EMBODIED MEANING IN JOHN ADAMS' *EL NIÑO*

A Thesis

Presented to

The Faculty of the Department

of Music

University of Houston

In Partial Fulfillment

Of the Requirements for the Degree of

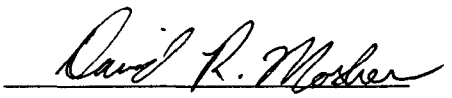
Master of Music

By

David R. Mosher

May, 2011

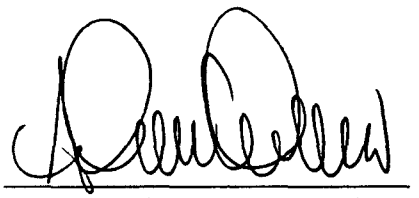
EMBODIED MEANING IN JOHN ADAMS' *EL NIÑO*



David R. Mosher

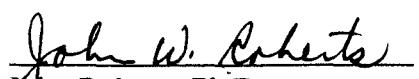
APPROVED:

Timothy Koozin, Ph.D.
Committee Chair



Andrew Davis, Ph.D.

John L. Snyder, Ph.D.



John Roberts, Ph.D.
Dean, College of Liberal Arts and Social Sciences
Department of English

EMBODIED MEANING IN JOHN ADAMS' *EL NIÑO*

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ABSTRACT

This thesis applies a new combination of elements from contour, embodiment, transformational, semiotic, and narrative theories in an analysis of selected scenes from John Adams' *El Niño*, including the movement "For With God No Thing Shall Be Impossible," sections of "The Christmas Star," and "I Sing of a Maiden." The analysis uncovers how musical contours and harmonic transformations project layers of narrative in Adams' stage works through their embodiments in physical action. The contour analysis reveals how the composer's expressive aims are realized through correlations among stylistic tropes that can be revealed through contour mappings. The transformational analysis is applied analytically to show Adams' priority in these three movements for relative mediant relationships and to show how these are used to project narrative meaning. The implications of applying this blend of methodologies in the new context of minimal and post-minimal repertoire are far-reaching. The approach provides the analyst with a novel lens through which to interpret minimal and post-minimal repertoire of all kinds with the aim of apprehending musical meaning.

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I would like to extend my most sincere thanks to Dr. Timothy Koozin, whose direction and insights have enabled me to be successful in this endeavor. His mentorship in my teaching assistant experience at the University of Houston and his guidance as a professor has also proved an invaluable aid in my own personal growth and development as a music theorist. Thanks are also due to my committee members, Dr. John Snyder and Dr. Andrew Davis for their valuable comments and suggestions as well as the positive influence they have had upon me while a graduate student at the University of Houston.

My heartfelt gratitude goes to my parents, Steve and Martha Mosher, and my brother Robert, his wife Kathryn, and my sister Gail for their continued prayers, support, and love that I have never been without for a moment of my life.

Most of all, I would like to give all my love and admiration to my wife Reneé Mosher, who has captured my heart forever and inspires me anew every day.

INTRODUCTION

While music composed in the common-practice period has its own well-established music theory methodologies for analysis, the music under consideration in this document does not enjoy such a long-standing tradition of analytical techniques. The primary reason for this is due largely to the newness of the compositional approach, as well as the sheer newness of the music itself. John Adams has forged his own compositional voice in our day. This is not to imply that his writing is devoid of influence from previous generations, only that his compositional language operates in a new way that renders many of our previous analytical tools, in their present form, of little use in approaching his music. Given this lack of tools for analysis, it is necessary that new tools be developed or old tools modified in such a way that they can begin to approach an understanding of this music.

In this document, I integrate tools of analysis from various areas of music theory as a means of interpreting embodied meaning in minimalist and post-minimalist repertoires. I combine elements from contour, embodiment, transformational, semiotic, and narrative theories as a means of drawing interpretative meaning from the music. The music analyzed in this paper includes selected portions from Adam's stage work *El Niño*.

The post-minimalist label, though an inadequate term, will be used in describing Adams' work. Initially Adams was lumped into a category of composers known as minimalists, a classification that Adams rejected. As Adams' compositional style has evolved, he has been termed a post-minimalist. This term is lacking in describing Adams' sound world in that the prefix "post-" simply means that it came after something

that previously occurred. While the label does show his style to be distinct from minimalism, it simply makes that distinction through an absolute temporal reference rather than a reference to that of which his style actually consists. Or, to put it more plainly, the label implies that Adams is different from the minimalist composers simply because he arrives on the scene later in the historical timeline. The influence of minimalism on his compositional style is certain, but his music is not limited to this compositional approach. So, how can an analyst adequately begin to explain his music? The analytical techniques offered in these pages present an approach rooted in theories of semiotics and contour theory. Helpful analytical techniques are already available, though they will need to be appropriated in a new way in order to accommodate this different repertoire.

The contents herein provide an introduction to the analytical techniques employed followed by analysis of sections from *El Niño* utilizing the techniques in context. Chapter One addresses contour and embodiment theories. The chapter begins by providing a backdrop for understanding the ways in which contour theory, as an analytical tool, mirrors aspects of human musical perception. Examples of its application to a variety of musical parameters are provided for a simple children's tune and a piece of well-known classical music. The chapter also introduces embodiment theory as it pertains to the listener's natural tendency to conceptualize musical image schemas and map them onto previous bodily experiences. Aspects of mappings that occur in the listening experience are then rendered analytically through a contour graph. Chapter Two begins by providing the reader with a background in semiotic theory. It uses Wagner as a prime example of a Romantic composer who intentionally encoded extra-musical signification in his music through timbre and sonority in like manner to Adams. The chapter concludes by showing

some standardized minimalist topics of signification. Chapter Three proceeds to apply the methodologies to selected scenes from John Adams' *El Niño*, including the movement "For With God No Thing Shall Be Impossible," sections of "The Christmas Star," and "I Sing of a Maiden."

CHAPTER ONE: CONTOUR THEORY METHODOLOGY

The use of contour theory is the first step in uncovering embodied meaning in the John Adams repertoire discussed in this document. The shape of musical elements is used compositionally in these selected pieces to tell the listeners a story that may or may not otherwise be told outright. For example, in certain instances the contour embodies musically what is being told through the text of a vocal or chorus line. In other instances, it embodies a story that is disclosed only through musical contour and is not stated explicitly or overtly anywhere in the libretto itself. In this way, the story is embedded in the contour, which makes contour theory a prime means of uncovering embodied and narrative meaning in these pieces. This chapter begins with an explanation of basic principles in contour analysis. It is then applied as a basis for interpreting embodied meaning.

1.1 Contour Codes and Specific Interval Codes

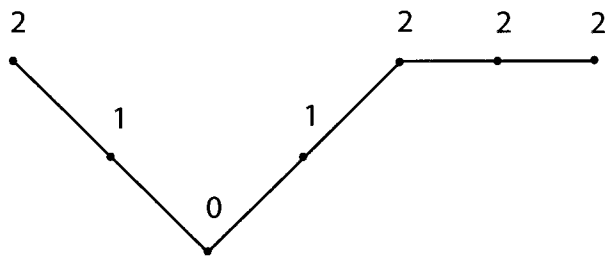
Melodic lines and repeated gestures are often carriers of embodied meaning in minimalist and post-minimalist style. In my analytical process, the shape of a musical gesture is captured via a contour graph of the melodic shape. It is therefore helpful to understand how melodic contour graphing works.

Melody is made based on what Bharath Chandrasekaran et al. calls "two types of pitch information: a contour code, involving changes of pitch direction between successive

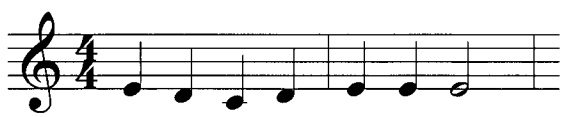
tones; and an interval code, involving the relationship between successive tones on a musical scale."[1] Example 1.1.1 below illustrates these two types of information.

Example 1.1.1

Contour Code for "Mary Had a Little Lamb"



Interval Code for "Mary Had a Little Lamb"



The contour code shows a graph of the shape of the melodic line without reference to specific pitches, while the interval code, simply standard musical notation, shows the exact pitches and their specific intervallic relationships to one another. In the contour code graph, the shape of the melodic line is represented by the code <2101222>. The lowest pitch is a contour segment is always set to zero, with each successively higher note receiving the next successive Arabic numeral. The interval code graph is standard musical notation, which obviously contains much more information about this piece of music including letter names of each of the pitches, the precise intervals between each

[1] Bharath Chandrasekaran, Ananthanarayan Krishnan, and Jackson T. Gandour, "Relative Influence of Musical and Linguistic Experience on Early Cortical Processing of Pitch Contours," *Brain and Language: A Journal of the Neurobiology of Language* 108/1 (January 2009): 1.

successive pitch, the scale degrees that are implied, and so forth. In comparison with standard musical notation, contour graphs enable us to focus our attention on the general shape of a single parameter of music at any given time. In the above example, melodic shape was the focal point, but the methodology is flexible enough to allow any parameter of music to be graphed. This is a testimony to its flexibility as a methodology, which will be put to use in analysis of Adams' music.

1.2 Understanding Melodic Contour

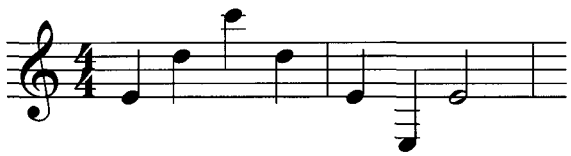
Melody tends to be the most memorable of musical materials. In all types of music, one is familiar with what it feels like to walk away from a concert humming a theme from the musical work that has just been experienced. In understanding this melodic power, the contour of a melody is the first type of contour analysis to be explored. Furthermore, in large part, it is the contours rather than the pitch classes themselves that make a melody memorable.

It has been proven that even from the youngest of ages we will naturally retain the contour of a melody before we will actually remember the precise pitches themselves. Even after the melody is precisely memorized, were we to forget the melody after a period of non-use, the contour will naturally be preserved longer than will the precise melody notes.[2] These most natural human attributes of contour perception, recognition,

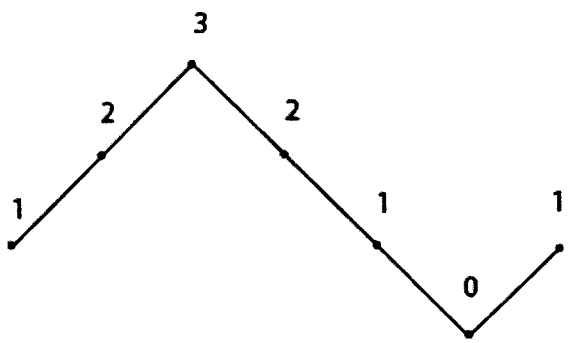
[2] Diana Deutsch, "The Processing of Pitch Combinations," in *The Psychology of Music*, ed. Diana Deutsch (London: Academic Press, 1999), 349-411.

and retention demonstrate the power and effect that contour can have upon a listener. Contour theory capitalizes on these human powers of perception, modeling the ways we as humans listen.[3] This study proposes that in the music of John Adams, melodic contour is foregrounded as a primary focal point for the listener. Contour segments are easily recognizable through the patterned repetition found in minimalist and post-minimalist style. With this kind of highly repetitive music, the small melodic segments are repeated seemingly endlessly to the point that we feel as if they have become a part of us. This promotes communication of embodied meaning as listeners perceive the physical gestures involved in the performance of patterned repetitions.

Example 1.2.1



Contour Graph of Re-Composed Version of "Mary Had a Little Lamb"

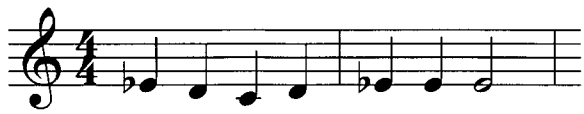


[3] Michael L. Friedmann, 1985. "A Methodology for the Discussion of Contour: Its Application to Schoenberg's Music," *Journal of Music Theory* 29/2 (1985): 226.

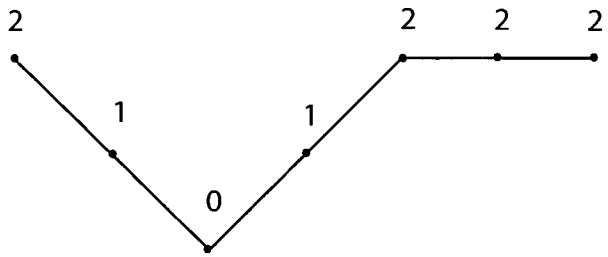
In Example 1.2.1, the melody of "Mary Had a Little Lamb" has been recomposed using the same pitch classes and rhythms as in the previous example, but the melodic contour has been significantly altered through registral change. This new melodic contour renders one of the most familiar melodies from early childhood almost completely unrecognizable. This points to the fact that a large part of what is perceived by the mind as memorable is due to the contour of that melody. In "Relating Musical Contours: Extensions of a Theory for Contour," Elizabeth West Marvin and Paul A. Laprade state that "listeners are for the most part unable to recognize familiar melodies which have been distorted by octave displacement unless the melodic contour remains invariant."[4] Even when the specific intervals are changed within a melody—such as a melody that undergoes a mode alteration—if the contour is retained, the melody is far more recognizable (despite its darker sound) than when the contour is altered. This is illustrated below in Example 1.2.2.

[4] Elizabeth West Marvin and Paul A. Laprade, "Relating Musical Contours: Extensions of a Theory for Contour," *Journal of Music Theory* 31/2 (1987): 225.

Example 1.2.2



Contour Code for "Mary Had a Little Lamb"
in Minor Mode



Despite the mode change in "Mary Had a Little Lamb" through a specific interval alteration, one would have no trouble recognizing the tune. A typical listener recognizes that the tune was altered, but would easily recognize the reference to the original. Again, this shows the brain's attention, retention, and recognition of musical contour. This is also true with regard to rhythmic contour. If the rhythmic durations were altered so that it affected the rhythmic contour, it would also impair recognition for a listener. On the other hand, if the rhythmic contour is retained, the listener has less trouble identifying the selection. This makes contour theory's application to other parameters in the music all the more relevant.

1.3 Contour Segments Applied to Other Parameters

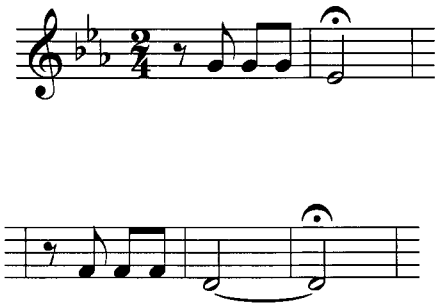
In minimalist and post-minimalist repertoires, musical parameters other than melody are often prominently foregrounded and are used to convey embodied meaning. As an analyst, it is therefore helpful to graph the motions of these other musical parameters as well. Contour theory provides this flexibility. Elizabeth West Marvin utilizes contour theory as her analytical method for approaching the music of Edgard Varèse via rhythmic contour.[5] In her *Music Theory Spectrum* article, she states that "rhythmic contours may be understood as analogous to melodic contours: they represent relative durations in much the same way that melodic contours represent relative pitch height without a precise calibration of the intervals spanned."[6]

Rhythmic contour graphs are constructed by using relative temporal space comparing the durational distance from one element to the next in a general manner from shortest to longest note value.[7] The note value that is the shortest is set to zero. Due to issues of articulation such as staccato or legato etc., actual sounding values of the notes are not what is measured. Instead there is a more general application of what Justin London refers to as interonset intervals or IOIs. An IOI is the distance "between attack points of successive events."[8] However, in London's approach, precise timings measured in seconds are applied, whereas contour theory's more general approach simply measures durational distance in terms of "short – longer – longest" from one attack point to the next. In considering the Beethoven example, the initial rest is not notated in durational

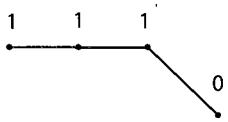
[5] Elizabeth West Marvin, "The Perception of Rhythm in Non-tonal Music: Rhythmic Contours in the Music of Edgard Varèse," *Music Theory Spectrum: The Journal of the Society for Music Theory* 13/1 (1991): 61-78.
[6] Ibid., 64.
[7] Marvin, 65.
[8] Justin London, *Hearing in Time* (Oxford: Oxford University Press, 2004), 4.

contour because no attack point has yet occurred, so it is not notated on the rhythmic contour graph.

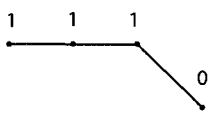
Example 1.3.1



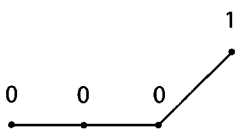
Melodic Contour Graph of Notes One Through Four
From Beethoven's Fifth Symphony



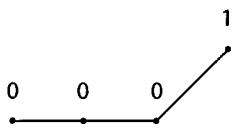
Melodic Contour Graph of Notes Five Through Eight
From Beethoven's Fifth Symphony



Rhythmic Contour Graph of Notes One through Four
From Beethoven's Fifth Symphony



Rhythmic Contour Graph of Notes Five through Eight
From Beethoven's Fifth Symphony



Example 1.3.1 compares melodic and rhythmic contour graphs of the well-known opening motive of Beethoven's Symphony No. 5 in C Minor op. 67. The first eight notes are given, broken up into two segments where the segmentation is obviously based on the sequence of the original four-note motive. Notice that in the two melodic contour graphs, these two segments are shown as equivalent contours <1110>. The rhythmic contour graphs are also equivalent to one another as <0001>. Unity between melodic and rhythmic contours is achieved through the contours' inversional relationship.[9]

Rhythmic proportions at all levels of musical listening from the smallest cell to those on the much larger formal proportions of a movement can easily be compared and mapped onto a contour graph. Once again, this approach is much more akin to the way an actual listener will perceive and experience various rhythmic units in relationship to one another. Particular to the music of Adams, small cells of rhythmic groupings are used in a highly repetitious manner. These cells are most naturally heard in terms of comparing the relative duration of note values of the notes within the cell. The regularity of the pulse stream created by the repetition of a cell causes us to compare the whole cell's duration with that of a new cell that later takes its place or in comparison to its rhythmic interaction with concurrent and competing pulse streams in the music. On a larger scale, blocks of music that make up the parts of a musical form are heard by the listener in terms of general shorter and longer as well. Contour theory, through the rhythmic lens, allows us to graphically display an interpretation of temporality as a listener most naturally hears it in listening to Adams' music.

My analysis of *El Niño* selections will show that John Adams uses musical contour to tell a story. The musical contour may be used to support, contradict, or even provide its

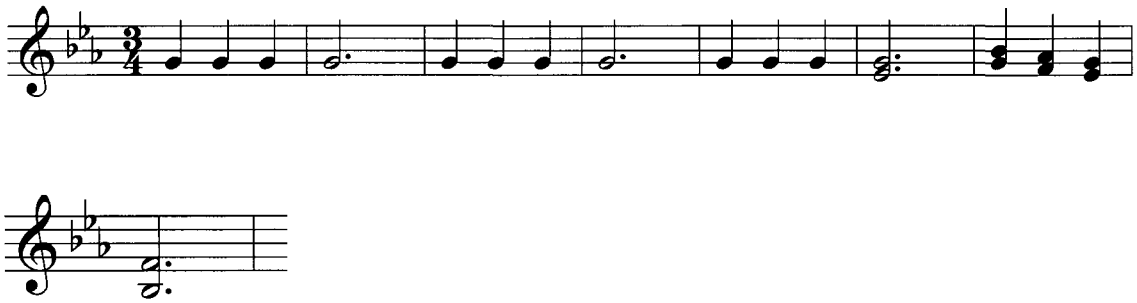
[9] Marvin and Laprade, 225-267.

own second narrative that would otherwise go untold. Segments that are equivalent will often slowly morph over time through slight alterations in the repetition indicating changes in the unfolding of the musical narrative. Drastically different contour graphs often indicate conflicted states or different stories occurring simultaneously. It will be shown that as repeated elements migrate through varying contexts, different kinds of narrative agency are projected.

Marvin and Laprade posit that "given the same or similar rhythmic pattern, listeners are generally able to perceive equivalence or similarity among musical contours more easily than among pitch class sets in a melodic setting."[10] Returning to the example currently under consideration, Beethoven presents his well-known rhythmic motive throughout this symphony in all kinds of different melodic, harmonic, and even metric contexts, and yet because of the general rhythmic similarity, the reference to the original opening motive is clearly understood. One example of this is realized in Example 1.3.2. In this example, every two-bar segment is represented by the rhythmic contour graph.

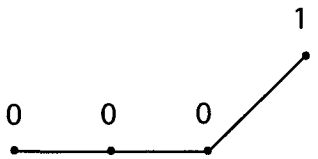
[10] Marvin and Laprade, 226.

Example 1.3.2



horns ms. 19-26 mvt. 3

Rhythmic Contour Summation
For Horn Excerpt

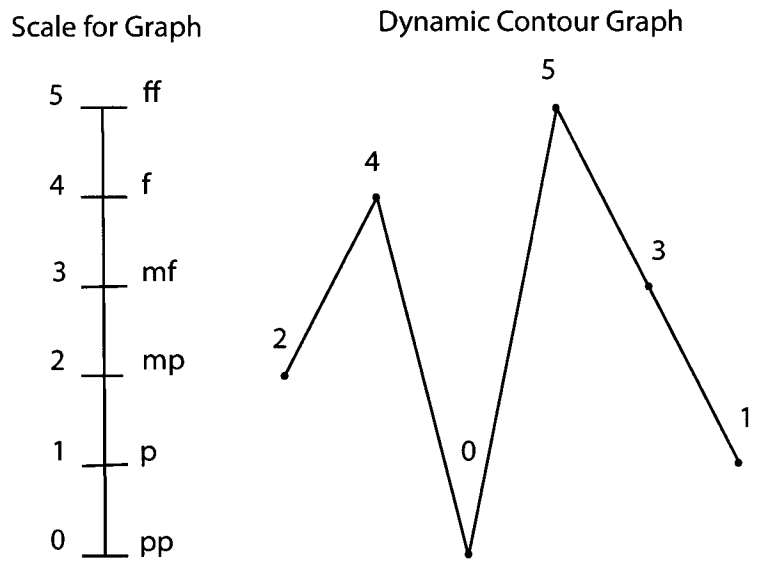


By comparing Example 1.3.1 and Example 1.3.2, it is evident that Example 1.3.2 uses a different meter, different pitches, and different note values and yet it is easy to recognize and understand its association with the original statement of the motive. It is even termed a "rhythmic motive" based on the fact that the general rhythmic contour is short-short-short-long and therefore marked in our conciousness. Notice how well the contour graph illustrates this rhythmic "sameness" by showing the rhythmic grouping of short-short-short-long or <0001> without reference to note values, metric context, pitch context or anything else. It very effectively links this statement as an identical rhythmic contour with the initial statement at the beginning of the piece. Once again, these rhythmic

contours, when compared with the melodic contours, can be seen as inversionally related, creating an audible sense of unity.

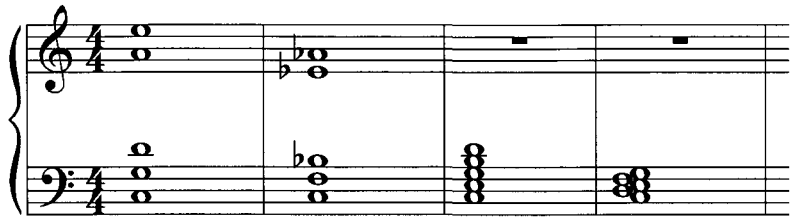
Again, in minimal and post-minimal repertoire, any musical material is subject to semiotic treatment. The following graphs are helpful in illustrating how contour graphs may be used to interpret other musical parameters.

Example 1.3.3

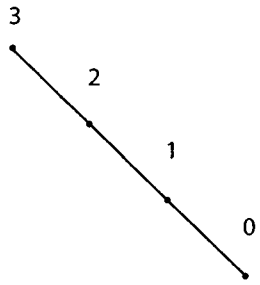


In the above graph, several dynamic indications are shown throughout a hypothetical piece of music in the following order: mezzo piano, forte, pianissimo, fortissimo, mezzo forte, and piano. The contour graph takes the softest dynamic level and sets it to zero, with each increasing dynamic level receiving the next highest Arabic numeral. This creates a graph that reads <240531>.

Example 1.3.4



Harmonic Interval Spacings Contour Graph



3 = Voicings in Stacked Perfect Fifths - C-G-D-A-E
2= Voicings in Stacked Perfect Fourths- C-F-Bb-Eb-Ab
1= Voicings in Stacked Major and Minor Thirds - C-E-G-B-D
0= Voicings in Stacked Major and Minor Seconds - C-D-E-F-G

Example 1.3.4 shows four intervals stacked upon each other to create four distinct sonorities. Voicings stacked in seconds are set to zero, with increasing interval size receiving a corresponding larger number on the graph.

1.4 Ascribing Embodied Meaning to Musical Gestures

After a contour graph is derived from elements that musical intuition suggests might be marked for semiotic interpretation, the shape of the contour graph can be compared to similar shapes of physical motion that might occur or be implied in the narrative or subject matter of the work. The contour graph then becomes a visual representation of one-to-one mapping between the modalities of musical motion and physical motion. The contour graph becomes an image of both a physical motion and a correlating musical motion. The graph is a direct way of comparing the musical shape, motion, or gesture with a corresponding physical motion, shape, or gesture common to human experience. This embodied gesture is subsequently interpreted for its semiotic significance in the context of the narrative.

Theories of embodiment available to us through science and philosophy have far-reaching ramifications when it comes to the way listeners experience music. According to George Fisher, *The Body in the Mind* by Mark Johnson argues that human understanding comes out of bodily experience and that metaphorical projection of our movements is the basis of our thinking.[11] That includes musical thinking. Fisher states that this concept of Johnson's "proves particularly fruitful for music scholarship. For instance, the metaphors of musical movement, the directionality of that movement, and the notion of tension and release achieve their significance from bodily experiences of moving, of spatial orientation, and of muscular feeling."[12] Cognitive science has shown that "thinking consists, at least in part, of matching patterns of thought to patterns of experience. Second is the notion that much of our thinking consists of mapping patterns of bodily

[11] Mark Johnson, *The Body in the Mind* (Chicago and London: University of Chicago Press 1987), xiv. Cited in George Fisher and Judith Lochhead, "Analyzing from the Body," *Theory and Practice* 27 (2002): 41.
[12] Ibid., 39.

experience onto patterns in other domains."[13] Musically speaking, Howard Margolis says that "all thinking—from the recognition of a musical motive to the proof of a mathematical theorem—is based on pattern matching."[14] This type of pattern matching is exactly what I am proposing signifies meaning to the listener in much of Adams' music. The contour graph of a musical segment provides a visual picture of an experience that the listener has encountered aurally. The aural image, or *music schema*, is an internal representation of pattern that the listener experiences. It is encoded with meaning based on a similar patterning stored in the listener's memory from a previous bodily experience. The process of musical schemas interacting with bodily experience is referred to by Candace Brower as cross-domain mapping. According to Janna Saslaw, Lakoff and Johnson posit that our normal conceptual system is primarily metaphoric "so metaphors are not merely literary devices in the realm of language, but agents of conceptual organization...In this sense a metaphor may be defined as 'a cross-domain mapping in the conceptual system'."[15] This cross-domain mapping may occur at a conscious or subconscious level constantly in Adams' music. In fact, the high amount of repetition of musical units reinforces the implication of image schemas. The musical schemas presented are marked for our awareness as they interact with stored memories of previous bodily experiences in other domains. As Brower states, "The various alignments among these mappings contribute to the music's metaphorical resonance, resulting in an intensification of meaning like that found in poetry. In a texted work, this effect is further heightened by the resonances established between music and text."[16] In Adams'

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[13] Candace Brower, "A Cognitive Theory of Musical Meaning," *Journal of Music Theory* 44, no. 2 (2000): 323.
[14] Ibid., 323.
[15] George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: The University of Chicago Press, 1980), 3. And George Lakoff, "The Contemporary Theory of Metaphor" In *Metaphor and Thought* (Cambridge: Cambridge University Press, 1993), 203. Cited in Janna Saslaw, "Forces, Containers, and Paths: The Role of Body-Derived Image Schemas in the Conceptualization of Music," *Journal of Music Theory* 40, no. 2 (1996): 220.
[16] Brower, 355-6.

operas, the texts offered in the libretto are expanded, intensified, elaborated, contradicted, and given new meanings by the musical schemata presented.

1.5 Holistic Experience

Through its high amount of repetition, music of Adams and composers of the minimal and post-minimal tradition enable the listener to fully and bodily experience the action of a character, idea, or persona that is being represented musically—the music, in effect, *becomes us*. This process is not unlike the student who repeats factual information to himself over and again until he has ownership of that information—until it has become part of himself. The average listener gives little thought to *how* he experiences music; he simply *does* experience it. Yet embodiment theories inform us that the musical experience is one that is holistically encountered. Our entire bodies are engaged and active in the musical experience. Embodiment theory that was first developed by such philosophers as Heidegger and Merleau-Ponty and cognitive scientists such as Valero emphasized that the manner in which we experience all things is as a unified whole, or as a holistic being. This approach to human experience stands in stark contrast to the more dualistic notion of mind versus body.[17] Rather, embodiment theorists unite mind and body as a single experiential unit. As that belief translates into music theory practice, they claim that "detailed understanding of music as sounding phenomena is crucial to an understanding of music as a human activity generally and that the most fruitful access to comprehending music as meaningful behavior is through the active and creative body."[18] This is my approach to the selections from Adams music. The music is not simply a listening experience, but an encounter with our whole being. This encounter through the music allows us to fully and bodily experience the action of the character onstage, the

[17] Greg Corness, "The Musical Experience Through the Lens of Embodiment," *Leonardo Music Journal* 18 (2008): 21.
[18] Fisher and Lochhead, 37-67.

idea, or the persona that is being represented musically—it in effect *becomes us*. In this way, the meaning that is projected is interpreted through our own holistic experience of the action inherent in the music.

In what ways then is this holistic bodily experience of music played out? Gilbert Rouget makes the following observation on *how* humans experience music: "We respond to it in several ways; to simplify matters, let us say physiologically, psychologically, affectively, and esthetically."[19] Rouget emphasizes that to experience music with our entire being, whether we are consciously aware of it or not, is the most natural way to experience music. Most listeners tend to focus only on what is perceived by the ear, but all too easily forget that the sound we hear is also a very physical experience. Embodiment theory emphasizes the physicality of music. " 'To bathe in music' is not just a metaphor. It happens that we truly perceive it through the skin."[20] We understand through science that sound actually comes to us as wave vibrations emanating from a vibrating body (or body in motion) that sends these vibrations out and physically strikes our ear drums causing them to vibrate, transforming the vibrations into nerve impulses that are subsequently perceived by our brains.

Music listening is a very tangible and palpable experience that emphasizes the unity of cognition and the physical body. Rouget states that "the movement of the objects that give rise to these vibrations – or the movement that they excite in objects, since the transfer of energy can take place in either direction – is always palpable and often even visible. It is thus directly perceptible as material and concrete."[21] There are numerous examples of how listeners and performers alike experience the physicality of sound. From the classical world of music listening, one can readily identify with being literally immersed in the wave vibrations of a fortissimo passage radiating from a massive pipe organ. Rouget mentions that "the candle flames flickering in churches at the sound of the

[19] Gilbert Rouget, *Music and Trance: A Theory of Relations Between Music and Possession* (Chicago: University of Chicago Press, 1985), 119.
[20] Ibid., 120.
[21] Ibid., 119-120.

organ provided Louis Roger (1748) with one of the observations on which he began constructing his theory of the effects of music on the human body."[22] In the world of rock and popular music, one can experience the physical shaking of the body's insides as the bass player unleashes his sound through the amplification of subwoofers.

From a performer's perspective, the instrument itself has to be engaged by physical movement. Being a pianist, I will illustrate using the example of someone performing at the piano. Initially, the piano sits silently awaiting the moment when one of its keys will be depressed; otherwise, no sound will ever be produced. The performer must first move his body in a physical gesture that places his own body in contact with the body of the instrument. This is a process that begins from his center of gravity, to the leaning gesture of his torso, to the rotation of his shoulders, to the freedom of his arms, to the proper curvature of his fingers and their movement, through the tips of his fingers finally making physical contact with the piano by depressing the keys in a precise gesture and with the correct amount of weight that elicits just the right tone. The physical body of the instrument then must go through motion as well. The key moves downward where it was depressed with the fingertips, but, being on a fulcrum, moves upward in the rear, which begins a process that engages the piano action and moves the hammer to strike the strings. At the contact of the hammer with the strings, the string itself moves (vibrates), beginning the movement of the wave vibrations discussed earlier. Evelyn Glennie provides an example of how these wave vibrations can play a crucial role in musical experience: she is one of the most renowned performers in the percussive arts, and the fact that she is "profoundly deaf" calls our attention to the "central role of bodily activity in the projection, apprehension, and constitution of musical meaning."[23] Embodied physical motion will then occupy a central role in the construction of musical meaning in the Adams selections. As one can clearly see, physical movement and gesture are

[22] Ibid., 120.
[23] Fisher and Lochhead, 37.

inextricably linked to music. In fact one would certainly not be remiss to say that music *is* movement. One cannot experience music without experiencing movement and gesture as well.

Merleau-Ponty argues in his *Phenomenology of Perception* that the lived-body "grounds all experience and knowledge and provides the synthesizing function that unifies the world as lived. Meanings of the world arise not through some conscious activity of the mind but rather through real or implicit bodily action."[24] This world-view has been appropriated by scholars in a variety of disciplines, including music theory, and has also become a framework for analysis of musical meaning. Adapting it for application to musical analysis would render it something like this: *The lived-body synthesizes musical experience and musical knowledge and unifies the musical world as lived. Musical meaning arises through real or implicit bodily action.* And again, this certainly includes Adams' music. The lived-body experiences Adams' music holistically and identifies with the musical gestures intimately because these gestures are common to human action in the real world. In this way, we experience musically the same thing we have experienced elsewhere in our own actions. Bodily action, then, can and will be used as a subject of musical analysis. This can take the form of analyzing the bodily actions of: a) the composer, b) the performer(s), c) the audience, or d) the musical narrative. In my analysis, the bodily actions taking place in the musical narrative and the composer's writing will comprise the bulk of the emphasis, though analysis of the actions of those in other categories certainly provides a fruitful area for further research.

A search for musical meaning is a search for musical performativity. As a person investigates what is meant musically, they are in essence asking, "How does the music perform, or what is its musical performativity?". Performativity analysis works very naturally in musical arts because music itself is a *performing art*. As music's

[24] Maurice Merleau-Ponty, *Phenomenology of Perception* (London: Routledge, 2002), 145-46. Cited in Fisher and Lochhead, 38-9.

performativity is analyzed, musical meaning gains further clarification as well.[25] The musical meaning itself is tied up in the way the music performs as expressed through the actions of the composer, the contours and motions and shapes of the music on the page, how this motion is rendered through the physical gestures of performance to appropriately express the inherent directed motion in the line, and how that motion from the performer is in turn received by audience's identification with the musical gestures and motions being conveyed (i.e., in what ways does it "move" the audience?).

The embodied musical experience is a shared, communal bodily experience linked through hearing. "Intercorporeity" is Merleau-Ponty's term for describing this shared bodily activity of the composer, performer and audience.[26] The concept of intercorporeity is a very important one. It allows us to apply the bodily motions or felt sensations of one group or category (composer, conductor, character in a musical narrative, performer, audience member, etc.) to those of *all* the other categories. As Fisher and Lochhead claim, "hearing entails a bodily enactment of musical meaning that links listeners, performers, and creators in the same musical enterprise."[27]

To preview an example of how embodied meaning is shared through intercorporeity, "The Babe Leapt in Her Womb" from Adams' *El Niño* seems an appropriate brief example.

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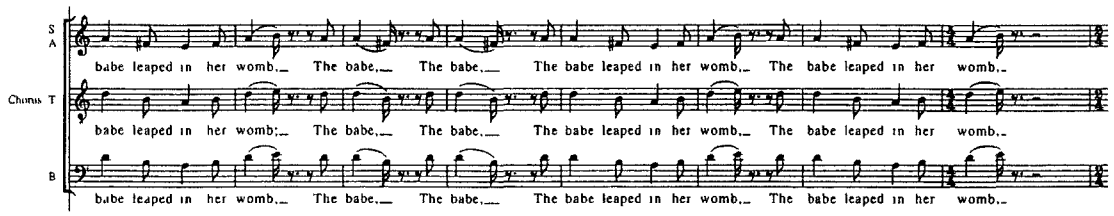
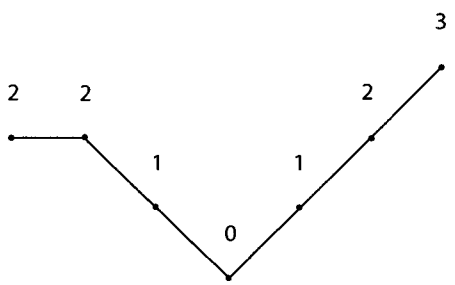
[25] Ibid., 39.
[26] Ibid., 39.
[27] Ibid., 46.

Example 1.5.1



El Niño by John Adams

Melodic Contour Segment from
"The Babe Leapt in Her Womb"



This part of the narrative is the meeting of Mary, the mother of Jesus, and Elizabeth, the mother of the prophet John, for the first time since they have both become pregnant. John has been prophesied to be the one to herald the way of the coming Messiah. As the narrative proclaims "the babe leapt in her womb" (referring to John jumping for joy inside the womb of his mother Elizabeth at the first "embryonic meeting" of himself and Jesus), the music embodies the physical actions of John as he jumps. Considering the shape of the contour graph of this moment in the music in Example 1.5.1, the movement and path that a jump would take is actualized here in this shape. The first portion of the

graph, <2210> represents the body's preparation for the jump: <22> is the body becoming set and balanced for the jump, while <210> is the crouch preparing for the body to spring upward. <0> is the ictus of the motion that ends the downward preparatory crouch <2210> and simultaneously initiates the upward spring of the jump in the second portion of the gesture. <0123> completes the entire jumping experience, yielding the full gesture <2210123>. This musical embodiment of a physical action is experienced on many levels. The action of a jump is a common shared experience that every human being has actually performed themselves in their own bodies. The vocalists experience the performativity of this gesture in their own bodies, as the jumping motion is actualized through the downward and then upward motion of the pitch production in their voices. The audience experiences this performativity through listening: they hear the shape of this gesture actualized by the performer and internalize it in their minds (consciously or unconsciously receiving the performativity of this shape). The mind has experienced this shape before in the listeners' own previously lived experience of jumping. Therefore, listeners can experience a one-to-one mapping with the melodic contour in this musical selection. The musical gesture thus has embodied meaning. Intercorporeity is also achieved through the shared experience that has taken place among composer, performer, listener, and character in the narrative. Interestingly enough, the rhythmic pattern also embodies the jumping motion of preparation and leap. Every two syllables of the phrase "the babe leaped in her womb" incorporates a miniature jump. The words "the" and "babe" are rhythmically grouped respectively as anacrusis followed by strong beat stressed agogically. This same pattern is found in "leaped in" and "her womb." In my interpretation, this anacrusis represents the preparation for the jump as its forward motion leads toward the jump, while the longer note value represents the jump itself.

1.6 Gesture

Gesture is a useful concept in the application of embodiment theory. Gesture fuses the abstract and the concrete into a single identifiable entity. It "is the link between bodily motion and musical sign."[28] I will consider two kinds of gestures in Adams' music. One is the musical gesture, and the other is the physical gesture. Our working definition of a musical gesture is a grouping of sounds that combine distinctively to form an identifiable unit. In Example 1.5.1, the melodic segment of "The Babe Leapt in Her Womb" is the musical gesture. It lends itself naturally to being grouped as a unit because of the rests that set it off on either side as well as the fact that it is a full sentence of text (a natural linguistic grouping) that is subsequently repeated. Gestures of the other type (i.e., physical gestures) can include any type of movement that the body is capable of in actuality, perception, or sensation. In "The Babe Leapt in Her Womb," jumping is the physical gesture. Both physical gestures and musical gestures are correlated. Analysis of one type of gesture should inform understanding of the other type of gesture. An experience of one enlightens the understanding of meaning in the other.

Methodologically, when one conducts analysis from a bodily-based standpoint such as this, the body's "outwardly observable" and "inwardly felt" bodily actions are used as evidence to support a particular reading of musical meaning or significance. "Our attention to what humans do and feel affirms that music is a human activity rather than a thing to be studied outside a human context."[29] "By conducting analysis in this way one insures that it is rooted in the facts of bodily existence rather than divorced from them."[30] The body's experience itself is treated as the musical analyst's evidence.

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[28] Ibid., 43.
[29] Ibid., 44.
[30] Ibid., 44.

1.7 Embodiment and Emotional Expression

Music can elicit a vast array of feelings and of emotions, and analysis of embodied motion allows us a tangible way into those felt emotions through an emotion's performativity in physical action. Emotive motion, or the bodily motions one performs while experiencing a given emotion, is one of the important types of motion that is musically embodied in the Adams selections. Knowing this, it is crucial to understand how felt emotion translates into real or perceived motion that may be expressed through musical motion as well. In *Kreisleriana*, E.T.A. Hoffman speaks of the instrumental music of Haydn using such affective terminology as happy, full of love and childlike optimism, sweet, and blissful. He states further that Mozart leads us to experience love, dread, melancholy, and gentleness while in reference to Beethoven he claims to feel awe, fear, terror, pain, and infinite yearning.[31] These deeply felt emotions that humans encounter through life experience and through music may be seen to unite in their expression through gestures that accompany these emotions – bodily and musical. Peter Kivy quotes Mattheson on this subject: "sadness, on the other hand, is caused by a *contraction* of those same subtle parts of our bodies. It is, therefore, easy to see that the narrowest intervals are the most suitable. ...Hope is caused by an elevation of the spirits; despair, on the other hand, a casting down of the same. These are subjects that can well be represented by sound especially when other circumstances (tempo in particular) contribute their share. In such a manner one can form a concrete picture of all the emotions and try to compose accordingly."[32] When we experience sadness, we ourselves are physically more contracted. For example, when someone close to us dies, we find

[31] Ernst Theodor Amadeus Hoffmann, *E.T.A. Hoffmann's Musical Writings: Kreisleriana, The Poet and the Composer, Music Criticism*, ed. David Charlton (Cambridge: Cambridge University Press, 1989) 97-98.
[32] Hans Lenneberg, "Johann Mattheson on Affect and Rhetoric in Music," *Journal of Music Theory*, II (1958), 51-2. Cited in Peter Kivy, *The Corded Shell: Reflections on Musical Expression* (Princeton: Princeton University, 1980), 39-40.

ourselves dealing with many negative emotions of which the term "sadness," though it may not fully describe the complex emotions we may be experiencing, may be a general and generic term that will suffice for our purposes at this time. Under such sad circumstances we might find that we are physically contracted. Our head literally hangs low, our posture is less erect, our shoulders slump forward, we may need to sit down to take our mind off it and even cry with our head between our knees. This is a physical form of contraction and an outwardly observable sign that takes place in our physical bodies under the circumstances associated with being emotionally filled with "sadness." Musically, Mattheson would say that the composer would do well to take these physical gestures, movements, and postures into account when composing with the intent of embodying these emotions effectively. Musically, one might experience a passage that similarly expresses grief and find that the musical contour itself expresses this same contraction that the physical body experiences, perhaps through intervals that begin large and are subsequently contracted further and further in the same manner as the body would do under these same circumstances.

Embodiment of joy will serve as an appropriate opposite example that is also mentioned by Mattheson (quoted by Kivy). Mattheson states: "since, for example, joy is the result of an *expansion* of our vital spirits, it follows sensibly and naturally that this affect is best expressed by large and expanded intervals."[33] When joy is experienced, a person allows more air in the chest and contains more energy; the person feels expanded. A passage of music may express this same emotion of joy by utilizing intervals in such a way that they expand more and more. A person may not physically notice the slight posture change of someone with a little more air in their chest (though if exaggerated, it may become readily obvious), but people still certainly identify with the *inwardly felt*

[33] Ibid., 39.

expansion that occurs when a person experiences the emotion of joy, and this can be musically symbolized via a similar motion.[34] Once again, musical gesture embodies the physical gesture that accompanies the emotional experience of joy.

1.8 Music as a Signifier

The embodied motion in Adams' music expresses or signifies meaning. Musical signification means that music may literally signify or stand as a representation of something other than itself. Understanding music as a signifier is not something new. In fact, Kivy recalls what he terms the "speech theory" of the *Camerata.*[35] "The members of the *Camerata* and their spokesmen saw the melodic line of their monody as resembling the rise and fall of the human voice in impassioned speech."[36] Here music represents and embodies an extra-musical experience. And we see that this way of thinking has a long history to it. The speech theory, however, Kivy claims "does not go nearly far enough."[37] Musical gesture may embody any kind of experience and must not simply be limited to patterns of speech. He takes this concept a step further by saying: "It is a "sound map" of the human body under the influence of a particular emotion."[38] The contour theory techniques presented earlier in this chapter give us a tangible way of looking at various musical parameters (melody, harmony, rhythm, tempo, dynamics, etc.) as a means for expression and embodiment of all kinds of extra-musical experiences. It then provides us

[34] Ibid., 39.
[35] Ibid., 51.
[36] Ibid., 50.
[37] Ibid., 52.
[38] Ibid., 53.

with a "map" or graph of the shape of the particular type of gesture that is itself symbolic of some human experience.

Kivy links various examples of materials of music as ways to correlate bodily motion and music. In regard to rhythm, he recalls plainly: "*of course* funeral marches are slow and measured, as sadness slows and measures our expression of it; *of course* rapid rhythmic pulses in music are suggestive of rapid behavior under the influence of the lighter emotions; *of course* jagged and halting rhythms have their direct analogue in human expressive behavior."[39] He also speaks of melodic lines with regard to the motion of the physical body: "The "rise" in pitch, like the raising of a physical body against gravity, requires, at least in a great many of the most familiar cases, increased energy. And the rise of pitch, both in natural organisms and machines, betokens a rise in energy level. The faster the wings beat, the shriller the sound; likewise, the more energy expended, the higher the engine's whine."[40] To further his argument, he quotes Nelson Goodman: "the forms and feelings of music are by no means all confined to sound; many patterns and emotions, shapes, contrasts, rhymes and rhythms are common to the auditory and the visual and often to the tactual and the kinesthetic as well."[41] Music, then, is not restricted to simply the black dots on a sheet of staff paper. Instead, this type of understanding allows music to come alive to our experiences through the lived-body. It reminds us that music is indeed a form of human expression both emotionally and "motionally." It is a medium with which to express any kind of human or even non-

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[39] Ibid., 55.
[40] Ibid., 55.
[41] Nelson Goodman, *Ways of Worldmaking* Indianapolis and Cambridge: Hackett, 1978), 106. Cited in Kivy, 56.

human (see the examples of birds and machines above) experience. Any musical parameter—rhythm, melody, harmony, spacing, form, or dynamics—may be used as an expressive device to embody a particular extra-musical experience or behavior.

I propose, acknowledging Kivy's precedent, that this method of analysis does not simply offer us a way in which we might try listening to music, but instead that this *is already* the way we naturally listen to music. Kivy states: "It is a hard psychological fact that we tend to "animate" what we perceive." This is why it is so easy for a cartoonist to turn a car's headlights into eyes, the side mirrors into ears, the grill into a smile and the windshield wipers into eyebrows and the public very readily accepts it with all the physical, psychological, social, and emotional attributes of a human being. We naturally anthropomorphize. One can also readily perceive this concept in our modern emailing and texting from cell phones by observing the way people see faces in combinations of parentheses, colons and semicolons as in Example 1.8.1 below.

Example 1.8.1

Smiley Face	**Winking Smiley Face**	**Frowning Face**
:)	;)	:(
Colon followed by closing parenthesis	Semicolon followed by closing parenthesis	Colon followed by opening parenthesis

The argument in Example 1.8.1 is that rather than simply seeing colons, semicolons, and parentheses, we tend to animate them. This is not the exception, but rather the rule of how we tend to see things. The majority of youth culture (and adult culture too, in informal settings) will use the above signs to connote these particular anthropomorphic meanings. In fact, it is probably much more natural and certainly no less "correct" for humans to see these as faces. Furthermore, to see them in this particular instance as less than faces is to miss the meaning entirely in this context.

Aurally, the same principal applies—to miss the embodied meaning in a musical gesture may cause a listener to miss the entire point of the musical expression. In *El Niño*, this is definitely the case, as the embodied motion of the musical gestures is a container of meaning in the music. Kivy argues that it is natural to animate the aural the same way we animate the visual.[42] For example: "A musical theme is frequently described as a 'gesture.' A fugue subject is a 'statement'; it is 'answered' at the fifth by the next 'statement' of the theme. A 'voice' is still what musicians call a part in a polyphonic composition, even if the part is meant to be played on an instrument rather than sung by a voice. Violins as well as sopranos are instructed to sound *sotto voce*. A pianist is advised to cultivate a 'singing' tone. A good woodwind is said to 'speak' easily. And it is an age-old observation that instruments in musical ensembles seem like partakers in a conversation. ...In short, our descriptions, and perceptions of music are redolent with animistic, anthropomorphic implications."[43] This type of anthropomorphic behavior is not simply one that occurs visually, then, but is very much a large part of what we do when it comes to music. This is also not a bad thing, nor is it something we should

[42] Ibid., 57-8.
[43] Ibid., 58.

attempt to avoid. On the contrary, this is something that should be celebrated and enjoyed. Kivy recalls Richard Wollheim (author of *Art and its Objects*) as he observes: "We must see a visual pattern as a vehicle of expression—a face or a figure—before we see expressiveness in it. Likewise, we must hear an aural pattern as a vehicle of expression—an utterance or a gesture—before we can hear *its* expressiveness."[44] According to Wollheim and subsequently to Kivy, our apparent predisposition to anthropomorphize sights and sounds is a good thing, or we would never experience any expressiveness in our art forms at all. Kivy also makes a charge along these lines to the music analyst: "that emotive *descriptions* of music might well serve a valuable function in music analysis and, when absent, be a considerable impoverishment."[45] Kivy, then, sees considering emotive descriptions of what is being conveyed in the music as a necessary part of analysis. Adams' music is filled with such musical anthropomorphisms, and only by examining these musical animations can listeners truly comprehend the meaning in his music. The contour theory graphs allow these anthropomorphic elements to be seen objectively; they allow the analyst a way into embodiment, even embodiment of gestures rooted in the emotive.

[44] Ibid., 59.
[45] Ibid., 60.

CHAPTER TWO: MUSICAL TOPICS AND TROPES

2.1 Introduction

Raymond Monelle states, "Music is interesting because it is meaningful, and its meaning is as apparent as that of literature, painting, architectural decoration, or anything else."[46] Offering a solid methodology with which to uncover various meanings in the minimal and post-minimal repertoire is the primary purpose of my analytical investigation. In the selections in chapter three from *El Niño*, semiotic meaning is ultimately recognized in the music, often on multiple interacting levels. These interacting levels function as a montage in which Adams is "re-contextualizing familiar objects or images and so rendering them visible."[47] He "subverts established patterns of perception and so brings about a new awareness of reality."[48] In this manner, Adams creates a new meaning for an ancient story.

Uncovering meaning in this music involves a process of investigation. The process first begins with the segmentation of a musical gesture. After mapping that musical gesture onto a contour graph, it is then analyzed for properties of embodied physical action. Once embodiment is recognized, one can analyze the embodied gesture for possible meanings within the framework of the overall operatic narrative. Thus, the focus

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[46] Raymond Monelle, *Musical Topic: Hunt,,Military, and Pastoral* (Bloomington: Indiana University Press, 2006), 32.
[47] Nicholas Cook, "Uncanny Moments: Juxtaposition and the Collage Principle in Music," In *Approaches to Meaning in Music*, edited by Byron Almén and Edward Pearsall (Bloomington: Indiana University Press, 2006), 122. Cook relates this to surrealist practice.
[48] Ibid., 122.

of this chapter elaborates upon the basis for semiotic interpretation of music, which will in turn be applied to the Adams selections in the next chapter.

Eero Tarasti confirms for us that music is indeed filled with semiotic meaning. In his *Signs of Music: A Guide to Musical Semiotics*, he states plainly that "The presence of music is so overwhelming that we hardly dare ask whether or not it is communication, or even more specifically, if it is a sign."[49] But what kinds of things are communicated through various musics? It is the analyst's job to give an interpretation of the meaning, supported with evidence, behind a particular musical expression. The evidence for the semiotic interpretation in this paper is the one-to-one mapping between musical contour and a specific outwardly observable or inwardly felt physical action which can even extend to gestures associated with particular emotions. Musical context, style, and narrative also aid and further support the semiotic interpretation that is recognized.

Three terms of semiotician Charles Sanders Peirce are relevant here for understanding semiotic relationships. These three main entities are the *sign*, the *object*, and the *interpretant*. "The *Signs* stand for specific entities, which he calls the *Object* of a sign, and the *Interpretant* is the thought that mediates the relationship between the *Object* and the *Sign* itself."[50] The *sign* must be related to its *object* in a manner that allows the *interpretant* to come into relationship with the *object* by experiencing the *sign*.[51] In speaking to the music under consideration, the gesture in music is the sign, which the interpretant apprehends using contour, to yield the object, which is the physical gesture.[52]

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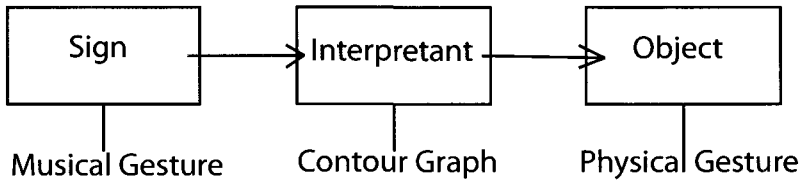
[49] Eero Tarasti, *Signs of Music: A Guide to Musical Semiotics* (Berlin: Mouton de Gruyter, 2002), 3.
[50] Sean Atkinson, "An Analytical Model for the Study of Multimedia Compositions: A Case Study in Minimalist Music" (Ph.D. diss., Florida State University, 2009), 2.
[51] Ibid., 2.
[52] Monelle, 26.

Example 2.1.1



2.2 Precedence in Musical Semiotics

There is significant historical precedence for finding semiotic meaning in music. During the Baroque era, music was discussed as conveying "affects of a universal character," while during the Romantic era, music was thought to convey more "the personal emotions felt by a composer."[53] Guido Adler posited that changes in musical styles "are not merely surface phenomena of music, but are related to deep epistemic changes in their proponents' worldviews."[54] He supports this by citing the major shifts in musical and philosophical values among the various periods in music history. These musical and philosophical value changes are also certainly applicable today in our postmodern society. Value changes were definitely a part of the minimalist movement. In fact, minimalism was largely a reaction to the ideals and rigid, overcontrolling approach of serialism and total serialism. Worldview is definitely a part of the compositional process for John Adams as well. In closing out his autobiography, *Hallelujah Junction*, Adams speaks of how small the world has become and how we have access to the music not just of a few particular regions, but of the entire globe.

[53] Tarasti, 27-8.
[54] Ibid., 29.

Furthermore, "The evolutionary scientist's sentimental hankering for a return to a golden age in music may indeed be proven irrelevant by a new generation of composers who, while enjoying the option to creatively plunder (in the best sense of the term), give us something entirely new and fresh, thoughtful and pleasurable, and in so doing, confirm a more positive outlook: 'advances to something better as reasons for celebration.'"[55] This worldview shift in Adams incorporates in his creative output all the influences of an increasingly global society. He is not simply interested in furthering the approaches of past masters of the Western European tradition. Instead, he has a forward-looking compositional perspective that indeed draws from elements of his classical training, but also is generous in drawing from the music of his own roots including jazz, popular, and world musics unashamedly to create his unique body of repertoire. This converging of influences along with an understanding of Adams' non-traditional worldview further validates the converging of analytical techniques presented in this document for apprehending meaning in his music.

2.3 Musical Topics

In Adams' *El Niño*, topics signified through a musical element will arrive in succession, overlap one another, and occur simultaneously at various points. There are also moments when a single gesture may imply multiple topics at once. Music often projects extra-musical meanings through its surface by means of these "topics."[56] Topics

[55] John Adams, *Hallelujah Junction: Composing an American Life* (New York: Farrar, Straus and Giroux, 2008), 318.
[56] Tarasti, 32.

are subjects of musical discourse or communication.[57] They also act as musical signs. There is no rule set as to the number of topics that may be contained in any given work, though there must be valid evidenciary support in order to back up the claim of a particular topic. They may also be hierarchical. [58] A topic consists of two components: a signifier and the signified. This relationship is the same as the Peirceian sign and object relationship. A signifier is a musical entity projected through harmony, rhythm, etc. The signified is the concept that is being referred to by the musical signifier.[59]

John Adams' is well-known for his minimalist influence, but also expresses himself via Neo-Romanticism. These Neo-Romantic tendencies warrant a look at how Romantic composers, specifically Wagner, used topics. Romanticism capitalized on topics by using various musical materials for signification. During the Romantic period, extra-musical messages were often carried by themes. Often, these extra-musical messages were signs of a character or actor in the narrative.[60] These gestural themes allowed an audience to follow the narrative "through psychological identification with the actorial gestures."[61] With Wagner, even certain chords and sonorities had symbolic meaning and expressed certain narrative topics. *Lohengrin* uses the A major tonic to imply the sphere of the grail; "in the *Ring des Nibelungen* the chords of the Walhalla motive are firmly anchored in D flat major; the sword motive mostly appears in C major; and so on."[62] The Tristan chord is also an example of Wagner's musical symbolism of longing. With composers of late Romanticism such as Mahler, chords can be "catastrophic" and can be signs of

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[57] Kofi Agawu, *Playing with Signs: A Semiotic Interpretation of Classic Music* (Princeton: Princeton University Press, 1991), 26.
[58] Ibid., 49-50.
[59] Ibid., 128-9.
[60] Tarasti, 34.
[61] Ibid., 39.
[62] Ibid., 36.

conflicted and disturbed emotions. Alexander Scriabin described his own *Prometheus* chord in semiotic topical terms as consisting of a diminished fourth (major third), which he termed "soft;" a perfect fourth, which he termed "hard;" and an augmented fourth, which he termed "conflicted and demoniac."[63] Rhythms, meter, tempo, and timing in music also were used in Romanticism to carry signifying functions. Syncopations, caesuras, fermatas, rallantandos, ritardandos, accelerandos, and others often have special signifying purposes for musical discourse and are rooted in bodily motion, according to Eero Tarasti. Timbre is yet another method used to convey semiotic meaning by Romanticists and Adams. Each timbre of the orchestra, for Wagner, is itself a musical actor with signifying function. Figure 2.3.1 below catalogues these meanings.[64] The comments regarding Berlioz and Liszt in the figure indicate that Wagner was not alone in ascribing musical meaning to aspects of timbre.

[63] Ibid., 38.
[64] Ibid., 41-43.

Figure 2.3.1

Instrument	**Meaning**
Violins	Symbolic of the Grail, sublimity, religiosity, sweet joy (depending on mode)
Violas	Sad, forlorn (Berlioz also used this meaning)
Cellos	Passions, need, disaster
Basses	Gloom, foreboding
Flute	Light effects
Oboe	Naivety, innocence, sorrow, nostalgia, pastorality
English horn	Sadness, plaintiveness (in Berlioz – dreaming and distant events)
Clarinet	Love, eroticism
French horn	Hunting, nature, solemnity, rejoicing, "lost paradise"
Trumpet	Heroes, rulers, (Liszt calls it brilliant, radiant, with touch of religiosity)
Trombone	Festivity, nobility, sublimity
Harp	Index of local/historical color

Timbre is also an important indicator of musical meaning in Adams' music. Adams is so particular about timbre that he creates his own musical timbres electronically, to be combined with the acoustic instruments in his scores. Also, with the advent of modern technology, he has more recently created entire sonic environments that are exactly to his specifications. This quote from Adams shows just how particular he is about his unique sound:

> "It is an immensely complex undertaking to successfully marry the sound of natural acoustic instruments with those that come from a synthesizer, sampler, or computer-generated program. The setting in the concert hall or opera house is often fraught with discontinuities. Over time I have come to realize that a generalized sound design is required to make a completely unified and satisfying experience. ...By 2000, with all my stage works I was requiring that every aspect of the production be subject to sound design. This extended not only to the performers ... but to the actual room itself. The confidence I had in doing this was bolstered by the growing collaboration I was enjoying with an exceptionally brilliant and creative sound designer, Mark Grey, who proved that sensitive and subtle use of technology can be a major artistic element in the listening experience. ...Most orchestras and opera companies were reluctant to support the expense. And even if proper sound design could be achieved, it would inevitably be followed by objections from musical purists, certain that the use of microphones heralded the corruption of the art form."[65]

Despite major objections by some powerful individuals that Adams was required to work with, Adams made sure that he had the sound he wanted. Similar to Wagner, Adams'

[65] Adams, 208.

choice of timbre quite often has semiotic meaning tied to it. Also like Wagner and the Romantic composers listed above, specific chords, chord qualities, chord relationships, tempo, dynamics, and rhythm also play an important role in how semiotic meaning is conveyed in his music. In fact, all the materials of music are subject to potential semiotic meaning in the music of John Adams. This includes, but is not limited to: small, repetitive musical gestures or repeated riffs, longer musical lines, simple or complex sonorities, rhythmic density, or dynamic changes throughout a piece. All have expressive possibilities in representing a character in the narrative, or embodied narrative motion.

2.4 Embodiment in Minimalist Topics

Minimalism has developed its own standard musical topics. A look at how minimalist topics display themselves will give further insight into how Adams presents his own topics. Minimalist composer Steve Reich states that minimalism tries to merge listener and musical process.[66] This is achieved in large part through its incessant repetition of motivic units. This large amount of repetition, without regard to the normative workings of musical syntax, has caused minimalism to resist analysis. Many have claimed that the surface is all that there is to the music, and that therefore, there is nothing to analyze. Others have claimed that minimalism is static, lacking large-scale structure.[67] Yet despite these critiques, through its repetition, minimalism has been able to achieve a stunningly wide variety of different affects. These affects may be analyzed through the embodied motion inherent in their expression. In her "Toward a Typology of Minimalist Tropes,"

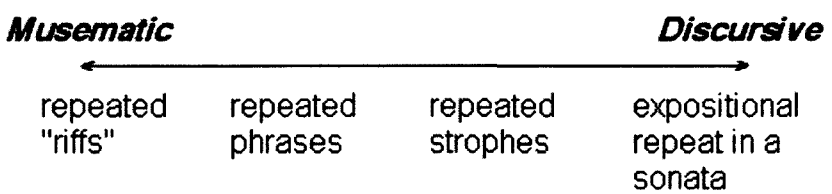
[66] Tarasti, 48.
[67] Jonathan W. Bernard, "Theory, Analysis, and the 'Problem' of Minimal Music," In *Concert Music, Rock, and Jazz Since 1945: Essays and Analytical Studies*, ed. Elizabeth West Marvin and Richard Hermann (Rochester: University of Rochester Press, 1995), 259.

Rebecca Leydon refers to affects of : a) transcendent mysticism, b) a prison-house effect, and c) cool indifference.[68] In the emotional universe, these are each on completely different planes.

Different types of repetition in this music lead to different types of stories, actions, and emotions in regard to the musical subject. Leydon presents a graph reproduced below as Figure 2.4.1 showing the repetition spectrum.[69] Musematic repetition is of the shortest duration and the lowest level. It can be made up of fragments of motives that are repeated in a groove-like manner. The middle of the repetition spectrum involves the repeated phrase, followed by the repeated strophe, and at the far right side of discursive repetition, the expositional repeat of a sonata. These various levels of repetitions interact with one another to project meaning. In *El Niño,* various levels of repetition often project their own narrative function, then play a role in the narrative as a whole.

Figure 2.4.1

Types of Repetition



[68] Rebecca Leydon, "Toward a Typology of Minimalist Tropes," *Music Theory Online*, 8/4 (2002): 1.
[69] Ibid., 2-3.

Minimalist repetition over the years has also led to some standardized topics, itemized by Leydon and by Rebecca Marie Doran Eaton, in her dissertation "Unheard Minimalisms: The Functions of the Minimalist Technique in Film Scores." Figure 2.4.2 combines their findings.

Figure 2.4.2

Minimalist Topic Categories

1. MATERNAL: repetition evokes a "holding environment," or regression to an imagined state of pre-linguistic origins
2. MANTRIC: repetition portrays a state of mystical transcendence
3. KINETIC: repetition depicts (or incites) a collectivity of dancing bodies
4. TOTALITARIAN: repetition evokes an involuntary state of unfreedom
5. MOTORIC: repetition evokes an indifferent mechanized process
6. APHASIC: repetition conveys notions of cognitive impairment, madness, or logical absurdity
7. ALTERITY: repetition evokes the quality of being "other"
8. THE MATHEMATICAL MIND: repetition shows similarities with the precise, methodical, unbending mathematical thought process
9. DYSTOPIA: repetition evokes a society characterized by human misery by entrapment and human in-escape

Nicholas Cook posits that meanings are not limitless, but rather limited by the attributes of the music itself.[70] The minimalist meanings represented in the figure above

[70] Rebecca Marie Doran Eaton, "Unheard Minimalisms: The Functions of the Minimalist Technique in Film Scores" (Ph. D. diss., University of Texas, 2008), 252.

are becoming increasingly standardized within the minimalist repertoire and have the potential for being culturally encoded. This cultural encoding takes place as society becomes more accustomed to recognizing and accepting this growing body of music's common usage for implying these particular meanings.[71] In *El Niño,* the narrative itself provides for many opportunities to use these minimalist topics, and Adams certainly takes these opportunities: a) maternal: the birth of the infant Christ, b) mantric: appropriate due to the religious theme, c) totalitarian: the edict of Herod, d) motoric: the action set in motion by God's plan, e) aphasic: Joseph's reaction to finding that Mary is pregnant, f) alterity: the "otherness" of angels and Christ himself, g) the mathematical mind: the mind of God that orchestrated the events g) dystopia: again, Joseph's initial reaction to Mary's pregnancy could be categorized in this way.

In *El Niño*, the embodied repeated elements do indeed project many of the above topics, adding to cultural encoding, but Adams' repeated elements also project much more context specific and narrative specific meanings based on the audience's previous cultural encoding of the narrative as well. In other words, the previous general familiarity and subsequent internalization of the story of the birth of Christ plays a large part in the listener's hearing of the meaning of repeated gestures in his music. In fact, this seems to be quite often the case in Adams' music. The topics for many of his operas involve stories with which the listeners have previous association. In this way we are predisposed to hear and anxiously expect the musical representations of the narrative elements with which we already have a working knowledge. With Adams' works in general, we might ask how Adams musically embodies the tensions that the listeners

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[71] Ibid., 252.

already knew existed between the United States and China in *Nixon and China*? People were already very aware of the situation. How does Adams musically embody the ancient, yet modern international conflict between the Jewish and Muslim faiths compounded with issues of international politics in *The Death of Klinghoffer*? How will Adams musically embody the fear, anguish, stress, and coming detonation of the atomic bomb in *Dr. Atomic*? Again, this is a story that most of the audience has bodily experienced and lived in their own lifetime. What better to musically embody than a lived experience that is on its own already so emotionally charged that it is etched in the living memories of its audience? Of course, a motoric topic as expressed in the minimalist topic list above is applicable to a story about a bomb, but this recognition only lumps Adams' into a broader category with other motoric repetition composers. An embodiment of an element in the narrative allows Adams to be context specific as well. The interest is then more on how he precisely embodies the atom bomb as an inanimate, yet anthropomorphized persona, and how this maps onto a listener's previous experience. In this next chapter, the exploration will concern how Adams embodies the various elements of the well-known story of the coming of Christ.

CHAPTER 3: ANALYSIS OF SELECTIONS FROM *EL NIÑO*

3.1 Embodied Meaning in "For With God No Thing Shall Be Impossible"

In this analysis, I will incorporate the methodology described in the first two chapters in order to show its application in a post-minimal context. Embodied meanings uncovered by this method include Christ's descent from heaven to earth, the elevation of man in relation to God, the musical representation of the relationship between God, man, and Christ, Mary's apprehension and subsequent peace, the musical announcement of Christ's coming, and the moment of conception. The narrative elements described above, as well as those in the other two selections, are shared experiences of the listeners, as "according to the mimetic hypothesis, we experience patterns of exertion by way of mimetic participation, and in this way it is as if we are acting – acting in a way that is more or less isomorphic with the sound producing actions heard...we enact the role of a character or persona."[72]

El Niño is a stage work composed for the recent turning of the millennium that celebrates the observed two-thousandth anniversary of the birth of Christ. Adams saw the writing of this work as a Handel's *Messiah* for this generation, though this speaks more to the parallel subject matter of the Nativity in both works than to a comparison of compositional styles. "For With God No Thing Shall Be Impossible" is the first piece from this work under consideration. The setting for the piece is taken from a point in the biblical narrative found in Luke 1:26-37. The angel Gabriel has come to announce to the

[72] Arnie Cox, "Hearing, Feeling, Grasping Gestures," in *Music and Gesture*, ed. Anthony Gritten and Elaine King (Chippenham: Ashgate, 2006), 53.

Virgin Mary that she will conceive a child by the Holy Spirit. The biblical account is provided below in Example 3.1.1.

Example 3.1.1

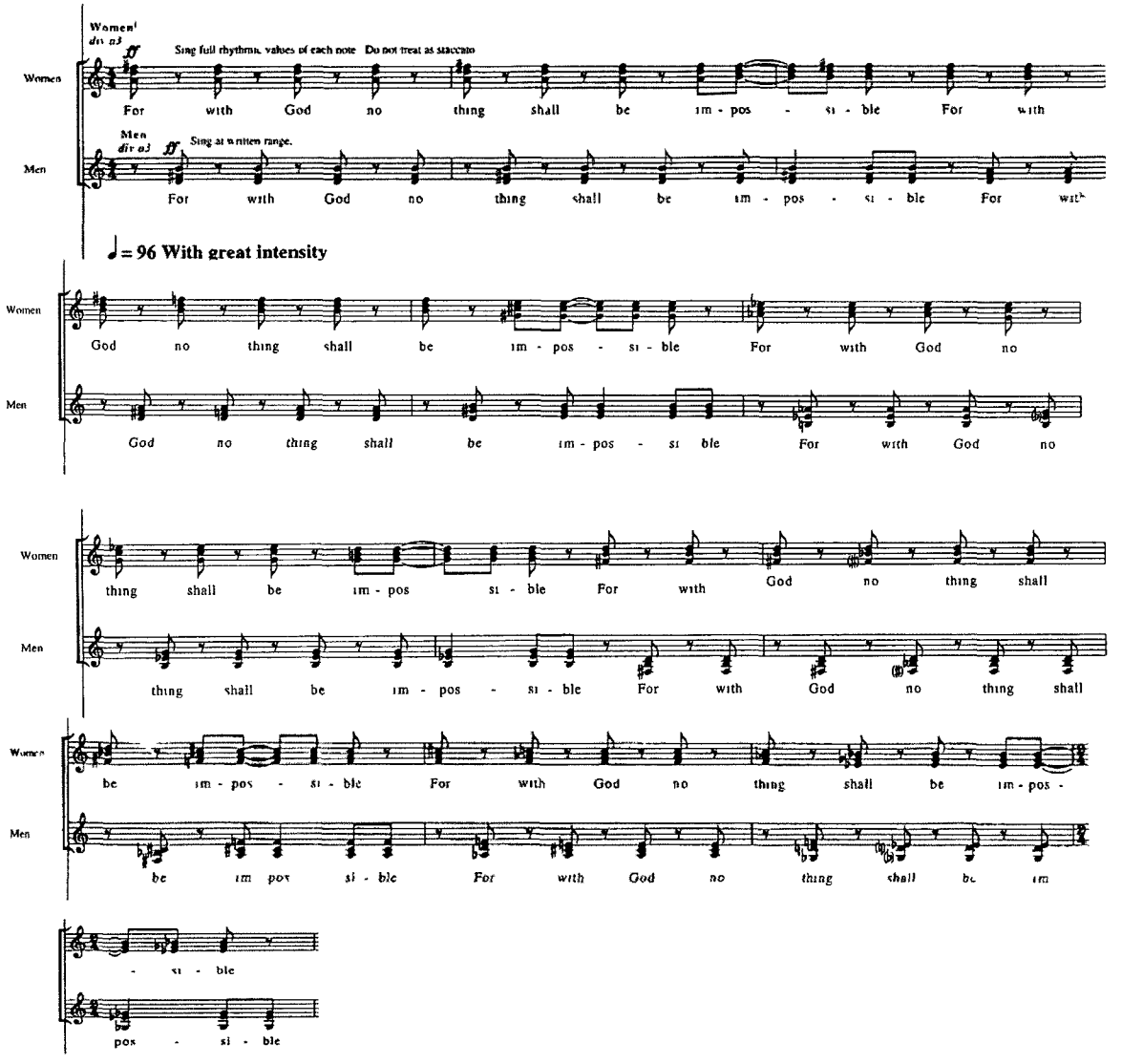
Luke 1:26-37 (KJV)

[26]And in the sixth month the angel Gabriel was sent from God unto a city of Galilee, named Nazareth, [27]To a virgin espoused to a man whose name was Joseph, of the house of David; and the virgin's name was Mary. [28]And the angel came in unto her, and said, Hail, thou that art highly favoured, the Lord is with thee: blessed art thou among women. [29]***And when she saw him, she was troubled at his saying, and cast in her mind what manner of salutation this should be.*** (bold and italics added for emphasis) [30]And the angel said unto her, Fear not, Mary: for thou hast found favour with God. [31]And, behold, thou shalt conceive in thy womb, and bring forth a son, and shalt call his name JESUS. [32]He shall be great, and shall be called the Son of the Highest: and the Lord God shall give unto him the throne of his father David: [33]And he shall reign over the house of Jacob for ever; and of his kingdom there shall be no end. [34]Then said Mary unto the angel, How shall this be, seeing I know not a man? [35]And the angel answered and said unto her, The Holy Ghost shall come upon thee, and the power of the Highest shall overshadow thee: therefore also that holy thing which shall be born of thee shall be called the Son of God. [36]And, behold, thy cousin Elisabeth, she hath also conceived a son in her old age: and this is the sixth month with her, who was called barren. [37]***For with God nothing shall be impossible.*** (bold and italics added to emphasize Adams' choice of title as drawn from the biblical text.)

At this point in the narrative, the angel Gabriel has appeared to Mary and then suddenly leaves her. The words left ringing in her ears after this holy encounter are "For with God nothing shall be impossible." Adams sets this entire movement with no other text than this single sentence. The sentence is repeated over and over again by the chorus, split with an echo between the women and the men. This treatment of the words of the angel indicates they will be seared into Mary's memory. The placement of this piece just

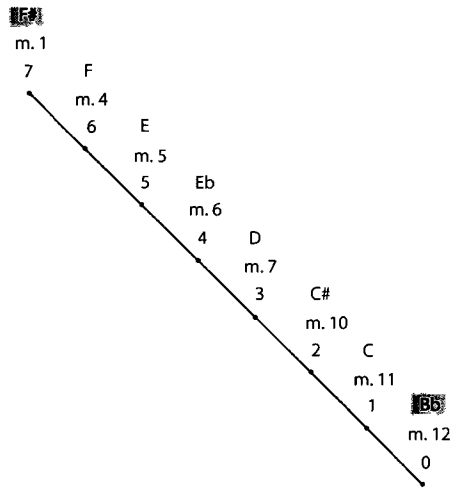
before the movement "The Babe Leapt in Her Womb" indicates that this is the actual point of conception within the framework of the opera. It is as if while the angel is announcing to her that she will be made pregnant by the Holy Spirit, Christ is at the same time descending from heaven down to earth and into the womb of Mary.

Example 3.1.2



El Niño by John Adams

Melodic Contour Graph of Top Voice from
"For With God No Thing Shall Be Impossible"

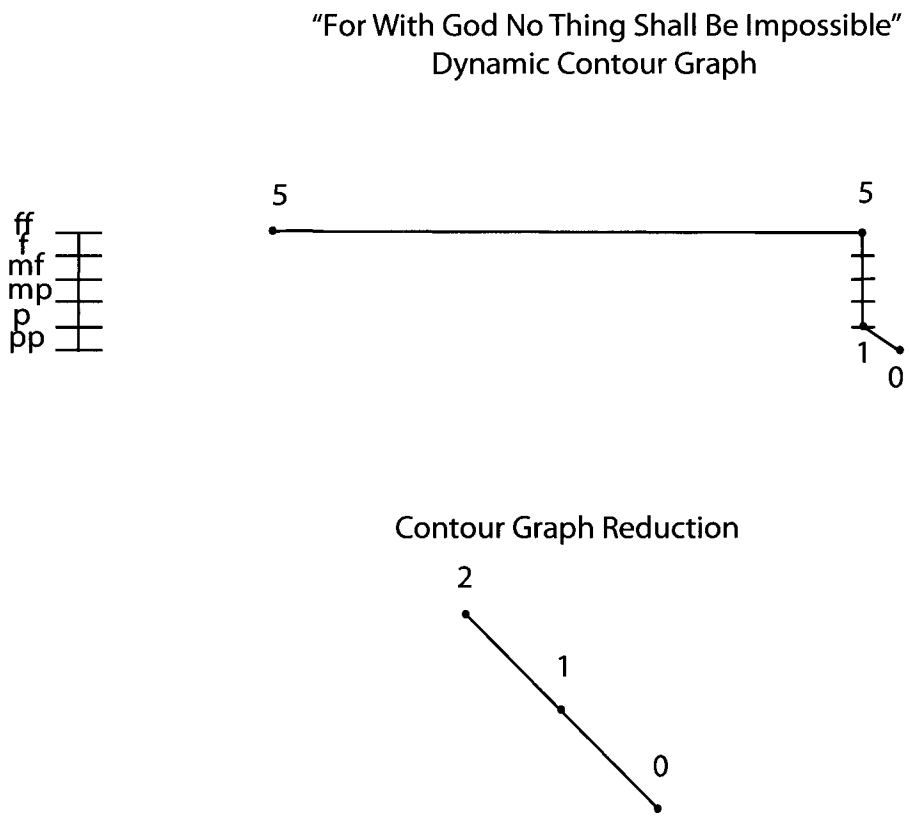


The descent can be seen in the score excerpt and in the melodic contour graph of Example 3.1.2. This represents the descent of the Christ child coming toward Mary. The descent is very slow with every note repeated several times before the next chromatic pitch is sounded and subsequently repeated several times again before the process continues. This may indicate Christ's resolve and complete submission to his Heavenly Father's directives toward him and his lack of fear. Repeated notes have been eliminated in the graph. There is not a single change of direction, not one note that might indicate Christ's hesitation about coming to Earth or desire to turn back to His Father in heaven, but rather a single-minded unified direction and goal.

In the midst of the embodiment of Christ's descent as offered through the contour of the top voice, we encounter very intense dynamics, which may help convey a sense of Christ's power and authority, or, the probable fear and apprehension of Mary's heart as she experiences anxiousness about carrying the child that will be called the Son of God. We feel, through the intensity, Mary's trembling at the divine quickly and decisively

entering into her life with no turning back for her. The dynamics that Adams gives us in this piece are only three, and they are extremes: fortissimo, piano and pianissimo. The dynamic contour graph (Ex. 3.1.3) shows these extremes, mapping sustained intensity followed by the tranquility of Mary's experience. The highest numbers represent the highest dynamic levels and the most intense emotions. The lower numbers represent a move toward more placidity and lower dynamic levels.

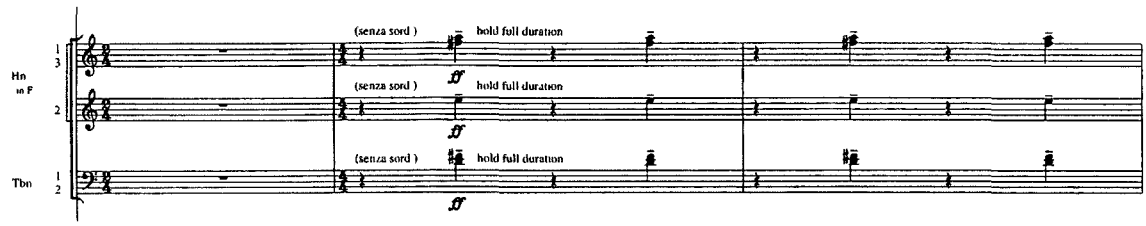
Example 3.1.3



These two contour graphs are two ways of expressing the same thing; each highlight a different feature. The top graph uses the standard dynamic divisions pp, p, mf, etc. as ascending integers respectively in order to show the drastic and abrupt dynamic cutoff that occurs at the end of the movement as the dynamics change from fortissimo to piano and pianissimo. The dynamic level is fortissimo throughout the first twenty-five bars of the short twenty-nine bar piece, accompanied by directives like sempre ff and furioso. These dynamic markings embody the very real emotional dynamics that Mary is experiencing at that moment in time. In m. 25, to signal the peaceful and tranquil arrival of the baby Jesus, the bombastic chorus is abruptly cut off in mid-sentence by the gong sounding at a piano and successively struck at a pianissimo three more times to tranquilly close out an otherwise fierce encounter. This pianissimo that dispels the unrelenting fortissimo of the rest of the movement is a musical embodiment of the divine power contained in the small infant Jesus, conveying both fragility and authority. The music depicts the power to quiet Mary's soul. The contour graph reduction shows simply and more generally that there are three dynamic levels that occur. The shape of this graph shows Christ's descent into the womb of Mary just as the downward directed melodic contour does. These narrative, physical and emotional expressions are brilliantly embodied musically by Adams through their dynamic shading.

Timbre is also used to express meaning in this piece. The brass is used throughout this piece to announce the arrival of the coming King. This agrees with the historical topic of announcing royalty by means of the sounding of the brass. Example 3.1.4 below shows us Adams' usage.

Example 3.1.4



El Niño by John Adams

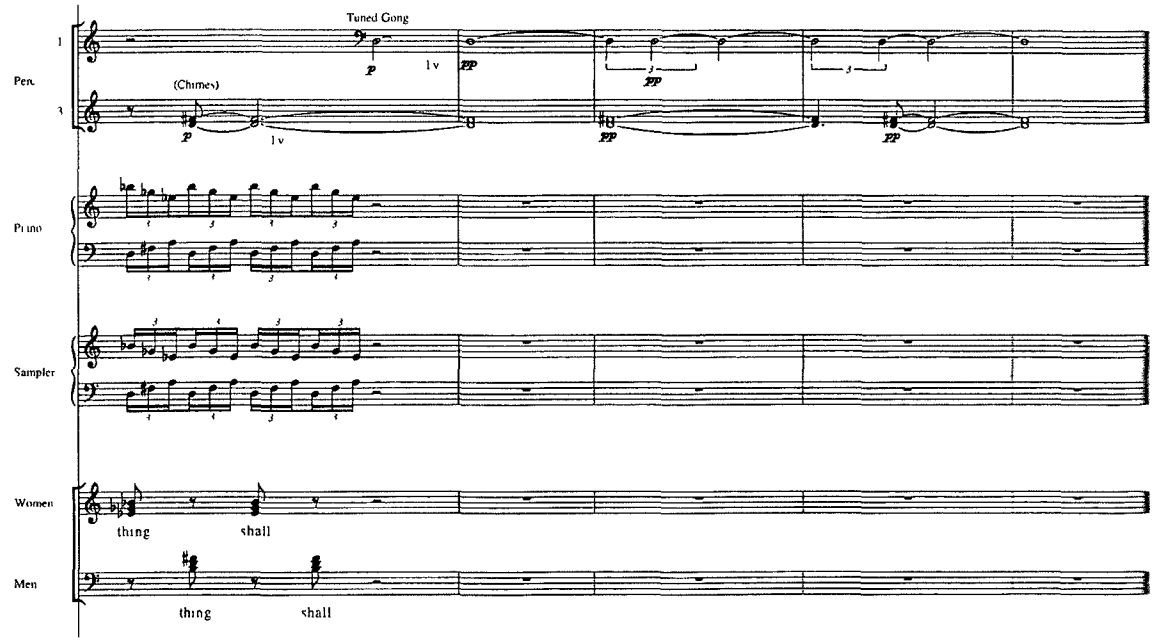
Adams shows a sense of Mary's apprehension through the dissonance that is created between these brass chords and the chromatic descending lines of the chorus. At the point of the sudden shift to pianissimo, the chimes and gong are used as timbral embodiments of Christ's arrival as well. If one were to ascribe words to these instruments, the brass might well be saying "the ***King*** is coming." The chimes also echo this sentiment, but as more of a reminder that the King is a baby, as one might find similar chime-like sounds in and around the crib of a small child. They are more fitting to express "The ***baby*** is near," since they are not as commanding as the brass. The gong is the timbral indicator of the immediate sound of his arrival. This is definitely in line with Eastern ways of announcing the entrance of a King; this stands in contrast to the earlier brass—the Western method of announcing a King. This interpretation shows a more universal meaning: that Christ is Savior and King for both East and West. The combined usage of the gong and chimes with a pianissimo dynamic create an expressive opposition.[73] All instrumentation is immediately hushed in a rhetorical gesture,[74] the

[73] Robert Hatten, "Metaphor in Music," in *Musical Signification: Essays in the Semiotic Theory and Analysis of Music,* ed. Eero Tarasti (Berlin: Walter de Gruyter, 1995), 378.
[74] Robert Hatten, *Interpreting Musical Gestures, Topics, and Tropes: Mozart, Beethoven, Schubert* (Bloomington: Indiana University Press, 2004), 177.

sounding of the gong. The gong is a sign for His kingship and majesty, while the chimes and pianissimo dynamic level are signs of His infancy.

Example 3.1.5

(chorus cut off by gong and end of piece)



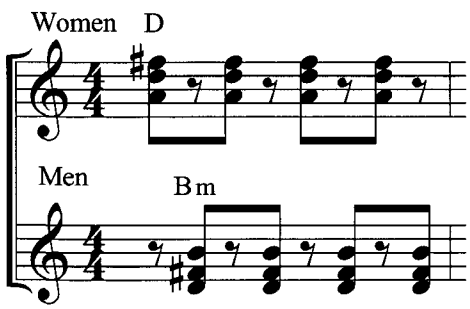
El Niño by John Adams

From the above explanations, one can see that the entire story is told musically through the use of melodic contour, dynamic contour, and timbral topics that are couched in our own cultural codes and perceptions.

Embodied meaning in this chorus is further supported by an analysis of the linear trajectory and harmonic implications in this music. Harmonically, this piece begins with two sonorities: a D-major chord and a B-minor chord. In terms of transformational

theory, these two chords are R-related. This relationship is one in which the two chords share two common tones, while the distinct tone moves by whole step from being the fifth of the first chord to the root of the second chord or vice versa. The relationship between these two chords can be generalized into a helpful classification that David Kopp refers to as a relative mediant relationship. This label includes the relationship between both tonic and submediant triads as well as the relationship between tonic and mediant triads.[75] In the movements analyzed in this document, Adams shows a preference for the relative mediant relationship. In this movement, these chords combined could spell a B minor seventh chord, but Adams treats them as separate entities, dividing them in the orchestration from one another so that we experience them aurally as distinct with a neighboring motion in their distinctive pitches of A and B.

Example 3.1.6

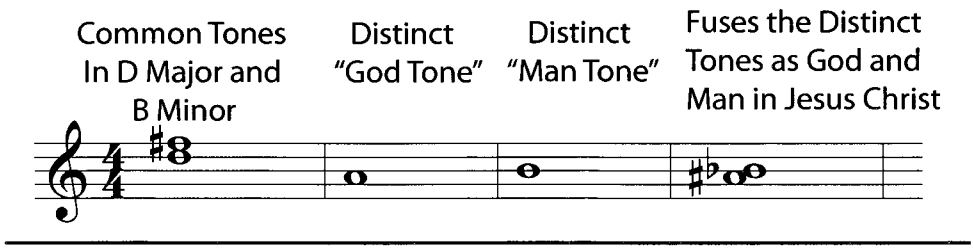


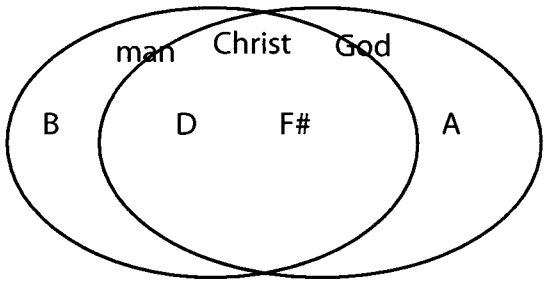
Example 3.1.6 shows how Adams separates them from one another in the male and female choruses. There is much symbolism conveyed through the dualism of these two sonorities. In my interpretation, the D-major triad represents God or the God-nature and the B-minor triad represents man, as biblically speaking, the minor quality could

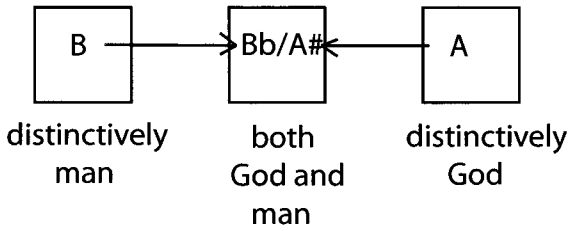
[75] David Kopp, *Chromatic Transformations in Nineteenth-Century Music* (Cambridge: Cambridge University Press, 2002), 2.

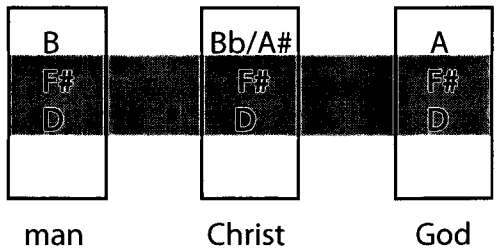
metaphorically represent that man is yearning and in need of a mediator between himself and God. The common tones D and F# shared between the D-major triad and the B-minor triad represent the link between God and man in the infant Jesus Christ.

Example 3.1.7


Common Tones
In D Major and
B Minor
Distinct
"God Tone"
Distinct
"Man Tone"
Fuses the Distinct
Tones as God and
Man in Jesus Christ

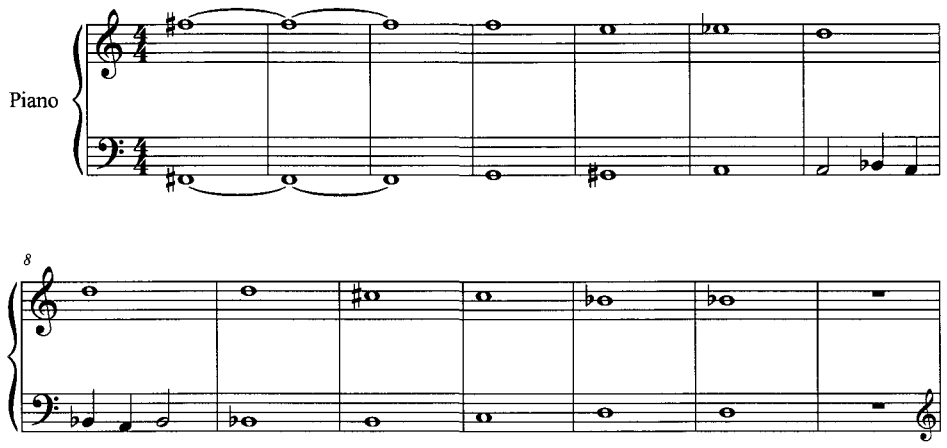

man
Christ
God
B
D
F#
A


B
Bb/A#
A
distinctively
man
both
God and
man
distinctively
God

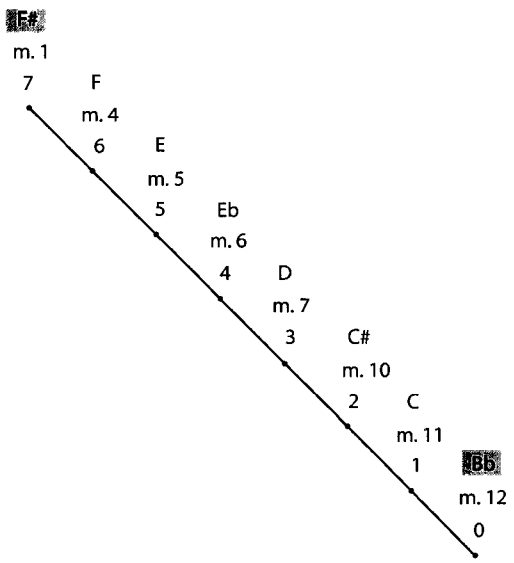

B
F#
D
Bb/A#
F#
D
A
F#
D
man
Christ
God

These tones are emphasized repeatedly in the chimes part, already mentioned as representative of the Christ-child. (see chimes in Example 3.1.5.) The only difference between the two chords D-major and B-minor are the notes A and B, which metaphorically represent the distinction between God and man. The large-scale descent already discussed with regard to contour and its embodiment of Christ coming from heaven to earth begins in the "top voice" as an F#. This F# is duplicated in many registers and by various voices in the texture. A large-scale chromatic ascent also occurs in the low register voices that will be represented by the bassoon as a representative instrument. This puts the outer voices in chromatic contrary motion in one large gesture from mm. 1—13 (and subsequently repeated). The large-scale chromatic contrary motion is shown below in Example 3.1.8.

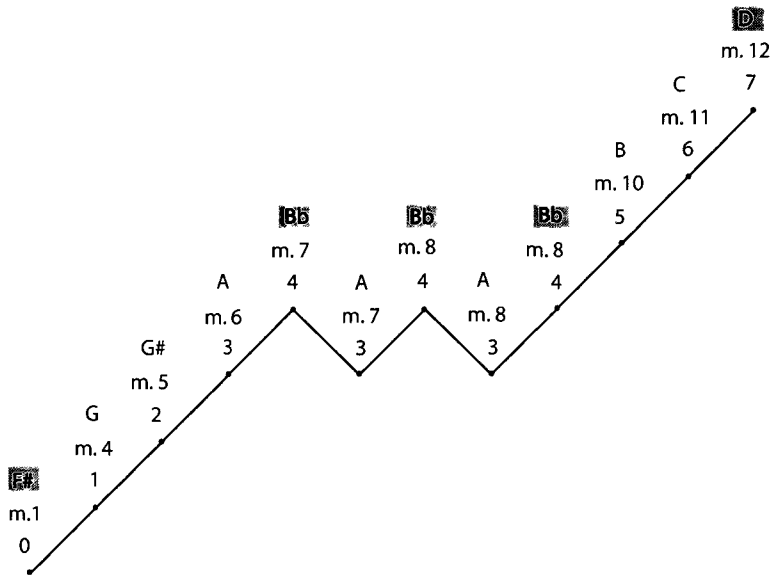
Example 3.1.8



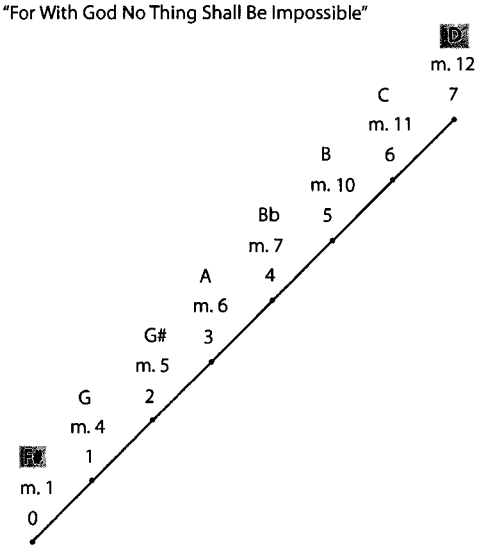
Melodic Contour Graph of Highest Voice from
"For With God No Thing Shall Be Impossible"



Melodic Contour Graph of Bottom Voice from
"For With God No Thing Shall Be Impossible"



Melodic Contour Reduction Graph of Lowest Voice from
"For With God No Thing Shall Be Impossible"



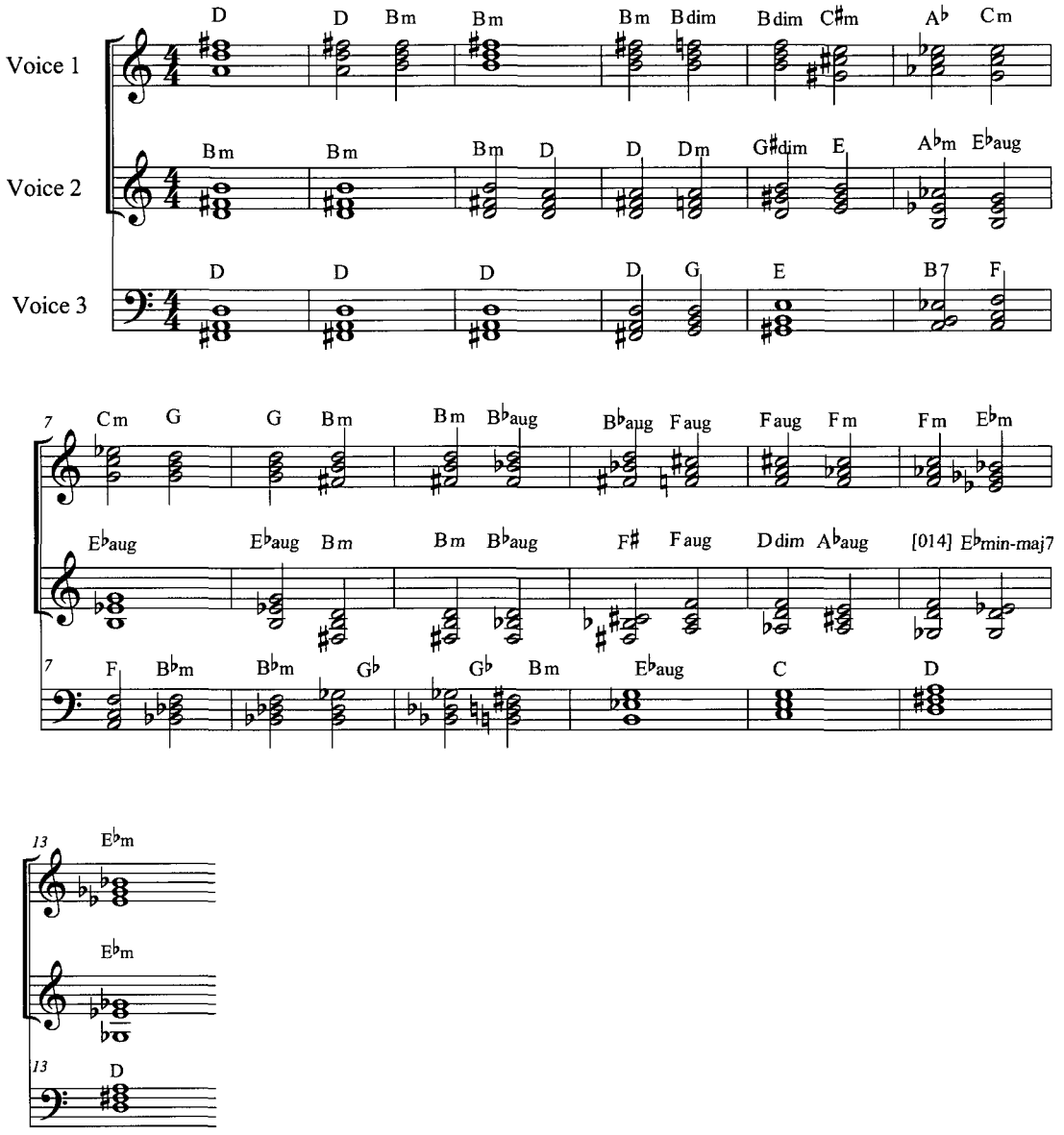
There is only one time that either voice moves by an interval other than a minor second. From m. 11 into m. 12, both voices move by whole step. The ascending voice moves by whole step from a C natural to a D natural. The D, as was mentioned earlier, along with the F#, is a common tone that represents the image of God in man. Therefore the large-scale ascending line began with a common tone F# and moved to the other common tone of D. These notes may be understood to represent the commonalities between God and man. In the descending voice, the line also begins on the common tone of F#, but why is its goal tone Bb? The emphasis on this Bb can also be seen in the ascending linear trajectory as the ascent seems to "get stuck" on repeatedly leading to the Bb in ms. 7-9. This is significant. As David Lidov points out in *Is Language a Music?*, "One aspect of the quality of consciousness enhanced by textural repetition is heightened sensitivity to detail."[76] and "Every change is magnified in import and effect." His term "textural repetition" refers to music comprising significant amounts of repetition, which definitely would include minimal and minimal-influenced music such as this. Therefore, a motion such as the lowest voice becoming stuck on a Bb rather than simply continuing in its upward direction deserves attention. As was pointed out with the chords representing God and man, the only differences between the two chords were the pitches A and B. The Bb as a goal tone splits the difference between these two tones. Symbolically speaking, what made God and man distinct from one another (musically the pitches A and B) was bridged in Christ's coming to earth (Bb/A#). The Bb/A# bridges the gap between God and man with Christ being all God and all man in the same essence. This is also pictorially seen in that the note Bb may be represented enharmonically representing

[76] David Lidov, *Is Language a Music?* (Bloomington: Indiana University Press, 2005), 37.

either nature (the God nature A# or the man nature Bb). The contour of the large-scale contrary motion also pictorially embodies the joining of God's nature with man's nature in Christ. This semiotic meaning embedded in the chords and goal-directed motion of the large-scale linear counterpoint perfectly illustrates the narrative and theological implications at a deep musical and compositional level.

Embodied meaning is further supported through Adams' harmonic language throughout the movement. Example 3.1.9 shows a reduction of the harmonic language of the piece's first large gesture (mm. 1—13).

Example 3.1.9


Voice 1
Voice 2
Voice 3
D D Bm Bm Bm Bdim Bdim C♯m A♭ Cm
Bm Bm Bm D D Dm G♯dim E A♭m E♭aug
D D D D G E B7 F
7 Cm G G Bm Bm B♭aug B♭aug Faug Faug Fm Fm E♭m
E♭aug E♭aug Bm Bm B♭aug F♯ Faug Ddim A♭aug [014] E♭min-maj7
7 F B♭m B♭m G♭ G♭ Bm E♭aug C D
13 E♭m
E♭m
13 D

Transformation	Example	Explanation
R*	C Major←→A minor	2 common tones; chord 5th moves by whole step to become chord root or vice versa
L*	C Major←→E minor	2 common tones; chord root moves by half step to become chord 5th or vice versa
P $(_{1,3,5})$**	C minor←→ C diminished	2 common tones; distinct tone moves by half step (P_1=distinct tone is root; P_3=distinct tone is 3rd; P_5=distinct tone is 5th
M**	C minor←→G Major	1 common tone; other tones move by half step in same direction
Planing	C minor←→Bb minor	all tones move by same interval in same direction
Lift**	C diminished←→D minor	all tones move by various intervals

*relative mediant relationships—2 common tones, distinct tone moves by step (half step or whole step)—5th becomes root or vice versa—harmonic root motion by diatonic 3rd

**author's term

***T=transposition; for example T_3 indicates that all tones move in an upward direction by three semitones, while T_{-3} indicates that all tones move in a downward direction by three semitones

Transformations in "For With God No Thing Shall Be Impossible"

Chord Label	D major	to	B minor	to	B dim	to	C#minor	to	Ab	to	C minor	to	G
Numeric Label	(2,+)		(11,-)		(11, dim)		(1,-)		(8,+)		(0,-)		(7,+)
Transformation		R		P_5		Lift		M		L		M	

Chord Label	G major	to	B minor	to	Bb aug	to	F aug	to	F minor	to	Eb minor
Numeric Label	(7,+)		(11,-)		(10,aug)		(5,aug)		(5,-)		(3,-)
Transformation		L		P_1		Planing T_1		M		Planing T_2	

\+ = Major
\- = Minor
dim = Diminished
aug = Augmented

* in numeric labels, C is set to zero

Measures 14—25 use a similar large-scale harmonic gesture to mm. 1-13, only to be interrupted by the tonic D in the gong along with the D and F# in the chimes to close out the movement. The harmonic language is highly chromatic, just like that of the outer voices, and does not follow typical tonal harmonic progressions. The chord successions are easily described through chordal transformations. The transformations are explained in the spreadsheet portion of example 3.1.9. They group into three larger, more general categories. The common-tone transformations: R, L, P, and M (P and M are this author's terms) all maintain one or two common tones;[77] the Lift transformation moves all tones by differing intervals; and the Planing T moves all pitches by the same interval and in the same direction. The R and L transformations also group into a broader category of their

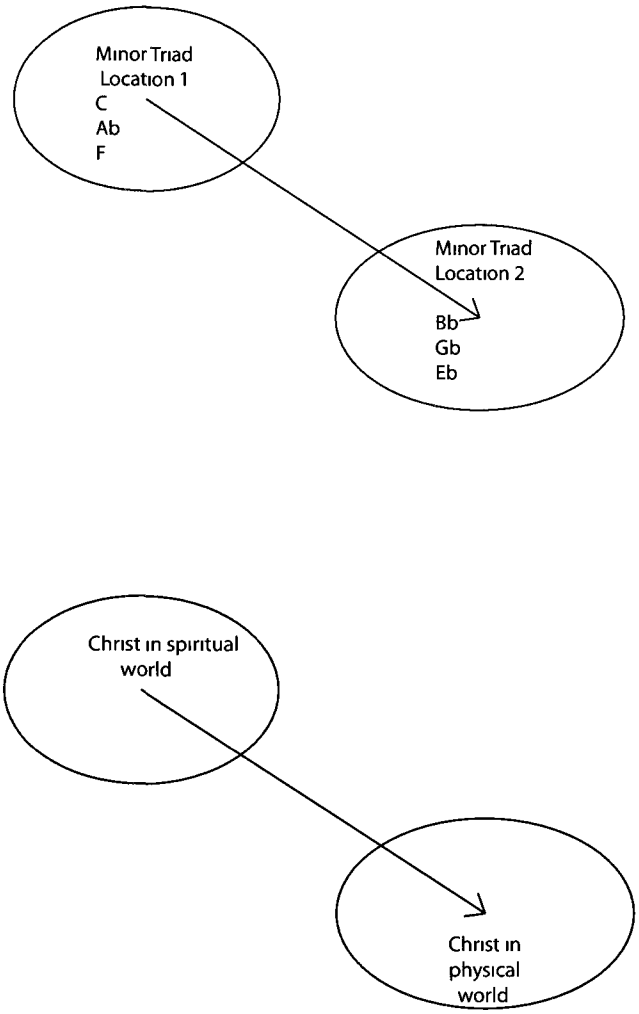
[77] Guy Capuzzo, "Neo-Riemannian Theory and the Analysis of Pop-Rock Music," *Music Theory Spectrum,* 26/2 (2004): 177-199.

own referred to as the relative mediant relationship. This relationship describes chords that share two common tones and one distinct tone. The one distinct tone moves by step (either half or whole). This distinct tone is either the fifth of the first chord becoming the root of the second chord or vice versa.[78] In all three movements discussed in this document, Adams sets up this relative mediant relationship as the central competing chord relationship.

These transformations can all be interpreted semiotically. The common-tone transformations represent a changing from one form to another just as was described in relation to the D major and B minor chords above representing God and man. There are commonalities as well as distinct tones. This morphing of chords signifies God changing and morphing Christ into a baby to enter the world. The harmonic language here invokes this type of play on the narrative. The Lift transformation may indicate a new beginning. A chord had one identity (B diminished) and now simply has a new one (C# minor). Symbolically, Christ was in God form, then became man. The Planing transformation may symbolize an entity moving locations. This happens twice in the piece: from Bb augmented to F augmented and from F minor to Eb minor. The entity in the narrative is Christ moving from the spiritual world to the physical world, as illustrated in Example 3.1.10.

[78] Kopp, 2.

Example 3.1.10



The chords listed in the various systems of Example 3.1.10 suggest a polychordal treatment harmonically. In many instances, one might be able to hear a composite sonority and give the chords in the three staves a single label, but Adams' approach is to separate these triadic sounds using timbre in the orchestration in order to achieve a polychordal effect based predominantly on triads. This polychordal treatment does much to add to the intensity of the movement by creating striking dissonances that combine with the aforementioned fortissimo dynamic levels. This combination of polychords, a

unique treatment of harmonic succession, contrary chromatic motion in the outer voices, and the extreme dynamic contrast from fortissimo to pianissimo in mid-utterance all combine to create a unified whole with an appropriately intense affect all supporting the embodied meaning of the narrative.

3.2 Embodied Meaning in "The Christmas Star"

In this selection, I show musical embodiment occurring in two distinct narratives that take place simultaneously. One of these narratives is presented through the libretto and amplified through musical elements, the other is communicated through contour and temporal aspects of various instrumental parts that parallel the traditional biblical account of the Christmas Star through their motion. Multiple qualities of temporal experience are presented to the listener at the same time, which further clarifies the telling of multiple stories through the music. Harmonically, Adams presents the God-man relationship once again through R-related triads and presents the "Christ chord" using polytonality.

"The Christmas Star" is the supernatural star referenced in the Nativity story that the wise men from the East followed in order to find the Christ child. The text of Scripture recounts this event in Matthew 2: 1-12.

Example 3.2.1

[1]After Jesus was born in Bethlehem in Judea, during the time of King Herod, Magi from the east came to Jerusalem [2]and asked, "Where is the one who has been born king of the Jews? ***We saw his star in the east*** and have come to worship him." [3]When King Herod heard this he was disturbed, and all Jerusalem with him. [4]When he had called together all the people's chief priests and teachers of the law, he asked them where the Christ was to be born. [5]"In Bethlehem in Judea," they replied, "for this is what the prophet has written: [6]" 'But you, Bethlehem, in the land of Judah, are by no means least among the rulers of Judah; for out of you will come a ruler who will be the shepherd of my people Israel.'" [7]Then Herod called the Magi secretly and found out from them ***the exact time the star had appeared.*** [8]He sent them to Bethlehem and said, "Go and make a careful search for the child. As soon as you find him, report to me, so that I too may go and worship him." [9]After they had heard the king, they went on their way, ***and the star they had seen in the east went ahead of them until it stopped over the place where the child was.*** [10]***When they saw the star, they were overjoyed.*** [11]On coming to the house, they saw the child with his mother Mary, and they bowed down and worshiped him. Then they opened their treasures and presented him with gifts of gold and of incense and of myrrh. [12]And having been warned in a dream not to go back to Herod, they returned to their country by another route.

(bold and italics added for emphasis)

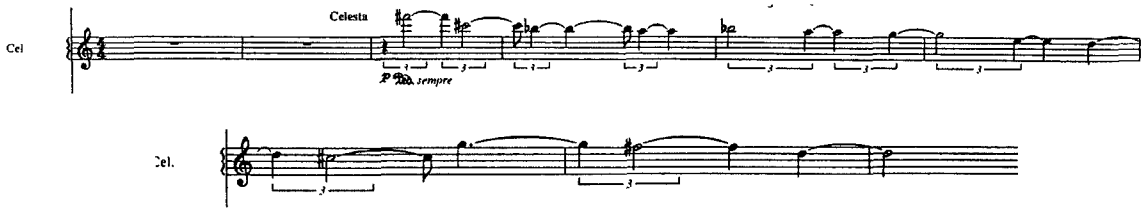
Adams does not use the traditional scriptural text as written above, but instead simply implies it through the use of his title. Rather, his libretto for this piece is a mythical tale of a little girl who catches a star and runs with it. As she runs with the star, it literally begins to set her ablaze until the star's power completely transforms her into its image. The girl becomes the star itself. She continues to run, but after being transformed, she runs as the star. After a time, the star turns to ashes. Ultimately, the ashes cause the earth to catch fire and the whole earth burns with its energy. This new tale can be seen to enliven the more familiar scriptural text by letting the audience know in a fanciful way

why this particular star is moving in a manner inconsistent with a more typical star in the night sky. How, one may ask, did the Magi follow a star that led them all the way from their own eastern country with enough specificity that it would light directly above the house where the child was so that they could know the location without mistake? In Adams' fantastical rendering, it is because of a playful child that caught a star and ran with it until it actually absorbed the child into itself. This caused the abnormal phenomenon of a star descending from the heavens down upon the roof of an individual house where the Christ child was residing. Then this divine power was dispensed into the earth so that all could draw from its divine energy.

Elements from both the biblical narrative and Adams' tale are embodied in this piece. The first embodied element considered is the physical trajectory of the star from the perspective of the biblical narrative, which was a downward descent from the heavens toward the house of the Christ child. This directed physical motion of the star is embodied musically by a similar downward melodic motion shown in the celesta part below.

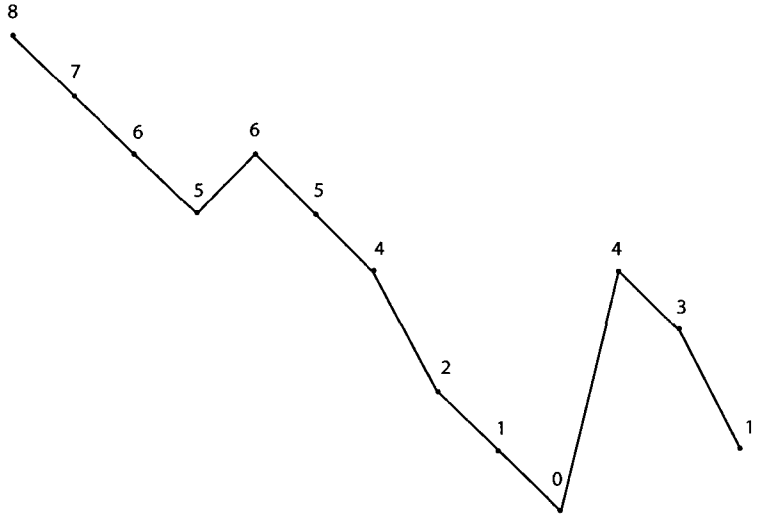
Example 3.2.2

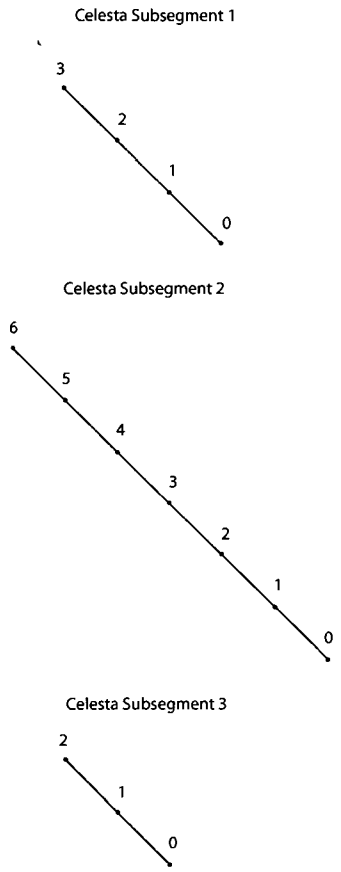
(celesta part mm.1—9)



El Niño by John Adams

Celesta Melodic Contour Graph from "The Christmas Star"



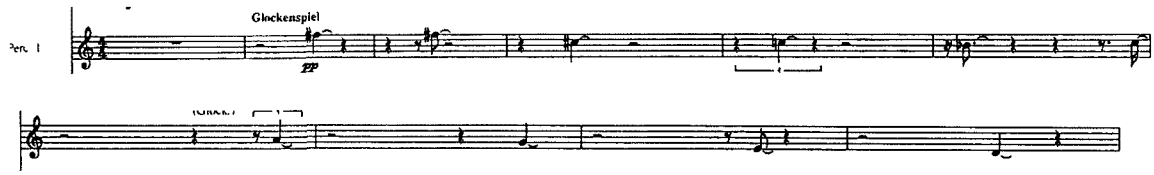


The embodiment of the star's movement in the celesta part is further supported by the timbre that Adams selected, as listeners would agree that a celesta "twinkles" like a star should. Register also plays a role in hearing this part as a star. The celesta part begins in the very high register of an F#6 to initiate its descent. This is an aural reference to the fact that stars are high up in the sky (at least from our earthly perspective). A star given to the basses simply wouldn't make sense to us at all.

The glockenspiel part also gives voice to the star as experienced by the Magi. Similar to the celesta, it too contains a downward directed melodic contour. Its part is seen below in Example 3.2.3.

Example 3.2.3

(glockenspiel part mm. 1—10)



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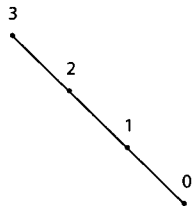
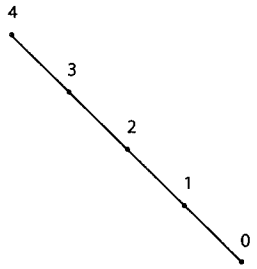
Glockenspiel Segment 1



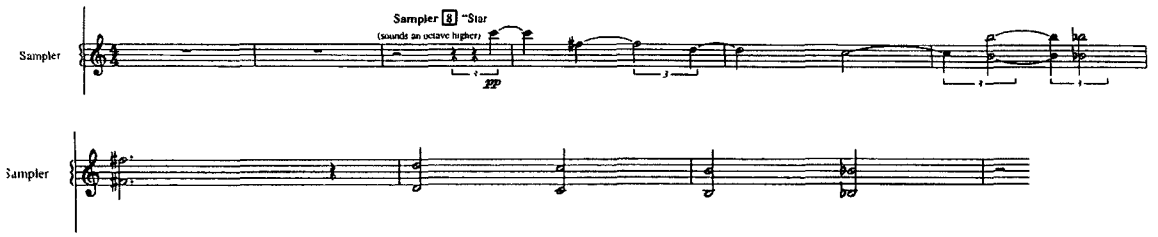
Glockenspiel Segment 2



As if the celesta and glockenspiel parts are not an obvious enough reference to the star in the biblical narrative, Adams clears up any misunderstandings with the title he gives his electronic sampler part.

Example 3.2.4

(sampler part mm. 1—9)



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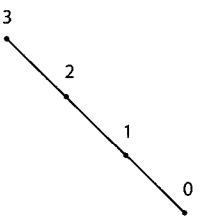
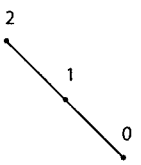
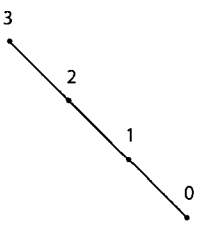
Sampler Segment 1



Sampler Segment 2



Sampler Segment 3

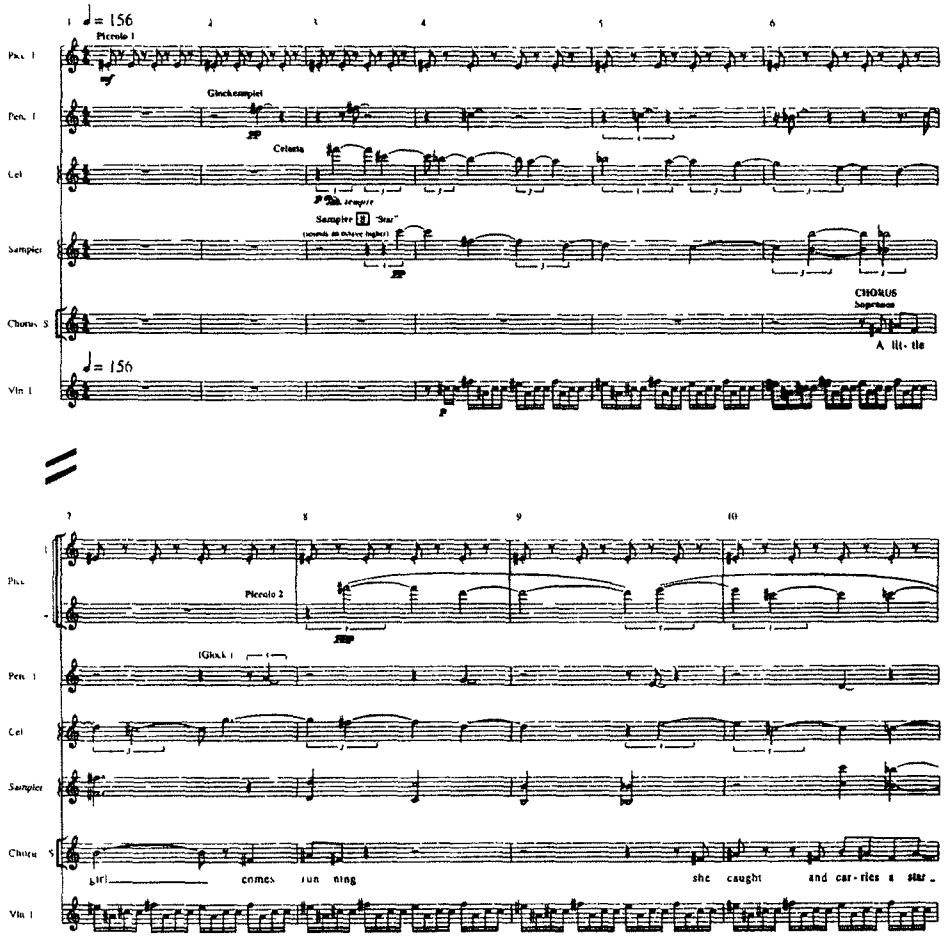


Adams himself indicates on the score that the sampler part is indeed a "Star." Once again, in complete similarity to the celesta and glockenspiel, the melodic contour of the sampler "star" part embodies the directionality of the star's physical motion in the Christmas narrative, a descent.

Durational values of these three parts also are of semiotic significance. Jonathan D. Kramer, in his book *The Time of Music*, speaks about various types of temporalities that can be experienced in music simultaneously with the experience of clock time. He also mentions how music itself can provide the listener with vastly different temporal experiences.[79] In this piece, a multiplicity of temporal experiences are contained simultaneously, even within the music itself. This is due to Adams' use of perspectives on time in telling the two stories (biblical and mythical) simultaneously while the listener also experiences his own clock time. Notice below in Example 3.2.5 the longer note values being given to both the celesta and the "star" sampler parts in comparison with the rest of the orchestration (with the glockenspiel part, longer inter-onset intervals carry the same function as the longer note values).

[79] Jonathan D. Kramer, *The Time of Music: New Meanings, New Temporalities, New Listening Strategies* (New York: Schirmer Books, 1988), 7.

Example 3.2.5



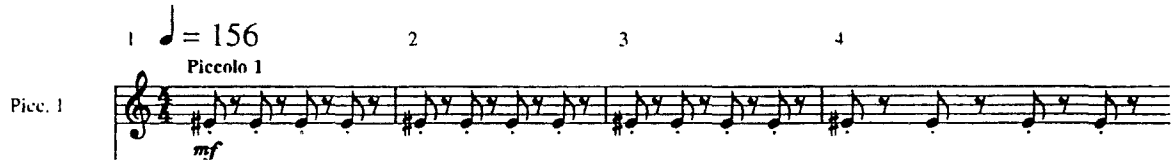
El Niño by John Adams

These longer note values are indicative of the passing of time for the Magi in the biblical narrative. They make musical reference to the fact that the Magi followed the star for a considerable period of time (particularly in comparison with the shepherds in the biblical narrative, who were in the immediate vicinity). The long note values are the musical embodiment of the physical passing of time from the perspective of the Magi. But this passage of time is only one time vantage point that is conveyed in the piece. Yet another

type of time is occurring in the quick sixteenth note figures that occur in the violin part. These short note values can be seen to represent time as experienced in the supernatural realm by the girl that is running with the star in Adams' mythical tale. The opening line of Adam's libretto for this piece states: "A little girl comes running, she caught and carries a star." The short note values above embody the speed with which the girl runs. This is a much faster-paced action sequence in comparison with the long, slow journey of the Magi. Even though the story of the Magi and the story of the girl are presented simultaneously as though they are one and the same story from differing perspectives, the characters are oblivious to one another and experience time and space in incredibly different ways. There is also a third type of time expressed in this piece that acts as a grounding for the other two temporal experiences. The opening bar in the piccolo part can be seen as establishing clock time, or more specifically the clock time of the story. In fact, it sounds like the ticking of a clock because Adams uses the same pitch and creates space between attack points through the use of staccato and eighth rests. This mimics the second hand of a clock, which ticks on the same pitch with silence between ticks.

Example 3.2.7

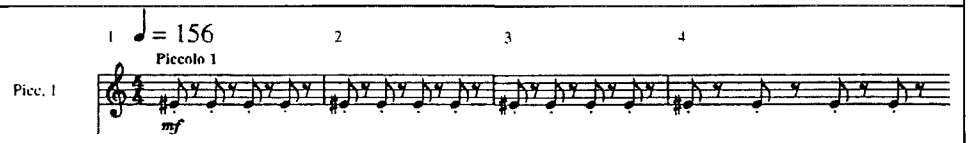
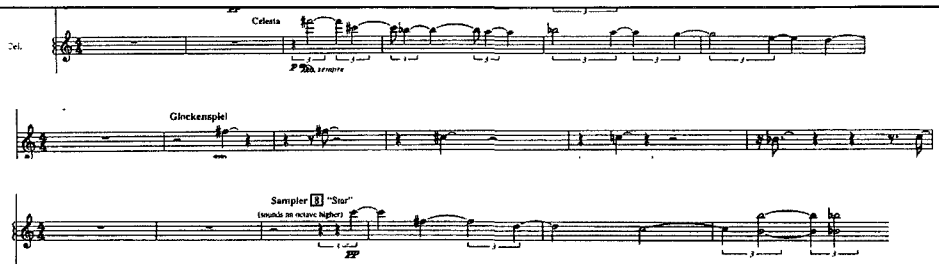
(piccolo part in mm. 1—4)



El Niño by John Adams

This is very natural way to begin telling a story. It signifies the standard narrative opening "Once upon a *time*...," before launching into the events themselves. The piccolo is very regular and on a single pitch, just like a clock would be, and it sounds very naturally on each beat of the measure. The "Magi time" and "spirit girl time" express their own relationships to clock time based on their own perceived experience within the story. The celesta, glockenspiel, and sampler "star" parts embody time from the perspective of the Magi following the star. The violin part expressed in sixteenth notes represents time from the girl's perspective. The sixteenth-note values embody the speed of the spirit girl running or the speed of the star through real space in coming toward earth. Both temporal experiences are grounded in "story clock time." Despite the fact that the characters perceive time differently, they are both bound by the "story clock time" embodied in the piccolo. The listeners, however, get to experience Magi time, spirit girl time, story clock time, and their own real-world clock time all in the same listening experience. This multiplicity of temporalities is illustrated below.

Example 3.2.8

Temporal Experiences	**Timbral Representation**	**Durational Values between successive attacks**
Story Clock Time	Piccolo	
Magi Time	Celesta, glockenspiel, and sampler	
Spirit Girl Time	Violin	
Real World Clock Time	Second hand On clock	00:00:01

Listeners, then, by experiencing all of these temporalities at once, find themselves very literally in four different locations. They are grounded in their own reality by the ticking of real world clock time, but this type of time is increasingly backgrounded the more deeply one involves themselves in the listening experience.[80] Foregrounded are the other three temporal experiences – those of the music itself. In Magi Time, the listener experiences the camel ride to Bethlehem, which was a slow and lengthy journey, as well as the slowness of the star (from the Magi's perspective) as it preceded them at their pace. The listener is capable of experiencing the spirit girl's speed across the sky, a speed and location that the listener would be unable to experience in the "real world." With a new referential clock time, Story Clock Time mimics the second hand of the clock, an experience that further draws the listener into the stories because its reference is one that most of us experience and live by everyday in our own world.

The minimalistic, seemingly endless repetition of these temporal figures also gives the listener an experience of stasis in the midst of all of this forward-directed motion. This combination of stasis and forward motion occurring simultaneously may also be referred to as experiencing being and becoming, temporal nonlinearity and temporal linearity, sacred time and profane time (see example 3.2.9).[81]

[80] Ibid., 17.
[81] Ibid., 16-17.

Example 3.2.9

Frozen Time Experience	vs.	**Played-Out Time Experience**
Stasis		Forward Motion
Being		Becoming
(Temporal) Nonlinearity		Temporal Linearity
Sacred		Profane

The listener's experience in this piece with respect to time is complex and multi-faceted. Not only does the listener experience the played-out time of the characters and the story itself, but he also experiences through incessant repetition of these figures, a freeze-framed moment in time, a snapshot of the event, or the eternity or timelessness of the event. The sense of eternity or timelessness plays out in this manner: what was (the figure played out previously), what is (the same figure played out currently), and what is to come (an expectation that the same figure will occur once again). This meditative and eternal quality is certainly appropriate in a telling of a sacred story such as the birth of Christ. The term *sacred* above in the example and in the previous sentence also should be briefly explained. In our conception of heaven, the eternity that one experiences is often viewed as a way of stepping outside of time itself. We only picture God as aging because we age due to time. As we step out of time, we simply *are*. This frozen time experience then is a means of transcending time through the ever-present now.

The melodic contours of the celsesta, glockenspiel, and sampler parts have been shown to embody the trajectory of the star from the perspective of the biblical narrative; the

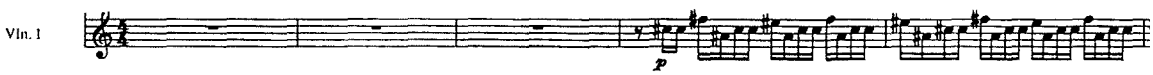
durational values of various timbres have been shown to embody the temporal experiences of each character in the story and the listener. The melodic contour of the violin part will now be considered for its embodied meaning. The violin part, as was shown in reference to its note values, is concerned with the mythical narrative that Adams creates for the girl carrying the star. Its general melodic shape is one that zigzags. This musical motion embodies the physical motion of the girl carrying the star. One can observe easily enough that the path of motion for a child while playing is one characterized by zigzagging. Children are not typically single-mindedly goal directed, but rather frolic this way and that way (a concept we are quickly reminded of by a line from a well-known children's song: "did you ever see a lassie go this way and that way?"). This physical motion of zigzagging is musically embodied below in Example 3.2.10. The violin part expresses the frolicking of the spirit girl in a zigzag motion embodied in the melodic contour, while embodying the speed that she runs through the use of the sixteenth-note durational values. The violin part is also simultaneously foreshadowing a future event, the burning and crackling of the star in her hands (which eventually becomes the burning and crackling of the entire earth), since we know that the jumping flames of a fire also have this type of jagged upward and downward motion associated with them.

The libretto goes on to speak of the star's literal heat and its effects on the girl and ultimately on all life on earth:

"Making the plants and animals she passes bend with fire.
Her hands already sizzle...
Although her face, her arms, her chest and her hair are on fire,
She burns down to her waist...
The road catches fire,
And now we all receive her
Entire Earth is burning."

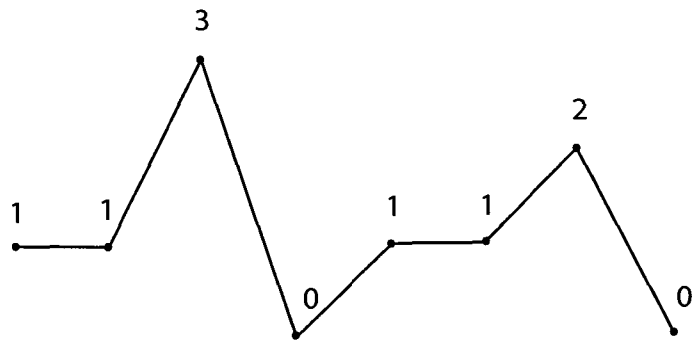
Example 3.2.10

(violin part, mm. 4—5)



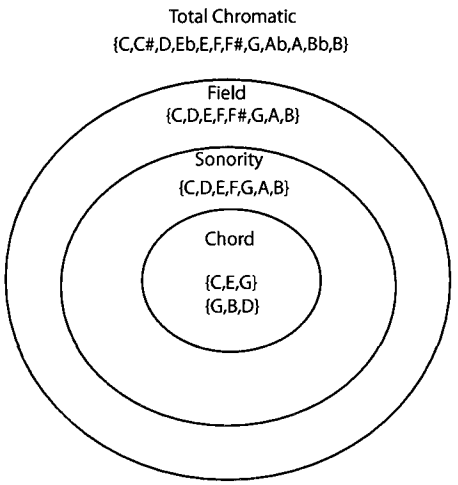
El Niño by John Adams

Violin Melodic Contour Segment
(segmentation is first eight pitches,
then the pattern repeats)



Example 3.2.11

Example of Harmonic Complex in Tonal Music



From a harmonic standpoint, Adams once again prioritizes thirds. He also once again projects the "Christ chord." In "For With God No Thing Shall Be Impossible," the "Christ chord" was projected through linear motion in the outer voices, rather than sounded as a harmony directly, though the augmented triad (the same quality chord) was planed in that piece. In this piece too, it is not sounded directly, but rather implied through Adams' play with multiple tonics.

Harmony in this piece is best realized through a harmonic complex.[82] An example of a harmonic complex in a traditional tonal context is provided in Example 3.2.11. A complex consists of a central chord or chords that are strongly projected in a particular passage (usually triads or seventh chords), a sonority that includes both the chord(s) and the strongly presented pitch classes in that passage, and a field that shows the complete diatonic collection used plus all strongly presented non-diatonic pitch classes. In this

[82] Timothy A. Johnson, "Harmonic Vocabulary in the Music of John Adams: A Hierarchical Approach," *Journal of Music Theory,* 37/1 (1993): 117-156.

traditional tonal context, the central chords are the C-major chord (shown as {C,E,G}) and the G-major chord (shown as {G,B,D}). These are foundational in this context because of the priority of tonic and dominant triads in traditional tonal music. The surrounding circle is labeled sonority, and encompasses not only the pitches making up the tonic and dominant triads, but also the entire diatonic collection. The collection in this circle includes the pitches in the circle it subsumes, and as a whole can be said to be slightly less hierarchically prioritized than the tonic and dominant triads. It is however, prioritized more than the outer circle labeled *field.* The *field* circle includes all of the pitches in the two smaller circles and adds an F#. The F# might be used in the context of a V/V. It however, would be a lower priority than the typical diatonic collection contained in the level below it. The total chromatic collection shows all of the chromatic pitches in pitch space. The harmonic complex then, is a system of prioritization with the central circle being the most foundational chords to a composition and each larger circle indicating less priority.

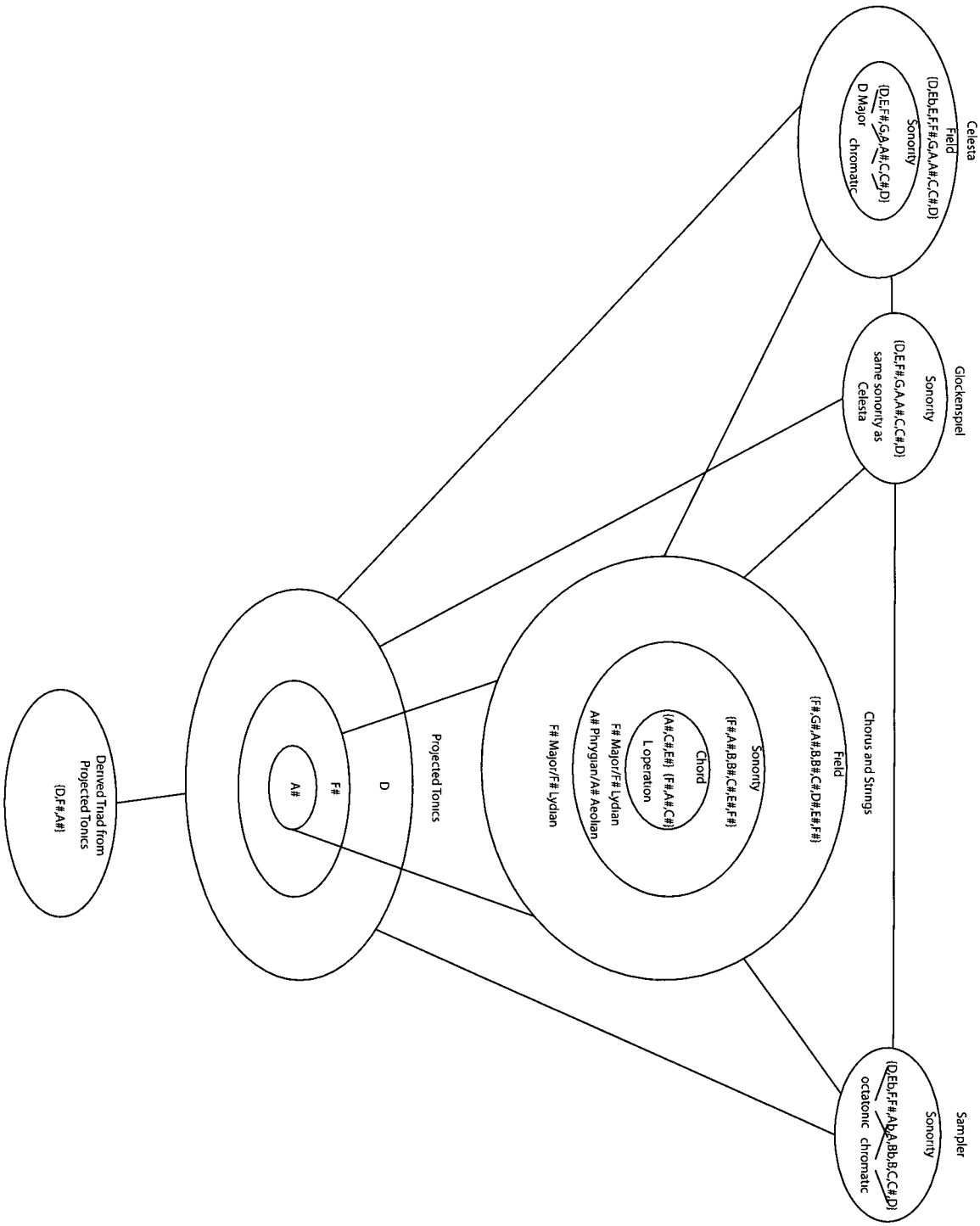
Example 3.2.12 shows a harmonic complex of mm. 1—54 of "The Christmas Star." The central chords to this piece are L-related. They are F# major and A# minor. These chords share two common tones, the A# and the C#. They also each contain a distinct tone, an E# in the A# minor chord, and an F# in the F# major chord. Recall that the central chords of "For With God No Thing Shall Be Impossible" were the R-related chords of D-major and B-minor. These two chords also contain two common tones and one distinct tone. In the R-related triads, the distinct tones are a whole step away from one another and in the L-related triads, the distinct tones are a half step away from one another. Both L-related and R-related triads may be grouped into a more general

classification referred to by David Kopp as relative mediants, in which two common tones remain and the one distinct tone is either a major or minor second away.[83] In all the movements analyzed in this document, Adams prioritizes these relative mediant relationships. Once again, the relative mediant relationship may be seen metaphorically to represent the relationship between God and man.

Both central chords project their own respective tonic, vying as it were for supremacy, though A# seems to project more strongly. Each of these tonics also project two modes interchangeably: F# contains moments of both major and Lydian inflection, while A# contains moments of both Phrygian and Aeolian. The interplay between modes may be read as the narrative of the spirit girl who is qualitatively a spirit, not a physical body, and yet becomes the star in her hand and falls to the earth burning, setting it ablaze. The reader of the libretto is unsure of what is happening spiritually and what is happening physically, in the same way that the music is switching back and forth between modes.

[83] Kopp, 2.

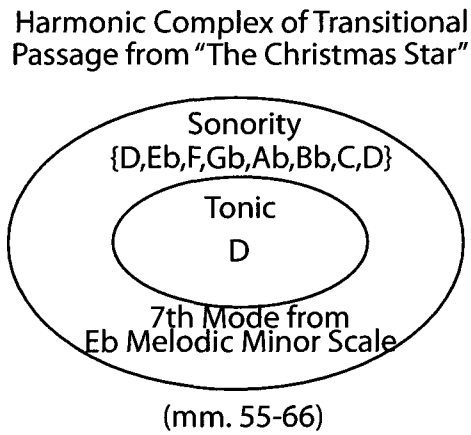
Figure 3.2.12


Harmonic Complex of ms. 1-54 from "The Christmas Star"
Celesta
Field
{D,Eb,E,F,F#,G,A,A#,C,C#,D}
Sonority
{D,E,F#,G,A,A#,C,C#,D}
D Major
chromatic
Glockenspiel
Sonority
{D,E,F#,G,A,A#,C,C#,D}
same sonority as
Celesta
Chorus and Strings
Field
{F#,G#,A#,B,B#,C#,D#,E#,F#}
Sonority
{F#,A#,B,B#,C#,E#,F#}
Chord
{A#,C#,E#} {F#,A#,C#}
L operation
F# Major/F# Lydian
A# Phrygian/A# Aeolian
F# Major/F# Lydian
Sampler
Sonority
{D,Eb,F,F#,Ab,A,Bb,B,C,C#,D}
octatonic chromatic
Projected Tonics
D
F#
A#
Derived Triad from
Projected Tonics
{D,F#,A#}

Three parts of this harmonic complex are shown to be operating on a different plane from the central circles. These parts are the sampler, glockenspiel, and celesta, which have already been shown to be operating in a different time frame and telling a different story. These parts also project their own tonic as D (so do mm. 55-66, as shown in Example 3.2.13). They are shown as single circles displaying only the *sonority* category because they are written simply as descending lines, rather than expressing particular chords.

When taken together, the three projected tonics D, F#, and A# once again express the augmented "Christ chord." Just as in "For With God No Thing Shall Be Impossible," the chord is not literally present. It is projected through different means. In "For With God..." it is projected through the linear motion of the outer voices. In "The Christmas Star" it is projected through three tonics expressed in different planes of the texture. This "presence" of the Christ chord embodies our understanding of God as spirit—seen, but not seen literally.

Figure 3.2.13



My analysis of this selection has shown ways in which John Adams uses music to speak in multiple ways. Once again he uses descending contours, relative mediant central chords, multiply-directed temporal strategies, and the implied Christ chord. He draws upon the traditional story of the Christmas Star, though it is never mentioned in the libretto; its story is told completely through the music itself. He also at the same time tells a new story about a girl who brings the star of Bethlehem to the earth. Each of these stories and the corresponding physical actions that take place within the story are embodied in musical gesture. This includes the actions of the star, including its trajectory and pacing, as well as the actions of the spirit girl—her playing, running, transformation, and dissemination of energy to the earth through the star's flames. All of these narrative elements and actions are embodied musically through melodic contours, rhythmic values, harmonic implications and timbre.

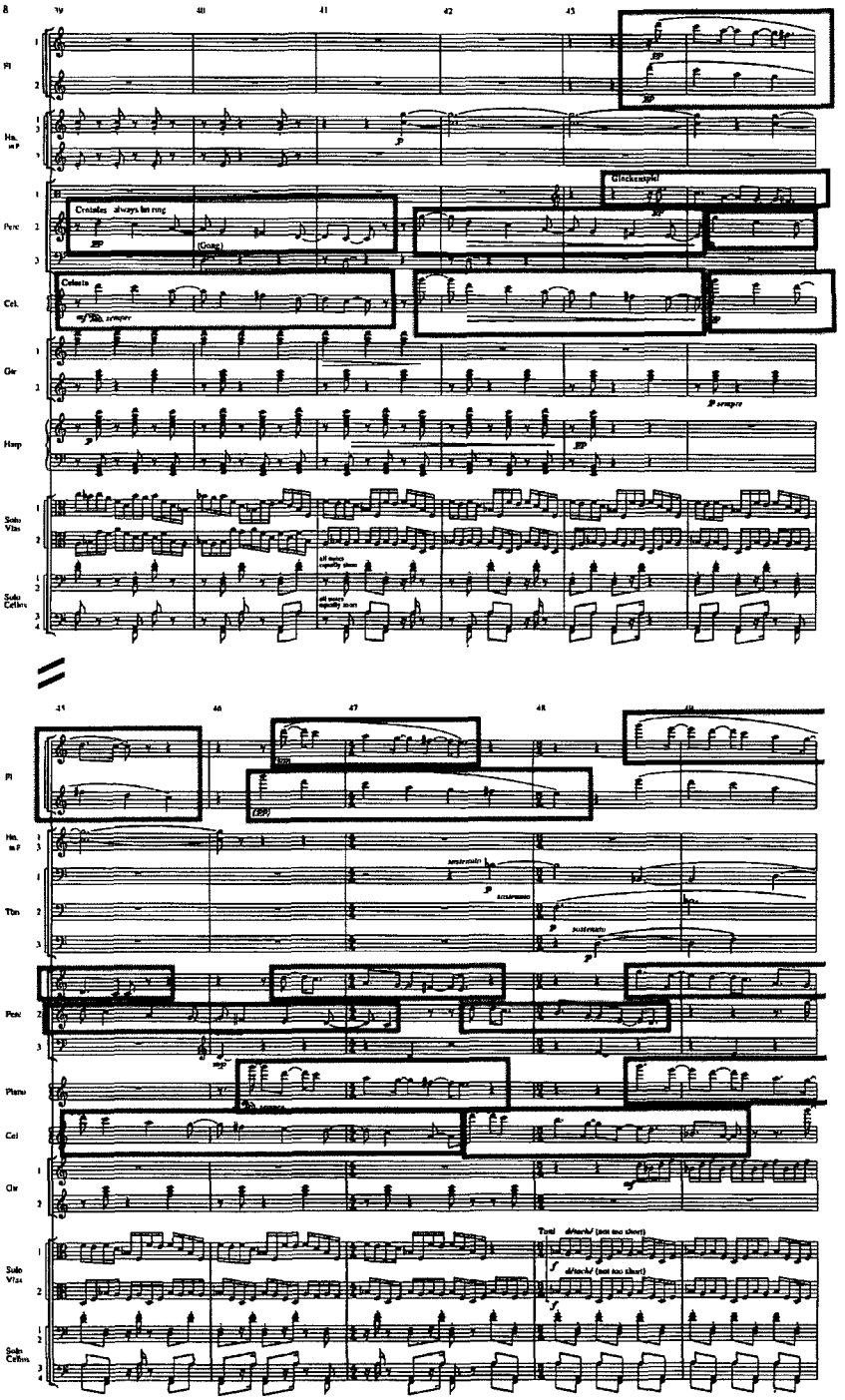
3.3 Embodied Meaning in "I Sing of a Maiden"

In "I Sing of a Maiden," the opera's first movement, several of the embodied meanings previously discussed in other movements are foreshadowed. In this movement, it is as if the whole story occurs at once in a kind of aural snapshot, after which the individual parts of the story are told in the movements that follow.

This layering of embodied meanings comes about through a combination of musical gesture and the listeners' expectations about a story with which they are already familiar. The downward directed motion of the star as perceived by the Magi in "The Chrismas Star" takes a prominent role in this first movement from measures 39—97, but here it has

multiple meanings. Example 3.3.1 highlights instances of the star's appearance in the score, beginning at m. 39.

Example 3.3.1

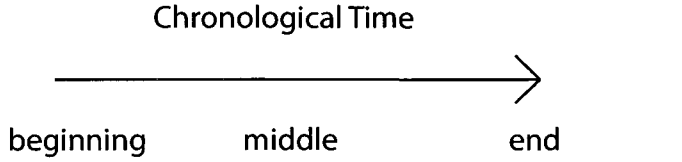


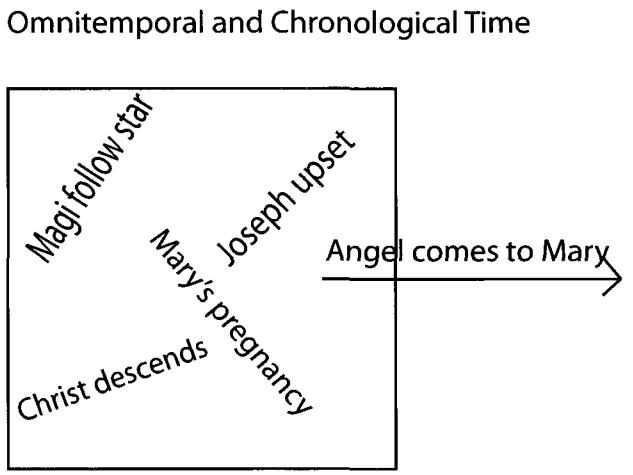
El Niño by John Adams

Many motions throughout the story's chronology are depicted here at once. In this way it functions like an overture through its introduction of motives and meanings that appear later in the work. The meanings multiply to include Christ's descent that takes place in "For With God No Thing Shall Be Impossible," the descent of the Star of the Magi in "The Christmas Star", and the descent of the angel Gabriel to announce the coming of Christ to Mary. The first two of these meanings occur in omnitemporal time, meaning that all time in the story is experienced at once in this movement as if from an eternal perspective. The descent of the angel to Mary occurs in chronological time, beginning the story for the audience. This is an instance of what Hatten refers to as a "troping of temporality": "when the 'ongoing present' is contradicted by events that appear to be out of place."[84] These two types of temporal experience that occur in "I Sing of a Maiden" are shown in Example 3.3.2 below.

[84] Edward Pearsall and Byron Almén. "The Divining Rod: On Imagination, Interpretation, and Analysis," In *Approaches to Meaning in Music*, ed. Byron Almén and Edward Pearsall (Bloomington: Indiana University Press, 2006), 7.

Example 3.3.2

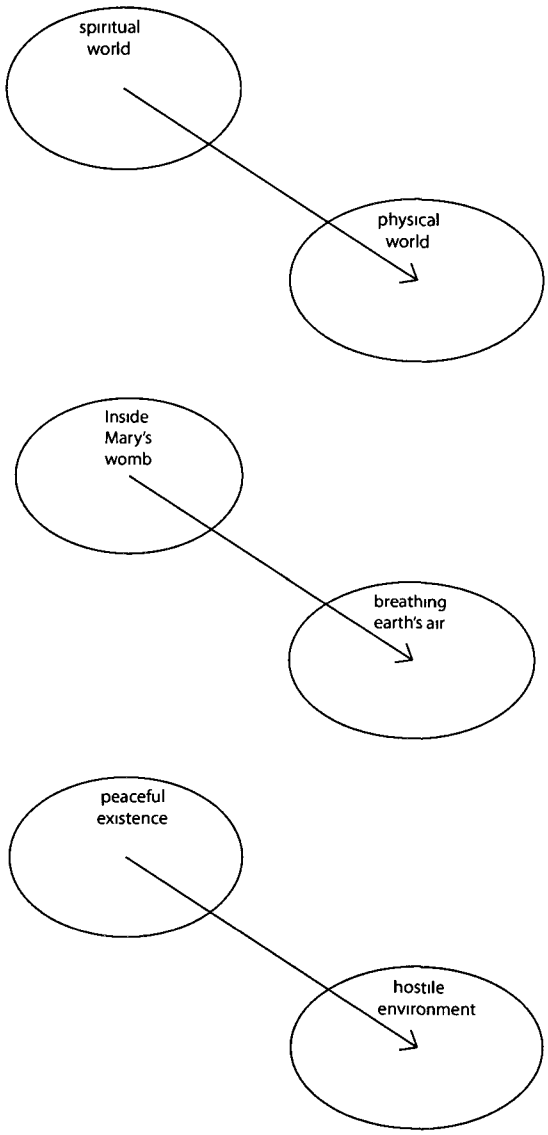




This movement represents Christ's descent not on the basis of the actual pitches or note values, as they are not the same as in "For With God No Thing Shall Be Impossible." Rather, it does so through a combination of the downward directed melodic contour and the listeners' expectations upon hearing this story played out. Listeners are expecting to hear about Christ coming from heaven to earth (from up to down). This expected downward directed motion occurs not just in a narrative form that most are familiar with, but rather through the actual embodiment of this directed contour in the music itself.

Christ's descent as a contour contains in itself a multiplicity of metaphorical meanings. His descent is expressed in Example 3.3.3 on three distinct levels as descending from one container to another. The first shown is Christ moving from the spiritual world to the physical world. The downward directed motion is a metaphor for our perception of heaven being in a location perceived as "above" the earth. The second illustration is of Christ moving from the container of Mary's womb into the world. The downward directed motion being due to the protected environment of the womb as opposed to the unprotected world. In this sense, the third illustration can be seen as a parallel to both of the previous two illustrations. The peaceful existence container could represent heaven or Mary's womb, as both would be a placid environment; the hostile world is so termed due to the historical relationship of Christ to the world, the world eventually having him crucified.

Example 3.3.3



In a way, even the star coming to earth is itself also simply a metaphor for Christ's coming to earth. The star's descent in this movement sounds the most like the star's descent in "The Christmas Star" movement later on in the opera, though a comparison of the scores from both movements confirms yet again that the precise pitches are not

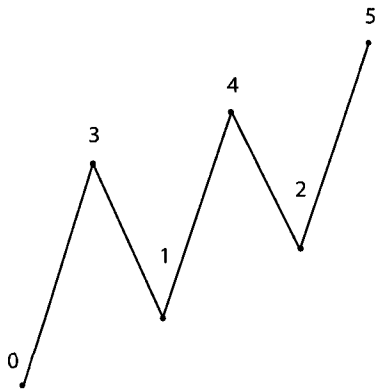
maintained across movements, or even within their respective movements. It is the similarity of contour in these gestures that marks them for semiotic significance. This gesture occurring in the chronological time of this opening movement signifies the coming of the angel Gabriel to bring Mary the news of her impending pregnancy. This interpretation is grounded in the fact that the following movement, "Hail Mary, Gracious," begins the actual announcement of Gabriel to Mary.

The sounding of the gong (symbolizing the arrival of the child) that was discussed in "For With God No Thing Shall Be Impossible" is also found in this movement, with the gong tuned to same pitch "D," in mm. 34—42, though this time it occurs in the midst of the swirling chaos of the *El Niño* storm because again, the whole story is being told at once in this movement; when the movement ends however, just like in "For With God No Thing Shall Be Impossible," the abrupt cutoff does occur seemingly in midstream. In movement one the interrupted ending is to leave the audience in a suspended state in the midst of this overwhelming story only to increase the anticipation for the "played out" story to begin. In movement four, the chaos is interrupted by the quiet gong symbolizing the arrival of the child in Mary's womb.

The last semiotic meaning that will be drawn from this movement makes a parallel with a movement that will not be discussed at length in this document. Mary's contractions are embodied in a similar manner in both this movement and "La Annunciation." (In "La Annunciation" contractions begin in m. 115 and continue to the end of the piece.) A summary contour graph of the contractions in both movements representing dynamics, texture, articulation of surface rhythms, and tempo is provided below.

Example 3.3.4

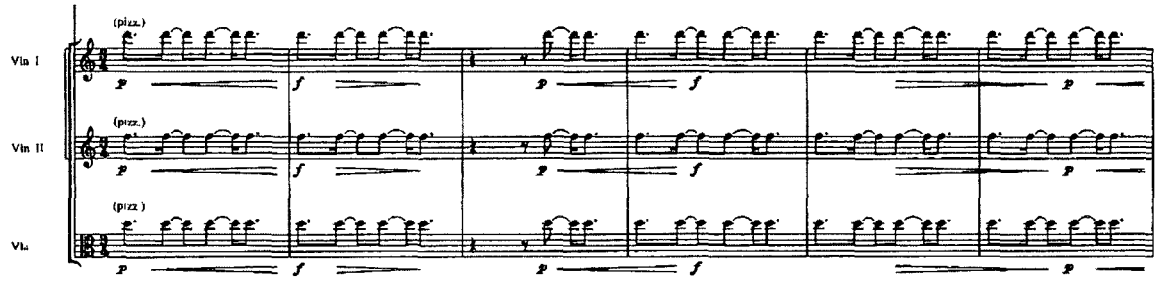
Contractions in "La Annunciation"



Graph represents contours of overall:
1. Dynamics
2. Size of Orchestration
3. Articulation of Surface Rhythms
4. Tempo

This graph embodies the similar process a woman experiences while giving birth. The ups and downs would simply be mapped onto concepts like the fluctuating (yet overall increasing) bodily stress, emotional stress, fluctuation of heart rate, etc. In "I Sing of a Maiden," the opening dynamic fluctuations make a reference to Mary's contractions, though here the fluctuations happen in a much shorter period of time in comparison with the ones later experienced in "La Annuciation." An excerpt from one of the violin parts can show a representation of the fluctuations occuring on a larger scale. The excerpt is from mm. 7-12, though this goes on from mm. 1—38 where the reference to the star begins to take over.

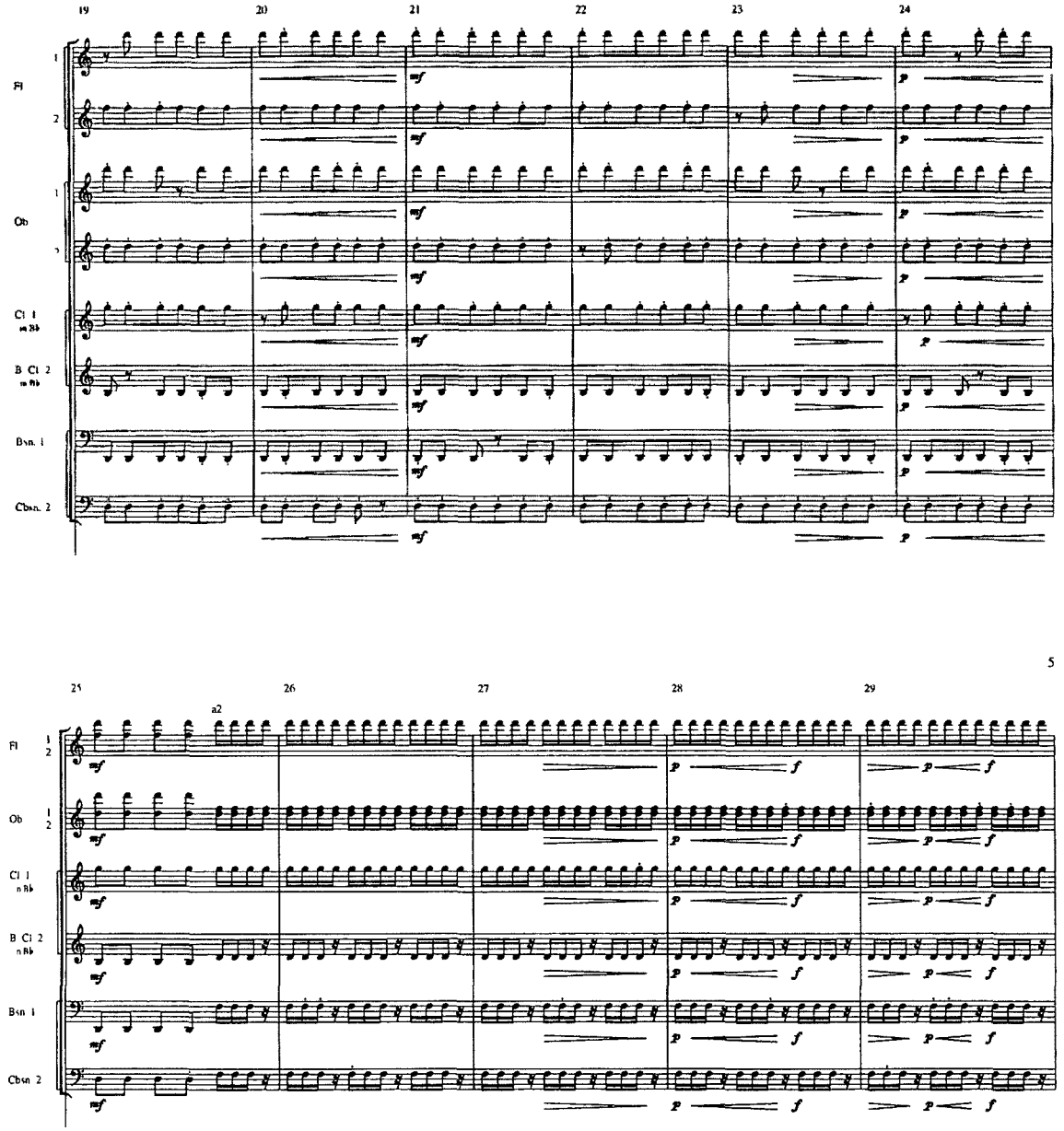
Example 3.3.5



El Niño by John Adams

Articulation of surface rhythms similarly increases by pulsing faster note values, as a look at the woodwinds in Example 3.3.6 shows. In measure 25, the winds begin pulsing at a sixteenth note value, in comparison with the eighth note value that has been articulated since bar 1.

Example 3.3.6

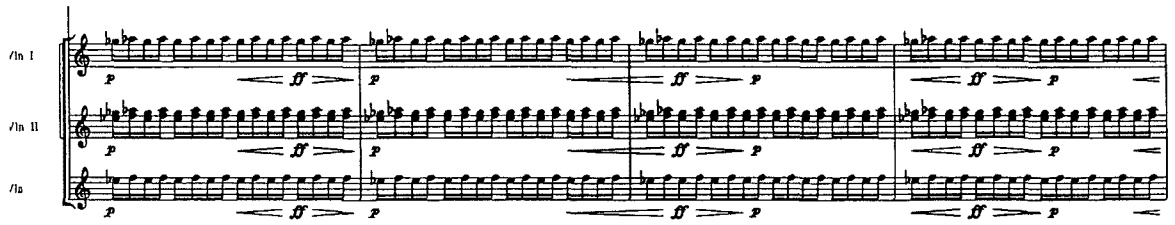


El Niño by John Adams

By m. 36, the large orchestration, the quick ebb and flow of dynamics, and the pulsing sixteenth notes of the winds have died away to allow the star reference to emerge by m. 39. The second contraction in "I Sing of a Maiden" begins in m. 138, after the chorus has

finished their statement, and continues to the end of the movement. Again, it is characterized by an increasing in surface articulation through smaller note values, tempo increases, dynamic increases, and an increase in orchestral forces.

Example 3.3.7

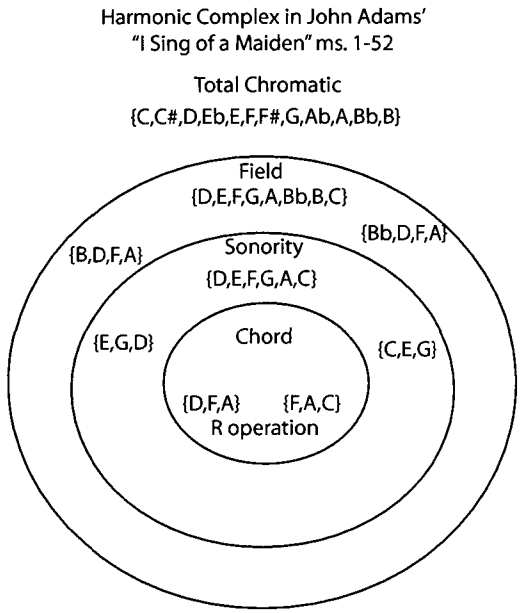


El Niño by John Adams

Example 3.3.7 illustrates the similar swells and decreases in dynamics in an incredibly short period of time (example shows mm. 148-151). Notice that this time it swells to a fortissimo rather than just a forte, as it did earlier on in the music. The piece ends with an abrupt cutoff at a fortissisimo dynamic level. This is also true of "La Annunciation." This is just one more way in which the contractions in "I Sing of a Maiden" are also an a omnitemporal foreshadowing of what will occur later in chronological time.

Harmonic language in "I Sing of a Maiden" is best represented using a harmonic complex, as in "The Christmas Star."

Figure 3.3.8



Harmonically, the chords represented in the center circle once again show a priority for the God-man relational metaphor expressed through relative mediants, whose subcategory includes both L-related and R-related triads. (In both L-related and R-related triads, two common tones are retained and one tone is distinct. In L-related triads, the distinct tones are a minor 2nd apart; in R-related triads, the distinct tones are a whole step apart.) R-related triads F major and D minor are used in this movement, as was the case in "For With God No Thing Shall Be Impossible" (D major and B minor.) In "The Christmas Star," L-related triads F# major and A# minor are used. It is also valuable to notice the set given in the field category—{D,E,F,G,A,Bb,B,C}—which shows Adams' propensity to maintain D as a tonic identity, and yet to inflect Dorian and Aeolian modal forms freely. This is the same free modal inflection technique used in "The Christmas Star," metaphorically projecting the concept of change of form, yet rooted in a tonic

"*identity.*" In "The Christmas Star," the change of form was from spiritual to physical. A spirit girl became a star, then fire, and yet somehow the identity of the girl was maintained, though she was found in the form of the fire. In this movement, foreshadowing the theme of the entire opera, the identity may be Christ, while the free change of form is between God and man.

3.4 Conclusion

In this document, I have provided a methodology for discovering embodied meaning in minimal and post-minimal repertoire. Minimalist and post-minimalist music has tended to resist analyis. In response to this problem, I have combined elements from several areas of music analysis including contour, embodiment, semiotic, transformational and narrative theories in a new way in order to ground interpretation of meaning in this music within a solid methodological framework. This method of analysis does not simply offer a way in which we might try listening to this music, but instead uses a method that mirrors the way we naturally tend to experience it. The theory that I have proposed here is that elements of music work together in Adams' music to project layers of meaning and deepened experience to listeners through mappings of physical motion. In the *El Niño* analyses, embodied motion allows the listener to personally experience the diverse elements of the narrative including the leaping babe, Mary's contractions, the spirit girl, the Star of Bethlehem, Christ's descent, the joining of God and man, the "Christ chord," and Jesus' arrival in Mary's womb. These motions and the narrative roles they play in effect become a part of the listener through the mapping of the

musical contour onto similar motion of previous bodily experience. The analysis provided here simply scratches the surface of moments contained within selections from this particular opera. This novel approach provides an analytical toolkit that will enable analysts to uncover embodied meanings in the largely untapped musical repertoire of minimalism and post-minimalism.

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