex. 5–45).

While the theory of Smith’s harmonic drive in this progression is quite interesting and convincing, the larger point has to do with the potential of expanded chords (especially of a complex nature) to lead the ear in different directions. In many instances, Ives not only avoids a tonic resolution, but concludes pieces without any resolution—tonic or otherwise (seen in previous examples such as “Ann Street” and “The Things Our Fathers Loved”). This approach of incorporating potentiality into a chord reflects not only Ives’s early fascination with harmony but also his views concerning music’s ability to cross temporal borders and to evolve continuously over time as discussed earlier. To the latter point, complex chords and their potential for multiple resolutions reflects

³⁶⁴ Ibid., 371.

a statement Ives's made about the *Concord Sonata*—a work he considered to be unfinished:

This is, as far as I know, the only piece which, every time I play it or turn to it, seems unfinished ... some of the passages now played haven't been written out ... and I don't know as I shall ever write them out, as it may take away the daily pleasure of playing the music and seeing it grow and feeling that it is not finished.³⁶⁵

Perhaps this inclination to leave a work unresolved is part of an inherent quality in expanded chords with regard to of open-ended implications, contributing towards an aesthetic prominent in Ives's music. Even beyond the tri-tone element described earlier in "Afterglow," Ives obscures the potential of an otherwise obvious motion from one chord to another with the insertion of a distant harmony. For instance, in Ex. 5–45, G11 (strongly outlined as a foundational V7 moving towards the double triad of C major) is interrupted by an F# triad—most likely a device used by Ives to "undermine the otherwise powerful effect of the C."³⁶⁶ Additional support of C as the tonic comes from Burkholder's assertion that "C major is selected to coordinate many of Ives's tonal 'experiments.'"³⁶⁷ In this case, its position in the piece as a tonic lends a creative interpretation to the function of the mystery chords and general expanded harmony that permeates his music. With the acceptance of C as the tonic, one can appreciate all of the various remote tonal centers navigated by Ives in circling around the home key/tonal center.

³⁶⁵ Charles Ives, *Memos* (New York: W. W. Norton & Company, Inc., 1972), 79–80.

³⁶⁶ Kenneth M. Smith, "The Tonic Chord," *Journal of the Royal Musical Association* 136, no. 2 (2011): 371.

³⁶⁷ *Ibid.*, 373.

In keeping with the notion of C as a tonic, the song “At Sea” includes a clearer confirmation of C in the first few measures, but not without the hint of another tonic conveyed by the combination of expanded chords along with sixth and seventh-chord formations. As seen in the earlier diagram of Ex. 4–1, both the tonics of C and A are implied by the chords used in this piece. The E13 of m. 2 contains a tritone, imparting a dominant quality that could easily move towards A. However, due to its third inversion position, with D in the bass, it can also be perceived of as some type of extended D chord (i.e. major seventh chord with a raised eleventh and ninth), which can then be heard as a V of V or D leading to a G chord (which, in fact, occurs on the downbeat of m. 3). Both harmonic implications are inherent within the chord structure. Likewise, the G chord on the downbeat of m. 2 is G11, containing a minor triad foundation and a minor seventh as well as a ninth (certainly not typical for a V chord in C), eventually progresses to C on the third beat of m. 4. Before doing so, G11 morphs into an Eb9 chord (first inversion) on beat two of m. 3 (considered to be an Eb chord due to the voicing, including an E-flat in the melody). This trajectory is further confused by the arrival of an F11 (including the passing B-flat in the piano melody) on the last beat of m. 3, which moves comfortably to an E11 (with a diminished and raised fifth) on the downbeat of m. 5 by way of step-wise voice leading. While the F11 to E13 suggests a subsequent motion towards A (i.e. VI to V to I), a leap is made from the E13 to a V - I progression of G to C (end of m. 4), further obscuring any single, logical progression. The potential for multiple tonics is supported not only by the “overlapping charges of dominant-seventh

tensions”³⁶⁸ and the chord extensions of elevenths and thirteenthths but also by the text (“Some things are undivined”). The implication of text and chords is that “everything here is tonally vague.”³⁶⁹

Expanded chords can also function to obscure a tonic that has been firmly established. In “Mists,” polychords of augmented triads (arranged as triads in the left and right hand in mm. 3–4) function to obscure a vocal line and pedal tone, which have established the tonic of G major in the first two measures (Ex. 3–0). Even though G persists in the bass, the alternating polychords “weaken(s) the G pedal at any given moment.”³⁷⁰ The tonic of G is further challenged in m. 7 where C-sharp arrives, not as a IV chord but as a tri-tone substitution for the tonic of G, which dominates mm. 1-6. (Ex. 5–47). In the case of m. 7, C# is extended by dyads, further challenging an established tonic rather than signifying other multiple tonics.

The image shows a musical score for measure 7 of the piece "Mists." It consists of two staves. The top staff is a vocal line in treble clef, with lyrics "grey skies weep with" under the notes. The bottom staff is a piano accompaniment in grand staff (treble and bass clefs). The left hand (l.h.) plays a series of chords, including augmented triads, with a 7-measure rest indicated. The right hand plays a melodic line with a 7-measure rest indicated. A sharp sign (#) is placed below the bass staff, indicating the key signature or a specific note.

Ex. 5–47. “Mists,” m. 7, Tri-tone substitution (C#).

Returning once more to the multiple tonic signifiers governed by C as a

³⁶⁸ Ibid., 377.

³⁶⁹ Ibid.

³⁷⁰ Ibid., 382.

tonic, “Premonitions” (ca. 1918–19) provides examples of dueling dominant seventh chords (as well as polychords) in obscuring a stable sense of the tonic. In the first system (sixth beat) a quasi-polychord (using shared pitches) of D7 over E7 has the potential to move in two directions; E7 can lead towards A and D7 can lead towards G (Ex. 5–48).

Slowly

There's a shadow on the grass that was nev-er there be fore;

p

D7 (top four pitches)

E7

Polychord: D7/E7** (resolution following D7)

D7 implies a resolution to G

G

G7*

E9

Complex chord

r.h. l.h.

*Note: Even though harmony of a complex chord is tied over from the previous beat (bass clef), G7 is distinguishable as a separate harmony following the earlier D7 (occurring at the polychord supporting the word "There's").

**Implies a resolution to A

Ex. 5–48. “Premonitions,” p. 57, system 1, Multiple tonic signifiers.

In this case, motion in favor of D7 is provided by a subsequent resolution to G major (occurring just beyond the middle of the system on the word “shadow”). However, immediately following G major is a complex chord³⁷¹ sustained prior to the arrival of the next chord—G7. This complex chord helps to obscure the major triad sonority before allowing G7 to sound, implying that the earlier D7 is not a V

³⁷¹ This chord is difficult to identify.

of G (as a tonic) but rather a II chord in the key of C for which G7 is the dominant (Ex. 5–48). In typical Ives fashion, a direct arrival to C is avoided. This tendency to avoid the expected resolution is most likely a result of what Burkholder explains as his “penchant for revealing as artificial and conventional concepts others accept as natural and inviolable.”³⁷² Even with other suggested resolutions, the tonic of C is alluded to frequently as if to remind us of the possibility of the assumed tonic following the chords of D7 and G7 of the first two measures. However, motion towards C is ultimately achieved beginning with an elongated G13 harmony in system 2, which unfolds from the middle to the end of the measure (Ex. 5–49).

and the rip-ples... as they pass whis - per of an un - seen oar; And the

pp

ppp
(cluster chord obscures arrival of C tonic)

G¹³ (includes a raised fourth and dominant seventh)
Harmonic function: (V)

C (tonic)

A⁹ (VI)

Ex. 5–49. “Premonitions,” p. 57, system 2, Dominant-tonic confirmation through a motion of G13 to C. Note: G13 includes added dissonant pitches as coloration.

The tonic of C finally arrives at the end of the second system, only it is obscured by the interruption of a cluster chord in the right hand (Ex. 5–49). The case for C

³⁷² J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990), 222.

is strengthened by the subsequent chord of A9 (VI chord in the key of C), occurring at the end of the second system. Additionally, system 2 and the downbeat of system 3 provide clear references to C as a tonic with several instances of G (as a either a polychord or extended tertian chord), interrupted by a brief D9 chord (or V/V) in the middle of system 2 and finally cadencing on C major at the downbeat of the third system (Ex. 5–50).

Now are mes - sen - gers of Fate; and the bless - ing held the best com - eth not or comes too late.

Heavily *mp* *pp*

Polychord: Cmaj7/ G

D⁹
V/V

G⁹
V

Both chords delay the arrival of C (tonic).

mf *faster*

Yet what - ev - er life may lack, not a blown leaf beck - ons back,

mf

C D E^b F

C¹³ C¹⁵ G⁷/C

Ex. 5–50. “Premonitions,” p. 58, systems 2 and 3, Prolonged dominant-tonic confirmation.

In each of the examples illustrated for “Premonitions,” the tonic of C is obscured by the injection of expanded chords (some of which are too complex to assign a conventional label) as well as an expanded dominant seventh chord of

G13 (found in Ex. 5–49) and G9 (at the end of system 2 in Ex. 5–50:). Even though, as in system 2, the chord of G13 moves toward the tonic C at the end of the measure, the intervening dissonant cluster chord carries over to the tonic C—further obscuring its arrival and function. Hence, the tonic of C has a difficult time of appearing in a clear and uninterrupted manner. Within this piece, many other expanded harmonies surround the V (G) to I (C) progression. And while an entirely new tonic is not provided in this work, the potential for other tonics is suggested.

Another powerful example of masking the tonic C in moving from both the dominant chord (G7) to the tonic chord (C) is seen towards the end of “Premonitions.” In Ex. 5–21 Ives provides a motion from G7 (end of third system) to C (Downbeat of fourth system). Nevertheless, he obscures this progression by voicing a C major triad under the G7 (last beat of system 3) followed by the arrival of the tonic C triad (in the bass clef) with a Bb triad in the treble clef on the downbeat of system 4, projecting the sound of a C11. In turn, this resolution opens the possibilities for subsequent harmonies leading further away from “C” with a wedge-like presentation of expanded tertian chords and polychords—each pulling away from the tonic. In the process, the tonic chord becomes just another signifier (in the context of expanded harmony), suggesting other tonics that move further away (Ex. 5–21).

Continuing with the progression in the fourth system of Ex. 5–21 (following the arrival of C11), polychords move in contrary motion and eventually arrive at a final polychord of F over Eb. The collection of distant triads, assembled as polychords in the last two measures, creates such an obscure sense of a tonic

that almost any triad combination can be implied in the process. The multiplicity of notes in these chords opens up the harmonic trajectory to advance freely towards different triadic combinations. In terms of the final measure of *Premonitions*, the arrival on Eb over F does not surprise the ear as the listener's sense of a preconceived tonic (C) has been washed away through a wedge of polychords, beginning in the penultimate measure. Through the examples of "Afterglow," "At Sea," "Mists" and "Premonitions," complex chords [as well as polychords and expanded tertian chords] serve as functional agents in numerous keys,³⁷³ obscuring any sense of a tonic.

The final polychords in "Premonitions" support not only the notion of obscuring tonality, but also serve to show how certain patterns and predetermined relationships can yield a musical effect—especially concerning the formation of expanded chords. While such planned patterns are not applicable to all expanded chords in Ives's music, it does point out that devices other than stacking thirds (as used in his early experimentation with organ interludes) can be employed with equally creative results. In the final measures of "Premonitions," extended tertian chords and polychords (consisting largely of triads) are used in contrary motion guided by a system of intervals employed in the outer voices. In the penultimate measure, the melody advances by a semitone (B-flat to B natural) and then by four semitones (B natural to E-flat) (Ex. 5–21). This pattern is repeated by moving a semitone from E-flat to E natural and then from E natural to G-sharp (one semitone and four semitones). The end of

³⁷³ Kenneth M. Smith, "The Tonic Chord," *Journal of the Royal Musical Association* 136, no. 2 (2011): 398.

this particular sequence of intervals occurs when moving from G-sharp to A natural (semitone) in the last measure between the first and second half note on the downbeat. In coordination with the outer voice, the bass moves consistently in a pattern of descending thirds (four semitones), ending at the same time as the right hand pattern on a G natural which, while displaced an octave higher, is still four semitones from the previous bass note of B-flat in terms of unordered pitch-interval, concluding the series of descending thirds. These outer pitches are then harmonized by triads (with the exception of an added pitch of A natural on the last beat of the penultimate measure as well as a cluster chord inserted between the first and second beat of the final measure). The overall effect of this intervallic progression is an example of word painting in that the harmony reaches beyond any hint of a tonic by mirroring the text: “Forward! Forward! Is the summons. Forward where new horizons wait.” The shape and sound of expanded chords project a feeling of forward motion as well as a quest for harmonic expansion; each chord’s arrival is a tonal surprise (guided only by the intervallic motion of outer voices).

f) Systematic composition

In short, the use of such patterns (as described in “Premonitions”) demonstrates what Lambert refers to as “systematic composition”—a term describing “compositional strategies involving precise measurements and exactly formulated relationships among musical entities.”³⁷⁴ In the final two measures of “Premonitions,” an example of systematic composition is produced

³⁷⁴ Philip Lambert, *The Music of Charles* (New Haven: Yale University Press, 1997), 14.

in the form of a wedge pattern or “wedge” model which “might be realized by a mirroring of melodies or a succession of incrementally structured chords, or by some combination of both ... Once a pattern is established and set in motion, the musical progression becomes automated or self-generating.”³⁷⁵ The technique used here involves intervallic repetition and triadic harmonization of the outer voices. This particular technique can be found in several pieces, demonstrating another approach for the formation of expanded chords.

A similar use of the wedge exists in an organ interlude from the cantata *The Celestial Country* (ca. 1895–8) and reflects the early experimentations suggested to Ives by his father—especially concerning the stacking of thirds. However, the wedge used in this piece utilizes a different intervallic approach with regard the outer pitches and chords. As seen in Ex. 5–51A, the excerpt begins with two seventh chords of the same intervallic construction, forming a polychord (downbeat of m. 1). In mm. 1–2, the outer voices descend chromatically harmonized by seventh chords in both hands. Yet, on the downbeat of m. 3 the melody ascends two semitones from the last beat of m. 2 and continues ascending chromatically until the second beat of m. 5. Also on the downbeat of m. 3 the bass begins on D-flat and continues descending chromatically until the second beat of m. 5.

³⁷⁵ Ibid., 14.

[Andante sereno]

A. Org. [p] Mm7₂ Mm7 3 4 5 rit. Vcl.

B.

Ex. 5–51A/5–51B. Philip Lambert, *The Music Of Charles Ives*. Ex. 4.1 *The Celestial Country*, Interlude before No. 4, *The Celestial Country*, mm. 1–5, Wedge examples.

While this particular method mirrors the approach used in “Premonitions” with contrary motion at m. 3, the handling of the inner voices employs a different systematic method. Beginning in m. 3 (through m. 5) the right hand melody is harmonized with ascending dominant seventh chords. However, although the left hand contains a descending outer voice, the chords formed above this voice move in an ascending direction and, beginning on the third beat of m. 4, also consist of dominant seventh chords. The entire hybrid method produces polychordal harmony as well as voice crossing between the outer voices (Ex. 5–51B). The wedge approach also supports a traditional harmonic scheme in *Celestial Country* with a motion from the key of the interlude (B-flat) to the V chord (F) on the last beat of m. 5 (Ex. 5–51A). Even though the V chord is not a pure dominant seventh (it is actually an eleventh chord following the passing note

of D-flat to C natural in the upper voice), E-flat in the left hand provides the dominant seventh quality, which actually leads to B-flat (the chord that begins the next movement). In short, the wedge technique produces a system for utilizing specific expanded chords while also providing a tonal function of moving from V to I in the key of B-flat for the subsequent movement (*Intermezzo for String Quartet*).

Just as the wedge can be used to create expanded chords of a tertian nature, it can also be applied to the formation of cluster chords as in *Study No. 20* for piano. In the following excerpt, outer voices move in contrary motion (Ex. 5–52).

21 tempo primo 22 23 24

[clusters]

Ex. 5–52. Philip Lambert, *The Music Of Charles Ives*. Ex. 4.5, *Study No. 20*, mm. 21–24, Cluster chords.

In doing so, the outer pitches expanded and contract using a scale as seen in the eighth-note pick-up to m. 23 through the first beat of m. 24 in the treble clef; the scale consists of A natural, B natural, C natural, D natural, E-flat, F natural, and G natural. In the left hand, the line expands and contracts similarly using pitches from the same scale with the exception of Bb. More importantly, the inner voices are comprised of only black or white notes depending on the quality of the outer voices. Therefore, on the downbeat of m. 22, the outer voices are white notes and so are the pitches between them—forming cluster chords. Similarly, the last

eighth note of m. 1 contains only black pitches in the outer voices and is mirrored with only black notes in the inner voices—again forming a cluster chord (Ex. 5–52).

A final example of the wedge technique creates clusters of a whole-tone nature such as in *Psalms 90* which, like the other pieces mentioned, presents contrary motion in the outer voices (soprano and bass). The inner voices move in an expanding and contracting manner, yielding what Lambert refers to as a “whole-tone cluster wedge”³⁷⁶—applied to all but the cluster formed on the word “wrath,” which “disrupt[s] the intervallic consistency”³⁷⁷ (Ex. 5–53). Occasional departures from a technique, such as in this example, are to be expected from Ives as his tendency to stray from convention applies to all of his styles of composing (e.g. inserting a minor second interval into an otherwise strictly tertian chord).

The musical score for Ex. 5-53 shows four staves (Soprano, Alto, Tenor, Bass) for measures 60, 61, and 62. Above the staves, numbers 9, 8, 7, 6, 5, 4, 3, 2, 1 are written, corresponding to the notes in measure 60. The lyrics are: "9. For all our days are passed a way in thy wrath". The score includes dynamic markings like (f) and (cresc.) and various musical notations including notes, rests, and accidentals.

Ex. 5–53. Philip Lambert, *The Music Of Charles Ives. Ex. 4.6, Psalm 90*, mm. 60–62, Wedge example.

³⁷⁶ Ibid., 61.

³⁷⁷ Ibid.

The wedge is also used in Ives's orchestral music. In "The Fourth of July," the string parts of a single measure include a "rapid succession of or stacked intervals ... followed by a half-step cluster"³⁷⁸ (Ex. 5–54). A reduction of this measure (from Lambert) consists of decreasing intervals from the first to the fifth sixteenth note with a possible programmatic function of simulating a "wisp of smoke from a single pyrotechnic blast, anticipating the huge explosions when the celebration becomes more boisterous later."³⁷⁹ This gesture is achieved through the formation of a wedge, yielding a combination of chords (including those of an expanded nature). The chords in succession consist of a complex chord made up of i11 (downbeat) followed by an E diminished seventh chord (second sixteenth note), quintal harmony (third sixteenth note), quartal harmony (fourth

intervals:

E	9	7	5	4	half-step cluster
E	9	7	5	4	
E	9	7	5	4	
E	9	7	5		

Ex. 5–54. Philip Lambert, *The Music Of Charles Ives*. Ex. 9.5, *The Fourth of July*, m. 20. (third and fourth violins, viola, cello), "The Fourth of July," *Holidays Symphony*, Wedge example.

³⁷⁸ Philip Lambert, *The Music of Charles* (New Haven: Yale University Press, 1997), 173.

³⁷⁹ *Ibid.*

sixteenth note), and finally a major seventh in inversion (fifth sixteenth note). The remaining chord is a cluster chord formed on F-sharp. The wedge itself is built upon a reduction of intervals between each respective note in the chord using the following intervallic structure for the construction of each sixteenth note (E, 9, 7, 5, 4).

Related to the wedge is a compositional device known as the palindromic wedge. In this approach, pitches are arranged according to a specific construction of intervals but also produce a unique symmetry in which the intervals and chords formed in one direction are mirrored at the halfway point to produce not only the same intervals in retrograde but also the same pitches. The result, as seen in “Soliloquy” (ca. 1917–17), is that the pitches of a particular passage read the same forwards as backwards—hence the term palindrome³⁸⁰ (Ex. 5–55).

int. 10 7 5 4/3 2 1 1 2 4/3 5 7 10

Ex. 5–55. Philip Lambert, *The Music Of Charles Ives*. Ex. 4.14, “Soliloquy.” ©1933 Theodore Pesser Co. Used by Permission, “Soliloquy,” mm. 6–7, Wedge example (piano part only).

³⁸⁰ Intervals (in semitones) are shown below each chord of the wedge in Lambert’s diagram.

The result is a mixture of very distinct, varied expanded chords from those of a pure tertian nature to clusters, quintal, quartal, and secundal (or minor seventh—the inversion of a second...see Ex. 5–55). While Ives uses these chords throughout his oeuvre, they are included here in a specific order due to the intervallic construction of each chord from top to bottom in an order of decreasing size. The outer voices move in contrary motion and mirror the same unordered pitch intervals.

Supplementing wedge techniques and the wedge palindrome are systematic techniques including what Lambert refers to as the “Ives Omnibus”—“a series of musical entities, often simultaneities, ordered according to a pattern of gradual, incremental structural change.”³⁸¹ In this approach, as seen in an early version of *Processional: Let There Be Light*, “a series of vertical displays of transposition cycles or combination cycles [are] placed in order according to a gradual expansion or reduction in the sizes of the formative intervals.”³⁸² In Ex. 5–56 (from the first sketch of the organ part), the piece is constructed with the upper parts formed in relation to a C pedal including a rising bass line in half steps (omitting D-flat). The various combinations of intervals move forward in a pattern of consonance to dissonance with “a resolution on the initial consonance.”³⁸³ As with other pieces discussed earlier, the tonal center of C is used once again as a reference point in his experiments and concepts of

³⁸¹ Philip Lambert, *The Music of Charles* (New Haven: Yale University Press, 1997), 170.

³⁸² Ibid.

³⁸³ J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990), 219.

harmonic development. The chart presented by Burkholder (Ex. 5–56) illustrates the combination of:

one repeated or two alternating intervals, including the interval formed between the bass and the pedal C. When the two intervals are included, they are both of the same ordinal number but different in size by a half step ... The piece is a virtual catalog of the possible chords of this type.³⁸⁴

Indeed, the catalog of chords is the most important element of this systematic technique as it supports the creation of expanded chords as labeled in Ex. 5–56.

³⁸⁴ Ibid., 219.

Example 7. Processional, chord series for organ (from first sketch)

Oct 8 2nd MAJ & MIN MIN 3r MAJ 3r MIN 3 ALL MIN 3rd MAJ 3rd MIN 3rd ALL MAJ 3rd MAJ 3rd MIN 3rd 1 - 4 ALL - 4ths

Sw[ell] 2' 4'

4' 8' G[reat]

Ped[als] 8' 16'

f This is the Day of light Let there be light _____

Rising chromatic dissonance in top voice (except for Db) [b ?]

Interpretation using expanded chords: D¹¹/C^{**} Cm⁷ C¹³ C¹³ C⁺ C⁺ Quartal harmony

*D¹¹ employs a minor triad foundation; however, in the context of this paper, expanded chords are generally labeled to indicate size and not altered harmonies. Also, C refers to the pitch beneath the chord of D¹¹.

** C refers to the bass note and not a triad.

9

Light _____ Let there be Light _____ to - to - day.

MIN 5 PER 4 ALL PER 5ths ALL MIN 6THS MAJ6 MIN6 ALL MAG6 ALL MIN 7 MIN7 MA7 ALL MAJ 7 ALL Octs

Quartal harmony Quintal harmony C⁺ C¹¹ A^{o7}/C

Remaining chords do not fit into specific categories of expanded chords. The predominant intervals in each render them complex in construction and label.

Ex. 5–56. J. Peter Burkholder, *The Critique of Tonality*, Ex. 7, *Processional*, chord series for organ (from first sketch), *Processional: Let There Be Light*, mm. 1–17, Diagram illustrates motion from consonance to dissonance and back to consonance (chord labels below the bass part have been added to original chart).

A final example of systematic composition is not comprised of self-generating models such as those discussed in the wedge and palindromic wedge, but rather derives from the approach of bitonality. Its results can produce a diverse collection of expanded chords as well as pitch-class variety (a result

observed by Lambert). The decision to compose a piece in two keys (or more, if the approach is polytonality) is a highly effective means for producing expanded chords. In addition to earlier examples (“London Bridge,” “The Alcotts,” and *Variations on “America”*), *Psalm 67* (possibly summer of 1894—specific date is not known) is what Ives calls a “kind of enlarged plainchant”³⁸⁵ consisting of two keys (C major—sung by the women and B-flat major sung by the men), resulting in a series of expanded chords (mostly polychords). With the exception of the first chord (which could be considered C/G minor if we relax the rule of a minimum distance of a fourth between the chords) the chords of both keys produce of lush string of polychords that appear to float without any clear allegiance to one key or the other. Although the chords can be analyzed with a reference to tonic dominant harmony (to be discussed in the final chapter), the chords impart the sound of consecutive ninths as shown in the breakdown of harmonies in Burkholder’s diagram (Ex. 5–22). Of greatest importance here is not an indisputable labeling of chords (or analog to tonic-dominant harmony) but a demonstration of how expanded chords are produced through the practice of bitonality. Bitonality, along with other techniques in systematic composition, provides an understanding of how certain chords are formed in Ives’s music and can be used to fulfill a programmatic element as well.

g) Performance techniques

Aside from the harmonic techniques listed above, performance techniques are also assisted by expanded chords—usually in fulfillment of programmaticism. One such piece (mentioned earlier) is “General William Booth

³⁸⁵ Ibid., 211.

Enters Heaven.” In this piece from (*114 Songs*), the thumping on the piano with mixed cluster chords and thirds is used to simulate the whack of snare drums and the thud of a bass drum (Ex. 2–3). Another piece, *The Celestial Railroad*, provides the sound of a march as well, simulating the bass and drums towards at m. 193 (not shown here). The first imitations of the sounds of “Drum corps” (indicated on the music) are delivered by complex chords consisting of whole tone clusters in both the right and left hand with subsequent complex chords made up of clusters of a secundal nature).

Chapter 6

Form

Although some theorists trace the use of form and structure back to Ives's European musical training (such as Burkholder), many find his approach to favor creative liberty and a sense of vagueness (earlier topic). Form, in the traditional sense, typically shows the unity of a particular work. However, as Audrey Davidson explains,

It was a mistake ... to understand the term as meaning structural completeness and coherence, an error made by two of Ives's more prominent critics, Copland and Carter. What was required instead, was a redefinition of the term, more consistent with the intuitive, nature-inspired vision of unity found in transcendentalist thought.³⁸⁶

Specifically, Ives achieves this “nature-inspired vision of unity” through the integration of many diverse elements. This is not to say that he does not use conventional forms/structures to organize his music. However, aberrations can develop at any point as his model of writing stresses both “diversity and a casual, open-ended sense of change.”³⁸⁷ For the listener and theorist, “understanding Ives's form should be a matter of open-mindedness rather than difficult study.”³⁸⁸ This viewpoint seems to be more practical when considering that “Ives aim is not to make the form simple and clear, but rather to create an underlying unity out of a large number of diverse elements, used asymmetrically; ... thus [relating] his music by analogy to the individual's experience of life.”³⁸⁹

³⁸⁶ David C. Paul, *Charles Ives in the Mirror* (Chicago: Illinois Press, 2013), 122.

³⁸⁷ Lloyd Whitesell, “Reckless Form,” *American Music* 12, no. 3 (Autumn, 1994): 313.

³⁸⁸ *Ibid.*, 315.

³⁸⁹ Cowell and Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955), 173–174.

Considering this aim, using a grand formal scheme to explain all components of a work should not necessarily be the first course of action. Even Burkholder, who tends to favor the connection between Ives's music and the European tradition, observes that "He (Ives) feels that music, like other truths, should not be immediately understood; there must always remain some further element yet to be disclosed."³⁹⁰ This implies that any surface connection to an established model may be just that—a surface connection. Regardless of the analytical approach, the variety of form and departure from conventional models are both assisted by expanded harmony as seen in "The Things Our Fathers Loved"—a piece which contains "aspects of a two-part form, of an arch-like or 'mirror' form"³⁹¹ (to be discussed in the next paragraph).

In "The Things Our Fathers Loved," Ives employs expanded harmony to distort what is otherwise considered to be a standard antecedent-consequent structure. The piece consists of an asymmetrical two-part structure (A, mm. 1–14, B, mm. 15–22), mirror[ing] that of the poem.³⁹² The first section is rooted in F major as confirmed with a strong presence in mm. 5–14 (see Ex. 4–4). But even the sense of F major is obscured by the presentation of F as an expanded chord, such as in m. 7 as an F13 and m. 3 where an F major triad in the upper piano part is colored by an eleventh (B natural), augmented fifth (C-sharp) and ninth (G natural). This first section is also filled with fragments of musical quotations that do not resolve. Thus, much like the antecedent phrase used in classical music,

³⁹⁰ Ibid., 142.

³⁹¹ Larry Starr, *A Union of Diversities* (New York: Schirmer Books, 1992), 64.

³⁹² Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 10.

the first section is not conclusive as seen in m. 14 in which the harmony wanders with a mixture of seventh chords, quartal harmony, and triads that motion towards the consequence (beginning in m. 15: Ex. 5–34). The coordination of the words along with the harmonic trajectory of the first fifteen measures communicates an inconclusive antecedent section in search of a resolution. The second section (consequence) moves strongly towards the tonal center of G as introduced by the dominant of D11 in m. 15 with the lyrics “Now!,” conveying a double meaning in that the song also switches loosely from the past to the present with a focus on one quoted tune—“In the Sweet Bye and Bye” (Ex. 4–6).³⁹³ Although the second section eventually arrives with a clear sense of G at m. 19 (with the word “Sing”) followed by the vi chord of E minor in m. 20 (Ex. 4–5), the V – I paradigm is obscured somewhat by the expanded harmony of the D11 back in m. 15, which slowly makes its way to the arrival of a G major seventh (with the third in the bass) at m. 19, implying a loose V – I cadence. The D11 chord of m. 15 not only marks the point of change from antecedent to consequent but also represents the turning point in the lyrics in which “abrupt shifts of memory that characterized the first half have disappeared, replaced by a continuous statement couched ‘in the present’ (underscored by the emphatic “Now!” opening the second part).”³⁹⁴ While expanded harmony appears to assist in establishing the role of antecedent-consequent phrases through a motion from an inconclusive first section to a seemingly conclusive second section, what

³⁹³ Note that the first section consisted of several borrowed tunes without settling into any one song for a length of time as seen in (Ex. 4–4).

³⁹⁴ Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 16.

ultimately occurs is a “distortion of ‘classical’ antecedent-consequent balances”³⁹⁵ as experienced by the final harmony of m. 22, consisting of an unresolved D#11 harmony (with a minor triad foundation). By concluding with this chord, both the form and memories contained within are left unresolved. The harmony of D#11 reflects back to the memories in the early part of the song. This harmony also reflects the vagueness and uncertainty that is inherent in much of Ives’s music. Although the form is clear for most of the tune, it is called into question in the final measures by the floating, ambiguous presence of expanded harmony. Both form and temporal order are obscured in these final measures.

In many pieces, form is achieved by referencing older models; yet it is also constructed through the use of stylistic heterogeneity—a recurring theme in Ives’s music. As Larry Starr explains, “Ives’s use of multiple, contrasting musical styles within a single work was not a defect, but a basic element of the musical form.”³⁹⁶ In the song “Ann Street,” Ives achieves both “formless form” (through-composed) as well as a stylistic arch where music “mov[es] from a relatively simple, diatonic style at the entrance of the voice to dense, chromatic complexity in the middle of the song and back to simplicity at the end.”³⁹⁷ This stylistic arch is marked by both a change of style and accompanying expanded chords. The relatively diatonic style referenced by Starr is introduced by the opening ninth and eleventh chords (A9 and A11 respectively) of mm. 1–2 (including a pick-up note) and continued with a series of expanded chords and simple tertian quartal mixtures in mm. 3–6 (Ex. 4–22: used to show m. 3 only). The area of “dense

³⁹⁵ Ibid., 17.

³⁹⁶ Ibid., 267.

³⁹⁷ Ibid., 268.

chromatic complexity” begins at m. 7 with a Bb11 chord (Ex. 4–22) and several other complex chords/polychords and continues through m. 15, marking a return to the simplicity of the beginning³⁹⁸ through the end (Ex. 4–23). The various styles and accompanying expanded chords create a stylistic arch with a simple beginning and ending, interrupted by a harmonically dense middle section. At the same time, a sense of openness and abrupt change of direction support a form that is free and wandering, yet inclusive of a broad overall structure to reflect a beginning, middle, and end (assisted by stylistic continuity between the first and last sections).

Another piece that uses style to create form is that of *Psalm 67*. In this choral work, the contrasting styles of the outer sections (consisting of a homophonic, Anglican chant style) and the middle section (imitative polyphony) create the form of the piece.³⁹⁹ The change from one style to another is facilitated by expanded harmony; the Anglican chant style of the first two sections (section A/mm. 1–11 and section B/mm. 12–15) is presented in the post tonal setting of consecutive expanded chords (essentially a series of ninth chords). Section C (mm. 16–22) departs from expanded harmony into imitative polyphony with simpler harmony throughout, followed by a return to expanded harmony for the final outer section beginning at m. 23. As a point of interest, a unique aspect of the change between sections occurs at m. 15 (end of section B) in which C9 becomes a C7 chord (third beat) (Ex. 6–0), facilitating a dominant seventh motion

³⁹⁸ The return occurs with the arrival of G11 on the downbeat of m. 15 (Ex. 4–23).

³⁹⁹ J. Peter Burkholder, “Stylistic Heterogeneity and Topics in the Music of Charles Ives,” *Journal of Musicological Research* 31 (2012): 186.

towards F major (the downbeat of section C—considered the middle section, employing imitative polyphony). As Burkholder observes,

the two styles are linked by a harmonic pun: Just before the middle section, Ives transforms the basic sonority of his opening section into a C-dominant ninth chord, then lowers the D in the chord to a C, creating a C-dominant seventh chord that then resolves to the F-major arpeggios that open the middle section.⁴⁰⁰

Middle section of imitative polyphony:

The musical score is for Psalm 67, measures 14-16. It features vocal parts (Soprano, Alto, Tenor, Bass) and piano accompaniment. A bracket labeled "Section C" spans measures 15 and 16. The piano part shows a harmonic progression from a C⁹ chord to a C⁷ chord, then resolving to F major arpeggios. The lyrics are: "God; Let all the peo-ple praise thee. O let the na-tions be".

Ex. 6-0. *Psalm 67*, mm. 14-16, Transition from Anglican chant style to imitative polyphony using expanded harmony.

⁴⁰⁰ Ibid.

The middle section (mm. 15–22) concludes with a return to the B section material at mm. 23–26 (Ex. 6–1), signaling the reappearance of expanded chords from the Anglican style chant section. This is followed by a return to the A section and the expanded chords that began the piece. The symmetrical form which results can be grouped as ABCBA, otherwise known as arch form.

The musical score is for Psalm 67, measures 21–23. It features a vocal ensemble with parts for Soprano (S.), Alto (A.), Tenor (T.), and Bass (B.), along with a piano accompaniment. The lyrics are: "ern the na - tions up - on the earth. Let the peo - ple". The score is in G major (one sharp) and 4/4 time. The piano part features a prominent bass line with a C^{II} (inversion) chord. An annotation "Expanded harmony signals a return to B section" points to the piano accompaniment in measure 23. A box labeled "Section B" is placed above the vocal parts in measure 23, with an arrow pointing to it from the text "Return to chant style" above the box.

Ex. 6–1. *Psalm 67*, mm. 21–23, Transition from imitative polyphony to Anglican chant style using expanded harmony.

Another conventional form, which undergoes drastic change in the hands of Ives, is that of sonata form and its use in one of Ives's most famous works

known as *Piano Sonata No. 2* (also called *Concord Sonata*). This piece hardly reflects the concepts employed in the first movement of a “classical” piano sonata, especially with regard to the development of a theme. In this work, Ives uses what Burkholder refers to as cumulative form, where the theme of a work is presented in fragments, with a final presentation of the complete theme towards the end. This approach reflects Emerson’s influence of building of fragments towards a complete whole.⁴⁰¹ Rather than presenting a full theme and using it as the basis for development, Ives injects both Beethoven’s Fifth Symphony motive and the human faith melody (especially in “The Alcotts” movement); both can be viewed as flexible motivic cells, holding together “an intricate layering of cyclic and movement-specific thematic ideas ...”⁴⁰² The various cells can be spotted by the use of the important interval of a third as found in both melodic cells.⁴⁰³ The elements of this sonata appear in contradistinction to the common principles of European sonata form, “including consistent motivic-thematic development, functional major-minor tonality, and correspondence of theme and form.”⁴⁰⁴ Instead, Ives’s counterintuitive approach for this work focuses more on the use of expanded chords. An example of the direct use of expanded harmony to develop and connect material is found in the Emerson movement in which Ives presents a massive series of expanded chords (of a dissonant nature) to slowly introduce the Beethoven motive (scattered about in fragments) as seen in Ex. 6–2, Ex. 6–

⁴⁰¹ Christopher Bruhn, “The Transitive Multiverse,” *The Journal of Musicology* 20, no. 2 (Spring, 2011): 175.

⁴⁰² Philip Lambert, *Ives Studies* (New York: Cambridge University Press, 1997), 123.

⁴⁰³ *Ibid.*, 123–124.

⁴⁰⁴ *Ibid.*, 125.

3, and Ex. 6–4. Even though development of a motive does not occur in a traditional manner as found in sonata form, interest and forward motion is the product of varied harmonic settings. In other words, the connective tissue of diverse expanded chords assists in developing and relating these fragments to one another. Instead of form arising from obvious relations that develop in sequence from beginning to end, it “arises from the connections among the various thematic, formal and historical elements and associations, ...”⁴⁰⁵



Ex. 6–2. “Emerson,” *Concord Sonata*, p. 6, system 2, m. 4, Varied harmonic settings of Beethoven motive utilizing expanded chords of E9 and A11.

⁴⁰⁵ Ibid., 126.

Beethoven motive / complex chords:

faster *mo*
ff *Ped.* *pp* *slow*

Ex. 6–3. “Emerson,” *Concord Sonata*, p. 6, system 4, m. 1, Varied harmonic settings of Beethoven motive utilizing complex chords. Note: the last note of the motive (bass clef) is delayed rhythmically.

F^9^* Bb^{11}
 $F^\# \rightarrow$ (bass pitch)
* F^9 is spelled enharmonically with the 9th (G) at the bottom.

Ex. 6–4. “Emerson,” *Concord Sonata*, p. 12, system 4, m. 4, Varied harmonic settings of Beethoven motive utilizing chords of $F^9/F^\#$ and Bb^{11} .

In the second movement of this sonata, “Hawthorne,” fragments of the main motivic cells (Beethoven’s 5th melody) are followed by expanded harmony, such as the final quote of the last page (Ex. 6–5). This conclusive Beethoven theme is followed by an aggressive chromatic gesture, resulting in a cluster chord.

The image displays a musical score for piano, divided into two main sections. The left section, titled 'Human Faith melody:', features a treble clef staff with a melody marked 'very slowly' and a bass clef staff with a single line of notes. The right section, titled 'Aggressive chromatic gesture resulting in a cluster chord:', shows a treble clef staff with a rapid, chromatic ascending line marked 'very fast' and a bass clef staff with a dense cluster of notes. Both sections include dynamic markings: 'ppp' (pianissimo) for the first section and 'fff' (fortissimo) for the second. The notation includes various musical symbols such as slurs, accents, and dynamic markings.

Ex. 6–5. “Hawthorne,” *Concord Sonata*, p. 51, system 5, Response to Beethoven’s 5th melody utilizing cluster chords.

In the final example, a return to *Psalm 67* reveals the use of expanded harmony as a means of creating harmonic structure, suggesting a broad tonic-dominant relationship (at least in one interpretation of the chordal analysis).⁴⁰⁶ In exploring the notion of a tonic-dominant relationship, chords are analyzed in relation to the root. In mm. 1–11, Ives sets up an analogue to tonality by using chords that represent a motion from the tonic (G13/m. 1) to the dominant (D9/m. 5) and then back to the tonic (G13/m. 11) (Ex. 6–6). Along with the vertical harmony of mm. 1–11, a breakdown between the treble and bass clef in mm. 1–4 reveals another level of the tonic-dominant relationship. Specifically, Ives has split the upper and lower voices into female and male choir (respectively), reflecting a bitonal outline. Hence, the upper and lower parts have their own harmonic structure as separate entities. In m. 1, the upper part moves from a C major triad to a G minor triad in m. 2, simulating a motion from I to V within the

⁴⁰⁶ The phrase “interpretation of the chordal analysis” is employed as this work has been discussed with different approaches to harmonic perception/ chord labeling as illustrated in Ex. 6–2.

key of C. Simultaneously, the lower part moves from a G minor triad in m. 1 to a D minor in m. 2, implying a I to V (albeit minor) motion within the key of G minor. This paradigm continues in m. 3 where the subdominant of F major occurs in the upper part while the subdominant of C major occurs in the lower. On yet another level, Ives appears to be mimicking the harmonic format for an Anglican chant, which includes not only a “tonic analogue, but...a chord functioning as a kind of dominant as well”⁴⁰⁷—more specifically a chord that cadences on the dominant or a V/V. This, in fact, occurs at the end of m. 6 with the presence of A9 (V/V) and its motion to D9 (the dominant of the piece) at m. 10 (Ex. 6–6). This activity is followed by a return to the tonic (G13) in m. 11, completing the broad harmonic trajectory from I – IV – V – V/V – I.

Comparable to dominant answering tonic

Example 3. *Psalm 67*, mm. 1 - 11

1. God be mer - ci - ful un - to us and bless us and cause his face to

shin e on us; That Thy way may be known up - on earth, Thy sav - ing health a - mong all na - tions.

Polychord: C/Gm Gm/Dm C/Gm Dm/C Eb/Bbm C/G Am/D
 Tertian chord: C⁹ (5th in the bass) D¹³ C⁹ (5th in the bass) F⁹ (5th in the bass) Eb⁹ (7th in the bass) C⁹ (9th in the bass) D⁹
 (Tonic - G) (Subdominant - C) (Dominant - D9)

6
 Bm/E G#m⁷ A⁹ D⁹ G#m⁷ G¹³
 (half cadence) (Dominant of a dominant) (Tonic - G)

(internal cadence to the dominant which is typical of psalm settings in an Anglican chant)

Ex. 6–6. J. Peter Burkholder, *The Critique of Tonality*, Ex. 3, *Psalm 67*, mm. 1–11, Tonic dominant outline adapted from original example.

⁴⁰⁷ J. Peter Burkholder, “The Critique of Tonality,” *Music Theory Spectrum* 12, no. 2 (Autumn, 1990): 212.

Conclusion

In previous chapters I've outlined numerous examples of the relationship between expanded chords and topics of scholarly research in an effort to show unification by a common element. In the following section I will discuss research objectives, indicating the areas that I believe have met this objective. To that end, I will provide a recap of salient points from each chapter followed by recommendations for future research on the music of Charles Ives—all of which are based on my findings as well as the research used to support my findings. The concluding section of this paper will consist of what I believe to be my contributions to existing knowledge on Charles Ives and his music. These personal observations will hopefully serve to enhance the insightful work of other scholars.

In chapter two I set out to show how the early influences of Charles Ives account for the continued presence of expanded harmony in his works, supporting the notion that expanded chords are the foundation and unifying element for all other concepts and techniques employed by Ives. Stories about his childhood experiences and interests, as conveyed by Cowell, Burkholder, Feder, and Ives himself, provide a basis for exploring the role of expanded chords in the early works of the composer and beyond. These stories involve the most influential people in Ives's musical life—among them George Ives, Dr. Griggs, Horatio Parker (as a foil) and the Transcendentalist writers of Emerson, Hawthorne, and Thoreau (even though early influence of these writers is debatable). Except for Horatio Parker, these figures encouraged Ives to break

with tradition and experiment—especially with regard to harmony. Between Ives's earliest influences and natural inclination towards experimentation, I felt reason to believe expanded harmony served as a foundational aspect of his compositional thought process. This led me to explore many avenues of research in discovering the relationship between expanded harmony and other areas such as the topic of gender-coded harmony.

In discussing Ives's philosophies on gender in relation to harmony, I have shown that his music consists of a balance between consonance and dissonance, reflecting notions of femininity versus masculinity—achieved largely in the context of expanded chords. Many pieces were revised with added dissonance (such as a semitone inserted into a largely tertian chord) to possibly bolster the masculine quality of a chord and strengthen the ears of the listener—a self-imposed responsibility). In exploring philosophies about composition and function of harmony, I have shown how Transcendentalist concepts about vagueness in art are mirrored in Ives's music through the use of expanded chords—many of which have ability to imply multiple resolutions, imparting a sense of vagueness. I have discussed the area of substance versus manner (a topic of great importance to Ives and the transcendentalist movement), revealing the relationship between expanded chords and the ideals that drive Ives's compositional thought (especially the use of harmony as a vehicle of substance). In discussing the concept of the past, present, and future, I have demonstrated how crossing temporal borders is achieved through techniques such as semitonal shifts, accompanied by expanded harmony.

On the subject of programmaticism (addressed by almost every researcher from my list of resources) I have provided examples of expanded harmony in representing several topics including: childhood memories, people, places, journeys, war, and fictional stories. Many of the programmatic topics involve nostalgic references to Ives's father—a figure tied directly to Ives's early associations with expanded harmony.

In the area of technique, I've outlined numerous examples to demonstrate how word painting is directly paired with expanded chords, often serving as a leitmotif along with coloring the text. Additional techniques (as described by other researchers such as Philip Lambert) have been presented to show how concepts such as the wedge, palindromic wedge, and other intervallic systems produce expanded harmony. Likewise, expanded chords are shown to reflect compositional techniques (e.g. chromatic aggregates, bitonality). In the area of style, I have provided examples of how stylistic change within a single piece is often facilitated by expanded harmony, marking the exact point of a shift between two contrasting styles (e.g. "Ann Street" and "The Things Our Fathers Loved").

On the topic of form, I have discussed cumulative form, or the idea of fragments building towards a whole, and the role of expanded harmony in the development of a motive—many times serving as the only significant change in a recurring fragment. This is seen very clearly in the *Concord Sonata* in which the motive from Beethoven's Fifth Symphony reappears in a variety of harmonic settings. Frequently this organic four-note cell is interrupted by other material with varying expanded chords to maintain interest.

Beyond discussions of cumulative form versus sonata form, I have shown that sections within conventional forms are frequently outlined and altered through the use of expanded chords. The use of such harmony also affects the perception of form—especially regarding the end of a movement. In the case of “formless form,” many pieces conclude without a feeling of finality—using chords such as an eleventh without further resolution. Works with text can convey a sense of “formless form” due to the stream of consciousness approach in which thoughts are expressed without concern for continuity; this is often mirrored in the accompanying harmony along with a free approach to changing sections. Even when text is absent, the sonority of a chord directly affects the notion of a section as being closed or open. In short, harmony appears to be a powerful and consistent expression of form in Ives’s music, uniting features such as text, length, formal structures, dynamics, quoted songs, etc. Lastly, I have shown that contrasting perspectives on the form and structure of a piece can be explained through the common element of expanded harmony. Even when scholars disagree on perspective, expanded chords are a common element in supporting opposing points of view.

The resources used for this paper have been invaluable in discovering the diverse elements that contribute to the functionality of Ives’s music. While some composers have considered Ives’s music to be incoherent, many researchers have adeptly shown his music to be a highly cohesive expression of ideas—even when the intention is to achieve vagueness and “reckless form” (in the words of Lloyd Whitesell). Commonalities in future research may be achieved by approaching Ives’s works with harmonic analysis as a first consideration. Once

expanded chords have been identified, parallels can be drawn between harmony and other aspects within a single piece, which can then be compared to other works to track consistency across Ives's repertoire. In many instances, expanded harmony will serve to connect seemingly disparate elements—making them into a cohesive whole.

While scholars have identified and explored the various topics covered in this paper (e.g. Transcendentalism, form, quodlibet, harmonic structure, etc.), there appears to be a gap explaining how all of these various elements are connected. Furthermore, expanded harmony appears to function as a subcategory at best within the context of other scholarly work. Even when Philip Lambert describes systematic techniques (such as a palindromic wedge) the resultant harmony (and its significance) is little discussed. Part of the inspiration to pursue what I believe to be the quality that “fills in the gap” is the clear evidence of Ives's focus on harmony at a very young age. His preoccupation with the overtone series (even quarter tones) and desire to experiment with chords in his early days as a church organist supports the notion that expanded harmony is at the core of his creative journey and an essential part of his being. Hence, there is good reason to pursue a comparison between expanded chords and all other aspects of his music.

This is not to suggest that the individual research used for this paper is lacking or insufficient. To the contrary, by exploring the different areas of focus from each author, my own theories about the interconnectedness between expanded harmony and other topics received greater support. For example, in a single work, such as “Grantchester,” Matthew McDonald's discussion of Ives's

aesthetic choices concerning dissonance and consonance in his reharmonization of Debussy's *Prélude*, provided a strong foundation in understanding his choice of chords. Furthermore, the notion of inserting dissonance into Debussy's original harmony helped to understand the role of harmony as relates to gender.

McDonald's observations also provided support for the transcendental concept of substance and manner. Within this piece, as well as others, the discussion of temporal borders and the relationship to semi-tonal shifts led to my investigation of expanded chords and their assistance with such transitions between past, present, and future. I have also explored the concepts of spirituality and nature as being represented by expanded chords, such as the final measures of "Grantchets" in which Ives depicts the solitary contemplation of one's natural environment, assisted by an eleventh chord. Lastly, the concept of employing borrowed tunes and the quoting of classics are shown as largely facilitated by expanded harmony. It is my hope that, through focusing on the role of expanded harmony as a thematic thread throughout the oeuvre of Ives's works, future scholarly work can show greater continuity within the diverse aspects of a given piece. While I feel my suggested approach will benefit future research, my personal observations and research are not meant to negate the work of others. Its goal is to enhance the findings of others and, hopefully, bridge the gap between opposing viewpoints.

In closing, expanded harmony plays an undeniable role in uniting and enhancing all aspects of Charles Ives's music. Its presence is all-encompassing—serving as a connective tissue for the topics presented by other scholars. Expanded harmony in Ives's music crosses over the borders of

theoretical approach much in the same way Ives's music traverses aspects of time; it is capable of simultaneously supporting differing perceptions in the same manner in which eternity embraces the past, present, and future.

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