

CHARLES IVES:

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CONSISTENT IN CHAOS

A STUDY OF SELECTED LARGE ORCHESTRAL WORKS

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## ABSTRACT

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“Charles Ives: Consistent in Chaos - a study of selected large-orchestral works” comprises a series of analytical studies that attempt to find order and consistency beyond the often chaotic surface of Ives’ orchestral music. Proceeding from a dissatisfaction with what are perceived to be ‘descriptive’ past accounts of the composer, a more rigorous analytical approach uncovers compositional consistencies within the selected works, often based on the permutation and manipulation of simple pitch-sets and melodic cells and the inclusion of carefully controlled ‘spoiler’ elements. The use of linear reductive graphs also focuses on the larger scale proliferation of the music and helps provide an answer to the perennial question of whether or not the symphonic works have a fundamental basis in tonality. Rather than tracing single analytical issues across all the selected works, each chapter examines a separate piece or movement from beginning to end, initially responding empirically to the demands of the music. The effects of Ives’ multifarious techniques and styles are therefore assessed in context, with the intention of providing a musically relevant picture of his serious, concert works.

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# CHAPTER ONE

## AN ESSAY BEFORE THE SONATAS

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*"The material undergoes perpetual organic change, elements arrive, proliferate, divide and then either disappear or mutate into other elements. At first all of this occurs on the surface, in terms of canons (or perhaps heterophony might be a better description): lines imitate each other and thereby produce harmony. But then the lines that are duplicating begin to rebel and as the piece advances this question of bifurcation deepens. The pulse itself on which the music is based warps and splits apart and, in so doing stratifies the harmony. And that means that at times the texture can be in three or four temporal and harmonic zones at once. On the other hand, as everything is based on a few hidden, immensely simple musical cells, all of this diverse activity can suddenly fuse into periodic, regular, pulsed simplicity."*<sup>1</sup>

Although the above description could plausibly belong to several of Charles Ives' orchestral works, it was actually written in 1993, almost forty years after the composer's death, for the premiere of a new work by George Benjamin. Whilst on the one hand this demonstrates how advanced Ives was for his time (or conversely, how much New Music still owes to him - however indirectly), it is included here by way of a contrast to the non-musical, overly descriptive language that is often used to describe his music. Under this banner can be included many of the sociological, historical, programmatic and poetically descriptive texts that, whilst often evocative and successful in their own terms, only rarely seem to promote a fuller understanding of the actual substance of Ives' compositions.

Ives was acutely aware of his position outside the musical mainstream and never courted popular acclaim. Even today, the myth of the maligned iconoclast is as much a part of the popular perception of the composer as his compositional legacy. This thesis, however, began simply from a curiosity with the actual sounds of the music, before inevitably embracing historical research. The author therefore make no apologies for leaving biographical detail, except where musically relevant, to other sources.

All written musical analysis is communicated, by definition, through the use of a meta- or secondary language,<sup>2</sup> be it symbolic, poetic or just plain English. The art of

musical analysis can therefore partly be described as the art of translation. The ‘translation’ of the structural element of music is correspondingly most highly developed in genres that appear to be ordered according to the meta-language that describes pattern-making, in other words, geometry. It is not so surprising then, that the modulo-12 mathematical basis of serialism, and the symmetrical cycle-of-fifths that drives tonality, make them amongst the most convincingly analysable of compositional systems. Where the musical meaning appears to run contrary to easily derived structural patterns however, as is the case with much of Ives’ output, so commentators quickly fall back on programmatic and descriptive accounts of the music to fill the analytical gap. The origins of this study were therefore based on the premise that the music was susceptible to some sort of patterning that fell outside the usual bounds of enquiry; a suspicion fuelled by the recognition of an instantly recognisable Ives sound-world that seemed to be more systematised and consistent than the superficially chaotic mismatching of timbres and materials would suggest.

One of the major analytical problems that has always been associated with the music of Charles Ives is the stylistic variations between, and even within, individual pieces. A pluralistic compositional approach somehow demands a corresponding analytical one, but since analysis traditionally seeks common denominators there appears to be something of a contradiction in terms. In the *Fourth Symphony*, for example, the second and fourth movements are highly dissonant and atonal, the first a blend of the chromatic and diatonic, whilst the third is consonant and plainly tonal. Any single analytical methodology that claimed to unify all these disparate elements could consequently only come up with the most nebulous and generalised of conclusions. Whilst preliminary studies in a range of analytical techniques as diverse as voice-leading, set-theory and semiotics has been useful as a background to this thesis, no single approach can cater for the range of techniques posited by Ives music. Consequently, the analytical techniques in this study are derived empirically for each work covered. Whilst this may not appear the most scientific way to establish correspondences across a broad range of styles, an approach to each work arising from the particular “problem” encountered, uncovers a surprising consistency to both Ives’ conceptual and technical thought. In fact, the hazy historical background to Ives’ compositional technique, complicated by the influence of his didactic father, is in itself a good example of empiricism; what can be assumed to be the *a priori* or established rules when it comes to an examination of *Central Park in The Dark* for instance?

With a composer so prolific and wide ranging in approach as Ives, the process of selectivity, although it becomes self-justifying as the thesis progresses, is worth explaining here. The choice of works included is partly defined by the need to provide a broad coverage of musical styles and techniques. In addition to the lesser requirement of a legitimate chronological spread, the works included here can therefore

all be said to be exemplars of particular ideas or processes. In Chapter Two, the *Second Symphony* shows Ives' early allegiance to the developmental processes of Brahms and Beethoven in conjunction with the fledgling use of musical quotation. The contrasting, more 'experimental' side to his character is then explored in Chapter Three through *The Unanswered Question* and *Central Park in The Dark*. The meeting of these two streams is demonstrated in the transitional *Third Symphony* that shows a final use of a traditional symphonic form whilst further exploring a rigorous, but still relatively consonant, experimental agenda. The central focus of the study is then reached in Chapters Five and Six with the *Three Places in New England* and the *Fourth Symphony*, perhaps the joint pinnacles of Ives' orchestral achievements in their uncompromising vision. A final chapter on the *Robert Browning Overture* examines one of the less well known and perhaps least successful works, yet one that contains elements of an early proto-serial technique.

The linear coverage of all the works, rather than the taking of single-issue cross-sections, is also in response to the selective approaches of past studies. It is important not merely to choose examples to fit preconceptions, but rather to consider entire pieces or complete musical structures, in the interests of objectivity. When a composer such as Ives deals so often with easily categorised experimental processes that are taken to logical conclusions, the overall musical effect is often ignored in favour of a kind of procedural cataloguing. In this study, the changing relationship over time between the chromatic textural strands and the central diatonic/modal melody in *The Housatonic at Stockbridge*, for example, is seen as more significant than comparing all the uses of either element right across Ives' repertoire.

Whilst this thesis aims to reveal the compositional consistencies behind the music of Charles Ives, it is also conceived in the evangelical spirit of the composer's own writings. A small example of this is the avoidance of the term 'Ivesian' to describe any assumed characteristic of the music or composer that is not justified by the foregoing discussion. By the conclusion of the study it will be shown that this term could equally well be used to mean 'rigorous' and 'intensely ordered' as 'chaotic' or 'mismatched'.

<sup>1</sup>George Benjamin, programme note for *Sudden Time*, 1993.

<sup>2</sup>Thus providing the motivation behind Hans Keller's Functional Analysis, a method designed to overcome this very shortcoming.



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# CHAPTER TWO

## SECOND SYMPHONY

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*"Some nice people, whenever they hear the words 'Gospel Hymns' or 'Stephen Foster', say 'Mercy Me!', and a little high-brow smile creeps across their brow - 'Can't you get something better than that in a symphony?' The same nice people, when they go... and hear Dvorák's New World Symphony, in which they are told this famous passage was from a negro spiritual, then think it must be quite proper, even artistic, and say 'How delightful!' "*

Charles E. Ives<sup>1</sup>

### Introduction

Through the pages of the *Memos*,<sup>2</sup> one can appreciate the difficulties faced by Horatio Parker, as composition tutor at Yale, when first assailed by the confidence and non-conformity of Ives' early works. The *First Symphony* that the twenty-three year old student submitted for his degree assessment "was supposed to be in D minor, but the first subject went through six or eight different keys." "(Parker) smiled", Ives later recalled, "and let me do it, saying '...you must promise to end in D minor.'"<sup>3</sup> As a composer whose own music was "seldom trivial", Parker must have eventually recognised that his student's "hogging all the keys at one meal"<sup>4</sup> was more than just undirected exuberance; Ives had previously shown him fugue exercises in four simultaneous keys to which he had responded with sarcastic humour but little positive advice, perhaps unable to come to terms with polyharmony that must have seemed both unnecessary and curiously naive. Not surprisingly, in Ives' own assessment of Parker's and his father's relative musical influences, the Yale professor fares badly, though without any attendant malice. The breadth of knowledge and thoroughness of approach afforded by Parker, however, should not be underestimated in a historical appraisal of the development of the young composer. Stuart Feder, in his psychoanalytical biography, concurs that, "without Parker, Charlie would not have come to write his music in the way he eventually did, nor would the aesthetic behind it have been the same."<sup>5</sup>

Whilst the *First Symphony* was composed under the strictures of the Yale degree requirements, the *Second* covers the period of Ives' graduation and the start of his business career. The work is therefore very much the amalgam of new-found freedom and solid technique that the changes in circumstance might suggest. The five movements, *Andante moderato*, *Allegro*, *Adagio cantabile*, *Lento maestoso* and *Allegro molto vivace* are still very much in the accepted symphonic mould, lacking both the names and so-called programmes of the later large-orchestral repertoire. One of the most important stylistic changes from the *First Symphony*, however, is the use of musical quotation. The subject of quotation is dealt with specifically in Chapter Four, with respect to the semi-programmatic *Third Symphony*, so it is sufficient at this point simply to note the emergence of this peculiarly Ivesian aesthetic in the purely abstract *Second*.

Many descriptions of Ives' music interpret the use of quoted material in the programmatic works in extra-musical language, with the associations or history of source material often portrayed as being more important to the meaning of the new composition than the material itself. In this study the focus is primarily on the abstract musical consequences of the quotations, enabling distinctions to be made between unmotivated, colouristic use and systematic, motivic integration. (As will be shown later, this is particularly relevant to an assessment of Ives' revision of the *Second Symphony* in the 1940s.) As an example of the use of extra-musical language, it is worth quoting part of Leonard Bernstein's comments on the *Second*, made at a New York Philharmonic concert which featured the work:

*"Most of the shouting about Ives is based on his pioneering - his experiments with atonality, even before Schoenberg - his experiments with free dissonance half a century ago - his experiments with multiple rhythms, with two or more pieces of music going at the same time..."*

*"But the real measure of his greatness is that those works of his that do not rely on such experimentation - works which employ the normal procedures of music - still succeed in carrying a strongly personal and original message."*

*"This Second Symphony is such a work. It contains few, if any, problems of dissonance or modernistic techniques..."*

*"Let us try to identify ourselves with the young Ives... trying to record the sound images of his world. Those images were a combination of the great works of the German tradition - Beethoven, Brahms, Wagner - plus the local music he lived with - hymns, folk songs, patriotic songs and marches, college songs. All this can be found in the Second Symphony - from Beethoven's Fifth to 'Turkey in the Straw'. But it all comes out Ivesian, transmogrified into his own personal statement."*

*"For example, Beethoven's Fifth. Ives had an obsession about those famous four opening notes which keep turning up in various works of his. But when you hear those notes in the third movement of*

*Ives' Second Symphony, you will hear them hushed and mystic - very different from Beethoven's fierce original statement...*

*"Then, there are other references - Brahms' Third Symphony, Wagner's Tristan and Walküre, Bach, Bruckner, even Dvorák's New World Symphony. But the Ives Symphony never sounds like Brahms and Wagner - it sounds like Ives... Ives goes even further by tossing odd bits of Americana into this European soup pot, thus making a new brew out of it, very American in flavour. The list of these oddments is very curious. Besides 'America, the Beautiful' and 'Turkey in the Straw' you'll hear 'Columbia, Gem of the Ocean', used here and there as a bass line and finally emerging triumphant. You'll here 'Camptown Races' and five or six hymn tunes, including 'Bringing in the Sheaves' and 'When I Survey the Wondrous Cross'. Then you'll hear phrases that sound like a mixture of 'Swanee River' and 'Old Black Joe'. There's a touch of 'Long, Long Ago', a wild sudden reference to Reveille, and a number of college songs.*

*"...there are gauche endings, unfinished phrases, wrong voice-leading, inexplicable orchestration. There are those strange personal jokes of his - burlesques, takeoffs, deliberate infringements of conventionality deliberately intended to shock - like the very last chord of the whole piece, full of wrong notes, incongruous as a Marx Brothers routine. So he ends his Symphony - with a yelp of laughter.*

Although this excerpt was probably part of a pre-concert talk, and understandably quite lightweight in tone, Bernstein's use of language is still insufficient to describe Ives' musical quotation as anything more than superficial ornamentation. Despite this he does, however, touch upon the relation of Ives' technique to European nineteenth-century models. The quotation as a whole therefore helpfully encapsulates the reasons for the inclusion of the *Second Symphony* in a thesis primarily concerned with the later 'mature' works: the chapter explores the origins of Ives' large-scale formal control of smaller-scale 'experimental' techniques, and (in contrast to Bernstein) introduces a purely abstract musical and analytical approach to the music that will become the central focus of the thesis. Although mentioning the other movements in passing, the chapter concentrates on the first movement, as an exemplar of the styles and techniques seen throughout the work.

<sup>1</sup>Charles E. Ives, "Memos", edited by John Kirkpatrick, Calder and Boyars, London, 1973, p.52.

<sup>2</sup>As 1.

<sup>3</sup>Ibid. p.51.

<sup>4</sup>Ibid. p.49.

<sup>5</sup>Stuart Feder, "Charles Ives: 'My Father's Song' - a psychoanalytic biography", Yale University Press, New Haven and London, 1992, p.142.



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## SECOND SYMPHONY

### FIRST MOVEMENT

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Despite Ives' outward rejection of his teacher's influence, the *Second Symphony* is still cast firmly in the Germanic tradition of Beethoven and Brahms to which Parker subscribed. In the original 1902 version it is not a recognisably "American" work. The instrumental forces are those of the standard late nineteenth-century European orchestra, although, interestingly, Ives subtitles the work "for large orchestra", presumably in contrast to the smaller contemporary American theatre-orchestra. The first movement, *Andante moderato* opens with an austere, contrapuntal presentation of a theme and an equally important scalar accompaniment. The combination is purposefully ambiguous in its assertion of both B minor and its relative major, D, through the alternation of A# and A natural in the lower line, the placing of the nominal tonic, B, on the second, weak beat of the bar in the upper line and the arrival at D in the bass at the fourth bar. The use of the ambivalent diad F#-D in the fourth bar to maintain this ambiguity is a characteristic feature of much of the nineteenth-century music that Ives would have studied under Parker, with precedents as far back as Haydn:

Ex. 2.1.1 'Cellos and basses bar 1



At bar 4 the violas repeat the upper line an octave higher, whilst the 'cellos assume the bass line, this time basing the upward sweep on a D major scale plus A#, to play further upon the harmonic ambiguity of the theme. The uncertainty is temporarily removed, however, as a third entry of the theme and accompaniment (from here called 1(a)) in

the second violins is joined by a half-speed scalic descent in the first violins, momentarily solidifying the D major interpretation:

Ex. 2.1.2 Strings bar 7

Ex. 2.1.2 shows the string parts for bar 7. The first violin (I) and second violin (II) parts are in treble clef, and the viola (vcl) part is in bass clef. All three parts are marked *mp* (mezzo-piano). The first violin part features a half-speed scalic descent, while the second violin and viola parts provide harmonic support with a similar but more active rhythmic pattern.

Whilst continuing its scalic motion, the bass line becomes syncopated, working across the barline, between bars 10 and 15. The first violin line, in continuing this contrapuntal, almost fugal style, becomes similarly scalic but in contrary-motion. The inner strings assume a double-speed, semiquaver rhythm that forms the transition to the faster scalic movement of bar 17.

At bar 17 the bass echoes the opening F#-B of theme 1(a) in the creation of a strong B minor cadence that launches a downwards version of the scalic introduction, in a faster semiquaver rhythm (theme 1(b)):

Ex. 2.1.3 Double basses bar 16/17

Ex. 2.1.3 shows the double bass part for bars 16 and 17. The part is in bass clef and marked *mp*. It features a fast semiquaver descent, which is a key element of theme 1(b), launching a downwards version of the scalic introduction.

Having concentrated thus far on rhythmic variation of the opening B minor/D major material, the semiquaver descent of theme 1(b) is then expressed over a bass chromatic sequence between bars 20 and 22:



## Ex. 2.1.4 Violin I and double bass bar 20

20 violin I and bass

This rising chromatic bass and scalar upper line converge at bar 23 in an unequivocal cadence in A major and the launch of the second subject. In retrospect this implies that D major is the home key and that this cadence forms the expected second subject modulation to the dominant. Since the key change follows both a chromatic sequence and the strong assertion of B minor at bar 17, however, the harmonic ambiguity of the first subject is not denied; in context, A major appears more the culmination of the foregoing sequence than a relation to a home D major.

Like the first subject, the second is also divisible into two related, but gesturally differentiated halves:

## Ex. 2.1.5 Violin I and double bass bar 23

23 violin I and bass

The new material is initiated in bar 23 by the semiquaver rhythm of 1(b), proceeding to large leaps of compound thirds (i.e. intervals invertible to a third) or octaves that form theme 2(a). The line then adds a chromatic mordent figure (2(b)) that is followed canonically in the bass, continuing the contrapuntal style of the first subject group.

Having clearly established the melodic and rhythmic essences of the two subject groups, Ives is quick to combine these elements through further permutations and transpositions. At bar 30, the upward scale of 1(a), the melodic leaps of 2(a) and the mordent figure of 2(b) are transposed abruptly to F major in a quasi-developmental manner:

## Ex. 2.1.6 Strings bar 30

The key of F major is short-lived, more a shift than a modulation, and the passage is promptly taken to G major at bar 33. The semiquaver opening of 2(a) is extended into a further chromatic sequence from bar 35, inverting the first use in bar 20 so that here the bass descends and the semiquavers ultimately rise (viola bar 39). Again, the sequence and resultant harmonic uncertainty are used to launch a strong modulatory cadence. Where previously the second subject was in A major, the dominant of the opening D major option, emerged from the sequence, F# minor is now presented, the dominant to the opening B minor option. A certain amount of tonal ambiguity is still seen in the ensuing verbatim transposition of theme 1(a), but the centrality of the F# is strengthened by the unequivocal perfect cadence of bars 39/40. Although the surface of the music has therefore implied a sense of development, the tonal organisation seems to work at a different pace, with the stability of this cadence at bar 40 intimating the end of an 'exposition'. From a tonal perspective a greater sense of developmental process now ensues. (This ambiguity of structure is a further nineteenth-century device assumed by Ives, in addition to the tonal ambivalence seen at the opening.) The beginning of the movement is further echoed in the addition of the half-speed descending melody (from bar 7) and modulation to the relative major, A, at bar 43. The clarity of the equivalent key change in the exposition, however, is now slightly obscured by the further knowledge that A major is not only the relative major to the dominant of B minor, but also the dominant of D and the key of the second subject. Perhaps for this reason, Ives chooses to prolong what was originally essentially a bridge passage (bars 10-16) between the two halves of theme 1, to exploit a 'developmental' key area that is related to both tonal interpretations of the opening.

The prolongation of the harmonically ambiguous bass line enables new figures to be superimposed, including one small, but unmistakably dissonant gesture, that brings

together the thematic compound-third and the chromaticism of the earlier sequences in a pattern wilfully oblivious of the prevailing harmony:

Ex. 2.1.7 Strings bar 47

47 strings

The musical score for bar 47 of the strings section. It features four staves: Violin I (I), Violin II (II), Viola (vla), and Cello/Bass ('c,bs). The key signature is two sharps (F# and C#). The time signature is 4/4. The Violin I part has a melodic line with a chromatic descent. The Violin II part has a more active line. The Viola part has a melodic line. The Cello/Bass part has a more active line. The score is labeled '47 strings' at the top.

As the prolonged bass line peters out in bar 50, the harmony moves sequentially flatwards before alighting on a return to the B minor/D major schism in bar 54. The contrary-motion of melody and bass is fully explored in the following six bars, the lower line moving, significantly, between the two poles of D (bar 54) and B (bars 57 and 59).

As in the early stages of the exposition, a perfect cadence into B minor and the launch of the semiquaver rhythm of 1(b) dispels the harmonic ambiguity momentarily at bar 61. Such clarity brings with it, if only in passing, the first hint of some form of tonal restatement suggestive of a larger recapitulatory function. The original chromatic sequence is also repeated verbatim, as is the insertion of a 4/4 bar prior to the start of the second subject. The sonata principle remains good for the repetition of the second subject group in what is now the notional home key of D major, its transposition providing the strongest evidence so far of recapitulatory intent:



## Ex. 2.1.8 Strings bar 66

66 strings

In addition to the expansion of the melodic leaps of theme 2(a) to two octaves and a sixth, A-F# in bar 67, the first melodic quotation is inserted in the bass. Despite being as much a precursor of the 'mature' Ives sonority as the odd chromatic gesture of bar 48, the insertion of *Columbia, the Gem of the Ocean*<sup>1</sup> cannot be said to be genuinely motivated from within the movement, in the course of what has thus far been a tightly worked argument, and accordingly disappears four bars later.

The recapitulation continues with further development of the canonic mordent figure of theme 2(b). The three note pattern is presented almost as a stretto from bar 76, the upper and lower lines separated only by a quaver. Under this exchange a dominant F# pedal gradually solidifies, in preparation for the full-blown recapitulation of the opening of the movement in a definite B minor at bar 79. The original six bars occupied by the opening theme, in its first two fugato entries, is halved to three before the scalar bass line transfers to the D root. At this point the melodic derivation of the compound thirds of the second subject is made clear as the rising fourth F#-B of theme 1(a) is extended to a sixth, F#-D, to fit the harmonic circumstances. The syncopation of the bass line that followed the first presentation of theme 1(a) returns at bar 85, accompanied by further contrary-motion melodic lines. Initially the compass remains within the B to D limits of the previous example of bar 54-59, but from bar 92 moves beyond the confines of B minor/D major to move flatwards in a half-speed imitation of the rhythm of theme 2(b). A further repetition of the contrary-motion and syncopation, from bar 96 onwards returns the scalar movement in all parts to the B minor/D major set but extends the ascents and descents over five bars in a final cadential preparation.

The movement ends with a return to the contrapuntal simplicity of the very opening, presented in D major at bar 101. Whilst on a local level this suggests a coda, it is typical of the structural ambiguity that Ives explores in this movement that its function is ultimately as a transition to the Allegro. After a second entry of the theme, bar 104,

the second violin line returns the opening F# of the theme to a tonic D, before concluding with a plagal cadence:

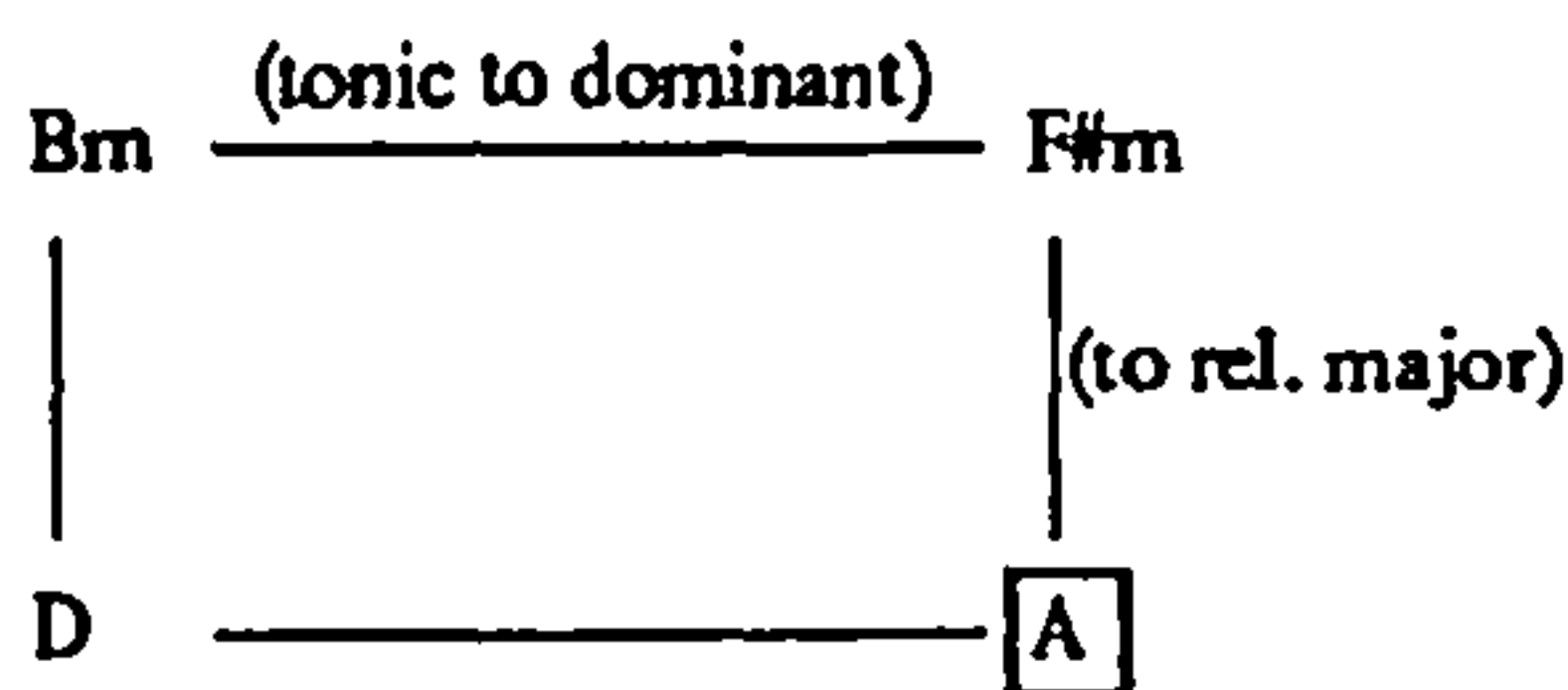
Ex. 2.1.9 Strings bar 104

The movement continues for a further six bars in the shape of an oboe solo marked “quasi recitative”, that repeats theme 1(a) before launching attacca into the second movement.

## Overview

The solid stylistic and technical grounding given Ives by Horatio Parker makes the fledgling indicators of his ‘mature’ style in this first movement stand out in high relief. The orchestration is based almost exclusively around the strings with the quotation of *Columbia* added by the horns, and whilst this is not unusual in itself, is a precursor of the consistent instrumental division seen in almost all the later orchestral works. In the *Fourth Symphony* and *Three Places in New England*, for example, complete quotation, particularly of martial or patriotic themes, is given predominantly to the cutting timbre of the horns or brass, whilst the woodwind present fragmentary or derived material. In the context of the *Second Symphony* it is therefore not difficult to see the relation between this later, complex division of the argument and the simpler orchestral models of Beethoven and Brahms. A further relation with such nineteenth century attitudes can also be seen in the pattern of modulation within the first movement. The presentation of thematic material in both the tonic and relative minor/major keys is a central feature of common-practice tonality originating in the mediant relationships explored by Beethoven, Schubert and particularly Brahms. It is typical of Ives’ musical philosophy that he should play strongly on this polarity in the harmonic ambiguity of the opening theme and the subsequent relationship between the dominant keys of both major and minor interpretations:

## Ex. 2.1.10 Key relations



Through the expected sonata form modulation of the second subject to the dominant, Ives maintains the ambiguity of the B minor and D possibilities of the opening by taking both keys to their dominants, F# minor and A major respectively, at different points in the movement. By way of a chromatic sequence, the F# minor passage modulates further to its relative major, A, highlighting the connection between the opening B minor and D major. It is therefore probably no coincidence that this passage of tension (and ultimately resolution) between the competing harmonic interpretations is also the most prolonged of the development. The sonata adherence to dominant modulations is therefore shown here to be secondary in overall importance to modulation by thirds, a situation that is reiterated throughout the symphony. The central importance of the third is also evinced by many of the melodic shapes, the prevalence of compound-third leaps in the second subject a prominent example. With regard to Ives' later works, subsequent chapters will demonstrate that this apparently innocuous preference for the interval of a third over the fifth ultimately influenced almost every aspect of his composition.

The first movement of the *Second Symphony* also shows the combining of archaic devices such as fugue and counterpoint with a style of proliferation that combines motivic extracts rather than overtly developing them, as Brahms or Beethoven might have done. Many studies on Ives use the word "collision" to describe his 'mature' manipulation of musical material but in many ways the word also applies to this early work. The main theme, 1(a), consisting of melody and scalar accompaniment, is presented as what Tovey might describe 'fugal texture', but remains relatively fixed in shape throughout the movement. Development of the theme concentrates mainly on harmonic reinterpretation through transposition in bar 30, for example, and metrical repositioning in bar 16/17. The 'collision' of all the thematic motives is shown most clearly at bar 30, as themes 1(a), 2(a) and 2(b) are simultaneously combined and redistributed amongst the strings. It is here that the later Ivesian predilection for single thematic sources is also prefaced, the motives more closely related than the first and second subjects of many a Beethoven sonata, but again showing a possible link with the thematic manipulation, even developing variation, of Brahms. Ives' enduring fixation with Beethoven's most famous, and propitiously major-third derived, motive spills over into the third movement, however:



## Ex.2.1.11 Strings bar 46 Third movement

47 strings

Whilst the fourth movement is almost a verbatim repeat of the first, at half-speed, the fifth contains the most infamous feature of the symphony in the climactic eleven-note final chord. The appearance of such a crass gesture at the conclusion of a long tonal scheme has often been interpreted as the ultimate Ivesian expression, simultaneously humorous and poignant. The historical sequence of events leading to the ‘surprise’ ending, however, is somewhat less prosaic. The original 1902 score closes in the expected F major with none of the now familiar dissonance, but was revised by Ives during the 1940s in his final period of creative work. J. Peter Burkholder posits that this alteration was both unnecessary and unfortunate:

*“I have ...seen the manuscript of the original ending (of the Second Symphony) in the Ives Collection and much prefer it. In my opinion, performing this work of 1902 with an ending from the 1940s is an absolute travesty. The new ending would not have been added had Ives received recognition for this symphony at the time he wrote it and would not have stayed in use this long had performers and scholars understood the logic and evolution of his music. Ives’ original, tonal ending belongs to his original tonal symphony.”*<sup>2</sup>

The connection between the first and last movements of the revised score lies in the quotation of *Columbia, the Gem of the Ocean* that appears as a transient counter-subject in the former and the build-up to the chromatic conclusion of the latter. The isolation of the tune within these movements, and its conspicuous absence from all the others (even the half-speed repetition of much of the material from the first movement in the fourth), would point to its later addition, confirming the lack of motivation mentioned earlier for its use, in bar 66, of the first movement.

<sup>1</sup>“...a tune that seemed to float into his mind whenever it was otherwise unoccupied.” Sidney R. Cowell, “Ivesiana: ‘More than Just Something Unusual.’”, *Musical America*, October 1974, p.16.

<sup>2</sup>J. Peter Burkholder, “Charles Ives - the ideas behind the music”, Yale University Press, New Haven and London, 1985, footnote text, p.145.



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# CHAPTER THREE

## TWO “CONTEMPLATIONS”

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*“In the summer of 1906, rumination gave way to contemplation as Ives composed two short pieces [The Unanswered Question and Central Park in the Dark] which were among his most original to date.”*

Stuart Feder<sup>1</sup>

### Introduction

It is somewhat ironic that although Ives designed *The Unanswered Question* and *Central Park in the Dark* as a set of two complementary “contemplations” from the outset, the works are in fact more often performed separately. Whilst many of the other orchestral “sets” remain doggedly fixed in programme orders improvised for early performances, despite disparate origins and dates for the component movements, the “contemplations” are not always allowed to demonstrate their obvious compatibility. One explanation for this is that the instrumental forces of the pieces differ quite substantially. Despite being ostensibly termed “chamber” works the pieces require between them almost as much timbral variety as found in an enhanced full orchestra - the first demanding an offstage trumpet and quartet of flutes, the second two pianos, Eb clarinet and percussion. Both also allow for the use of a second conductor and an unspecified number of strings. Partly due to its economical scoring but also to a very accessible style, *The Unanswered Question* remains the more popular of the two, and one of Ives’ most frequently performed compositions. In the Postface to the score he describes the movement in terms of the repeated asking of “The Perennial Question of Existence”, answered by increasingly agitated “Fighting Answerer’s” (sic) until “the strife is over for the moment”. These questions and answers are assigned to a solo trumpet and quartet of flutes respectively, accompanied by a metrically independent string texture designed to represent “The Silences of the Druids”. This continuous background string texture is presented as an unashamedly attractive diatonic sequence, too slow to be perceived rhythmically but mobile enough to provide ever changing harmonic contrast with the more strident and dissonant trumpet and flute foreground

argument. After six exchanges and a seventh and final unanswered question, the strings fade to "Undisturbed Solitude". The simplicity of this intent and the clarity with which it is executed makes the programme amongst the easiest of Ives' to understand, and the music, correspondingly, amongst the hardest to analyse with fresh insight. The two apparently independent strata of string and trumpet/flute are nominally synchronised through the use of fermata and "hold here until..." indications but the overall rhythmic freedom, and constant marked *accelerando* of the flutes, often makes pinpointing specific simultaneities difficult. For the writer attempting any more than a descriptive account of the work, an almost atemporal appreciation of large structure against large structure (rather than note against note) is required, and it is for this reason that a chapter on *The Unanswered Question* and *Central Park in the Dark* is included in this study of the larger orchestral works. Both pieces condense, almost into précis form, the more complicated multi-level arguments that Ives came to use in the later works, and provide the basis for an analytical introduction to the techniques of poly-rhythm, -tempo, -meter that pervade the structures of, amongst others, the *Fourth Symphony* and *Three Places in New England*. The second of the Two "Contemplations", *Central Park in the Dark*, in particular demonstrates the ultimate metrical separation of foreground and background textures, its string background maintaining a *molto adagio* whilst the remaining instruments accelerate to a dissonant climax:

"From measure 64 on, until the rest of the orchestra has played measure 118, the relation of the string orchestra's measures to those of the other instruments need not and cannot be written down exactly, as the gradual *accelerando* of all but the strings cannot be played in precisely the same tempi each time."<sup>2</sup>

Polystylism is also broached in *Central Park in the Dark* through the simultaneous portrayal of ragging pianos, street singers and fire engines in a conflict between the "natural sounds" of the strings and the man-made cacophony of the remainder of the ensemble.

Both *The Unanswered Question* and *Central Park in the Dark* have been the subject of innumerable previous studies, particularly amongst accounts of the wide expanse known as "experimental" American music. Whilst some of these studies are more descriptive than analytical, others, conversely, tend to invest Ives' tight construction and consistent intervallic use with almost mystical significance, as though such compositional integrity was a unique feature of the early works. The intention here is not so much to point out these compositional consistencies, which are clearly laid out in the score, but rather to use the pieces as exemplars of certain techniques and concepts that are fleshed out in the larger orchestral works.

<sup>1</sup>Stuart Feder, "Charles Ives: 'My Father's Song' - a psychoanalytic biography", Yale University Press, New Haven and London, 1992, p.194.

<sup>2</sup>From Ives' Postface to the score.

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## THE UNANSWERED QUESTION

### OR "A CONTEMPLATION OF A SERIOUS MATTER"

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#### The Question

The unanswered question of the title is a single plangent trumpet phrase pictured by Stuart Feder as the closest to a "...graphic representation of a question mark as might be notated on music paper."<sup>1</sup> The first of the seven repeats of this phrase traces an elliptical path (not unlike an expanded version of BACH) that can be described as a sequence of compound minor thirds and a semitone:

Ex. 3.2.1 Trumpet bar 16

(0,1,3,4,6)

Questions 2,4,6 and 7 then vary this intervallic sequence by substituting a B natural for the final C, altering the final interval to a major third and the whole set to (0,1,3,5,6).<sup>2</sup> All but the third question maintain a consistent rhythmic shape, though the changing placement of the phrase within the string-barring carefully hides any sense of metrical relationship with the background texture; questions 1 and 6 fall on downbeats, 2,4 and 7 on final triplet-minims, 5 on a second triplet-minim, and 3 on the second crotchet of a bar. Although metrically disguised, the interval between questions is temporally consistent; approximately seven bars of string background separate the start of each statement, except for the last two occasions that occupy six and eight respectively. The penultimate question, number six, therefore comes one bar earlier than expected, perhaps in response to the increasing agitation of the flute answers.



## The Answers

The flute quartet answers the trumpet phrase on the first six occasions, each one marked at a faster tempo than the last, becoming "gradually more active, faster and louder through an animando to a con fuoco."<sup>3</sup> In conjunction with the accelerando, the flutes also leave smaller and smaller gaps before replying to the trumpet, although Ives adds that the answers "...need not be played in the exact time position indicated".<sup>4</sup> Following question number five, the programme describes a "secret conference" amongst the "Fighting Answerer's"<sup>5</sup> (sic) that sustains right over question six and immediately launches a mocking account of the question itself, that remains unresolved right through to a final shrieking cluster at bar 57.<sup>6</sup>

## The Silence

In contrast to the background texture of *Central Park in the Dark*, and indeed most other examples of accompanying textures in Ives' orchestral works, the strings of *The Unanswered Question* are organised on a purely diatonic basis. The string sequence follows an ambiguous tonal path, balanced between G major and C major through the assertion of F# in the top line near the beginning and end of the piece (bars 4 and 54) but F natural at every other occurrence. The progression therefore begins and ends in G, but contains no dominant to fully resolve the sequence. Movement within the lines is predominantly stepwise, travelling slowly between the harmonic poles of C and G, with any non-homophonic part movement creating only the simplest passing-chords and suspensions. At no point are the resolutions to these suspensions fully prepared. Furthermore, all C and G triads are "spoilt" by delayed resolution e.g. at bars 6-7 the Vb-I in C is interrupted by a "spoiler" D natural that then resolves to E.

Bars 1-14 are repeated as bars 15-28 in a short progression that mirrors the larger G-C-G motion of the piece by placing the arrival at C at the midpoint of each phrase. An element of contrary motion is then introduced between bars 28-45, as the bass and tenor lines ascend and the treble descends in conjunct steps. The direction of the parts are then approximately reversed from bar 46 to the end, in an almost palindromic reflection of the opening bars. Through this combination of relatively undirected part movement and ambiguity of key, the string background avoids any real sense of tonal function or stability and becomes a suitably neutral canvas for the foreground argument.

Interaction

David Nicholls describes many of the trumpet phrases as holding a “blue” relationship with the string background,<sup>7</sup> presumably implying that the combination creates a major/minor-chord and/or seventh sonority. Certainly, in the first instance, the trumpet Bb of bar 16 resonates against a root position G major chord and in the second the low C# is played over A minor. It is the final note of each question, however, that explores this chromatic relationship most fully, since the strength of the phrase is ultimately gauged by the perceived resolution or irresolution of this pitch against the background. In all of the first four questions this final note is chromatically related to at least one of the string pitches:

Ex. 3.2.2 Trumpet and strings

trumpet

strings

Q.1 Q.3 Q.2 Q.4

The strings present four different harmonies for the trumpet to sound against, G, A minor, B minor and F, in all but the first case sustaining just the one chord for the whole statement. This pattern changes at question five, bar 45, and question six, bar 51, as more than one chord moves under the trumpet phrase:



Ex. 3.2.3 Trumpet and strings

trumpet

strings

Q.5

Q.6

Detailed description: This block contains two musical examples, Q.5 and Q.6, each showing a trumpet part and a string background. In Q.5, the trumpet plays a triplet of eighth notes (F4, G4, A4) followed by a quarter note (B4), all within a half-note duration. The strings provide a harmonic background with a sustained F major chord. In Q.6, the trumpet plays a triplet of eighth notes (F4, G4, A4) followed by a quarter note (B4), all within a half-note duration. The strings provide a harmonic background with a sustained G7 chord.

In these examples the chords remain consonant with the final pitch of the questioning phrase, C against an F major chord and B against G7. In terms of the programme this is also the point at which the flute answerers become much more agitated and indulge in the “secret conference”, as if sparked into action by the momentary agreement between the trumpet question and the string background. Once the furious energy of the flute quartet is spent, the seventh trumpet question continues the theme of partial resolution, placing the G major harmony of the first question underneath a final trumpet phrase that concludes on B natural.

The flute quartet answering phrases combine aspects of both the contrary motion outer lines of the string background and the chromatic interaction of the trumpet and strings. The first *adagio* reply, bar 20, demonstrates inward-moving outer lines and static inner parts:

Ex. 3.2.4 Flutes bar 20

20

I

II

III

IV

*p*

Detailed description: This block shows the musical notation for four flutes (I, II, III, IV) in bar 20. The notation is arranged in four staves. Flute I and II play a triplet of eighth notes (F4, G4, A4) followed by a quarter note (B4), all within a half-note duration. Flute III and IV play a triplet of eighth notes (F4, G4, A4) followed by a quarter note (B4), all within a half-note duration. The dynamics are marked *p* (piano).

The quartet stagger their entries until a chord containing a compound semitone and compound tone is created. The outer parts then move inwards towards a final chord that, as indicated, combines a compound semitone and a compound minor third. The second *andante* response of bar 26 then compresses the entries to a single attack, initially presenting two pairs of semitone intervals a compound major third distant:

Ex. 3.2.5 Flutes bar 26

The musical score for Flutes bar 26 consists of four staves labeled I, II, III, and IV. Each staff begins with a treble clef and a key signature of one flat (B-flat). A box containing the number '26' is positioned above the first staff. Above the first staff, a bracket with the number '3' indicates a triplet of eighth notes. The first staff (I) contains a triplet of eighth notes (B-flat, A, G) followed by a dotted quarter note (F). The second staff (II) contains a triplet of eighth notes (B-flat, A, G) followed by a dotted quarter note (F). The third staff (III) contains a triplet of eighth notes (B-flat, A, G) followed by a dotted quarter note (F). The fourth staff (IV) contains a triplet of eighth notes (B-flat, A, G) followed by a dotted quarter note (F). The dynamics *mp* (mezzo-piano) are indicated below the first staff. The score shows the staggered entries of the four flutes, with the first staff (I) entering first, followed by the second (II), then the third (III), and finally the fourth (IV).

The movement of the outer lines is inward once again, also culminating in two pairs of semitones, this time separated by a compound minor third. In the third *allegretto* answer all the above elements of chromatic pairs and contrary motion are combined with more mobile inner parts. These consistencies are maintained in answer four, bar 41, whilst the remit of the part movement is expanded to encompass tritones and major thirds and a more frantic semiquaver rhythmic division.

The staggered presentation of bar 47, and the fifth answer, disguises the chromatic melodic movement within the lines through unison entries between flutes I/II and III/IV, perhaps in response to the newly consonant end to the preceding trumpet question. All four lines progress, however, to the familiar pairs of semitones at the conclusion:



## Ex. 3.2.6 Flutes bar 47

Bar 47 of the flute part. The score is written for four flutes (I, II, III, IV). The key signature has one flat (B-flat). The time signature is 3/4. The music features complex chromatic patterns, including triplets and accents. The first measure of the bar is marked with a forte *f* dynamic. The second measure contains triplets of eighth notes. The third measure features a semitone cluster spanning a minor third, marked with an accent (^).

The ultimate reduction of the chromatic patterning is then demonstrated in the “secret conference” of bar 49 in a semitone cluster spanning a minor third:

## Ex. 3.2.7 Flutes bar 49

Bar 49 of the flute part. The score is written for four flutes (I, II, III, IV). The key signature has one flat (B-flat). The time signature is 3/4. The music features a semitone cluster spanning a minor third, marked with a pianissimo *pp* dynamic. The first measure of the bar is marked with a forte *f* dynamic. The second measure contains triplets of eighth notes. The third measure features a semitone cluster spanning a minor third, marked with an accent (^).

The melodic contours of all the flute answers (particularly four and five) follow a gradual progress towards the shape of the trumpet question, but this becomes particularly apparent at bar 52 as the *allegro* sixth answer combines the outline of the “prime” trumpet set with the chromatic closeness of previous flute answers, in a gesture of mocking disdain:



## Ex. 3.2.8 Flutes bar 52

The musical score for Flutes bar 52 consists of four staves labeled I, II, III, and IV. Staves I and II contain a melodic line with a triplet of eighth notes and a fermata. Staves III and IV are empty. The score is marked with a box containing '52' and 'etc.'

As before, the final flute quartet statement ends in two pairs of semitones, this time spanning a major third.

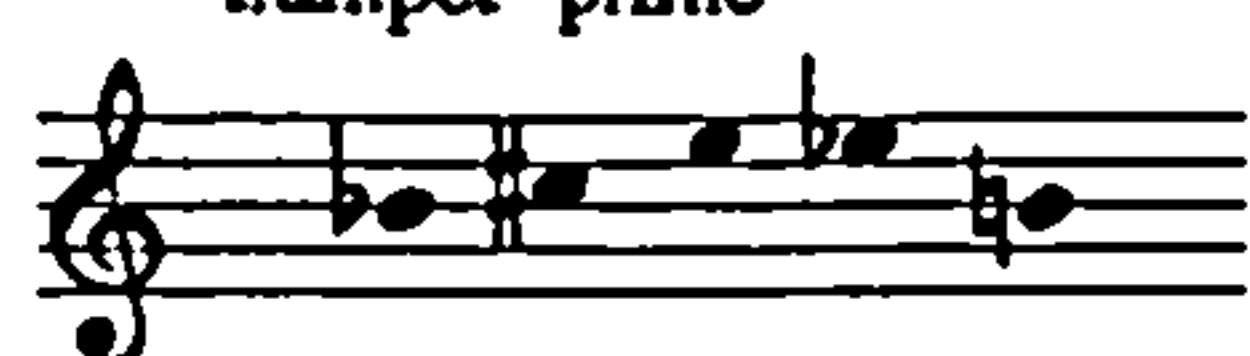
## Overview

The three elements of *The Unanswered Question* (question, answer and background) are united in the integration by the flute quartet of the minor third and semitone intervals presented by the trumpet and the contrary motion of the strings. The trumpet question changes its relationship with the string background through the move from dissonance to consonance of the final note of the phrase. In turn this progression alerts the flute answerers to, conversely, condense their chromatic argument to its smallest form in the “secret conference” and consequently to parody the question itself. The only resolution of any of the elements is seen in the final B natural, of the seventh trumpet question, against a final G major chord, leaving the majority of the pervading chromaticism “unanswered”.

In set-theoretic terms, the relationship between the question and the textural background rests on the use of the (0,1,3,5,6) set within both the “prime” trumpet phrase (ending on B) and the complete scale-set of the strings:


Ex. 3.2.9 Trumpet "prime" and strings

trumpet "prime"



= 0,1,3,5,6

string scale set



= interlocking 0,1,3,5,6s

(The shared notes of the interlocking sets (B natural and C) are, of course, also the final pitches of the two alternate trumpet questions.)

<sup>1</sup>Stuart Feder, "Charles Ives: 'My Father's Song' - a psychoanalytic biography", Yale University Press, New Haven and London, 1992, p.196.

<sup>2</sup>Similar to the expansion worked upon the motive to the Prelude of the *Fourth Symphony* and its development in the second movement.

<sup>3</sup>From the Postface to the score.

<sup>4</sup>Ibid.

<sup>5</sup>Ibid.

<sup>6</sup>Bar numbers refer to the barring of the string background.

<sup>7</sup>David Nicholls, "American Experimental Music 1890-1940", Cambridge University Press, 1990, p.59.

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## CENTRAL PARK IN THE DARK

### OR "A CONTEMPLATION OF NOTHING SERIOUS"

---

*"Present and past commingle in the hot, dreamy darkness of the summer night."*

Stuart Feder<sup>1</sup>

#### Introduction

*Central Park in the Dark* is the more conventionally scored of the Two "Contemplations". Strings, single wind, two brass and percussion are complemented by two pianos, often used by Ives in the larger orchestral works to help create polyrhythmic chaos through the doubling of two or more existing instrumental lines. In this instance, piano I performs this doubling role whilst piano II remains more or less independent, indulging in heavy syncopation to mimic "pianolas having a ragtime war"<sup>2</sup>, as part of the depiction of the man-made sounds that would have permeated Central Park on a summer's evening "before the invention of the car and radio".<sup>3</sup> These include representations of "... sound from the Casino, ...street singers, ...a street parade, ...a fire engine, ...(and) newsboys crying..."<sup>4</sup> Simultaneously, the fixed tempo strings portray "night sounds and silent darkness", in other words, natural sounds. This is achieved through the repetition of a fixed set of chords before, during and after the raucous interruptions of the remainder of the orchestra, in an apparently unending sequence, related both to the string textural background to *The Unanswered Question* and also the continuous percussion battery (sic) cycle of the last movement of the *Fourth Symphony*.

Through the simultaneous combination of these schemes, Ives makes an interesting comment on the paradoxical perception of natural and artificial sound: the "natural" sounds remain constant (in a cyclic sense) despite always appearing to change, whilst the "artificial" sounds gather momentum and complexity even though the density of scoring and overall gesture are perceived as consistent throughout. As a picture of the twentieth-century plague of ambient noise, Ives would appear to be making a remarkably prescient, not to mention Modernist, statement whilst also experimenting,

ironically, with the very intervallic "natural" structures that cause many of his subsequent works to sound so apparently chaotic and man-made.

## The Strings

The *perpetuum mobile* string background achieves its programmatic aims through the interaction of several levels of symmetrical and sequential patterning. The overall scheme consists of a ten bar 4/4 pattern repeated ten times over the course of the work:

Ex. 3.3.1 String orchestra

Within each ten bar cycle the pattern further divides into two and three bar segments (2+3+3+2) according to the harmonic set. Each segment is formed over a single bass

note and contains parallel-moving homophonic chords constructed from fixed intervals. The first chords of each group and their respective bass note are shown below:

Ex. 3.3.2 Strings

The musical notation for Ex. 3.3.2 Strings consists of four measures, each containing a chord. The chords are labeled 1, 3, 6, and 9 above the first measure of each group. The notation is written on a grand staff with a treble and bass clef. The first measure of each group shows a chord with a bass note on the bass staff. The second measure of each group shows a chord with a bass note on the bass staff. The third measure of each group shows a chord with a bass note on the bass staff. The fourth measure of each group shows a chord with a bass note on the bass staff.

The first set is constructed from the intervals of a tritone and major thirds, the second from perfect fourths, the third from tritones and perfect fifths, and the fourth from perfect fifths. The whole ten bar phrase therefore immediately contains an internal ebb and flow determined by the expansion of major thirds/diminished fourths to perfect fourths and likewise tritones/diminished fifths to perfect fifths:

Ex. 3.3.3 Strings

The musical notation for Ex. 3.3.3 Strings consists of a single measure containing a chord. The notation is written on a grand staff with a treble and bass clef. Above the first measure, there is an annotation "intervallic tension" with a line pointing to the chord. The chord is constructed from perfect intervals.

A simple layering of perfect intervals does not of course imply that the resultant chord is consonant, or that imperfect intervals form dissonant chords, but the fluctuation of interval content within the sets is clearly audible as the means of providing the momentum for the strings. Rhythmically the pattern remains unpredictable due to the interplay of rational and irrational values. The combination of groups of duplets, triplets, crotchets and quintuplets means that the common denominator remains very small (in the order of  $\frac{1}{64}$  notes) and any sense of pulse is heavily disguised. The succession of note-values is partially cyclic within the ten bar pattern:



## Ex. 3.3.4 String top line

Rhythmic subdivision

The key to the real function of the string background, however, lies in the relationship between the constant-interval chords and their transposition within each segment:

- a chord on fifths, for example, could be described as an “open” set since repeating the interval does not cause a pitch to be repeated until all twelve notes are presented. If a chord based on this set contains only seven members (e.g. bar 9), then transposition will liberate further members of the total-chromatic at a rate determined by the interval involved:

## Ex. 3.3.5 Strings bar 9

As indicated, after one transposition ten pitches have been presented and after two, all twelve. This coverage of the total-chromatic therefore depends upon judicious movement of the chords, in this instance by a major third and tone respectively. The technique is exemplified in the first bar:

Ex. 3.3.6 Strings bar 1

1

12

Since the opening chord is built on major thirds and therefore whole-tone, the set is only hexachordal and can be termed “closed” (unable to derive all twelve notes however far the constituent intervals are repeated). By transposing the chord through any interval not contained in the original set, here a minor third, the complementary hexachord is presented. The speed at which the strings cycle through all twelve pitches is therefore dependent on both the content of the set and the interval by which it is transposed. A diagram of the upper voice of all the chordal shifts illustrates how Ives adjusts the transposition level to match both the type of set and the rhythmic speed of the delivery:

Ex. 3.3.7 Strings bar 1

violin I

1 m3 m3 m3 m3 m3 ST ST m3 ST T m3

4 M3 ST 5 T m3 4 b5 ST ST ST M3 T ST T m3 b5

6

ST = semitone T = tone m3 = minor third M3 = major third  
4 = fourth b5 = tritone 5 = fifth

- the closed set of the first segment (bars 1 and 2 above) requires only a single transposition to present the total-chromatic and employs the slowest minim and triplet-minim rhythms.
- the open set of the second segment can be transposed by a greater variety of intervals and takes a greater number of transpositions to present all twelve notes. This is coupled with an increasing rhythmic division to include crotchets.
- the third set is semi-closed<sup>5</sup> since the combination of tritones and perfect fifths means that the total-chromatic only occurs after thirteen pitches (i.e. one note repeats

before each full repetition) and pitches do not recur in the same position in the intervallic structure. Since this unusual set does not therefore show simple repetition, some flexibility is allowed in its transposition and this is reflected in the use of transposition by both set members, tritones and perfect fifths, between bars 6 and 8. This slower coverage of the chromatic corresponds with the fastest rhythmic turnover that includes quintuplet-crotchets.

- the final open set, bars 9 and 10, reverts to the slower pulse of crotchets and triplet-minims and a more restricted set of transposition intervals.

The coverage of the total-chromatic slows, therefore, as the harmonic sets become more complex, the actual rhythmic progress of the chord-changes speeding up to even out the perceived rotation of all twelve pitches.<sup>6</sup> Since, as shown earlier, the rhythmic pattern within the ten bar phrase is semi-cyclic, so too the harmonic rhythm moves in a complementary undulating pattern.

The overall function of the string "silence" can be summed up as the repetitive presentation of the total-chromatic in chords that space conventionally dissonant intervals such that minimal chromatic interaction occurs. In other words, a smooth, quasi-consonant sound is sustained through the use of "natural" wide interval chords (reminiscent of the harmonic series), whilst the chromaticism/dissonance occurs on a linear level through rapid transposition.

### The Wind, Pianos and Percussion

As the strings continue at a regular tempo throughout, so the remaining instruments follow an accelerating scheme that begins and ends in synchronisation with the strings, but is independently barred between those points.<sup>7</sup> In essence, the changes in synchronisation define bars 0-63 as an introduction, bars 64-118 the main body of the work, and bars 119-139 as a coda.

In the course of the introduction several melodic themes are presented, the first in the clarinet:

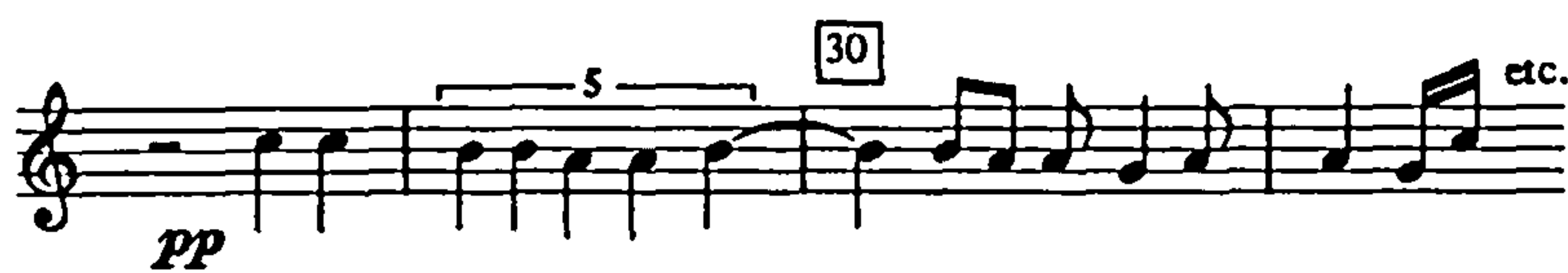
Ex. 3.3.8 Clarinet bar 13 (concert pitch)





This line immediately outlines the most important intervals to be developed in the main body of the work - the minor third and the semitone seen in the trumpet phrase of *The Unanswered Question*. In diatonic contexts these intervals (from the tonic) will be shown, in subsequent chapters, to form the basis of many infamous Ives' "wrong notes", particularly amongst the set *Three Places in New England*. The ambiguity of mode created by the presence of the minor third scale degree in a major-scale collection is also present here in the A/Bb contrast of bar 16, the implied tonic of the theme being Gb. The clarinet line comes to rest on a dominant Db from bar 28 onwards as the second, flute theme enters:

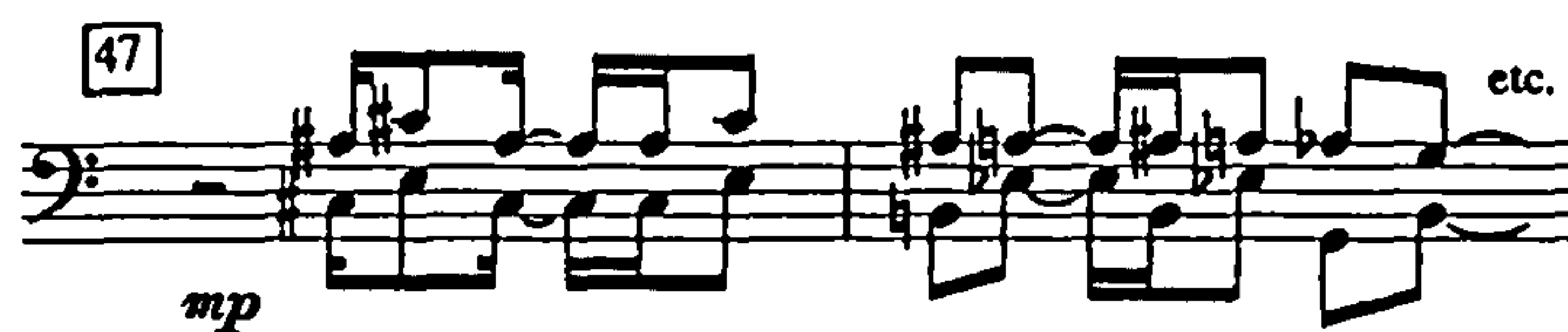
Ex. 3.3.9 Flute bar 28



The flute line expands the harmonic role of the semitone, guiding the implied roots of the melody chromatically upwards: G major bars 28-30, Ab major bars 31-34, from the Gb of the clarinet theme.

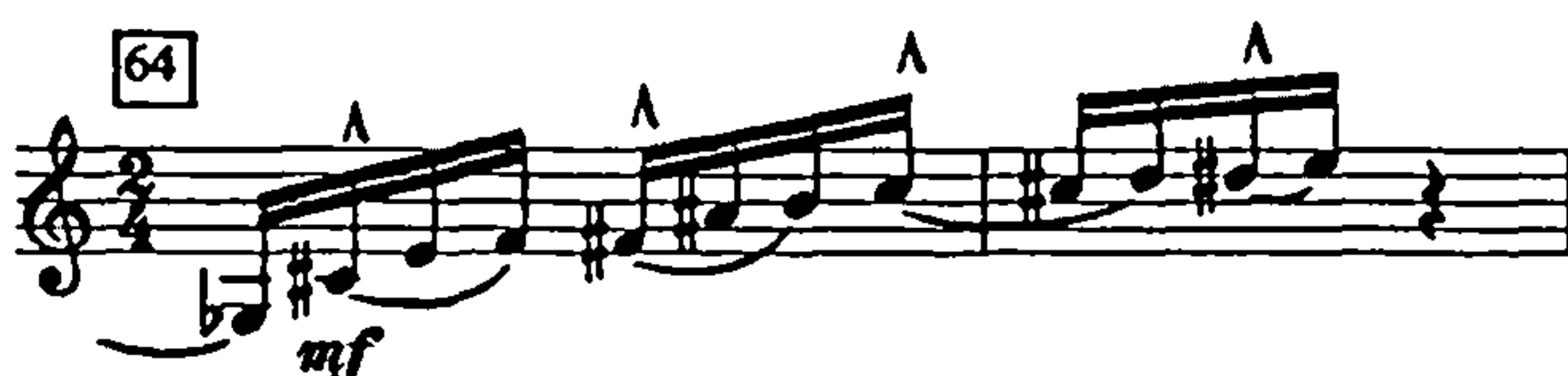
At bar 47 the piano states the left-hand pattern of what will later become its main theme. The two strands relate only superficially, concentrating on their individual interval content, specifically minor thirds and semitones:

Ex. 3.3.10 Piano bar 47



Similarly, the end of the introduction is heralded by an ascending clarinet figure composed of thirds and semitones:

Ex. 3.3.11 Clarinet bar 64



The introductory section of bars 0-63 therefore outlines the important melodic features to be developed in the main section of the work and their basis in a handful of simple intervals. Texturally, the instruments are introduced sequentially, the timbres and melodic extracts often dovetailing as if in preparation for their later simultaneous presentation.

Rather than give a complete description of all that occurs between bars 64-118, which will later be shown to be unnecessary, the following examines how Ives uses his material to create the "cacophony" of the wind orchestra. The principal characteristic of this middle section is its consistent level of dissonance. To ensure this the composer employs polytonal construction (that is, two or more keys in parallel), usually at the distance of a semitone, and canon. The pairings of voices can be described as follows:

- Flute and oboe: at bar 65 the instruments both play material derived from the original flute theme but at a semitone and one quaver distance, thus creating predominantly chromatic interaction.

- Piano and clarinet: the piano "ragging" at bar 79/80 is imitated by the Eb clarinet a bar later and at the unison, often creating diads between the two of a tone.

- Piano and clarinet: the reiteration of the syncopated "rag" theme places the two instruments at a minor third and a canon of one bar.

The same minor third and semitone intervals that built the melodic material can therefore be seen to control the interaction of the wind canons. This obviously does not preclude the creation of other intervals and scale-sets but does demonstrate the central integrity of the method.

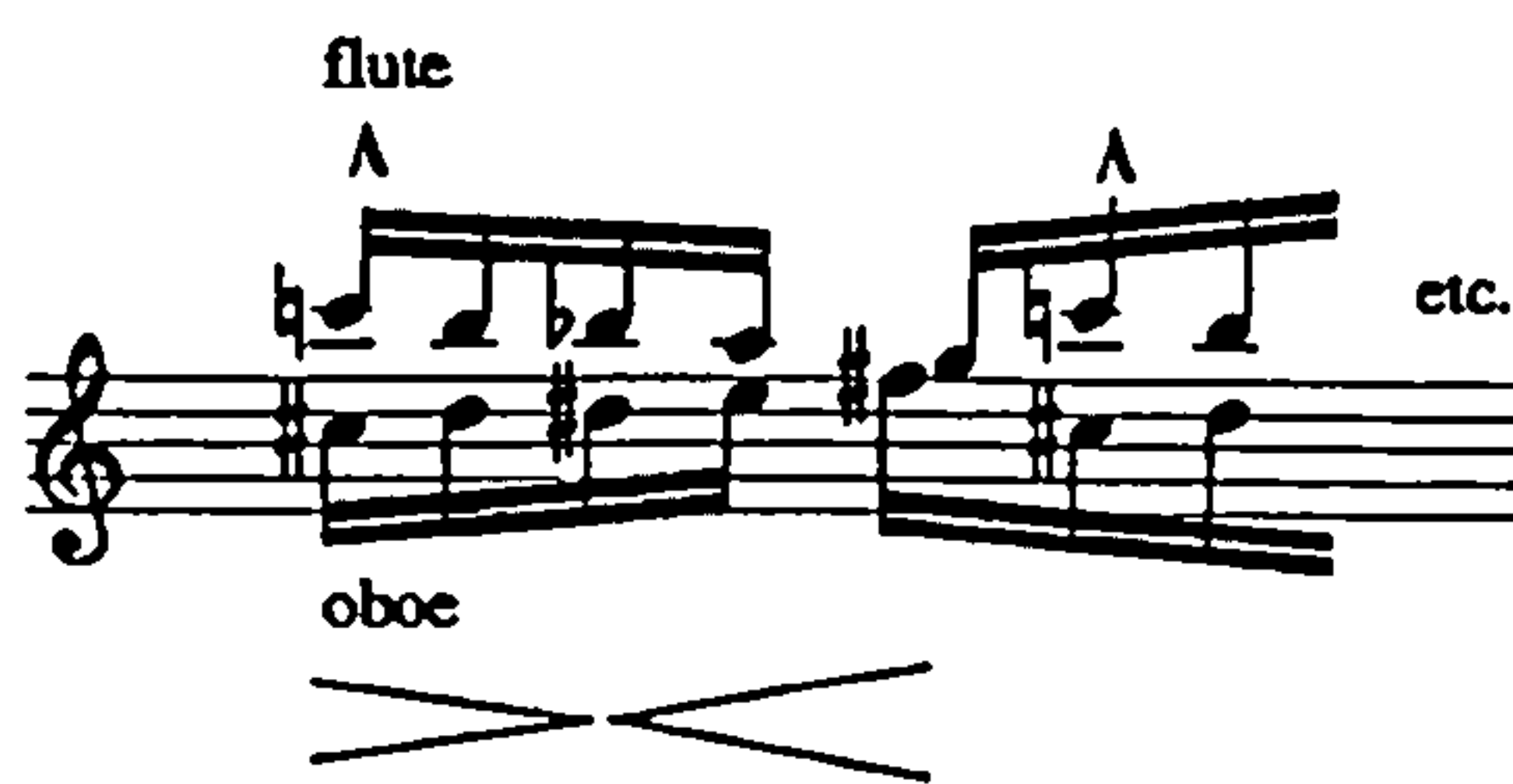
In conjunction with canon, the use of instruments playing similar lines simultaneously but at, perhaps, a semitone or whole-tone distance is employed:

- Flute and oboe: at bar 76 both instruments play a dotted-quaver passage at the distance of a tone.

- Oboe and clarinet: correspondingly, at bar 91 groups of dotted-quavers are played at a semitone.

A third device, used only once, involves contrary motion chromatic movement between the flute and oboe from bar 101 onwards:

Ex. 3.3.12 Flute and oboe bar 101



Just as with the string background, the level of intervallic tension fluctuates, as shown. The pattern contracts in length gradually, accelerating the pace of the marked accents.

All these varying devices surround four repetitions of the basic piano I "rag" melody, almost in the sense of variations around a central theme. The piano pitches remain fixed in the face of this constant elaboration, altering only the octave in which they occur. These variations, in conjunction with constant tempo increases, lead to a final twelve-note chord, described in the programme as a horse-and-cart crash - the final cacophony. The last section or coda, bars 119-139, is effectively a simplified repetition of sections from the opening. The proportions of the written score disguise, however, the fact that the string background plays only two complete ten-bar patterns in both the main section and the coda. The introductory passage correspondingly cycles through approximately six repetitions, placing the start of the "cacophony", bar 66, at approximately the Golden Section point of the piece.

## Overview

The relationship between the programme of *Central Park in the Dark*, mentioned in the introduction, and its musical expansion is dependent at least in part upon the constant rotation of the total-chromatic. The "silent" string background manages to remain quasi-consonant through careful spacing of the twelve notes both vertically and linearly, whilst the "man-made" middle section deliberately pursues constant close-position chromatic interaction. On a rather more philosophical level, Ives is perhaps demonstrating that the emancipation of the chromatic can take many forms, and that densely-wrought patterning need not necessarily be dissonant and, conversely, that mild melodic chromaticism in canon and transposition may appear very harsh.

The compositional control of the chromaticism is through tight intervallic manipulation within both foreground and background textures. In the former, the use of minor thirds and semitones informs not only the linear course of the melodic passages but also their vertical, harmonic interaction and consequent use of all twelve pitches. In the latter, rigid intervallic construction of the vertical structures is combined with more subtle minor third and chromatic transposition to ensure regular total-chromatic coverage.

The analytical rationale behind the joining of *The Unanswered Question* and *Central Park in the Dark* as a single set is based upon the consistent intervallic control demonstrated by both works. The minor third and semitone, specifically, become pivotal motivic and transpositional intervals, guiding much of the harmonic and

melodic material of the pieces. These intervals prove later to be crucial to the construction of many of the larger orchestral works, interpreted as both anti-tonal "wrong notes" when used as scale-degrees in *Three Places in New England* and as the basis of the quasi-tonal central motive of the *Fourth Symphony*. Both works also contain passages of unsynchronised polyrhythm, demonstrated by the accelerating flute "answers" of the first work and the freely asynchronous orchestras in the second. These attributes are also translated directly into the more complex polyrhythms and polymeters of the *Three Places in New England* and the *Fourth Symphony*.

<sup>1</sup>Stuart Feder, "Charles Ives: 'My Father's Song' - a psychoanalytic biography", Yale University Press, New Haven, 1992, p.195.

<sup>2</sup>From the Postface to the score.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

<sup>5</sup>Or semi-open if you're an optimist.

<sup>6</sup>The consistent level of dissonance achieved by changing the speed of rotation of the sets is not dissimilar in effect to the ever-changing but ever-constant sonorities of Schoenberg and Webern's *Klangfarben* works.

<sup>7</sup>A further development of the independent accelerandos given to the flute quartet in *The Unanswered Question*.



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# CHAPTER FOUR

## THIRD SYMPHONY

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*"I played over the Third Symphony and Max asked me how I got so modern??!! (When this was being copied... Gustav Mahler saw it and asked to have a copy - he was quite interested in it.)"*

Charles E. Ives<sup>1</sup>

### Introduction

Of all Ives' large-orchestral repertoire, the *Third Symphony* is the nearest to what could be described as a transitional work between the prescribed tonal exercises of his student years and the mature sound-collages. It also remains one of the least altered or revised. According to the *Memos* the original full score was first copied out in 1911, despite having been written and orchestrated between 1901 and 1904, and it is a copy of this score that, in all probability, Mahler took back to Germany shortly before his death. As with so many of Ives' compositions, the symphony remained unplayed for many years, but seems to have avoided the constant revisions that complicate the dating of other scores. In 1946 an "old almost illegible score of [the] 3rd Symphony" was re-copied by Lou Harrison, acting as amanuensis to the infirm Ives, and prepared for its premiere under his baton with the New York Little Chamber Orchestra on April 5th. Letters between Harmony Twitchell Ives and Harrison during this period confirm that Ives' memory of the original score was remarkably clear, indicating perhaps that he had been uncharacteristically satisfied with the results first time around. The trust in Harrison's copying shown by Ives is clearly demonstrated in Harmony's comment, "He knows you have done it all wonderfully well".<sup>2</sup> The lineage of the standard 1947/1964 Associated Music Publishers score can, therefore, be traced back almost to the original sketches without the intervention of unsupervised editorial input and thus represents one of the clearest analytical windows into this period of Ives' composition.

Amongst the works that Ives elected to call symphonies, the *Third* spans the enormous stylistic gap between the traditional *Second*<sup>3</sup>, the radical *Fourth* and the programmatic *Holidays*. Although the composer was trying out prototypes of the

individual movements of the *Third* (on the organ at church) in the same year that the *Second* was completed, the later work contains a surprising increase in the number of “advanced” techniques, used in conjunction with fugal and modal textures. Where Ives had previously kept his shorter experimental (and often humorous) works separate from the serious and abstract, the *Third* shows the first use of a diatonic but non-tonal scheme to guide a large-scale symphonic statement. It is also the first of the symphonies to follow his subsequently favoured slow-fast-slow scheme, each movement given a semi-programmatic title, despite the “absolute” quality of the music. The attractively gentle and superficially undemanding nature of this piece probably contributed to the main act of public recognition during Ives’ lifetime, the Pulitzer Prize, awarded for the symphony in 1947. Due perhaps to the enormous delay since its composition, but also to his noted modesty, Ives remained unimpressed by the long overdue acknowledgement and wrote to Lou Harrison through Harmony, donating him half the prize money; “As you are very much to blame for getting me into that Pulitzer Prize Street and for bringing a bushel of letters to answer and for bringing a check of \$500 thrown at me by the trustees of Columbia you have got to help me by taking  $\frac{1}{2}$  (sic) of this.”<sup>4</sup>

This chapter examines the first movement of the *Third Symphony*, “The Old Folks Gatherin’”, and details the fledgling use of the intervallic and scale-set manipulation that motivates the later, more chromatic works. The movement epitomises the fruitful conflict between the note-by-note regimentation and longer quasi-tonal pulls that is responsible for much of what is audible as the characteristic Ivesian orchestral sonority. Use of “borrowed” melodic material is also discussed, as the source and common denominator behind the motives that control the majority of the melodic, harmonic and formal aspects of the piece. The *Third Symphony* is, perhaps exceptionally, a unified three-movement work in which each stage draws upon processes explored in its opening movement. In a thesis which aims to categorise characteristic features of Ives’ compositional process, the presentation of findings limited to this initial stretch of material will suffice as an illustration of Ives’ methods at this stage.

<sup>1</sup>Ives, “Memos”, p.121.

<sup>2</sup>Harmony Twitchell Ives to Lou Harrison, June 16th, 1946.

<sup>3</sup>Before revisions added the dissonant finale.

<sup>4</sup>C.E. Ives to Lou Harrison, May, 1947

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## THIRD SYMPHONY

### FIRST MOVEMENT · "OLD FOLKS GATHERIN'"

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*"[The Third Symphony is] ...a kind of crossway between the old ways and the newer ways."*

Charles E. Ives<sup>1</sup>

#### Source materials

One of the great paradoxes associated with Charles Ives is the apparent contradiction between his uninhibited musical experimentation and his appropriation of melodic material from hymns and contemporary popular song. For a composer so obviously concerned with melodic manipulation, the decision to employ "borrowed" tunes rather than invent fresh ones is a conundrum that remains unresolved, even in the often enlightening pages of the *Memos*:

*"Exception has been taken by some (in other words there have been criticisms, often severe) to my using, as bases for themes, suggestions of old hymns, occasional tunes of past generations, etc. As one routine-minded professor told me, 'In music they should have no place. Imagine, in a symphony, hearing ...street tunes...' "*<sup>2</sup>

Ives continues in the article to defend the quality of the artistic expression seen in the performance of "street tunes" but avoids giving the reason for their centrality to his art-music. (Whether Ives the diarist was deliberately choosing to misinterpret the rather obvious criticisms of their use, or was genuinely unaware of how unusual his music may have sounded to contemporary ears, is unclear.) Despite failing to answer this question, the phrase "bases for themes" does tell us that the composer employed his source material as more than just colouristic ornamentation. Whilst the critics and "routine-minded professors" were probably concerned with the superficial incongruity of outbursts such as "Yankee Doodle Dandy" (seen in the *Three Places in New England* for example), Ives is actually admitting in his journal to a much more discreet and systematic manipulation of his sources, implying, perhaps, that the origins of the tunes would be disguised from all but the most informed listener. This disclosure has been of



great benefit not only to musicologists and historians cataloguing the music, but also to analysts following a common thread through his very varied output. Despite the many dozens of quoted tunes that pepper the surface of the orchestral works, it seems that only a handful recur consistently as the originators of themes and structures. Since these melodies are often very simple (and Ives generally uses only small extracts), many are almost interchangeable, defined, in some cases, by only a single interval. One particular example is the great similarity between the repeated minor third leaps of “Old Black Joe” and “Marching Through Georgia”, two of the sources thought to be behind *The “St. Gaudens” in Boston Common* from the *Three Places in New England*.<sup>3</sup> The provenance of any particular theme is therefore less important than its function, especially to a modern audience unfamiliar with the original usage, and in this study there is no exhaustive listing of the acknowledged sources within each work.

In the first movement of the *Third Symphony*, the principal melodic source is said to be a hymn by Charles C. Converse, known nowadays as the setting for “What a friend we have in Jesus”:<sup>4</sup>

#### Ex. 4.1.1 “Converse”



The key intervallic ingredients of the tune are the falling thirds C-A-F-D seen in the first two bars and the use of whole-tone neighbour-notes, such as the C-D-C in the first, fifth and thirteenth bars. Neighbour-notes apart, the tessitura of the tune stretches between the high and low Cs and is covered quickly, by the beginning of the third bar, the melodic contour pivoting about these dominant scale degrees.

## Form

The movement falls broadly into three sections divided by style, technique and tonal centre, but linked by continuous development of common themes. Despite these formal



divisions, seamless elision and the limited set of thematic shapes contribute to a through-composed quality. The first section, bars 0-10.3, comprises an introduction and fugal exposition, the second, bars 10.4-14.5, a modal drawing out of melodic material, the third, bars 14.5-24.8, a restatement (in order) of the tempi and contour of the first section combining familiar and related new material.<sup>5</sup> The form is therefore a ternary ABA<sup>1</sup> structure, and is reflected in the balanced 2:1:2 (53:27:53 bars) proportions of the score. This symmetry can also be seen in the final hymn-like allusion to the source of the motives of the movement, that both balances and fulfils the germinal introductory gesture.

## Themes, motivic material and harmonic implications

The hymn tune "Converse" donates the majority of the melodic themes to the movement, some concentrating on the predominant minor-third and whole-tone intervals, others derived from more or less complete sections of the hymn. Throughout the movement these themes are manipulated contrapuntally, development and variation arising from the many permutations of combination rather than through overt melodic or harmonic processes. To these ends the themes often remain "real" in a fugal sense (i.e. literally transposed) or are intentionally altered to avoid predictable tonal outcomes. Much of the resultant harmony is therefore ambiguous in intent, or merely static.

- **Opening**

The introduction begins with a complex of intervals from “Converse”, particularly sequences of thirds, divided into question and answer phrases according to the marked slurs of the score. (The accompanying harmony will be examined separately):

### Ex. 4.1.2 Violin I bar 0.1

0.1 violin I

The image shows two staves of music. The top staff is labeled '0.1 violin I' and contains a melodic line starting with a half note G4, followed by quarter notes A4, Bb4, and C5, then a half note D5, and finally a quarter note E5. The bottom staff, labeled '1', continues the melody with a half note F#4, followed by quarter notes G4, A4, Bb4, and C5, then a half note D5, and finally a quarter note E5. Both staves are in 3/2 time and have a key signature of one flat (Bb).

The elliptical turn figure of bar 0.5 and the descending thirds of the following bar (fig.1) are the most directly related to the source (from bars 9 and 1 respectively) but, in context, demonstrate how little even these phrases are reminiscent of the hymn tune and how effectively Ives disguises the original usage.

The second half of the introduction, bars 1.3-4.1, starts with a further motive in the horns, related to bar 1 of the hymn source:

Ex. 4.1.3 Horn bar 1.3 (concert pitch)



This is overtaken by the launch of what appears to be a fugal entry at bar 1.5 in the violin II, echoed a minim later in the horns. In fact, the line is an elision of the falling thirds of violin I, bar 1.1, and the above horn figure, and dissolves into a cycle of repetition and upward transposition of the combined motives, peaking at bar 4.1.

#### • Fugue

A smooth transition into the fugal “con moto” section, bar 4.2, is realised through an incomplete statement of the horn motive in the flute and oboe, straddling the join to the new tempo with a falling fifth (instead of minor-third) and an immediate repeated crotchet that characterises the rhythm of the fugue subject that follows. The subject emerges in the violas accompanied by a bass line transposed directly from the expanded horn motive seen in the violin I line at bar 3.5/3.6:

Ex. 4.1.4 Viola, clarinet, ‘cello and bass bar 4.2



The aforementioned ambiguity of harmony that occurs when transposed motives are placed together can be seen in the contradiction between the strongly functional subject

of the violas and its diversionary accompaniment. In common with the Baroque fugue subjects that the viola line so closely resembles, the first two notes clearly assert dominant and tonic scale degrees, which in this case (Bb-Eb) appear to represent Eb major. The accompaniment initially confirms this, with a preparatory dominant-seventh on Bb, but then immediately denies it by supporting the Eb with a C minor chord, significantly a motivic minor third lower. The clarinet reinforces this alternative reading and continues to shadow the subject at a third, leaving the 'cellos and basses counterpoint to work more freely against the subject.

As the answer enters at the traditional perfect fifth, bar 5.4, the viola plays a counter-melody based on the previous accompaniment figure of the basses, indicating that rather than follow strict fugal procedure (i.e. presenting a different counter-melody to the initial accompaniment) Ives appears more intent upon creating what Tovey would describe as "fugal texture". This corroborates the earlier assertion that various permutations of a limited set of motives are played one against another, rather than following clear developmental procedures in either the melody or harmony. This "answer" in the violin II, however, is supported in its melodic implication of Bb, without the previous emphasis on the relative minor.

Between bars 6.1 and 7.1 there occur three stretto false-entries, more akin to pre-Baroque "points" than true fugal elaborations. All three appearances, the horn asserting A (modified), the oboe Bb, the bassoon and 'cello G minor, are underpinned by contradictory harmony, similar to the original subject of bar 4.2. Until bar 7.1, the unusual situation exists, therefore, that the only entry of a fugue nominally in Eb to receive its implied harmony is that of the dominant, Bb.

Before the final 'cello and bassoon entry has finished its four bar course, the crotchet and minim rhythm of the descending thirds motive emerges again in the violin II. This is taken up by the violin I at bar 7.2, in conjunction with the re-emergence of a version of the horn motive in the basses. These extra ideas can be understood in the manner of a fugal episode. In the way that traditional episodes were designed to enable tonal diversions to more remote keys, so bar 7.1 modulates briefly to Gb. This occurs over a Db bass, a similar second-inversion sonority to that created by the short-lived G minor entry of bar 6.3 that was supported by C minor harmony.

The return to the subject, this time metrically shifted to the downbeat to emphasise further the harmonic ambiguity of the first two notes, comes at bar 8.4 in the basses and clearly implies Bb in all parts. The first note, F, acts as the fifth degree of the chord of Bb rather than as the root of a preparatory dominant. The subject is not complete, however, and the line breaks into a string of motivic descending major and minor thirds, that serve as roots to the accompanying harmony and further presentations of the horn motive in the violins. This first section of the movement concludes on a B7 chord, implying a modulation to E minor for the start of the next.



- Middle section

Instead of fulfilling the preparation for E minor, the bass shifts by a motivic minor third to D natural at bar 10.4. The key centre of this repeated passage of six bars is uncertain, the balance between D and G carefully maintained, in a similar manner to the uncertain bases of the fugue subject and episodic diversion. Whilst the violin I line emphasises C#, promoting D as tonic, the violin II naturalises the C to imply a G root. (This is a situation not unlike the F/F# ambiguity within the string background to *The Unanswered Question*, that promote C and G roots respectively) Meanwhile, the bass oscillates between D and C natural, hinting not so much at a tonal reading but, rather, the modal possibilities of the line. This lower line is presented as semibreves staggered across the barlines and initiates the move into syncopated rhythms in most of the orchestra from bar 12.1 onwards:

Ex. 4.1.5 Strings bar 10.4

The musical score for strings in bar 10.4 is shown. It features three staves: violin I, violin II, and double bass. The key signature is one flat (B-flat). The violin I part starts with a rest in the first measure, then plays a series of eighth notes: C#4, D#4, E4, F#4, G4, A4, B4, C#5. The violin II part also starts with a rest, then plays: C4, D4, E4, F4, G4, A4, B4, C#5. The double bass part plays semibreves (half notes) staggered across the barline: D3 in the first measure, C3 in the second, D3 in the third, and C3 in the fourth. All parts are marked with a piano (p) dynamic.

Through the use of a melodic fragment related to the descending thirds motive, the lower strings precipitate a tonal diversion to Db at bar 12.4. Its function is similar to the episode within the first section in the interruption of the prevailing harmonic flow. In contrast to the first occurrence, however, the modulation is definitely to Db rather than to a second inversion Gb. Following this harmonic side-step, the texture reverts to the presentation of further snippets of the fugue subject, signalling a return not to a tonic, but this time a shift into a modal ambiguity of key, possibly D Dorian or C major. From bar 14.1, a lengthening series of scalar descents in the bass culminate in a D minor cadence.

- Third section

As with the link between the first and second sections, the join between second and third revolves around a minor third span, D-Cb. This descent balances the former B-D



rise between bars 10.3 and 10.4. The third section begins with a modified presentation of the introductory chromatic “wedge”, reinforcing a sense of restatement and therefore the ternary formal interpretation. An accompanying development of the horn motive in the oboe, and then the flute, continues the ongoing combining of all the constituent motives. At bar 17.1 this is transferred to the violin I for a final explicit presentation before a new extract from the hymn melody is introduced at 17.4. In the equivalent position within the first section, this is the point at which the fugue subject enters, and the new hymn-derived material maintains the sense of harmonic ambiguity of that previous statement:

Ex. 4.1.6 Strings bar 17.3

The musical notation for Ex. 4.1.6 Strings bar 17.3 consists of a main staff for strings (Violin I, Violin II, Viola, Cello/Double Bass) and a separate staff labeled "Converse". The main staff is in B-flat major (two flats) and begins with a piano (*p*) dynamic. It shows a chromatic "wedge" formation in the Violin I part, which is mirrored in the "Converse" staff. The section ends with "etc." indicating it continues.

The dominant-tonic progression of bar 17.4 mirrors that of the original harmonisation of the “Converse” passage, but in the fresh context displays a similar ambiguity about the true tonic as did the fugue subject: V-I in Bb or I-IV in F.

A further chromatic “wedge” formation disrupts the prevailing diatonic harmony at bar 18.4, that leads to a repetition on the fugue counter-melody and descending-thirds motive (19.1/19.3) in conjunction with the syncopation seen in the middle section of the movement. Again in common with the middle section, incomplete fugal entries then reappear but this time in combination with the episodic harmonic diversion to Gb, bars 20.3-20.4. Transposition of the fugal counter-melody then forms the basis of a build up to a protracted dominant pedal on C, over which an extended version of the descending-thirds motive is pointedly stated, bar 22.5:

Ex. 4.1.7 Strings bar 22.4

The long dominant pedal is resolved at the start of a *largamente* chorale-like harmonisation of all the principal motivic figures of the movement, in the strings. This is accompanied by the oboe and flute with more freely developing motivic lines reminiscent of the start to the third section bar 14.5. The theme of harmonic ambiguity is not lost in the simplicity of this conclusion, however, the first two chords of the final I-IV-V-I (F-Bb-C-F) progression of the last four bars beginning with an apparent V-I (F-Bb) emphasis.

### Chromatic “wedge”

At the introduction to the movement and its restatement at bar 15.1 a strong melodic contour and simple harmonic device encapsulate many of the melodic and harmonic processes to be expanded during the movement. The first is presented only by the strings:

Ex. 4.1.8 Strings bar 0.1

This gesture contains a rising melodic contour, descending bass and the addition of accidentals in the upper two lines, hence the term “chromatic wedge”. Whilst the

strong metrically-emphasised IV-I in F motion of the first two outer lines, Bb-F, is negated by the formation of a Bb second-inversion triad on the first beat of bar 0.1, this Bb centre is also immediately subverted by the following C major root position triad and the G7 of beat three. In these terms, the overall gesture and colour of the first two bars is therefore generated through the careful avoidance of the melodically implied chordal progression, in conjunction with the poignant major-third interval of the melody, G-B natural, concluding a span of an augmented-octave line from the opening Bb.

At its repeat at the beginning of the restatement, bar 14.5/15.1, the intervallic contour remains similar but the underlying harmony changes:

Ex. 4.1.9 Strings bar 14.5



The metrical placement and transposition level of the opening bars are altered but the outer lines initially follow the same intervals of ascending fifth and tone in the melody and descending fourth in the bass. In conjunction with a held Cb in the oboe, the harmonisation of the first three notes retains the outline of the first statement whilst modifying the third chord to a diatonic chord II, Db minor, from the II major of the model. The original augmented-octave span over the first four chords is revised to a similarly chromatic diminished-octave/major seventh before rising to the octave, albeit over a half-diminished sonority. The extract concludes with a return to an enharmonic tonic triad in first inversion.

Both appearances of this gesture demonstrate a contradiction between the harmonic direction implied by the melody and the actual resultant harmony led by the inner parts. On a further occurrence at bar 18.4, however, this quality is omitted, the gesture recognisable purely through the “wedge” shape and chromatic evolution of a major chord III:



## Ex. 4.1.10 Strings bar 18.4

18.4 strings

V I III major

The first melodic leap is altered from a fifth to a fourth but the familiarity of a large initial interval remains. This is also true for the beginning of the concluding “chorale” passage of the movement in which the “wedge” formation is finally reconciled with the fugue subject:

## Ex. 4.1.11 Strings bar 23.2

23.2 strings

*mp* *mp* *p* *p* *p* *p*

The metrical position and harmonisation are unequivocal in asserting F as tonic, especially since the excerpt follows a protracted C pedal, but still allow for the further tonic/dominant ambiguity realised in bar 24.6/24.6.

This final example aside, it would therefore appear that the basic attributes of gestural shape and non-diatonic chord progressions are sufficient to form in the listener’s mind a sense of identity between quite different presentations of the chromatic “wedge”. This control of expectation through the use of similar sounding patterns is comparable to the fugal technique of tonal answer (i.e. adapting a pattern to circumstance) and in the context of this movement is therefore complementary to the predominant “real” transposition of much of the motivic material.



### Key Scheme

Despite local ambiguity of key in almost all areas of the movement, a larger tonal plan is discernible:

First section	0-7	Introduction and fugue Bb (Eb)	
	7-9	diversion to Gb	} Bb
	9-10	Bb	
Second section	10-12	G or D	
	12-14	diversion to Db	} G/D Dorian
	14-15	D Dorian	
Third section	15-20	Bb	
	20-22	diversion to Gb	
	22-24	dominant pedal on C	} F
	24-end	F	

The overall formal plan is thus either a Salzerian form of prolongation, arpeggiating the triad Bb-D-F, or, perhaps more significantly, Bb-G-F, an (0,2,5) set. Once the latter option is expressed in this set-theoretic form, its connection with smaller scale formations and particular melodic features can be more rigorously explored.

### Pitch-sets

- **Melodic motives**

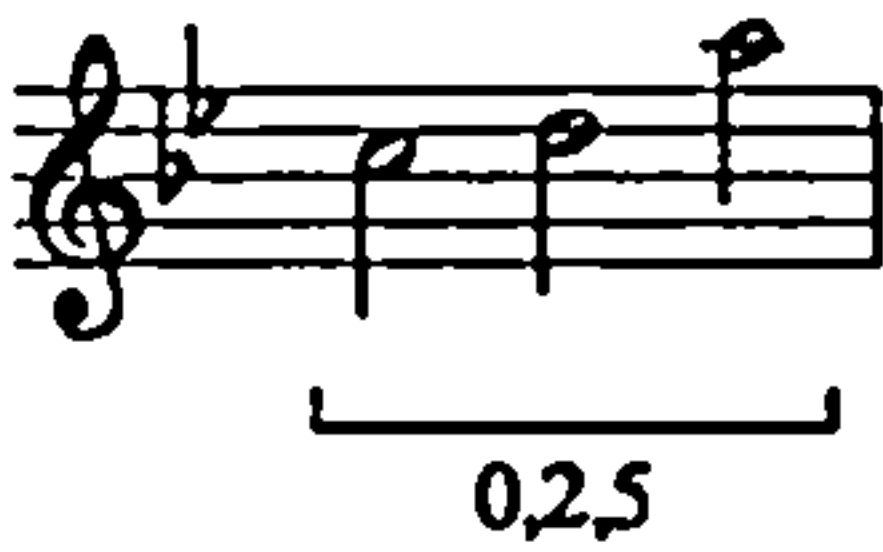
The principal neighbour-note and minor third characteristics of “Converse”, noted at the beginning of the chapter are of course also the component intervals of the smallest presentation of an (0,2,5) set. Many of the motives taken from the hymn are therefore reducible to, or related to, this set - for example, the opening and closing pitches of the introductory seven bars, the horn motive and its derivations, and the flute turn figure of the third section:

Ex. 4.1.12 Violin I bar 0.1, 1.2

[0.1] violin I



[1.2] violin I



Ex. 4.1.13 Horn bar 1.3, flute bar 16.4

[1.3] horn



[16.4] flute



The repetition of the component intervals of the set, such as the minor-third in the descending-thirds motive, also informs the majority of the melodic construction, the semitone and major-third conspicuous by their absence in much of the movement.

• Key centres

In addition to the main key centres of the movement, the “diversionary” keys of the three sections are related both to one another and to the main keys through the (0,2,5) set and the ubiquitous minor third:


Ex. 4.1.14 (0,2,5)s

First section

Second

Third

- central keys




Fugue

12.4

20.4

- diversionary keys

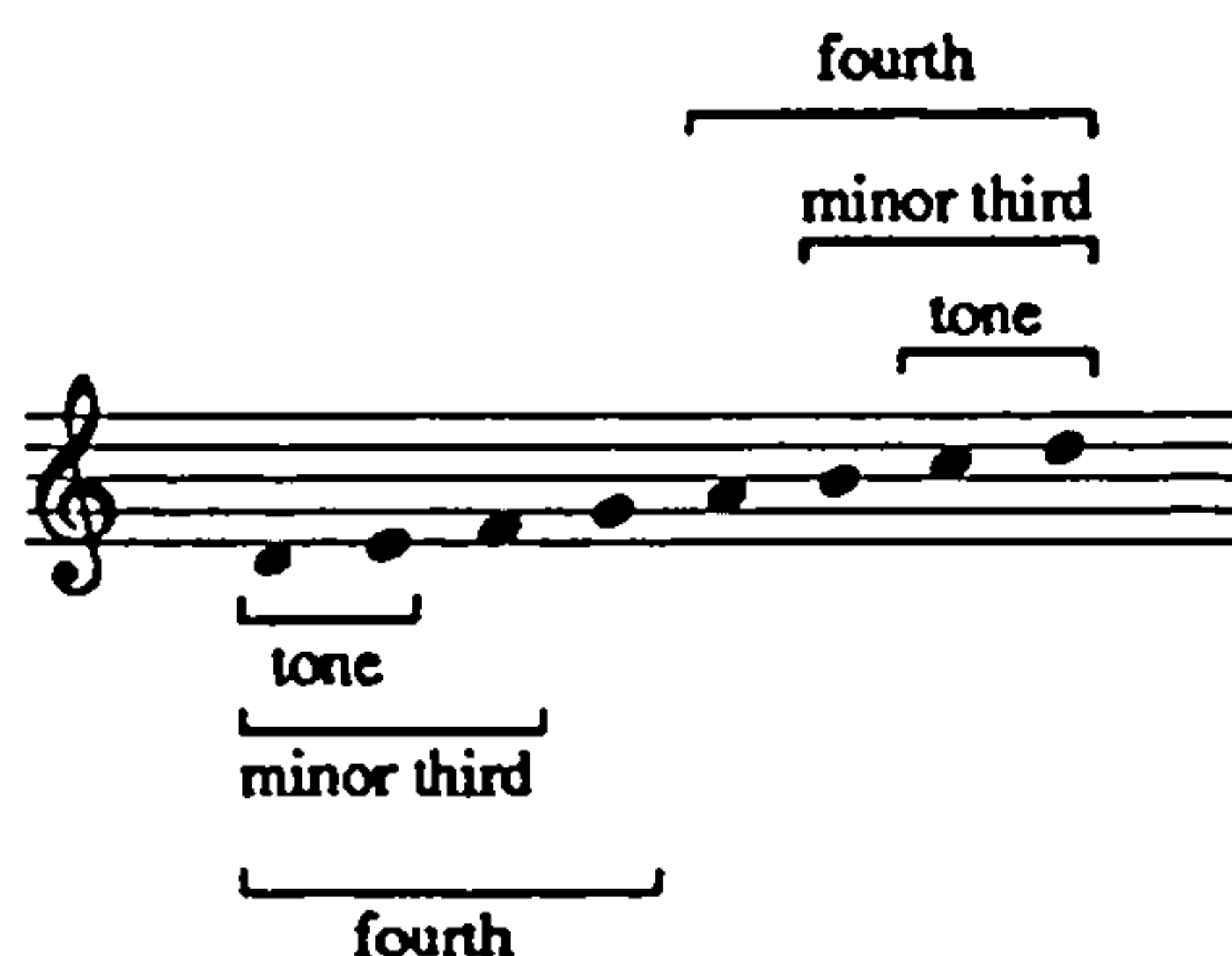


minor third apart

Dorian mode

The pitch-set (0,2,5) has the accompanying interval vector set 011010 (tone, minor third, perfect fourth), and this provides the rationale behind the use of the Dorian mode in the middle section:

## Ex. 4.1.15 Dorian mode



The Dorian is one of the few palindromic modes, and has a symmetrical interval content based exclusively on the vector set of (0,2,5), immediately linking its use with the above melodic motives and key-centre schemes. The use of the Dorian on D specifically, relates to the hymn “Converse” through the falling-thirds motive C-A-F-D, the four pitches belonging both to the mode and to the original F major of the source.

## Overview

The first movement of the *Third Symphony* demonstrates that the real paradox in this transitional work lies not in the use of source materials *per se*, but between the superficially archaic devices of ternary form and fugue and the more innovative motivic manipulation of source material. Whilst the critics in the introductory quotation point out the obvious vernacular derivation of the thematic source, insisting on a reactionary view of art-music that even by then had become obsolete, Ives demonstrates control of the “Converse” hymn tune that goes far beyond the low expectations of the “routine-minded professors”. As the originator of almost all the pitch material of the movement, the central melodic features of the hymn (descending-third and neighbour-note phrases) are distilled into motives that undergo expansion and elision. (The new context bears little resemblance to “Converse”, particularly for a modern audience.) The motives are then arranged in various permutative combinations that rely on “real” transposition for harmonic propulsion. As an extension of this process, Ives then develops a fugal texture that plays on the harmonic and metrical ambiguity of the theme, often presenting tonic and dominant harmonic implications simultaneously. This use of fifth-related harmony is then exploited in a central passage that oscillates between G major and D Dorian before settling on the latter. The larger ternary scheme then restates the tempi and phrase lengths of the opening third of the movement whilst allowing for further combinations of the basic motive set. A dominant pedal-point and explicit elaboration of the descending-thirds motive proceed to a final chorale-like presentation



of many of the motives. Although this final section, in a sense, reconstructs much of the material of the hymn source, it still holds no real affinity with “Converse”. A last moment of harmonic uncertainty, again based on competing dominant/tonic implications, concludes the movement.

Despite its old-fashioned, rather pastoral appearance, *Old Folks Gatherin’* is therefore based as much upon tight motivic construction as many of the more overtly experimental pieces such as *The Unanswered Question* and *Central Park in the Dark*.. This is confirmed through the use of set-theoretic notation to catalogue both large and small-scale features of the score; the simple pitch-set (0,2,5), derived from the principal whole-tone and minor-third intervals of “Converse” is found to inform not only the majority of the melodic material but also the key scheme of the three largest formal sections and their associated diversionary keys. Even the use of the Dorian mode on D can be explained in terms of the whole-tone, minor-third and perfect-fourth interval vectors of both the set (0,2,5) and the scale. The influence of the source material is therefore demonstrated at every level in the integration of melodic contour, harmonic control and intervallic consistency. In conjunction with the more traditional fugal and formal techniques this motivic integrity defines the *Third Symphony* as the large-orchestral work that most clearly unites Ives’ extensive formal training and exuberant musical experimentation.

The motivic proliferation and intervallic consistency of the first movement is maintained in the second and third. The last movement even reinterprets several of the melodic cells from the opening, as a further demonstration of overall unity within the symphony. This discussion of “transitional” techniques has therefore been limited to the first movement, introducing some of the characteristic compositional features that will fully explored in later chapters.

<sup>1</sup>Ives, “Memos”, p.128.

<sup>2</sup>Ibid. p.132.

<sup>3</sup>See Chapter Five.

<sup>4</sup>John Kirkpatrick, footnote to the “Memos”, p.94.

<sup>5</sup>The bar number system refers to the rehearsal numbers of the Associated Music Publishers score. The bar immediately following a rehearsal number is referred to as bar 1.1, 2.1, etc.



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# CHAPTER FIVE

## THREE PLACES IN NEW ENGLAND

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*"As I looked over the score, I experienced a strange, but unmistakable, feeling that I was looking at a work of genius."*

Nicolas Slonimsky<sup>1</sup>

### Introduction

The grouping together of Ives' orchestral works into sets or suites often appears to have been decided arbitrarily, to suit concert programmes, rather than for any pressing conceptual or compositional reasons. There are several recorded instances of Ives experimenting with different combinations of short works to those familiar today<sup>2</sup> - even the traditionally sacrosanct ordering of the movements of one of the symphonies, the *Fourth*, was changed during revisions. The works comprising the *First Orchestral Set*, subtitled *Three Places in New England*, are therefore typical in having been composed in different places and at different times, only later coming together as a single concert item. The first, *The 'St. Gaudens' in Boston Common*, is based upon an early work written as a tribute to the first Black regiment of the Union Army entitled *Black March*, and was re-sketched in 1911 and completed in full score in 1912. The second, *Putnam's Camp, Redding, Connecticut*, is also a reworking of old material, condensing two existing pieces, *Country Band March* and *Overture and March: 1776*, into a single movement. The sketches for this date from late 1912, the final scoring undertaken in 1914. The final movement, *The Housatonic at Stockbridge*, has less precise dates, the sketches dating back as far as 1908, but completed probably in 1913.

The idea of a three movement orchestral set was first conceived during 1914 as work on *Putnam's Camp* progressed,<sup>3</sup> and in this form the *First Orchestral Set* remained unplayed and unpublished for fifteen years. Following interest by the conductor Nicolas Slonimsky in including an Ives orchestral work in a Boston Chamber Symphony Orchestra season, the composer rescored the set in 1929 for the smaller forces, adding a piano to cover the missing woodwind and brass. Characteristically, the



existing parts were also altered in a renewed opportunity to experiment with the material.<sup>4</sup> In this reduced form the set was given a belated first performance in 1931, and finally published in 1935.

Subsequently, many performances of the set have utilised a full symphony orchestra, with complete strings and consequently double woodwind to balance. Since the revised chamber scoring becomes redundant in these situations, a full orchestral score was prepared in 1972 by James Sinclair as a recreation of Ives' original intentions. There now exist, therefore, two similar, but not identical versions of *Three Places in New England*, one, the chamber version, proofed and corrected by Ives himself, the other, an edited reconstruction of the original full orchestra manuscripts. For the purpose of this study all references will be made with regard to the 1935 chamber orchestra score.

The tempi of the set conform to Ives' preferred slow-fast-slow scheme. A rough description of the dynamic shape of each movement also demonstrates this symmetrical plan: the outer movements exhibit gradual crescendi to a structural climax and then tail off, gradually in *The "St. Gaudens"* and sharply in *The Housatonic at Stockbridge*. *Putnam's Camp*, conversely, both begins and ends fortissimo, with quieter, episodic central passages. All three movements demonstrate Ives' characteristic use of large dynamic contrast, softer passages often emerging unannounced from deafening cadences and vice versa. Almost all gradual crescendi and diminuendi are taken to their ultimate extremes - ffff or silence respectively.

The majority of the melodic material in all the movements is, not uncharacteristically, based on popular and hymn tunes, or, in the case of *Putnam's Camp*, devised to mimic the style. Variation technique is confined to small rhythmic alteration, extending intervallic leaps in a particular direction, elision, and other methods that do more to disguise than to overtly develop. The use of melody in each movement is quite distinct, however. *The "St. Gaudens"* manipulates the intervallic content of its source material, the supporting harmonic framework often dictated by the same intervals, *Putnam's Camp* states its melodic sources more or less baldly, abutting one tune with another, whilst *The Housatonic at Stockbridge* continuously develops a single unforced melodic line throughout its course.

The differences in presentation also provide pointers to the way in which each movement coheres formally and, therefore, the required analytical approach. The intervallic dissection of source material, in helping generate both vertical and horizontal components of the first movement, necessitates segmentation with reference to pitch-class sets and interval vectors. A more straightforward combination of melody and accompaniment in the second correspondingly demands to be viewed rather more sequentially, in terms of strings of gestures and their relative proportions. And, finally, the long, linear development of the third movement calls for the separation and

comparison of the layers of interacting melodic strata. Analysing the three movements in three different ways may not seem the clearest route to establishing common features and clarity of compositional thought, but, in attempting to understand the music of Ives, an intuitive response to problems that elude conventional analytical paths often seems to reveal more of interest than systematically applying a single technique. If the key to understanding the Three Places in New England lies in its very diversity, then the application of one enforced analytical approach may well be inappropriate.

<sup>1</sup>Nicolas Slonimsky, "Perfect Pitch - a life story", Oxford University Press, 1988, p.119.

<sup>2</sup>See James Sinclair's reconstruction of the full score, p.4, for details of proposed concerts by Koussevitsky that included regrouped sets suggested by Ives himself.

<sup>3</sup>Ibid. p.4.

<sup>4</sup>For a more cynical view of Ives' revisions see Maynard Solomon, "Charles Ives: Some Questions of Veracity", J.A.M.S., no.40, 1987, p.443.



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## THREE PLACES IN NEW ENGLAND

### THE "ST. GAUDENS" IN BOSTON COMMON

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*"I happened to have on the piano the score or the sketch of the Black March (The St. Gaudens). I started to play a little of this - (Sprague's) daughter's face grew sour. 'Do you like those awful sounds?' she said."*

Charles E. Ives<sup>1</sup>

#### Source materials

In Chapters Three and Six it is shown that the Two "Contemplations" and the *Fourth Symphony* are motivated primarily by simple, but original, melodic cells centred on the intervals of a minor third and semitone, and that both therefore run counter to the notion that all Ives' orchestral works are founded exclusively on "borrowed" melodic material. Although these motivic cells are certainly simple enough to be found within many of the source-tunes, it is argued that it is better, in these examples, to view the choice of quotations as consequent upon the all-pervading motive rather than the other way round. In other words, the most integrated, and perhaps most successful, use of source-tunes usually occurs when the intervallic content of the source and the original motive are virtually synonymous. In *The "St. Gaudens" in Boston Common* this almost symbiotic relationship is shown by the use of source-tunes that are remarkably similar in contour. Two of the most recognisable examples emphatically repeat an important minor third leap:

#### Ex. 5.2.1 "Old Black Joe"





### Ex. 5.2.2 “Marching through Georgia”

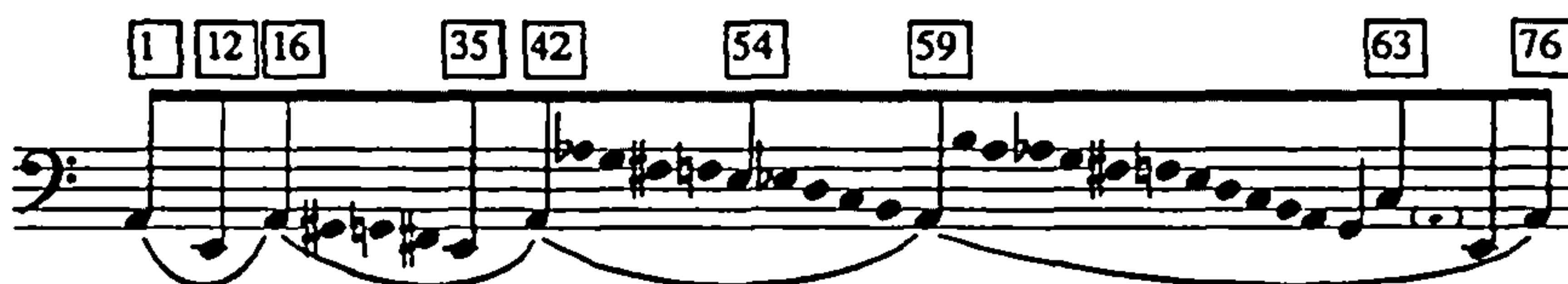


The interval of the minor third becomes central to almost every aspect of the work, from its opening melodic use in the piano, D-B-D, to almost constant repetition in the double bass phrase, A-C . In addition, the ability of the minor third to imply major triads, as the upper interval of a root position chord or lower interval in a first inversion, is exploited in much of the prevailing harmony. Later, the minor third will also be shown to be integral to one of the many orderings of the main diatonic pitch-set, [6-32], used within the work.

## Bass reduction

The motivic A-C oscillation in the double basses forms a pedal point to much of *The "St. Gaudens"*. In conjunction with a secondary E natural locus, the bass line can be seen to linearly segment the movement into four sections:

### Ex. 5.2.3 Bass line linear reduction

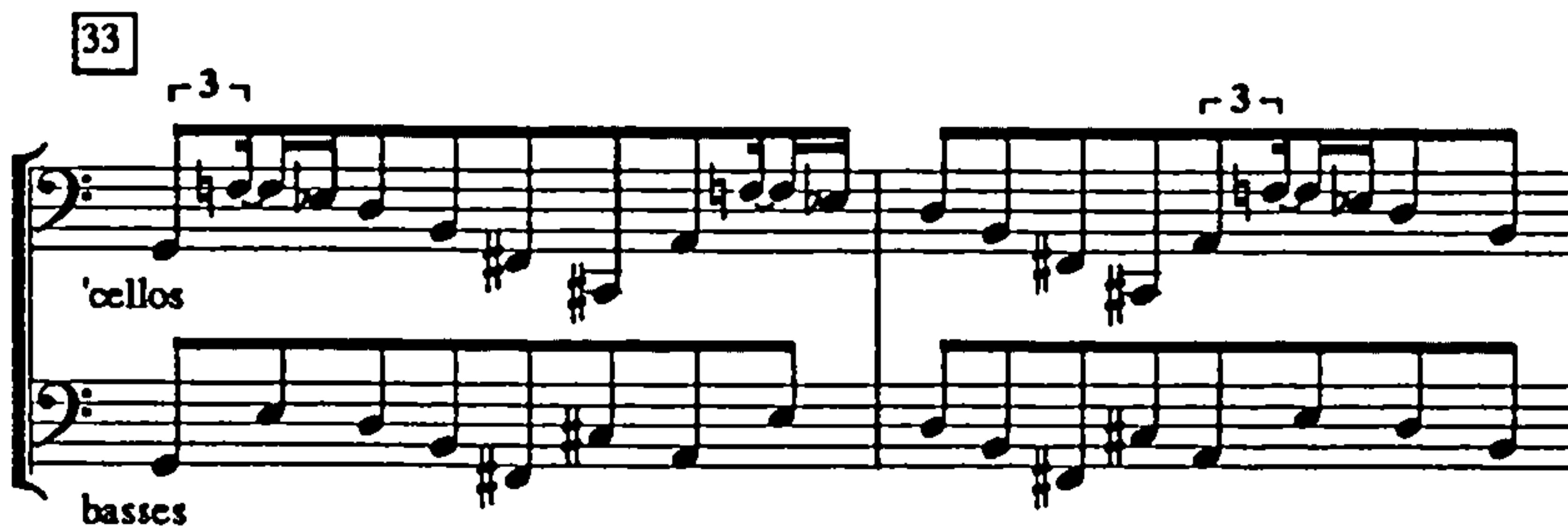


Each quartile division contains an A-E-A progression, often filled by chromatic and scalar descents. The only significant departure from this scheme occurs halfway through the fourth quarter in the climactic altered C major cadence at bar 63, to be examined later under pitch-set considerations. The overall shape of the movement is therefore by far the simplest of the *Three Places in New England*, based upon alternation of pitch or key areas, rather than following a specific developmental procedure as do the latter two movements.

## “Wrong notes”

One of the clearest examples of an extremely characteristic Ivesian sonority is seen in bars 33 and 34. Famed for his use of apparently “wrong” notes, Ives often subverts fixed sequences, particularly diatonic patterns, through the use of chromatically related spoiler notes, often resulting in humourously dissonant clashes:

Ex. 5.2.4 ‘Cello and double bass bars 33/34



In this instance the E of the double bass is surrounded, both rhythmically and chromatically, by the F natural and Eb of the ‘cello, almost as if by mistake. With regard to the accompanying set of the D major scale in the double basses, however, the extra pitches can be interpreted as flattened third and flattened supertonic scale degrees, the very same minor third and semitone relations that are used as important motivic intervals in areas of this and other works.

## Harmonic and melodic sets

The scale set of D major minus the seventh degree features strongly throughout the work despite a relatively small number of “key” related events. In many instances this accounts for the lack of harmonic resolution felt throughout the movement, the pivotal A and E bass pedals conspicuously avoiding the use of D as a root note (except in passing), even as part of an almost pandiatonic (complete scale-set) chord bar 35:

## Ex. 5.2.5 Strings bar 35



The expected D major cadence at the conclusion, denied by a side-step to C# major and accompanied by a now dissonant D major/B minor triad, also reinforces this unresolved character:

## Ex. 5.2.6 Orchestral reduction bar 83

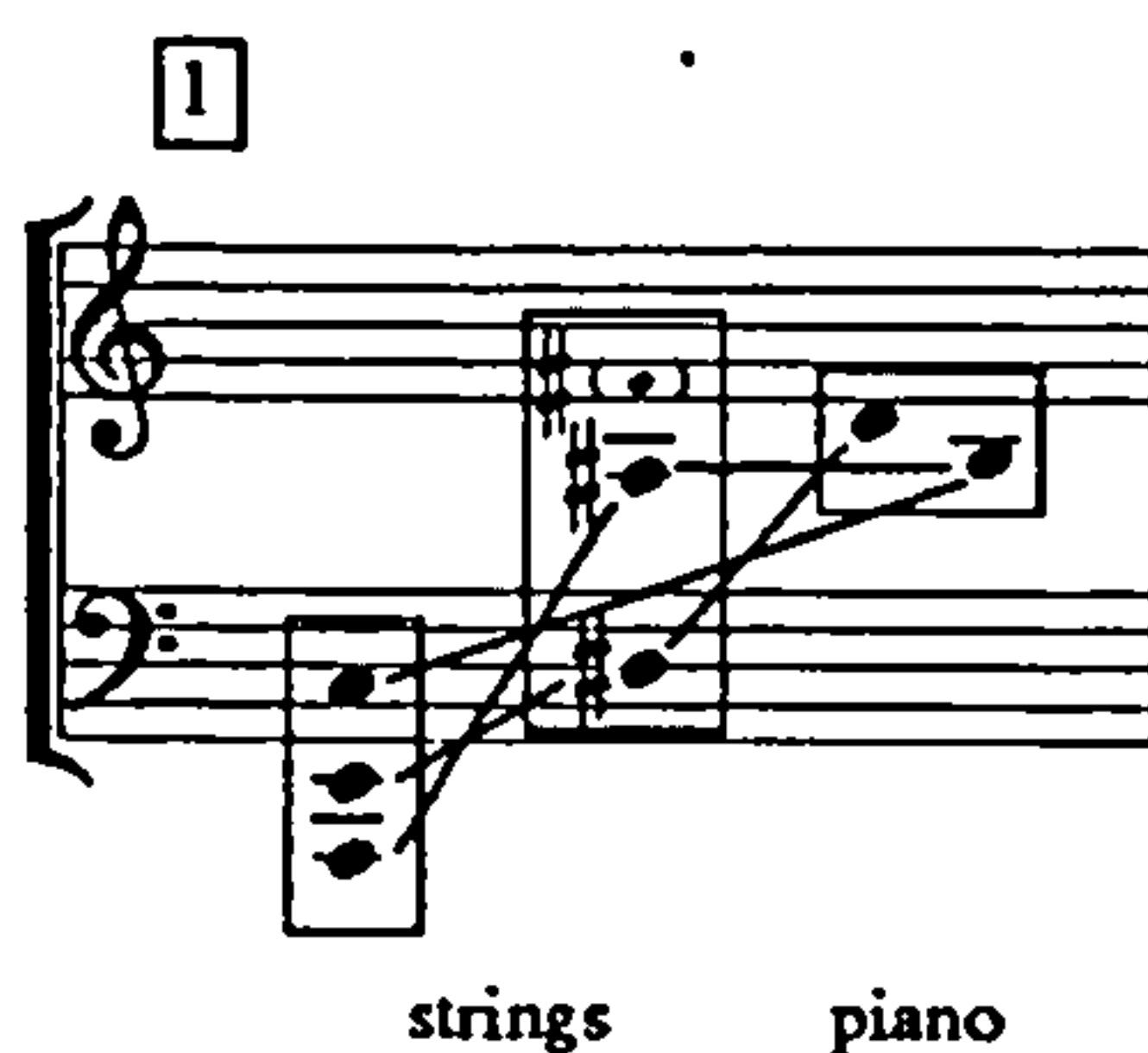
The naming of keys or key areas is strictly unnecessary for much of Ives' orchestral music, but in this case the widespread use of a diatonic scale set that avoids root position presentation helps to explain why much of the harmony appears unresolved even in plainly atonal contexts. The retention of the original key of D for *Old Black Joe* and its derivatives, and the ambiguous roles of C/C# and F/F#, the principal mode defining pitches within the scale, also point to its central importance. To increase the effect of these tonal pulls, Ives often contrasts chromatic passages, that mollify the ear into accepting many different interval combinations, with diatonic subsets and the



aforementioned “wrong notes”. His skill in the use of this technique lies in the manipulation of diatonic sets that don’t appear in traditional tonal music, such as chords based on fourths, thus disguising their diatonic origins: the surprisingly dissonant “wrong notes” of bars 33 and 34 demonstrate chromatic alteration to the established pattern following a passage of apparently more complex atonality. The addition of semitones to add dissonance is also historically documented in Ives’ later alteration, during the chamber orchestra revisions, of the plain C major chord of bar 63 to include the B natural of the French horn.

The interval of a semitone is also important to the construction of polychords - in this instance, chords built from triads a semitone apart or with chromatically related members. The most prominent example is the D/C# clash at the end of the movement, but a corresponding event at the opening of the work is the interaction of A minor and D# minor triads in the strings bar 1:

Ex. 5.2.7 Strings and piano bar 1



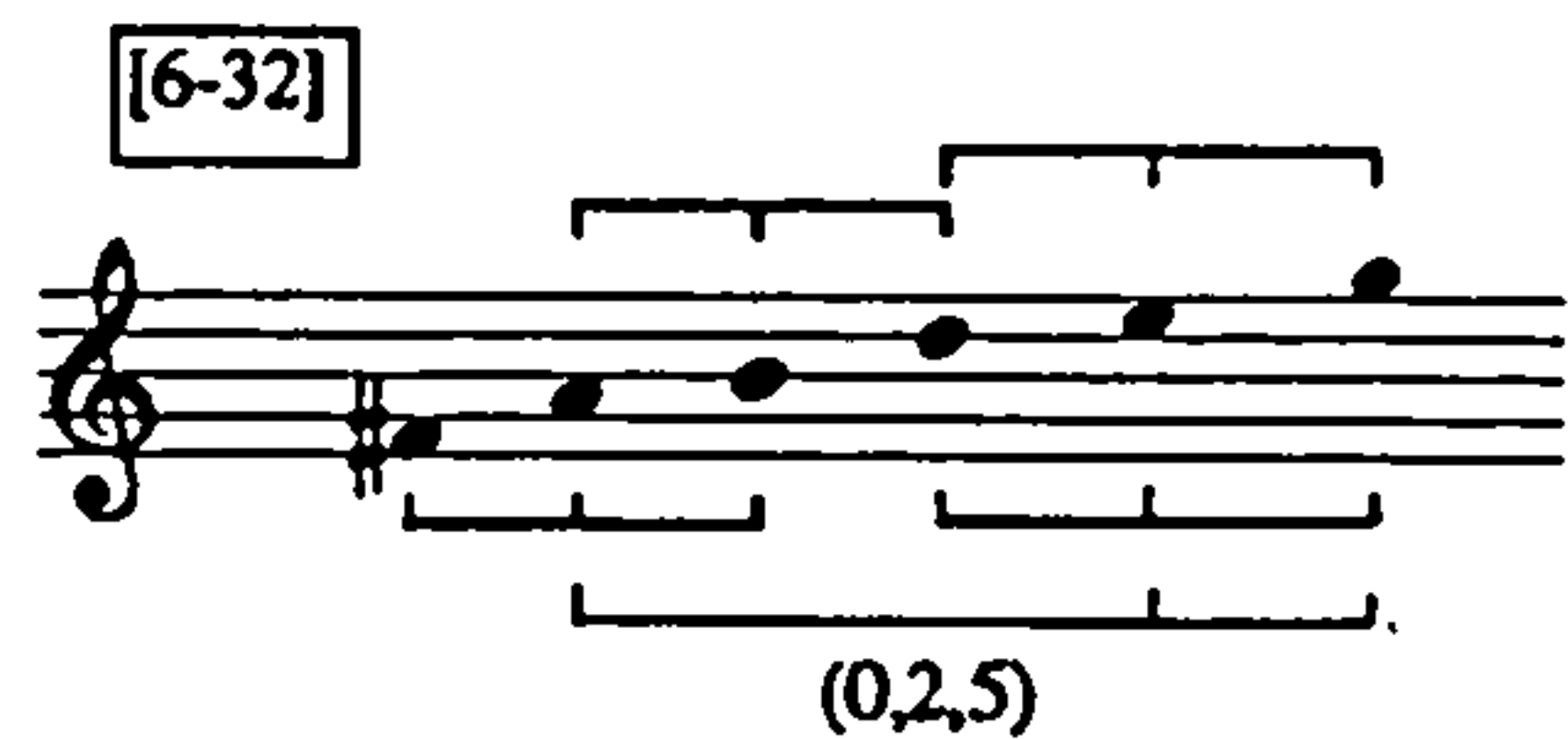
The use of diatonic terms to describe the harmony become necessarily limited once these areas of polytonality and polyharmony are uncovered. The labelling of chords as combinations of triads can be superseded through the use of pitch-class sets and interval vectors. As previously mentioned, one of the most important pitch-collections of the movement is the subset of the major scale that omits the seventh degree - one configuration of the set (0,2,4,5,7,9) [6-32]. The functions of the set already mentioned include scalic use, compound chordal use at bar 63, and allusion to its “chord on fourths” potential. One further use, however, sheds light on the relationship between source-melody and harmony; the set [6-32] can be presented as a set of alternating major and minor thirds (e.g. E-G-B-D-F#-A), thus illuminating the composer’s tendency to repeat melodic intervals beyond the limits of the original, and consequently links his experiments with “chords on fourths” and “chords on thirds” to the same essentially diatonic set.

As regards subsets of [6-32], the most significant in *The “St. Gaudens”* is the set (0,2,5) [3-7], the relationship between the two proving as symmetrical as the above



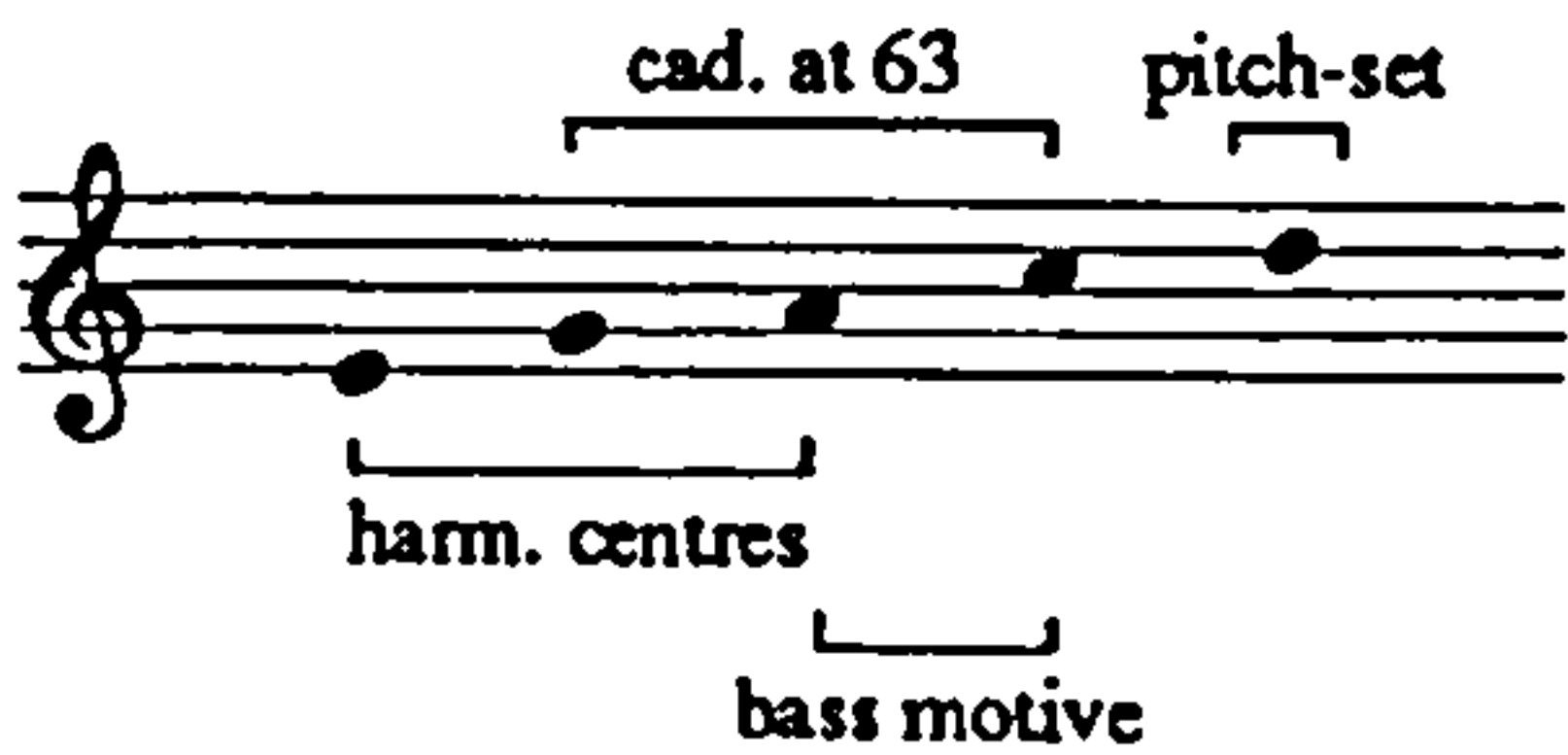
linked-thirds presentation since the larger set can be arranged as five interlocking (0,2,5) subsets:

Ex. 5.2.8 [6-32]



This use of interlinked (0,2,5) patterns within a particular set can be employed to describe the cadence to C major at bar 63:

Ex. 5.2.9 (0,2,5)s



The above group of (0,2,5) sets combine to form a larger set (0,2,4,7,9), a simple subset of the parent (0,2,4,5,7,9) set.

The small (0,2,5) sets also prove relevant to an understanding of apparently contradictory simultaneous events within the movement. The “dissonant” flute solo of bar 5 (0,2,5) is played against a major-scale segment in the strings:

Ex. 5.2.10 Flute and strings bar 5



The complementary half-diminished chords [4-27] of the piano, bars 35-40, have the (0,2,5) set in common with the initial [6-32] set of the strings:

Ex. 5.2.11 Piano and strings bar 35

35

piano

etc.

strings

## Overview

The link between a tonal and an atonal interpretation of The "St. Gaudens" in Boston Common appears to rest with Ives' use of diatonic subsets within atonal configurations and the extent to which the tonal aspects of the set are revealed. The relative tensions of linked musical segments are often controlled by the rapid alternation of chromatic and diatonic harmonies, the latter made dissonant by semitone spoilers or "wrong notes". In this work the composer also demonstrates a method to the chromaticism that often involves the use of similar diatonic sets placed a semitone distant to one another, again creating dissonance from essentially diatonic material.

<sup>1</sup>Ives, "Memos", p.99.

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## THREE PLACES IN NEW ENGLAND

### PUTNAM'S CAMP, REDDING, CONNECTICUT

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*"The places in this movement (Putnam's Camp) which some say come from Stravinsky were written before Stravinsky composed the Sacre (or at least before it was played), and came direct from the habit of piano-drum playing."*

Charles E. Ives<sup>1</sup>

#### Introduction

Ives' extensively documented use of "borrowed" source material has often led critics to suggest that the composer wanted for melodic inspiration. Superficially, it is true that the majority of his orchestral works contain well known tunes from the contemporary hymnal and marching band repertoires. In *Putnam's Camp*, however, Ives demonstrates the time honoured tradition of reusing his own material. Rather than simply redeploying an old melody, in the manner of many a Baroque master, the composer constructs the movement from two previously self-contained works, *Country Band March* and *Overture and March: 1776*, that have been segmented and reassembled into a single symmetrical span. The pieces originally date from 1903, nine years before their recomposition as *Putnam's Camp*, and although the immediate reason for their elision is unclear, both fulfil the necessary programmatic affects called for in the accompanying text to the new movement; the *Overture and March* material providing a central point of repose inside the more frenzied opening and closing sections of the *Country Band March*.

Whilst the surrounding movements of *Three Places in New England* fragment their source tunes and concentrate on intervallic control of material, building long structures from small motives, *Putnam's Camp* is constructed from whole melodic patterns, and derives its form from the phrase lengths of the tunes, rather than the exhausting of particular experimental permutations (see *The Housatonic at Stockbridge*). The source works retain their own identities under these conditions, never changing their original function or affect, and are modified through larger scale methods of variation such as



transposition and elision. The analytical issues raised by such a dramatic collage therefore centre on the interaction and continuity of the components, and their positioning and relative proportions. This further leads to comparison of the constructional and scale types, particularly in the coda, where the various designs achieve a form of synthesis.

General scheme

The movement can be divided into three distinct sections, delineated by source work. The first of these passages presents the two principal *Country Band* themes, A and B, the first containing a strong tonal sequence in a simple marching band style:

Ex. 5.3.1 Country Band (A) bar 6

6 violin

double bass (simplified)

etc.

the second, briefly defining modulatory and transitional material:

Ex. 5.3.2 Country Band (B) bar 37

37 violin

woodwind

etc.



Following an introductory scalic descent, Country Band (A) occurs twice, the two statements separated by a dominant functioning fanfare figure:

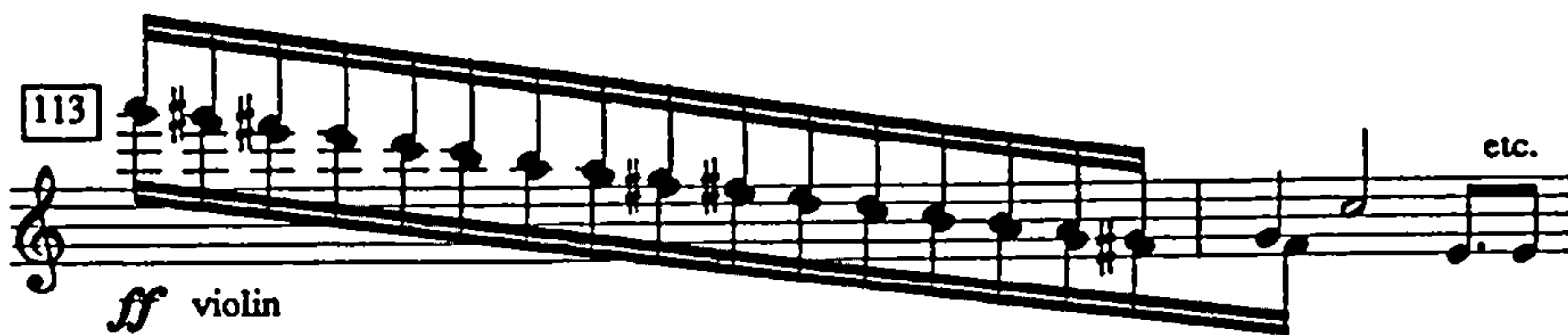
Ex. 5.3.3 Trumpet bar 25



Country Band (B) then provides the link to a much slower chromatic descent, and *rallentando* to a standstill.

The second section of the movement opens with a poised chord, representing the sorrowful “Goddess of Liberty” figure of the programme. The more ponderous *Overture and March: 1776* material then proceeds over various ostinato figures, building gently to a condensed scalic fall at the end of the section:

Ex. 5.3.4 Violin I bar 113



Country Band (B) again diffuses the rhythmic and chromatic tension, this time at the opening of the final third of the work. Linked by the fanfare of the first portion of the movement, two further versions of the melody are stated. Following the disappearance of this melody amidst a now stridently dissonant accompaniment, the movement continues to build, and a short coda leads to the final held chord and a last fanfare curiously reminiscent of the trumpet question of *The Unanswered Question*:

Ex. 5.3.5 Orchestral reduction bar 163

163 trumpet solo

orch.

*fff*

*fff*

Melodic development of Country Band (A)

Whilst each occurrence of the Country Band (A) theme is stated with an increasingly chromatic accompaniment, the tune itself remains almost intact until the conclusion. Variation is achieved through small rhythmic alterations, and the addition of complementary or contradictory accompanying lines:

Ex. 5.3.6a Orchestral reduction bar 6

6 orch. reduction

etc.

Ex. 5.3.6b Orchestral reduction bar 27

27 orch. reduction etc.

Ex. 5.3.6c Orchestral reduction bar 126

126 etc.

Ex. 5.3.6d Orchestral reduction bar 144

144 etc.



## The “Goddess of Liberty” Chord

Despite being composed of three parts, *Putnam's Camp* also appears, initially, to pivot around a notional centre point of bar 64, and the “Goddess of Liberty” chord. The tempo decreases towards this gesture, and then accelerates gradually all the way to the conclusion, making it the only point of repose in an otherwise perpetually moving structure. The chord is composed of nine pitches that can be partitioned in a variety of ways:

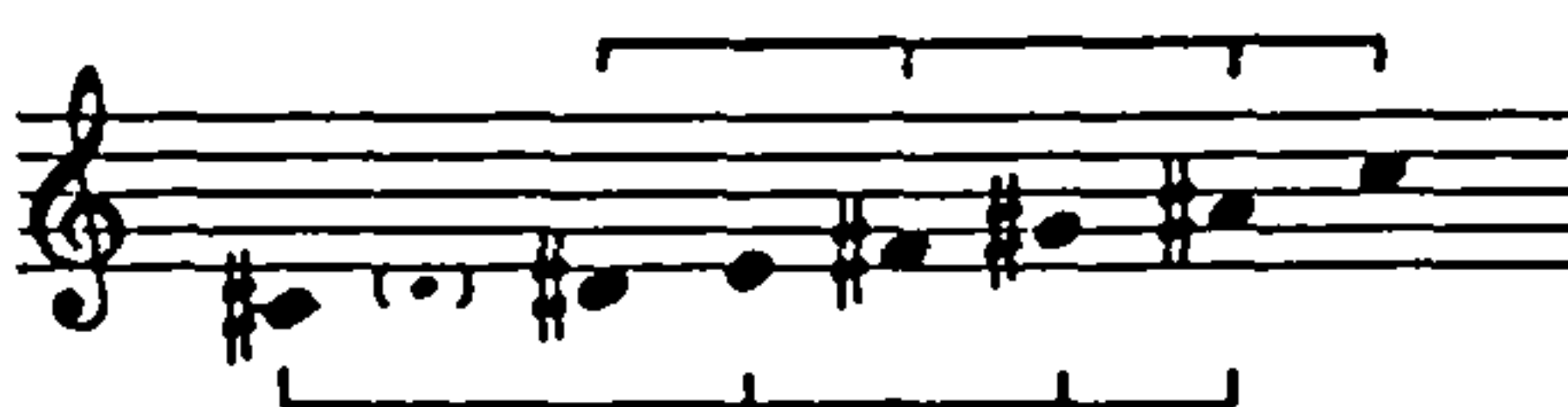
Ex 5.3.7 Orchestral reduction bar 64



Excluding the C# and D# that only occur in the piano, the chord is composed entirely of tritones and major thirds, a whole-tone aggregate that prefigures the predominant whole-tone scale basis of the following *Overture and March* section. When the two piano pitches are reintroduced, the chord comprises major and minor thirds in conjunction with one tritone, itself divisible as two minor third intervals. This open and concordant spacing contrasts the chord with the predominantly chromatic basis of much of the rest of the work.

The complete chord also has the ability to be partitioned as two Tristan chords plus an additional D natural:<sup>2</sup>

Ex. 5.3.8 “Goddess of Liberty” chord - Tristan partitioning bar 64



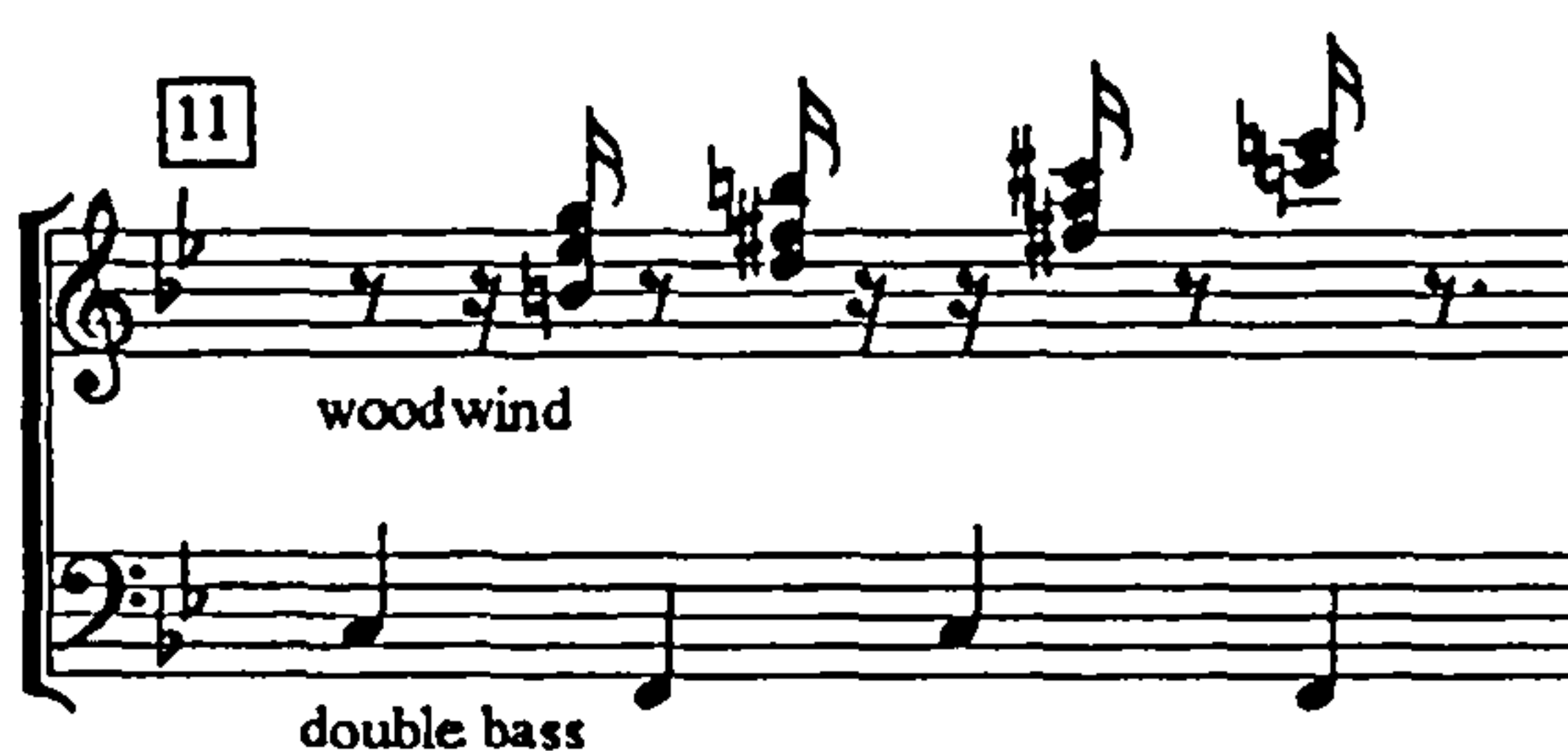
The pivot note of the two chords, A#/Bb, important as the tonic of the work until this point, is highlighted notationally in the piano part as the only flattened note of the chord, whilst remaining an enharmonic A# in the whole-tone strings. The nature of a Tristan chord as a potential dominant seventh sonority, confirms the linking and

transitional role of this chord on a large scale. This feature is examined later in a reductive plan of the movement.

### The Elision of *Country Band* and *Overture and March* material

The extra D natural of the Tristan partitioning of the “Goddess of Liberty” chord proves an important common pitch with the opening of the middle section of the movement, bar 65. The string pitches form a series of three triads at the interval of a fifth, comprising A major, E minor, B minor. In context this can be heard as a thirteenth chord on A, or simply as a set made up of the D major collection. The importance of this scale set and its division into fifth-related triads can also be seen in bar 11, as a woodwind interjection:

Ex. 5.3.9 Woodwind and double bass bar 11



The underlying chord in this bar is a dominant seventh on F, with the three additions forming triads on E minor, B minor, F# minor, that together create an Em13 chord, but are, again, all part of the set of the scale of D major. (The fourth diad of C and E can be interpreted as a return to the F major sonority.) In both bars 11 and 65 the piano supplies extra foreign pitches to the chords that would have been present in the larger orchestral version of the piece. These additions do not appear to follow any particular logic, aside from their role in creating extra dissonance, but do, by their very marginalisation, point out the simpler basis of the chords to which they belong.

The “Goddess of Liberty” chord and the scale set of bar 65 act as a method of bringing together the audibly chromatic end of the *Country Band* opening and the whole tone workings of the *Overture and March* based material: The first section of the movement concludes with descending lines in all parts, falling predominantly in whole-tone steps. However, the effect is chromatic from one line to another, since the lines descend at different rates:



## Ex. 5.3.10 Strings bar 58

58

The “Goddess of Liberty” chord then uses this intervallic control to create a vertical formation, retaining the whole-tone steps, but creating a more consonant texture through careful spacing and the avoidance of close intervals. In the following bar the material then reverts to a more diatonic scalar basis through the use of the pitches of D major whilst maintaining a similar spacing to the previous chord. Both the diatonic nature of Country Band (A), and its closing descent, are thus reinterpreted as homophonic chords that in turn become controlled by whole-tone sets in the subsequent *Overture and March* section.

### Overture and March: 1776 section

The predominant scale type to be found in the part of the movement based upon the *Overture and March: 1776* is that of the whole-tone scale. At bar 67 the first exclusively whole-tone chord is formed by the strings, employing pitches from the hexachord based on A. Upon the repetition of the chord in the following bar, the piano enters with an example of Ives’ “piano drumming”.<sup>3</sup> This device, designed to synthesise the sound of a group of drums, involves the piano striking closely spaced, non-diatonic chords in the lower registers, obscuring the individual pitches and creating a rich, homogeneous sonority. In this particular instance the composer’s choice of pitches for the effect is less arbitrary than usual, with the piano including notes from the opposing whole-tone hexachord to the strings:



Ex. 5.3.11 Piano and strings bar 68

68

piano

strings

etc.

The resulting aggregate of strings and piano forms a dissonant eight element set, each pitch having at least one chromatic relation. At bar 74 the opposition of the sets disappears momentarily, the strings and piano joining to form a six note whole-tone grouping to launch the primary *Overture and March* theme:

Ex. 5.3.12 Orchestral reduction bar 74

74

woodwind

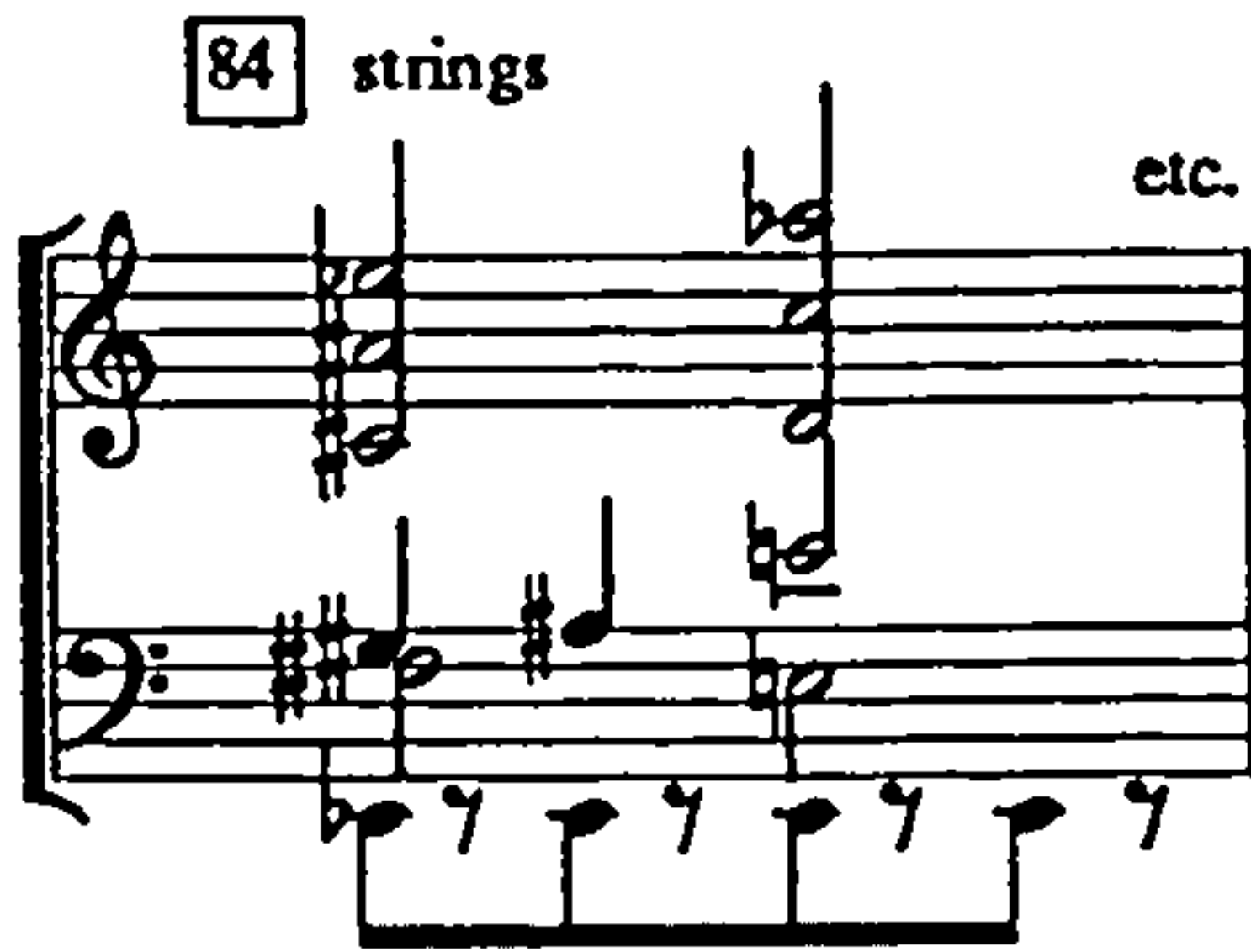
piano

strings

etc.

The gradual accelerando away from the “Goddess of Liberty” chord develops further at bar 80 with the transition to a stabler marching rhythm and the gradual removal of the piano-drumming. The pitch material is also modified, the strings moving between a pentatonic and a whole-tone set. As the bass Eb enters at bar 84, solidifying the new march tempo, these pitch sets become alternately consonant and dissonant to the root:

## Ex. 5.3.13 Strings bar 84



The whole-tone basis of the *Overture and March* is therefore now subverted by the use of that collection as dissonant to the Eb drone, whilst the new pentatonic set provides a consonant background for the transition back to a more diatonic scalar orientation. This process occurs between bars 85 and 89 as the G#-A#-E cello figure fades and the oboe, trumpet and viola gradually include the constituents of a chord on B minor into their offbeat marching. This progression to diatonic chords over a contradictory bass note is confirmed at bar 89/90 in the brass fanfare:

## Ex. 5.3.14 Brass and double bass bar 89

Ex. 5.3.14 shows the brass and double bass part for bar 89. The notation is for a brass section (trumpet, horn, and tuba/euphonium) and a double bass. The key signature has two sharps (F# and C#). The time signature is 4/4. The brass section plays a rhythmic pattern of eighth notes. The double bass part starts with a whole note chord of F#4 and C#5, followed by a half note G#4, and then a quarter note B4. The notation is labeled '89', 'brass', and 'double bass'.

The importance of the outstanding D natural of the “Goddess of Liberty” chord becomes more evident as the *Overture and March* continues. The *British Grenadiers* quotation of bars 91-93 exploits the scale set of D major in a series of parallel moving chords before extending its harmonic palette:

## Ex. 5.3.15 Strings bar 91



From bar 95 onward the sense of a scale set on D solidifies, the viola circling the pitch D and the woodwind employing source fragments in that key. The violins, however, retain the previous C/C# ambiguity, indicating perhaps the formation of a dominant on D. The uncertainty is resolved only when the bass drone falls to D natural, and the rest of the instruments either double the pitch or add C# appoggiaturas at bar 103.

As the middle section of the movement continues to accelerate to its conclusion, the chromatic, whole-tone and scale-set elements that have so far characterised the *Overture and March* material come together in a furious descent. Initially, the strings favour a whole-tone scale based on D natural at bar 107, but this soon fragments into freer chromatic descents, bar 110. The final arbiter, however, is the semiquaver downward scale of bar 114 that naturalises the pitch C in most parts, thus creating, in effect, a dominant chord in G that is resolved in the unequivocal modulation of Country Band (B) to G in the final section of the movement. The final chord of the *Overture and March*, bar 114.1, forms the ultimate synthesis of scale types by its inclusion of the total chromatic, minus one pitch. This pitch class, G#, will be seen to become significant as the “tonic” of the last third of the movement, and demonstrates Ives’ characteristic use of emphasis by exclusion.

### The Return of Country Band material

When Country Band (B) first appears, bars 37-40, its modulatory character serves only as a transitory link between the diatonic Country Band (A) and the chromatic descent toward the “Goddess of Liberty” chord. Its second occurrence, however, in bars 114-117, resolves the preceding *Overture and March* material to a tonic of G, providing a solid point of reference rather than departure. The brevity and simplicity of the modulation, after the dominant prolongation, ensures that any stasis in the new key is shortlived, and this is confirmed by the instability of the bass in the proceeding bars. The alternating C and B marching bass of bars 118-120 are gradually transposed downwards to G and G#, the proposed tonic and flattened second degrees, and these



continue to oscillate until the anacrusic chords of bar 125, where the G# takes precedence, albeit within a diminished chord sonority. Rejecting the modulatory possibilities inherent in the diminished chord cadence, Ives elects to maintain the G# as the tonic for the next presentation of Country Band (A), as an enharmonic Ab. This pitch remains the root note for the two final statements of the central source melody, until the chromaticism of the accompaniment overtakes the diatonic source in bar 157, and the movement enters a final resolution of the competing scalar forms.

### Coda or Resolution

The closing section of *Putnam's Camp*, from bar 157 onwards, brings together the various scalar forces of the movement, employing them in both vertical and horizontal formulations. The core of the texture is a sequence of major/minor chords in the strings and lower woodwind. These chords are predominantly second inversions, and initially proceed in a whole-tone sequence. Since the occasional root position chord or chromatic shift is interpolated, this pattern is disguised by inconsistent leaps in the bass:

#### Ex. 5.3.16 Strings and low woodwind bar 157

All named chords major/minor

157 Db Eb F A B C# D G A B Db Eb F G Ab A

F# E F G Ab Bb F# E F G Ab Bb B A G F

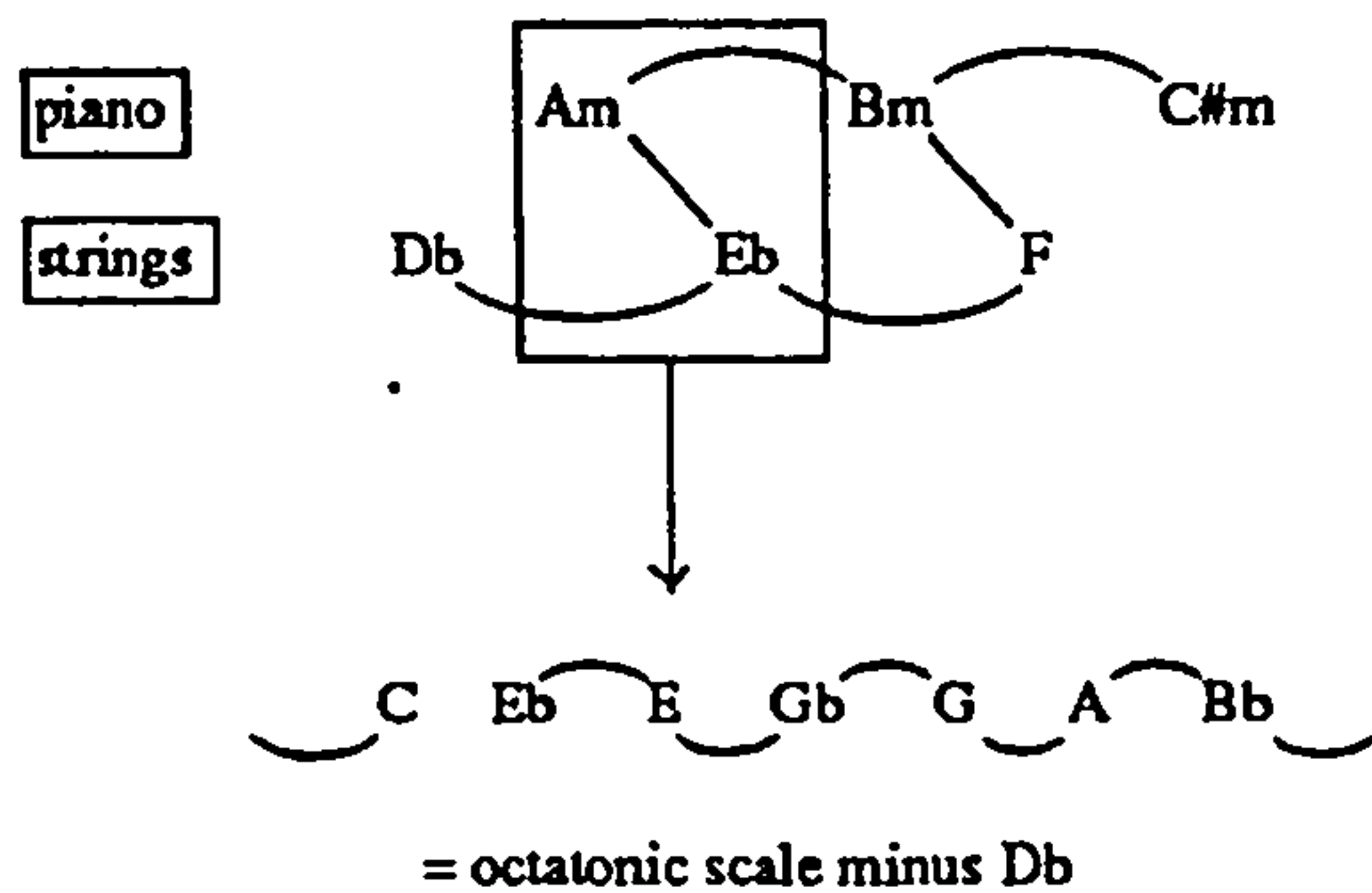
Eb? Db? B A G F Eb Db B

163

Whilst the piano left-hand shares the major/minor pitches of the strings, the right-hand follows a sequence of minor triads a tritone distant from the accompanying root, and a

triplet-quaver dislocated in time. The resultant chord approaches an aggregate of a complete diminished or octatonic scale, omitting only the pitch of the previous root, and thus brings together the chromatic and whole-tone scale types in a sequence of whole- and half-steps:

Ex. 5.3.17 Piano and strings bar 157



From bar 159 the horizontal progression of the chords becomes controlled by this same octatonic sequence, before again reverting to the whole-tone sequence. The interval between the string and piano chords also becomes variable, but remains predominantly that of the tritone.

As the movement reaches its conclusion the patterning disintegrates, leaving the origin of the final chords uncertain. An arpeggiated E major triad in the basses provides a last side-step before the tritone related A# bass of the final chord; a symmetrical return to the enharmonic Bb root of the opening.

### Bass reduction and scale forms

Reductive plans of the music of Ives demonstrate most obviously the interaction of the various component scale forms both on a linear and foreground-to-background basis; scale types often abut or contradict within a single level of reduction, but may also be found to support one another on a multi-level perspective. This contrasts with the more fractal nature of Schenker's original formulation of background tonal patterns supporting similar foreground tonal patterns, differing only in scale and duration. The number of reductive levels in Ives is therefore governed by how meaningful the interaction between scale types or features appears, and how far back the reductive process goes before the overall plan becomes simplified ad absurdum; rarely for Ives is a simple descent of a handful of notes the final graph. The Ursatz thus becomes an important window through which to view foreground features, and may itself, as will be shown in this movement, be open to more than one interpretation.



In *Putnam's Camp* the predominant superficial feature is the tonal framework of *Country Band March* that becomes a transposable *idée fixe*, important principally in containing a tonic pivot and providing a point of reference for the surrounding chromatic material. Further foreground features include semitonal and whole-tone ascents and descents, either elided or kept separate. Together these form Reduction A.

Ex. 5.3.18 Reduction A (to be read as one continuous reductive line)

The musical score for Reduction A is presented across five staves, showing a continuous reductive line. The measures are numbered in boxes: 1, 3, 6, 12, 27, 37, 41, 48, 54, 63, 64, 65, 74, 80, 84, 103, 114, 118, 121, 134, 140, 149, 156, 160, 162, 163. The score includes various musical annotations: 'chromatic' (between measures 48 and 63), 'whole-tone, scale sets on D' (between measures 64 and 80), 'whole-tone, pentatonic' (between measures 84 and 103), 'whole-tone' (between measures 114 and 118), and 'whole-tone' (between measures 149 and 163). Roman numerals (V, I, IV, V, I) are placed below the staff at measures 3, 6, 27, 37, 41, 114, 118, and 140.

### Reduction A

Due to the relative brevity of the movement, the majority of the bass pitches of the movement are present in the foreground reduction. Only simple repetition and obvious passing components have been removed to highlight the important scalic shapes. The reduction opens with a chromatic and whole-tone descent that traverses almost the entire tessitura of the bass line and characterises, in a dramatic Beethovenian or Haydnesque statement, many of the foreground and background features to come. A simple V-I progression, bars 3-6, then defines the B $\flat$  root of the *Country Band* theme and prepares its first and fullest (21 bars) presentation. The tonal basis of the first theme then guides the bass line to a second, curtailed version at bar 27. This statement is halted on the subdominant by the introduction of the contrasting Country Band (B)



theme effecting a brief modulation to a C tonic at bar 40. Having established a definite tonal point of reference in the opening bars, and then modulated away, however briefly, the reduction then descends through a chromatic and subsequently whole-tone sequence bars 41-63, mirroring the introductory fall but substantially extending it in time. A symmetry of sorts thus controls the first passage of the movement, the tonal/diatonic source themes emerging from, and developing into, intervallically controlled descents.

Around the "Goddess of Liberty" chord, bar 64, the bass reduction forms a quasi dominant-tonic motion from the E of bar 63 to the A of bar 65, indicating perhaps a preparation for the next section of the movement and its accompanying source material. This link is confirmed by the continued use of the whole-tone scale that led to the juncture - a verticalisation of the earlier linear presentation. The *Overture and March* themes then emerge from scale sets based on the scale of D major, thus not entirely divorcing themselves from the overtly tonal *Country Band* source. The collection of scale types then broadens to encompass the pentatonic set, in conjunction with whole-tone and chromatic elements, whilst the bass prolongs an Eb pedal bar 84 onwards. The tendency of the chromatic material of *Putnam's Camp* to descend is again displayed at bar 103 in the shift of the pedal note from Eb to D, as the level of perceived dissonance increases.

The period of *Overture and March* material is immediately followed by the transitional theme of Country Band (B) in a blunt modulation to a G tonic. Since the repeat of this theme in the original *Country Band March* source work remains untransposed (in C), its shift to a new key, and the dominant-tonic relationship with the preceding D-based section, again provides an unambiguous tonal reference, as a pointer to the structure, despite its separation of conflicting scale types. Retrospectively, this modulatory shift also provides the structural reasoning behind the Eb pedal of bars 84-103; the drone is now seen as a prolongation of a quasi-bVI to the implied dominant (D natural) that follows. In a reflection of the curtailed repeat of the Country Band (A) theme in the earlier stages of the work bars 27-33, Country Band (B) then fails to complete a second statement, bars 118-121, when a further chromatic descent intervenes.

A significant variation in the expected pattern of the descent forms the link to the restatement of Country Band (A) and the final section of the movement. The bass line oscillates between Ab/G# and G, prior to bar 126, before deciding on the former, an equivocal ascent in an otherwise descent dominated work. The significance of this denial of expectation becomes apparent, however, with the opening of the new section in Ab major, the first portion of the movement not to be heralded by a background V-I preparation. The following two presentations of Country Band (A), both nominally in Ab, continue the pattern previously established, deviating from the expected tonal bass



progression increasingly early, moving through chromatic and whole-tone descents to the resolution of the movement.

The transition from the final occurrence of Country Band (A) to the coda is blurred by the increasing dissonance surrounding the theme, but is complete by bar 157 with a move to an entirely intervallically controlled texture. Despite their contrasting scale types, the two sides of the juncture are again linked by a dominant-tonic movement in the bass, Ab to Db bar 157. The following bars, denoted by a double line in the reduction, contain a whole-tone logic mentioned earlier under the description of the coda, but do not assist in a bass-led reduction. The essence of the coda or resolution becomes evident, however, at bar 160.3 with the start of a whole-tone descent to the conclusion. A final return to a Bb in the bass, after the E major triad diversion of bar 162, achieves a symmetry with the opening key area of the movement but remains more significant as a member of the whole-tone set that descended to the final chord.

Ex. 5.3.19 Reduction B (to be read as one continuous reductive line)

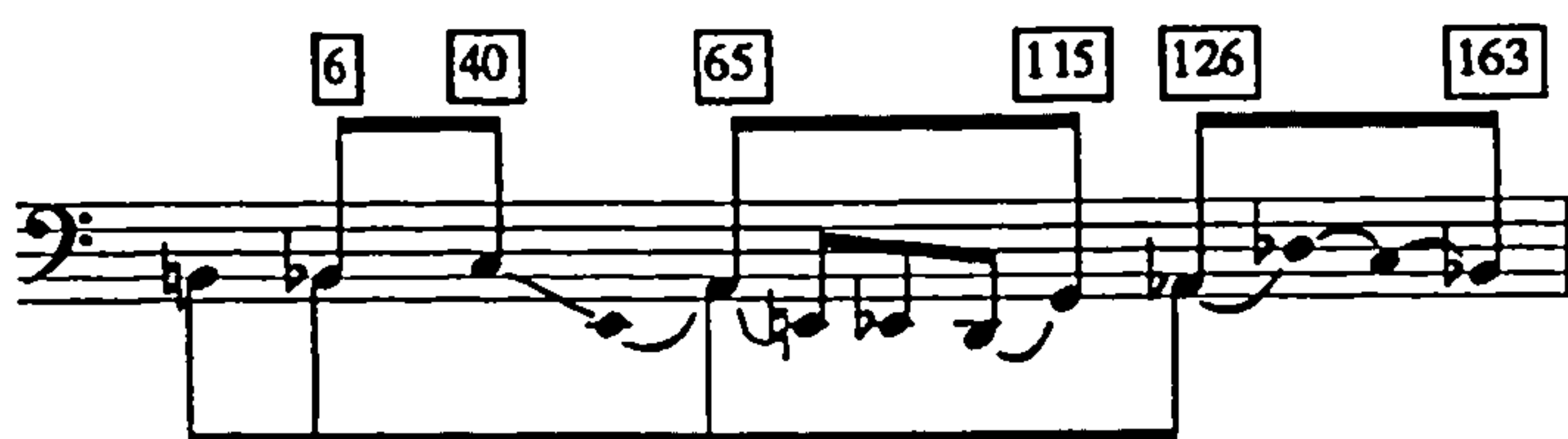
### Reduction B

The ternary divisions of the movement are demonstrated more clearly at the intermediate level of reduction. The areas of source-theme diatonicism are beamed, highlighting the main Bb (bars 6- 40) and Ab (bars 126-156) Country Band (A) occurrences. The intervening *Overture and March* section now appears as a descent from A (bar 65) to G (bar 115) with interpolated strong tonal movement, the opening A natural (65) moving through D natural (114) via E natural (80) and the quasi bVI Eb (84) in a standard modulatory progression. Both the whole-tone descent over the course of the *Overture and March* and the intervening chromatic shifts demonstrate the use of the prominent foreground descent patterns as middle ground structural features.

The aforementioned use of excluding a pitch or pitches is featured in Reduction B in the transition between the first and second sections of the movement. As the music moves chromatically away from the brief modulation to C in bar 40, and descends both chromatically and in whole-tone steps to the *Overture and March*, the Bb tonic, of the

preceding diatonic *Country Band* material, is pointedly avoided, even as a passing element. This contrasts with the inclusive continuation of the G# linking pitch (bar 125/6) that unites the *Overture and March* and second *Country Band* sections, thus avoiding any sense of modulation or key shift.

#### Ex. 5.3.20 Reduction C



#### Reduction C

The upper beam of the final reductive level, C, emphasises the ternary segmentation of the middle-ground graph, and points out the whole-tone pairing of the divisions; Bb-C, A-G, Ab-Bb. This grouping exhibits a form of radial symmetry, up-down-up, reminiscent of a tonal sequence, and emphasises the return to the original Bb root (though not as a definitive tonic). The whole-tone interval A-G of bars 65-115 is filled by the middle-ground noted descent E-Eb-D and the overall quasi-tonal relationship A-E, D-G, via the Eb. A further I-IV/V-I motion is indicated at the juncture of the final *Country Band* and the coda bar 156/7 between Ab and Db, the latter pitch providing the basis of a final whole-tone descent to the final chord of the movement.

An alternative reading of the graph is shown, however, by the lower beaming. The chromatic descents of the foreground are here translated into an overall background descent, B-Bb-A-Ab. This interpretation describes the movement as a chromatically derived structure and adds import to the opening B natural as the start of both a long term background and immediate foreground descent, strengthening the Haydnesque sense of the necessary formants of the work emerging from a single germinal gesture. The reading also removes the emphasis on the final Bb bar 163 as an important structural close, seeing the conclusion of the movement as the result of a final whole-tone descent from the coda onwards.

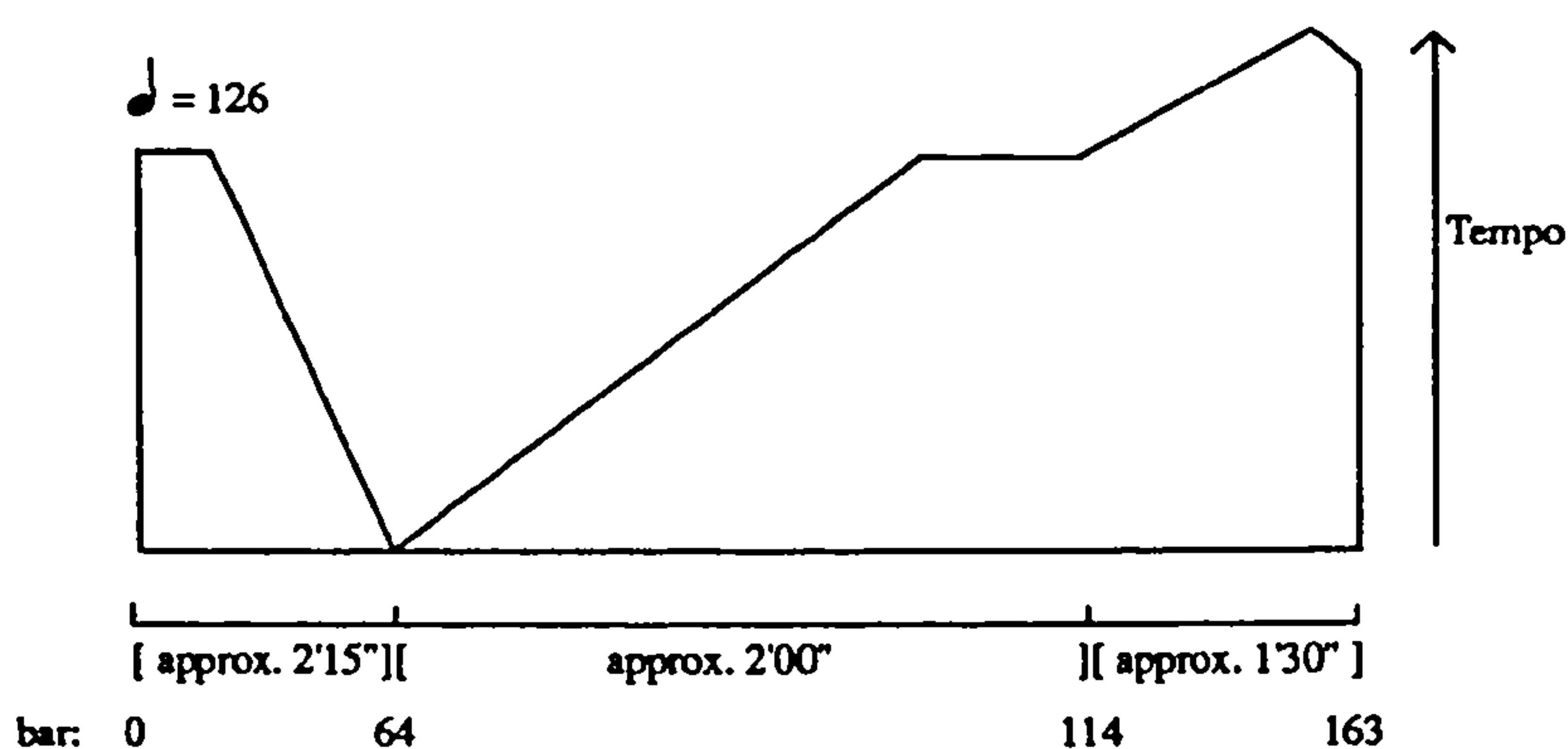
Both interpretations prove important in further investigations into the gestural structure of the movement, obviating the need to describe one as more accurate a picture of the music than the other; the interaction of the two beamings ultimately proving to be a better representation of the score than a single approach.



## Tempi

If measured with any sense of “musical time” the central *Overture and March* portion of the movement appears the longest of the three, its slow tempo and less sharply defined phrases slowing the perception of chronological time. The true progress of the piece shows, however, that every proceeding section is shorter than the last, in both time and number of bars. The fact that each one also contains a greater amount of musical material and complexity of ideas is reflected in the almost constant accelerando marked through the movement:

Ex. 5.3.21 Graph of tempo changes in *Putnam's Camp*



The point of repose highlighted by the “Goddess of Liberty” chord, bar 64, can now be seen as the axis between a decelerating first third and an almost constantly accelerating latter two-thirds. The perceived role of this gesture as the central pivot of the movement, both technically and stylistically, is therefore reinforced by the symmetry of this tempo(ral) design.

## Gestural and proportional design

The concept of “musical time”, referred to above in regard to tempi, is an attempt at measuring the progress of a work in terms of perceived musical events. Rather than using standard arbiters, such as minutes and seconds or barlines, a score is divided into a series of events or “gestures” that form an analytical middleground between note-by-note scrutiny and large scale formal segmentation. Each gesture aims to encapsulate a particular idea or event to form the equivalent of the words of a musical paragraph. Since this kind of segmentation can only be derived more or less subjectively, the absolute value of a particular gesture is consequently less important than the

comparison of one gesture with another, or an understanding of the syntactic structure that organises the sequence of events.

In common with other semiotic methods, gestural analysis can only be as meaningful as the criteria for segmentation will allow. This means that the qualities attributed to a gesture determine and delimit what can be interpreted from it, prohibiting the derivation of detailed results from generalised information. If, however, as many musical criteria as possible are considered simultaneously then the problems of an overly simplified or mechanical interpretation can be avoided.

Since much of *Putnam's Camp*, and the music of Ives generally, is concerned with avoiding the expected, and with the distortion of pre-established patterns, a suitable criterion or paradigm for analysing the movement is the good continuity or otherwise of the gestures, pinpointing their disruptive or non-disruptive features. In essence this method maps the fluctuation of tension and relaxation within the music, allowing a form of "musical time" to enter the equation - tension (and an increase in the number of events) generally corresponding to a perceived increase in the passage of time, and relaxation (and a lack of change) a decrease. An analysis of this sort can therefore create a model that indicates the perceived shape and proportions of the movement, and one that can assist in assessing the non-temporal final levels of bass/tonal reduction.

In conjunction with the more explicit qualities of rhythm, melody, and harmony, each gesture may also contains elements of continuity or familiarity that stem from the use of recognisable source material. Since this criterion has an important bearing on the acceptability or otherwise of distortion in the other features, it should be included in any paradigm that appraises tension/continuity. To these ends each gesture was assessed according to four qualities:

- 1) Disruption of rhythm?
- 2) Disruption of harmony?
- 3) Disruption of melody?
- 4) Elements of source theme?

Each quality was assessed on a scale from 1 to 10, from least to most disruptive, and from minimum to maximum recognisability and continuity for the source materials (*Country Band* and *Overture and March:1776*):

(See table overleaf)



Bars	0-5	6-10	11	12-17	18-20	21-24	25-26	27-31	32-34	35-36	37-39	40-41	42-45	46-52	53-63	64	65-66	67	68-70
Gesture length	5	5	1	6	3	4	2	5	3	2	3	2	4	7	11	1	2	1	3
Rhythmic tension	6	2	7	7	9	5	6	8	3	4	1	7	6	8	8	2	4	4	8
Harmonic tension	5	2	3	6	7	4	2	7	6	6	1	7	7	8	8	9	8	7	8
Melodic tension	2	1	5	6	7	5	2	4	7	4	1	5	6	7	8	9	7	6	6
Source melody attribute	5	10	5	9	8	8	5	9	4	10	10	3	3	5	2	1	5	5	7
Overall rating	3	1	3	4	4	3	2	3	7	2	1	8	8	4	8	7	3	3	4

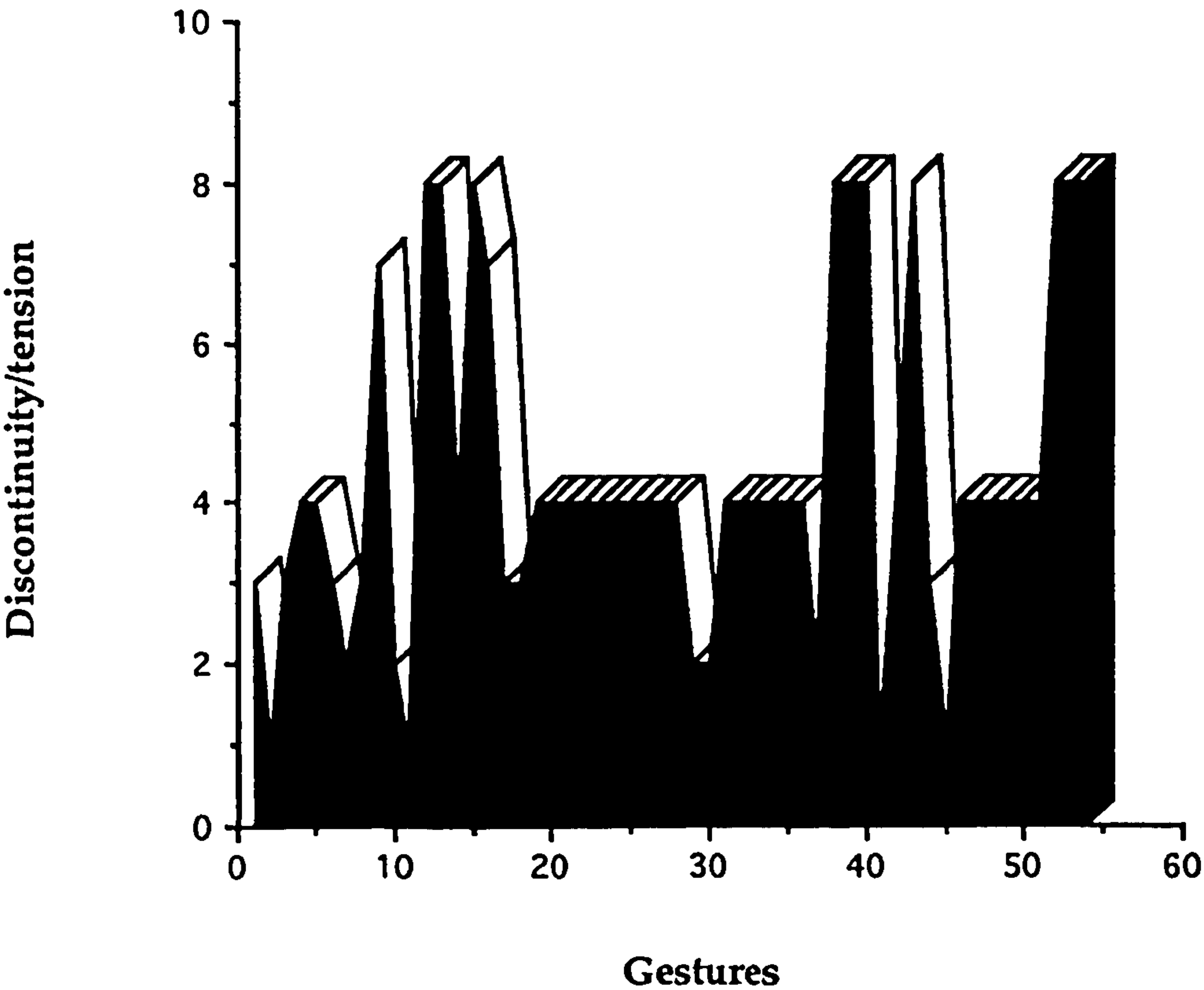
Bars	71	72	73	74-75	76	77-79	80-81	82-83	84-86	87-88	89-90	91-94	95-97	98a	98b	99-101	102	103-106
Gesture length	1	1	1	2	1	3	2	2	3	2	2	4	3	0.5	0.5	3	1	4
Rhythmic tension	8	8	8	7	7	8	8	8	7	3	4	7	8	8	8	8	5	6
Harmonic tension	8	8	8	8	8	8	7	7	7	6	5	7	7	7	7	7	7	4
Melodic tension	8	7	5	7	7	7	8	8	7	4	3	7	7	7	7	7	6	3
Source melody attributes	6	7	5	6	6	6	6	5	5	7	8	8	7	7	7	7	7	8
Overall rating	4	4	4	4	4	4	4	4	4	2	2	4	4	4	4	4	4	2

Bars	107-108	109-112	113	114-119	120-123	124	125	126-129	130-132	133	134-140	141-143	144-150	151-156	157-161	162	163
Gesture length	2	4	.1	6	4	1	1	4	3	1	7	3	7	6	5	1	1
Rhythmic tension	8	9	10	2	6	9	3	3	9	9	8	9	8	9	10	9	8
Harmonic tension	9	9	10	2	6	7	7	4	7	7	8	6	7	10	10	9	10
Melodic tension	8	9	10	3	6	7	5	3	7	7	8	8	7	8	10	7	10
Source melody attributes	4	4	2	10	5	4	7	9	8	8	8	8	9	7	2	2	4
Overall rating	8	8	8	1	4	8	3	1	4	4	4	4	4	4	8	8	8



To reduce this information to manageable proportions each set of four figures for every gesture was given an overall disruption or musical tension rating (lower row on the table). This was calculated as follows - a value of 6 or above for any of the rhythm, melody or harmony categories implies a high level of disruption or discontinuity. (Since it is difficult to assess which of the attributes causes most musical tension, all were assumed to be equal for these purposes.) The presence or lack of source theme elements was thought to supersede all other considerations, implying that a high rating for the first three categories coupled with a low incidence of source material generates the greatest level of discontinuity. Conversely, a low score for rhythm, harmony and melody in conjunction with a high source content was assumed to provide the best continuity and lack of musical tension. Within these two limits the “overall rating” was scaled to allow for the varying combinations of scores within the categories eg. high rhythm, low harmony, low melody, high source content etc. This overall rating of discontinuity or musical tension was plotted against the gestures as follows:

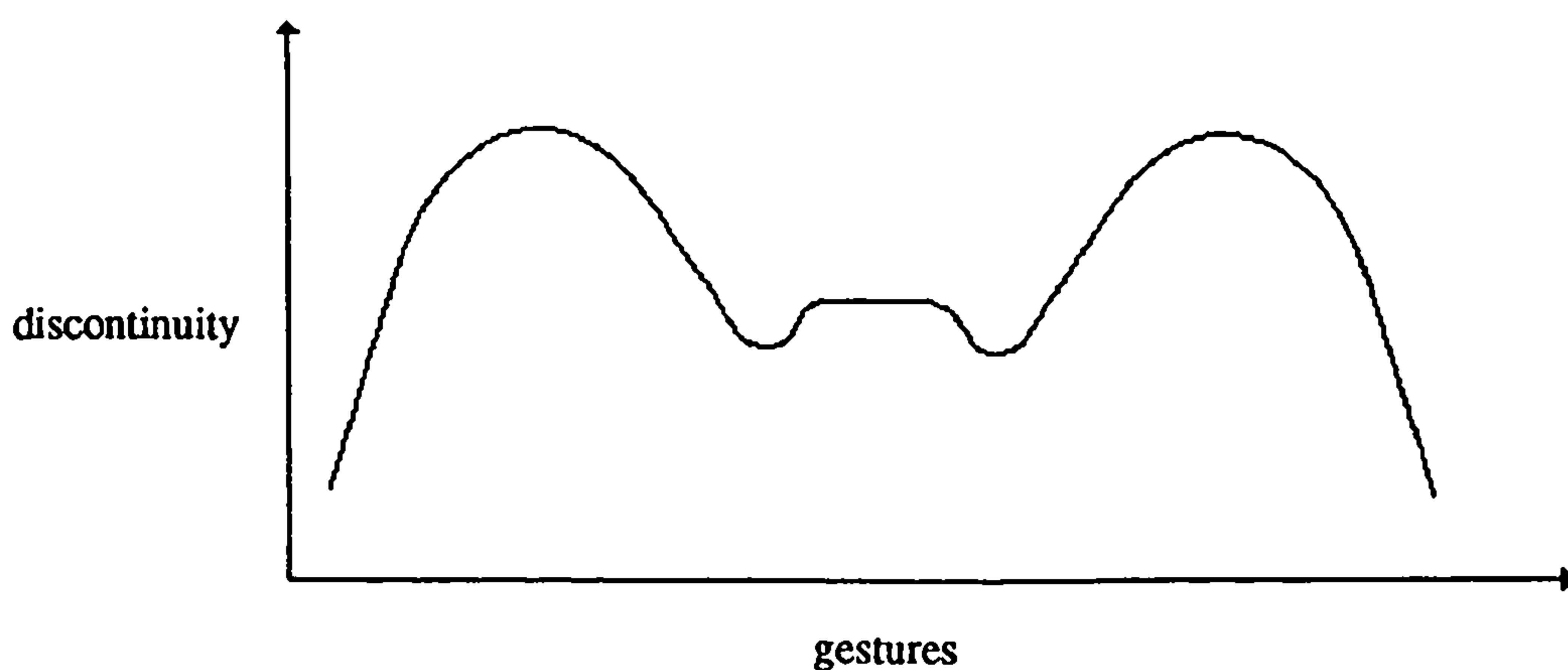
Ex. 5.3.22 Gesture graph



The first feature to note on the graph is the central plateau situated between approximately 20 and 36 on the horizontal gesture scale. This area corresponds to the period of *Overture and March* derived material, and maintains an almost constant

medium level on the discontinuity/tension scale, equating well with the slow, but not static, movement at this point. The opening and closing *Country Band* sections of the graph indicate the expected peaks and troughs, both sections increasing in intensity throughout their course. The former reaches its highpoint shortly before the “Goddess of Liberty” chord (gesture 16), indicating that a low dynamic does not always necessarily lead to a low perceived level of discontinuity/tension, whilst the latter contains a plateau before the final ascent, demonstrating that a high dynamic at this point need not imply high levels of discontinuity/tension. The first interpretation of the graph is therefore as a symmetrical or palindromic structure, balanced around a central plateau that contains its own pivotal low point (gestures 29 and 30), the outer sections rising away from this area:

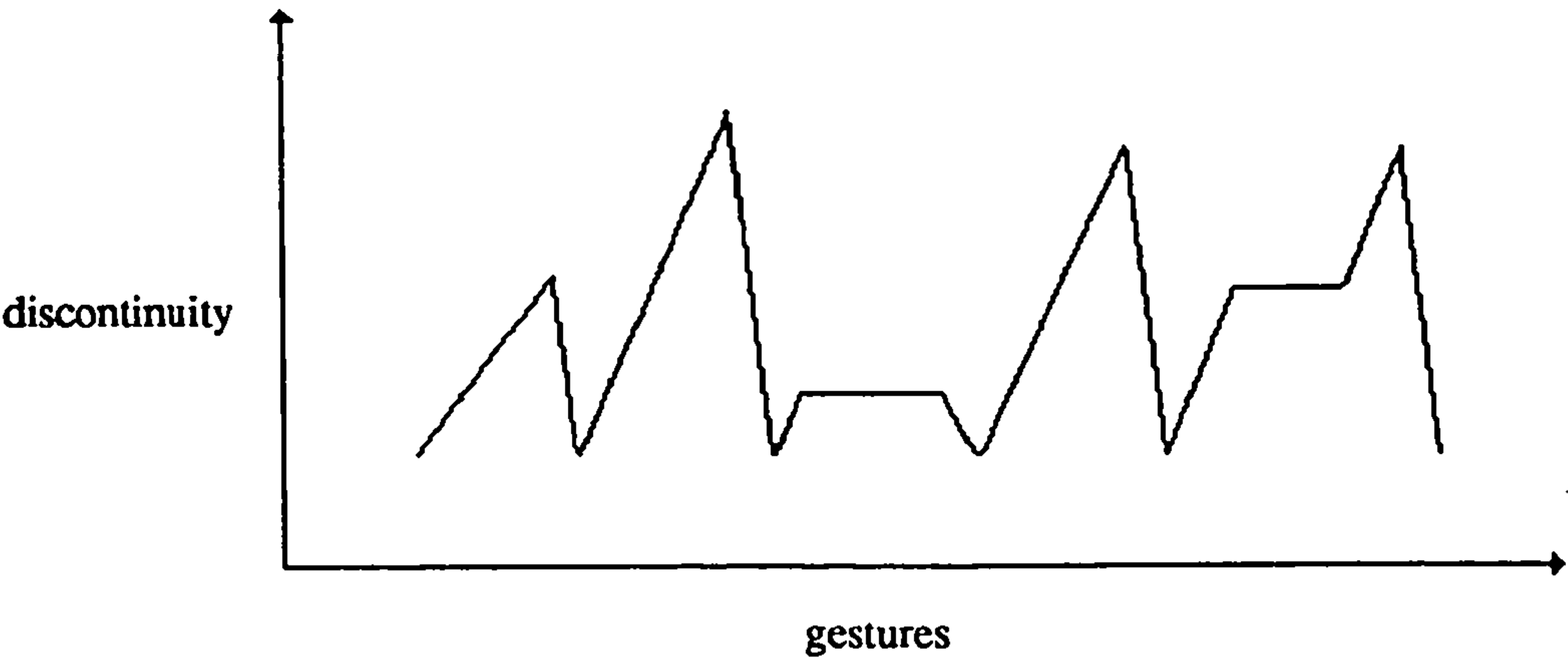
Ex. 5.3.23 Gestural graph



In terms of the final bass reduction (C) this equates with the lower beaming that links the pitches Bb-A-Ab and emphasises a chromatic derivation; the simple pitch descent reflecting a complete, enclosed structure, that contains a balancing centre.

A further reading of the graph sees it as a repetitive, cyclic pattern: rather than pivoting around a central gesture, the graph can be interpreted as sets of ramps separated by the plateau areas:

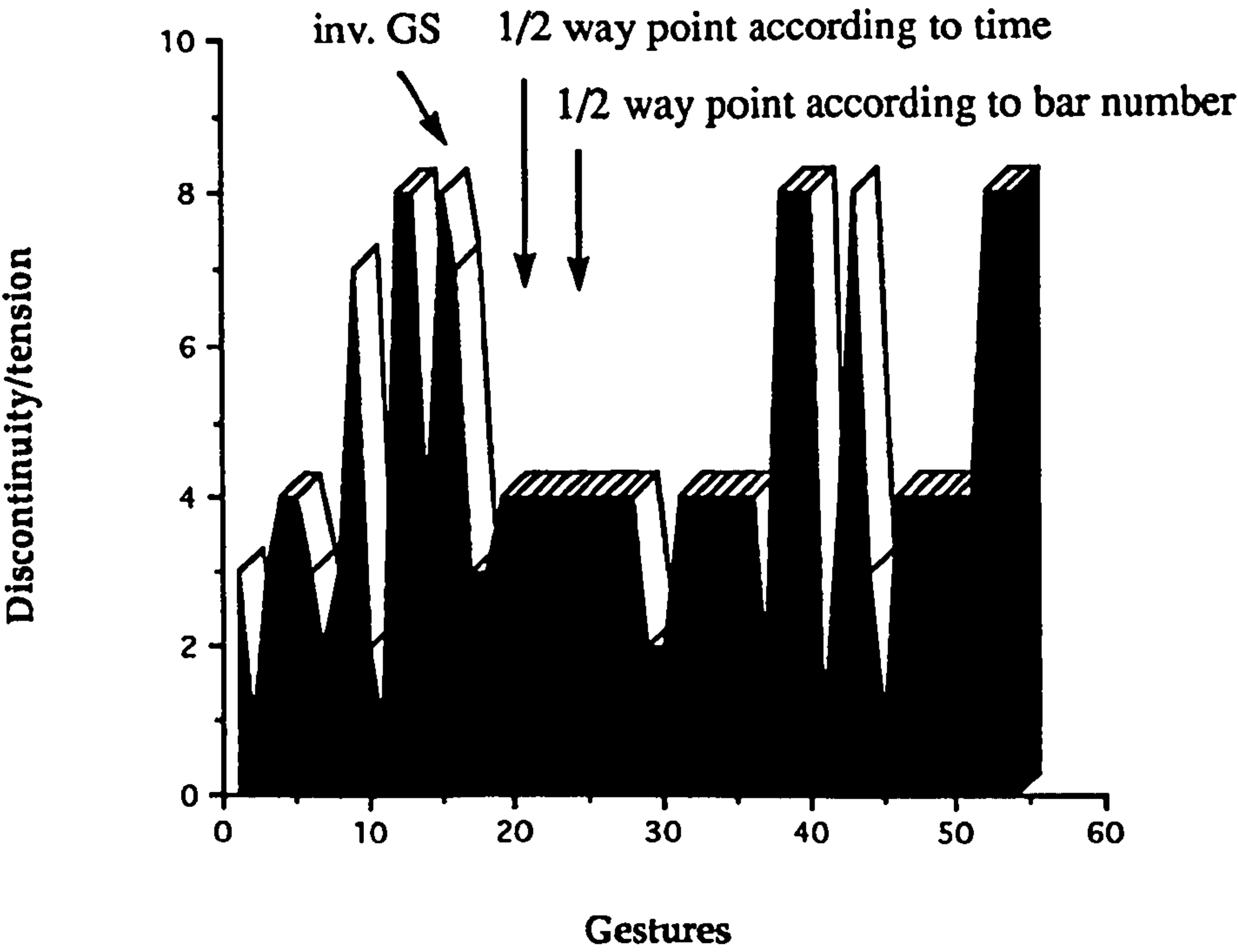
Ex. 5.3.24 Gestural graph



The form of radial symmetry implied by this reading is reflected in the upper beaming of the final reduction. The sequence of whole-tone pairings, Bb-C A-G Ab-Bb, that constitute this interpretation contains a similar repetitive logic, that seems to imply that the movement could continue indefinitely in a similar manner or return to the opening simply to repeat the whole process.

Given the importance within both interpretations of the placement of the peaks of the outer sections and the centre of the plateau, an interesting comparison can be made between the positions of these features when plotted against time, bar number, and gesture:

Ex. 5.3.25





Despite the reasonable correspondence between the three methods of measurement, the division by gesture places the halfway point of the movement nearest to the visual centre of the graph plateau and therefore perhaps explains the well formed perceived proportions. The inverse Golden Section points of all the measurements falls near the “Goddess of Liberty” chord (gesture 16), and this reinforces the importance of the gesture, not just as the conclusion to the first third of the form, but as a proportionally apposite pause in the piece, and as the balancing point of the lower beaming of the final bass reduction.

## Overview

In more than one sense *Putnam's Camp* is a model of descent. From the very opening gesture onwards, most of the attributes of the movement conform to this pattern either demonstrably or figuratively. As indicated under melodic and reductive considerations, the tendency has been seen for chromatic material to descend, be it in the short term (eg. bars 1-3, 53-63) as a foreground feature, or interpolated over longer periods (eg. bass reduction A bars 160.3-162, reduction C lower beaming) as background structure. A further form of descent can also be discerned in the temporal aspects of the piece, in the smooth accelerando from the “Goddess of Liberty” chord. The harmonic complexity of the various sections is mirrored by this constant change of speed, falling to a minimum at the open-spaced “Goddess of Liberty” chord and rising to a maximum at the highly dense conclusion. On a larger scale the background bass pitch-descent can therefore be seen to be mapped by the ever shortening chronological length of each proceeding section.

As demonstrated on the graph of gestural proportions this long accelerando, matched by the increase in harmonic density, is constructed in such a way as to even out the perceived proportions of the work. By describing the music in terms of events or gestures, the extra “musical time” filled by harmonic, melodic or rhythmic instability can be shown to balance out the simpler opening stages without losing the momentum of the overall descent.

The appearance of constant motion can also be seen in the harmonic means of *Putnam's Camp*. Despite the fast rotation of the total chromatic that so often occurs in his large orchestral works, Ives generates a sense of progression through emphasis by exclusion/inclusion. In essence, this method creates a hierarchy amongst the pitches by either omitting a member of a set before its subsequent important use, or by adding a conspicuously foreign member to an established set. An important example of this technique is seen in the “Goddess of Liberty” chord: the Bb pivot of the Tristan partitioning highlights the tonal centre of the opening, whilst the “spare” D natural

forms the root of the scale set that initiates the *Overture and March* section. At the close of the *Overture and March*, the climactic eleven note chord then excludes only the G# that later becomes the tonal centre of the last two statements of Country Band (A). On a smaller scale, each of the major/minor chords of bar 157 onwards excludes the root of its previous neighbour from its octatonic collection. In a view of the background, this principle extends to the omission of the previously central Bb, in the descent of Reduction B between bars 40 and 63.

Given the plethora of competing scalic and constructional types, the movement can certainly be described as technically eclectic. As an innovator, Ives is better known for his stylistic eclecticism and as a pioneer of this peculiarly twentieth century musical aesthetic, but in this second movement of *Three Places in New England*, the “manner” is matched by “substance” in most respects. The central, calmer period of *Overture and March:1776* material is supported by predominantly open spaced whole-tone harmony, as befits the programmatic effect, but the music reaches this scale type from the opening tonal standard through a subtle transition to intervallically controlled descent, that is then rearranged as a simultaneity in the “Goddess of Liberty” chord. The move back to the closing *Country Band* themes is then achieved via the addition of foreign pitches to the whole-tone sets and a shift to a pentatonic basis that elides smoothly with the return to the diatonicism of Country Band (B).

The relationship between style and method in *Putnam's Camp* is therefore symbiotic, and part of an overall structural plan that combines interacting, and yet independent, layers of scalic, temporal, and harmonic control.

<sup>1</sup>Ives, “Memos”, p.138.

<sup>2</sup>As a “spoiler” note?

<sup>3</sup>See Ives, “Memos”, p.42, for a description of the origins of piano-drum-playing.

<sup>4</sup>Ives' own distinction between the outward and inner forms of a work, taken from “Essays before a Sonata”.



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## THREE PLACES IN NEW ENGLAND

### THE HOUSATONIC AT STOCKBRIDGE

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*"The last movement, The Housatonic at Stockbridge, was suggested by a Sunday morning walk that Mrs. Ives and I took near Stockbridge, the summer after we were married. We walked in the meadows along the river, and heard the distant singing from the church across the river."*

Charles E. Ives<sup>1</sup>

*"Well, that's a funny-sounding collection of sounds - your tonality and your chord relations are more wobbly than César Franck's, which are bad enough."*

Harcourt Brigham, Yale 1897.

#### Introduction

*The Housatonic at Stockbridge* could be termed the most overtly "experimental" of the *Three Places in New England*. The majority of the compositional decisions appear directed towards taking a particular developmental technique to its logical conclusion, in a manner similar to smaller works such as *The Unanswered Question*, but explored within larger chamber orchestral forces. The relatively simple extra-musical connotations of the movement, in the depiction of a church service filtering across a mist covered river, allow an unusually large number of absolute musical features to control events, uninterrupted by the twists of a complex programme, and for this reason analytical observations can be made with a greater candour and precision than in the preceding two movements.

In essence the work comprises a single, long melodic strand surrounded by expansive, independent strata that combine to form chromatic textures of varying density. The melody moves between different instrumental groups, starting in the woodwind and passing through the strings to the brass, following a pattern of continuous development. As each instrument group takes the melody a quantifiable step towards greater chromaticism occurs, but the perceived effect is one of constant evolution. The remaining instruments in each phase assume the aforementioned



textural roles, either in the form of a harmonisation of the melody or as independent chromatic lines. The number of instruments employed shows a gradual increase directed towards the conclusion, the part writing becoming progressively more dense until the typically Ivesian full-chromatic final chord. In a similarly characteristic vein, a tiny coda adds a degree of parody and uncertainty to the climax of the movement, modesty or wry wit preventing the final return to a tonic.

## Form

The structure of the work is therefore determined by the gradual unfolding of the melody and its accompaniment; a process directed towards the twelve note final chord, and consisting of small increments in density and chromaticism in all parts. Such a form can, therefore, not be understood completely in terms of temporal segmentation, but rather in an unweaving of the individual component lines, a stratification of parts, and their development in time. The effect of division into groups of melodic instruments (wind, string, brass) will be determined under melodic considerations; at present it is the seamless quality of the development that should be emphasised.

## Melody and Accompaniment

### General relationship

Since all parts develop and expand during the work, it is worth noting that the increase in dissonance in both melody and accompaniment progresses at similar rates, resulting in the submerging of the melody under previously less important textural material in the closing stages of the piece. To the analyst, able to see the various competing elements in the score, but perhaps unable to hear them in context, the question then arises as to the composer's intentions at this point. The problem of whether to establish a hierarchy of lines or to accept the chaos of their combination is aided by examination of the song version of *The Housatonic at Stockbridge*, published as part of the *114 Songs*.

## Song

The occasional use by Ives of an existing work as the basis for a song (eg. *The Camp Meeting - Third Symphony*, *Thoreau - Second Piano Sonata*) provides a ready made précis or reduction, often highlighting the features he considered most salient to the

original. The song *The Housatonic at Stockbridge* is no exception, the piano and voice providing important clues as to the relative importance of the melodic and textural material of the orchestral version. With specific regard to the melodic conclusion, comparison of the voice, bars 31-40, and bars 33-44 of the orchestral score shows the line of the former to be fragmented amongst the instruments, taken by the horn, trumpet, and viola respectively:

Ex. 5.4.1 Song and orchestral interpretation

The example shows three staves of music, each representing a different instrument's interpretation of a vocal line. The first staff is labeled '31 song' and '33 orch.' with a 'horn' bracket above it. The second staff is labeled 'horn' with a 'trumpet' bracket above it. The third staff is labeled 'c' (cello) and 'viola' with a 'viola' bracket above it. The lyrics are: 'Ahl there's a res-tive rip-ple, and the swift red leaves Septem-ber's firstlings fas-ter drift; Wouldst though a-way, dear stream? Come, whisper near! I al-so of much res-ting have a fear: Let me to-mo-row thy com-pan-ion be, By fall and shal-low to the ad-ven-tu-rous seal'.

31 song  
33 orch.

horn trumpet

horn trumpet

c viola

Ahl there's a res-tive rip-ple, and the swift red leaves Septem-ber's firstlings fas-ter drift; Wouldst though a-way, dear stream? Come, whisper near! I al-so of much res-ting have a fear: Let me to-mo-row thy com-pan-ion be, By fall and shal-low to the ad-ven-tu-rous seal

The disintegration of what can be presumed to be the most important line, and its final transfer to one of the quietest instruments in the texture, indicates that the one line is not intended to be followed continuously. Indeed the fortissimo marking of the brass ensures a continuity in dynamic that obscures any melodic or voice-leading logic that might assist the listener in following a timbral shift to the strings. In essence Ives is demonstrating the power of volume and timbral continuity to triumph over the ability to follow melodic logic, or rather, the confusion that results when the two contradict one another.

## Melodic Development<sup>2</sup>

The state of disintegration reached at the end of the movement is the conclusion to a process of melodic development that proceeds through the entire work. As is usually the case, these workings are inflicted on a source tune; in this instance, *Missionary*



*Chant* by Heinrich Zeuner, a hymn tune that incorporates Ives' favourite Beethovenian motive, the falling major third of the Fifth Symphony. Ives concentrates on a small section of the hymn, isolating the Beethoven motive and a pentatonic set (Eb,F,Ab,Bb) from the latter half of the melody:

Ex. 5.4.2 Missionary Chant

The image displays two systems of musical notation for 'Missionary Chant'. The first system consists of two staves (treble and bass clef) in 3/2 time, showing a full musical phrase. The second system is a closer view of the same notation, with brackets above the staff identifying specific elements: a 'motive' spanning the first two measures and a 'pentatonic set (plus G)' spanning the last four measures. The notation includes various musical symbols such as notes, rests, and bar lines.

The following illustration traces the course of the main melodic strand through to the conclusion and coda. As shown, each instrumental group introduces new chromatic elements, modifying the original source cells:



## Ex. 5.4.3 Melodic development (to be read as one continuous line)

1 'cello

pentatonic motive

6 horn/cor

Beethoven motive

vln

22 strings

33 brass

hm

up

vln

The opening 'cello statement, bars 1-5, emphasises both the whole-tone and pentatonic nature of the source, or perhaps more accurately, the whole-tone element within the pentatonic, stating the rhythm as simply as possible. In formal terms this 'cello line fulfils an ambiguous role as both the precursor to the rather more emphatic woodwind statement of bar 6, and the first true development of the hymn source. In terms of the conceptual goal of the movement as a thorough and gradual process from beginning to end, the latter view would seem to be the most analytically satisfying, but since the programme stresses a half-remembered, distant quality to the use of melody, an

equivocal interpretation remains appropriate; part introduction, part development. The stronger horn/cor anglais entry of bars 6-20 introduces the anacrusic rhythm of the Beethoven motive, initially on the last quaver of bar 6, bringing forward the stressed beat of the phrase to the second crotchet of bar 7. The metrical ambiguity created by the odd placement of the motive is then further exploited as a factor in the gradual move to chaos at the end of the movement: in the woodwind and string statements of the tune, the stresses of the anacrusic motive fall either on beats two (bars 7,11,23) or three (bars 17,25), whilst in the final brass version the fourth (bar 37) and first (bar 40) beats are emphasised. The durations of the motive itself are also altered, as demonstrated in the triplet crotchet and quaver values of bar 36.

The first major chromatic deviation to the course of the melody occurs in bars 15 and 16, the first three notes of the pentatonic motive transposed up a semitone to the pitches A-B-A. The use of this transposition is then also demonstrated in bar 19, the pitches Ab-Bb-Ab-F shifting briefly to A-B-A-F#.

Following a transposition of the entire tune by a minor third in bar 22, the rhythmic aspects of the continuing move to fragmentation and chaos become more evident. The triplet crotchets and tied values of bar 27 and the triplet quaver of bar 29 blur the source melody without explicit development, the metrical grouping of the original remaining constant. A pitch alien to the transposed tune, D natural, is also introduced in bar 25, as the flattened seventh, adding a modal quality, and highlighting key ambiguities that will be analysed under harmonic considerations.

Bar 33 introduces the final stage of melodic development, initially in the horn. Since the strong sense of a single most important melodic line disappears at this point, and the trumpet is given the loudest dynamic marking once it enters, this part is the one examined in the melodic development illustration. Following a chromatic ascent, bars 34/35, a stream of source related figures emerges, rhythms slightly altered and accents shifted, finally distracting attention from any primary melodic strand. A final ascent leads to the twelve-note chord, and this in turn is followed by the last incarnation of the falling major third motive, G#-E, in violin I.

### Key Ambiguity

Through a lack of chromatic additions, the period of extended transposition of the melody between bars 22 and 30, in isolation, strongly implies the key of E major with an added D natural. The pedal point of C# remains throughout, however, denying any sense of a proper tonal shift to E as a new key. In common with the ambiguous formal nature of the opening 'cello statement, two tonal readings of these bars are possible, again determined by the dynamic balance between melody and accompaniment. The



continuing pedal point of C# could place the E natural of bar 23 as the third degree of a minor triad, the G# as fifth. Alternatively, the memory of the falling major third motive (motive 2) as tonicising the lower pitch could imply a shift to E major, albeit with a low level background drone. The inclusion of the D natural fits both hypotheses on a modal level, as a simple modal extension of E major or as the second degree of a Phrygian mode on C#, but contradicts both on a diatonic level, as, respectively, b7 and bII scale degrees. Once again, it is the tension generated by the uncertainty that is more important than the relative merits of each argument, the entire section functioning as a link between the conventionally harmonised opening and the chromatic conclusion.

Following the brief horn phrase of bar 33, that melodically implies F major, and is indeed supported by F based harmony, harmonic implications in melody lines become less clear, or important, as the level of chromaticism increases.

## Harmony

The harmonic implications of a melody, important as they are in a work comprising so many linear strands, obviously function in relation to an accompaniment, either affirming or contradicting its content or direction. The simplicity of the melodic source material, and its first clear statement in the woodwind (bar 6), is reflected in the hymnodic style of the bassoon, piano left-hand, 'cello, and bass accompaniment, as demonstrated in the following reduction. The style is presumably one that would have been second nature to Ives as a church organist, and as such, demonstrates a directly functional approach to the harmony. As with so many other features of the work, however, the importance of such a standard harmonisation lies in the way that it gradually diminishes in function as the work progresses:



Ex. 5.4.4 Harmonic reduction

1 A

9 (subset of major scale set)

16 C

D E

27 3 3

F G

(Harmony ceases to support the melody from this point)

Loss of harmonic support

As with many of the processes at work within the movement, the decrease in harmonic support for the melody is perceived as a very gradual effect whilst being

quantifiable as a set of discrete steps that follow the changes in instrumentation. The loss of harmonic stability traces a pattern from diatonic to bitonal/modal to chromatic writing, the unequivocal harmonisation of bars 1-12 setting a tonal standard to which later developments must refer. The first alteration (bars 22-33) is therefore to keep the internal consistency of the melody and accompaniment, whilst placing them in tonal conflict, the upper line ambiguously placed between a modal E major and a Phrygian C#, the lower remaining on C#. Examination of the viola scoring in particular demonstrates both a reinforcing of the E major quality of the melody and an addition to the C# pedal, interspersed with chromatic shifts to chords on D, and ninths on C, redolent of the ninth chords of the opening bars and the semitonal melodic shifts of bars 15 and 16:

Ex. 5.4.5 Viola bar 22

The image shows a musical score for two violas, labeled I and II. Staff I begins with a box containing the number 22 and the word 'violas'. The staff contains several measures of music with various accidentals (sharps and naturals). A box labeled 25 is placed over a measure on staff I, which contains a D chord. Staff II also contains several measures of music. A box labeled C9 is placed over a measure on staff II. A 'D' chord is also indicated on staff II. The word 'etc.' is written between the two staves. The notation includes various accidentals and a 'etc.' label.

The eventual loss of strong harmonic support is precipitated in bar 32 by the cessation of the pedal point, a tritone step to G in the bass removing any obvious tonal link with the final section. The following bar of F based harmony, and the horn melodic fragment, show a last token relationship between tune and accompaniment but implying a far-removed key area from the original C# pedal. The final separation of melody and accompaniment is accomplished from bar 39 onwards where the glissandi of the double basses indicate a purely textural role, albeit moving between C# and D#, the pitches of the opening 'cello motive.

## Texture

Ives' intentions as to the programmatic function of the chromatic textural lines are displayed in a footnote to the song version of *The Housatonic at Stockbridge*:

"... it was intended that the upper strings, muted, be listened to separately or subconsciously - as a kind of distant background of mists seen through the trees or over a river valley - their parts bearing little or no relation to the tonality, etc. of the tune..."<sup>3</sup>

The following illustration separates this “background” into its constituent parts and describes the internal organisation of each:

Ex. 5.4.6a Textural lines bar 1-20 (in order of increasing rhythmic speed)

1 viola

etc.

melodic period

rhythmic period

[4-1] 0,1,2,3

Ex. 5.4.6b

1 violin II and III

etc.

Staffed notes indicate rhythmic groupings - predominantly from whole-tone scale on C#

Major third pairings also often from W-T on C#

(Not shown) Adherence to W-T scale before melodic chromaticism of bars 12-15

(Not shown) Increase in chromaticism bar 18 onwards

etc.

Ex. 5.4.6c

1 violin IV

etc.

(complex organisation that becomes more more chromatic as it continues)

etc.

whole-tone sequence

predominant shape [4-1] 0,1,2,3



Ex. 5.4.6d

1 violin I

etc.

etc.

whole-tone on C#

Ex. 5.4.7a Textural lines bar 21 onwards (in order of increasing rhythmic speed)

21 flute

etc.

[4-11] 0,1,3,5

subset of major-scale set

gradually adds these pitches, giving all pitches between F and D

Ex. 5.4.7b

21 piano right-hand

etc.

[6-1](12) 0,1,2,3,4,5

Ex. 5.4.7c

21 oboe/clarinet

etc.

5

[7-1] 0,1,2,3,4,5,6

Ex. 5.4.7d

21 piano left-hand

[6-33] 0,2,3,5,7,9  
(C# maj/min scale excerpt + b7)

The single most noticeable feature of the strands is that they all employ different methods of construction whilst avoiding any hint of the tonality/pentatonicism of the melody that they surround. This complementary relationship of accompaniment to melody, and accompaniment line to accompaniment line, can be tabulated as follows:

Ex. 5.4.8 Text table

Melody	'Cello	Tonal/pentatonic
Accompaniment	Viola	Chromatic, repetitive
	Violin II	Predominantly whole-tone
	Violin IV	Short chromatic motive under whole-tone transposition
	Violin I	Larger chromatic pattern under more rigorous whole-tone transposition

Each line submits to a different method of construction, both melodically and rhythmically, to provide a dense but controlled chromatic coverage. If any sense of progression or development is apparent, it belongs to the addition of notes alien to the scheme of a particular strand, as seen in bar 18 of violin II/III onwards, and the increasing complexity of violin IV with its multitude of organisational axes. Pitch-class analysis reveals that the chromatically organised lines belong predominantly to the simplest set of a particular cardinal number (eg. 4-1, 6-1). The previous illustration demonstrates this technique, particularly in the viola and violin IV parts.

With the transfer of the melody to the strings in bars 21-32, the textural lines are taken up by the woodwind and piano/celeste. The role of each line as an independent entity remains. The piano right-hand and oboe/clarinet become the purely chromatic elements of the texture, and display the use of larger sets than violin I, violin IV, and viola of bars 1-20; sets (6-1) and (7-1) respectively - again the simplest sets of the

cardinal number. The flute and piano left-hand, conversely, show a move to a more diatonic organisation, employing subsets of major and major/minor scale patterns. In the light of the earlier complementary relationship between melody and accompaniment, this shift to a simpler diatonic method balances the increase in the complexity of the string melody to a quasi-modal standing. The relationship between strata can again be tabulated, indicating the continued use of separate means of proliferation in each part:

Ex. 5.4.9 Text table

Melody	Strings	Diatonic/modal
Accompaniment	Flute	Scale fragments with increasing chromaticism
	Piano right-hand	Six-note chromatic motive
	Oboe/clarinet	Seven-note chromatic motive
	Piano left-hand	C# maj/min scale fragment

Control of dissonance

Having seen that all the textural lines until bar 32 are independently organised, the progression in all parts, noted earlier, towards a greater dissonance, must be accounted for. Within the first twenty bars only two of the textural lines can be said to develop - violin II and III. (Viola and violin I repeat a set pattern and transpose a fixed motive, respectively.) Their metamorphosis to a greater chromaticism, and the use of whole-tone intervals, would seem unlikely to have a marked effect on the overall level of dissonance, given the surrounding parts. If this is indeed the case, then the second set of textural lines, bars 21-30, perhaps share the same properties: the gradual increase in tension generated by other means. The main characteristic of these later textural strata is the use of larger pitch sets, but still in the simplest orderings. In practical terms this implies that each set or bar encompasses a larger portion of the chromatic scale. A progression has therefore occurred in the number of pitches present within a single bar, but again development in a linear sense is limited, the flute conspicuous in adding fresh pitches to its initial set. The quasi-diatonic piano/celeste adds a new dimension with its arpeggiated major/minor figure, and this is probably the largest change to be registered thus far - to become effectively dissonant in chromatic surroundings seemingly requiring reference to a consonant major or minor background.



Final melodic section

As the movement accelerates from bar 33 onwards to the twelve-note chord, the function of each instrument group changes more rapidly, in a move towards fusing melody, harmony, and texture into a single chaotic formation. Although the brass appear to accept the principal melodic role, as the last to do so, it is perhaps more accurate to say that they express source-related motives more forcefully than the woodwind and strings, but are moving in the same direction to chromaticism and ambiguity of function.

Despite the extreme density of texture, instrument groupings remain in place initially, demarcation disappearing only in the closing bars. As earlier, each orchestral section appears guided by its own means of organisation, and these are described below:

Ex. 5.4.10a Text table bars 34-38

Woodwind	Principally, small pitch-sets in close grouping
Brass	Chromatic ascent to motive-laden melody - bass line in tuba
Piano	Amalgamation of other parts
Upper strings	Small pitch-sets similar to woodwind
Lower strings	Emphatic motivic chromatic lines

Ex. 5.4.10b Text table bars 39-41

Flute	Chromatic melody with embellishments
Clarinet	Whole-tone scalic, alternating both hexachords
Oboe	Whole-tone scalic progressing to semitonal movement
Brass	As before, rhythms becoming more complex
Piano	Amalgamation plus extra motivic references
Upper strings	Whole-tone scalic at a distance of a fourth
Lower strings	Glissando between C# and D#

## Metrical clarity

Whilst layering so many different independent lines, Ives increases the overall metrical clarity from bar 39 onwards. The crotchet division of each bar becomes clearer, and there is more conjunct movement between instruments. In the same way that the level of dissonance is carefully contoured towards the twelve-note climax, this rhythmic clarification is an important step towards the tutti chords of bar 42, the first time that the entire orchestra plays simultaneously.

## Fusion

The merging of melody and accompaniment is demonstrated in the closing section of the movement by part-writing that presents elements of both the source tune motives and the chromatic, textural pitch-sets simultaneously.

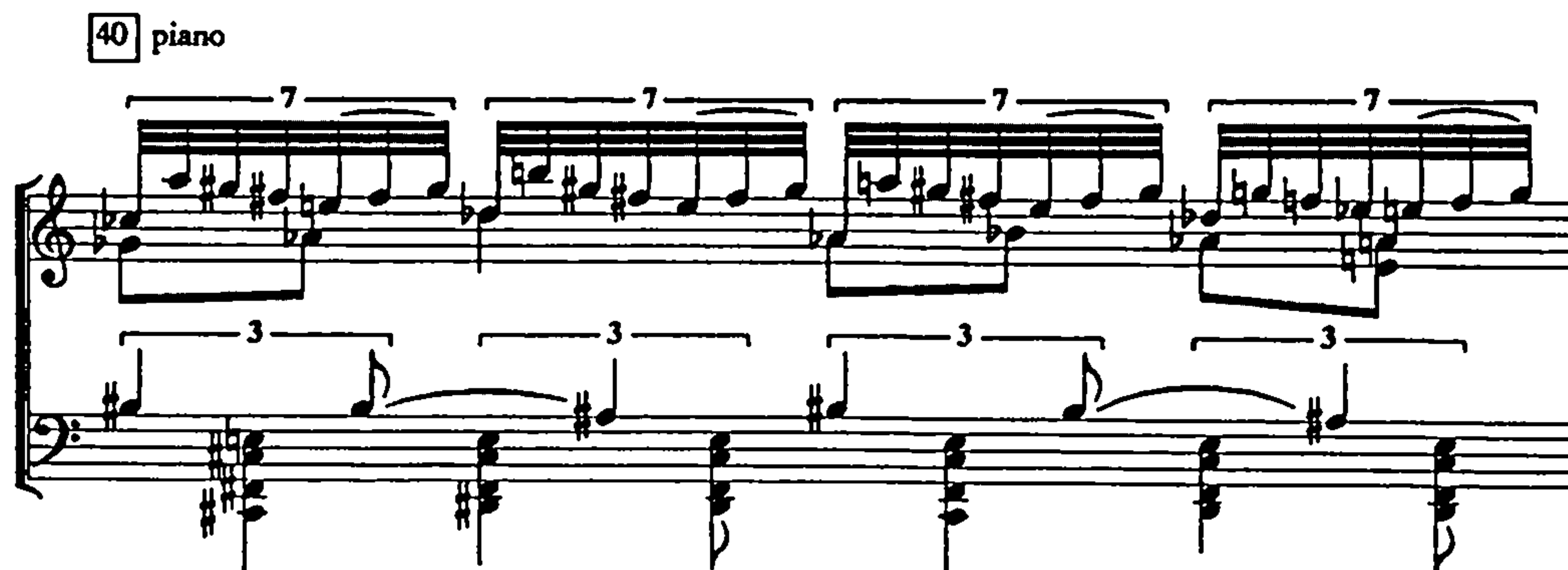
e.g. double bass and organ pedal combine the whole-tone opening statement with textural glissandi:

Ex. 5.4.11



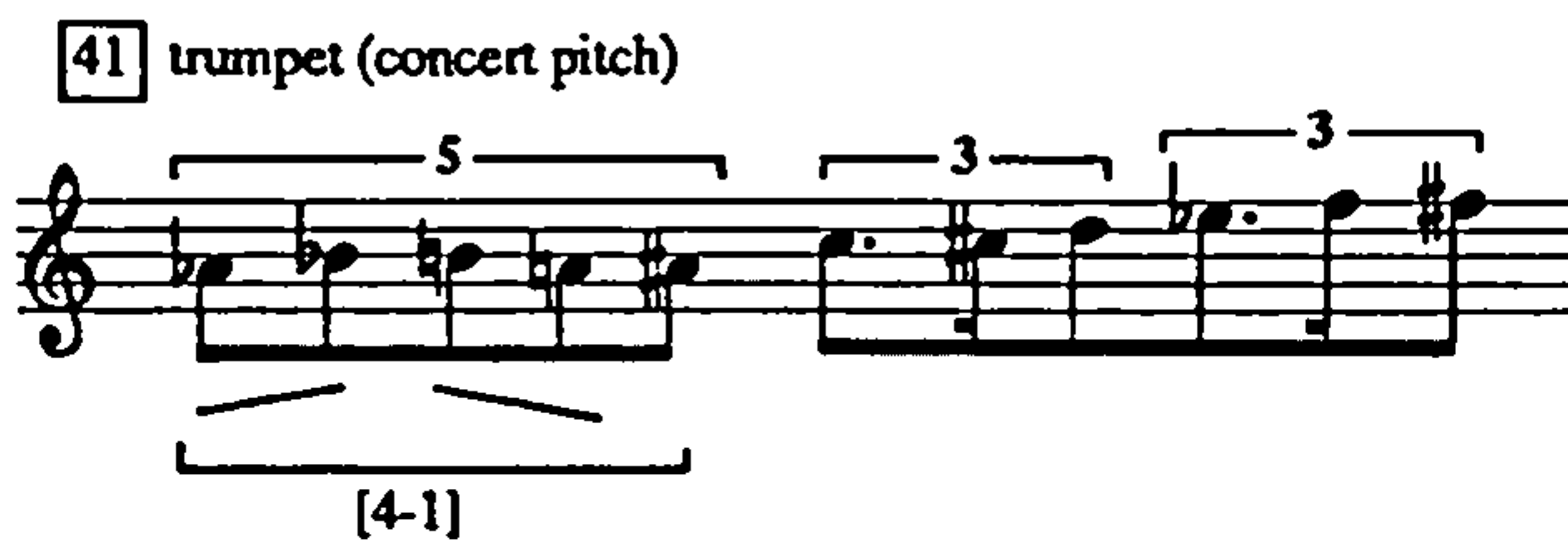
e.g. piano left-hand features the whole-tone motive, whilst the right combines the pentatonic motive with scalar runs:

Ex. 5.4.12



eg. trumpet fuses the up-down contour of the pentatonic motive and its early semitonal transposition, with pitch-set (4-1):

Ex. 5.4.13



## Coda

More afterthought than coda, the last two bars of the piece revert to the strictly hymnodic flavour of the source tune, in a plagal I-IV gesture:

Ex. 5.4.14 Orchestral reduction

[43] orchestral reduction

The seventh and ninth degrees of the final subdominant chord lend further instability (and parody) to the conclusion, the ninth also balancing the opening five bars and its melodic use by the 'cello. The falling major third, G#-E, in violin II is the final, and simplest, statement of the Beethoven motive, neither tonicising the E, nor leaving it as the third degree of a conclusive C# chord.

## Overview

Through the use of a small section of a single source tune, and the simple pitch sets that accompany it, the basic compositional materials of *The Housatonic at Stockbridge*



may be said to be minimal. It is the “process” nature of the form, however, that brings the movement closest to being Minimalist in the contemporary sense. In the place of a structure based on the relation of contrasting themes, and their recapitulation, Ives forces opposing modes of organisation to a symbiosis, and directs the gradual obscuring of a single diatonic source-tune towards a single twelve-note chord - the logical outcome of a progression to greater perceived chromaticism and the use of dense pitch-class sets throughout the work.

Control of dissonance is achieved through the balancing of organisational techniques in melody, harmony, and textural lines. Certain combinations of procedures appear harsher than others, almost regardless of the pitches employed, and the composer therefore exploits key clashes even in distinctly atonal contexts. The course of the movement in these terms is mapped below:

Ex. 5.4.15 Text table

Bars 1-21	Bars 22-32	Bars 33-end
Diatonic melody	Modal melody	Chromatic melody
Semitonal textures	Semitonal and key-clash textures	Semitone and whole-tone textures
Tonal accompaniment	Conflicting key accompaniment	Accompaniment disappears
Key: C#	Key: C#/E	Atonal

The density of orchestration is also carefully controlled, moving from pianissimo string writing to full orchestra, the level of dissonance often a function of the number of independent lines present and their timbral homogeneity or heterogeneity:

Ex. 5.4.16 Text table

	Bars 1-21	Bars 22-32	Bars 33-end
Texture:	Homogeneous strings	Heterogeneous woodwind	Full orchestra
Melody:	Soft hom/cor anglais	Full strings	Full brass

The psychoacoustics of relative melody and accompaniment dynamics influences the move to apparent chaos in the bars immediately preceding the total-chromatic chord. Ives seems instinctively to have understood the power of a harmonised tune to suppress surrounding chromaticism, and in moving the melody amongst several instruments in the closing bars, removes this perceptual support, leaving the listener susceptible to the plethora of competing voices.

<sup>1</sup>Ives, "Memos", p.87.

<sup>2</sup>The term *development* used here in the broadest sense of change and restructuring ie. the move to entropy as well as order; the melodic development of Ives often obscuring and mutating, rather than clarifying and simplifying.

<sup>3</sup>*The Housatonic at Stockbridge*, No.15, "114 Songs By Charles E. Ives", 1954, Peer International Corporation.

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# CHAPTER SIX

## FOURTH SYMPHONY

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*"So, as I look back, I seem to have worked with more natural freedom, when I knew the music was not going to be inflicted on others. And this is probably one of the reasons that, not until I got to work on the Fourth Symphony, did I feel justified in writing quite as I wanted to..."*

Charles E. Ives<sup>1</sup>

### Introduction

According to a description supplied by Ives for an early performance, the Prelude to the *Fourth Symphony* was designed to evoke "...the searching questions of What? and Why? which the spirit of man asks of life."<sup>2</sup> The successive movements are posited as musical answers to these questions and, from a biographical perspective, reflect the three philosophical states that Ives seems to have personally striven to embody and unify. The second movement is designated not a scherzo but, rather confusingly, a "comedy"<sup>3</sup>, representing a subjective, human response. The third is an extended fugue, as a scholarly attempt at rationality, objectivity and clarity, whilst the final movement is a spiritual statement that perhaps brings the listener closer than any of the other works to a musical appreciation of Ives' personal blend of Transcendentalism and more orthodox Christian religious belief. The stylistic and motivational differences between the movements seem initially, therefore, to defy any sense of symphonic through-composition, but hold out the possibility that any consistent features will offer further insight into a fundamental analytical model of Ives' mature, more experimental composition.

The second and fourth movements, in particular, are often seen as cornucopia containing many of this century's most radical technical developments, hidden under layers of Yankee melody and dense orchestration. To extract these novelties in isolation is, however, to continue the trend of comparing Ives' innovations only to those of European composers of the same period, particularly Schoenberg with regard to dodecaphony, Stravinsky with rhythm, and Debussy with orchestral colour. As with all



the orchestral works, but particularly the *Fourth Symphony*, more sense seems to be made of Ives' music through the elucidation of the internal relationships within the score, judging original features with regard to their integration with existing techniques, rather than isolating and dissecting them from an external or historical perspective.

Use is made in this chapter of linear reductive graphs to describe foreground and background structures. Although the technique is usually applied to tonal or modified-tonal music its use is extended to allow chromatic, whole-tone and quasi-tonal patterns to emerge, often demonstrating that different scales/sets control different reductive levels. This represents a change from the usual tonal reduction outcome of similar patterns within similar patterns, and helps to resolve the long-standing debate as to whether Ives was fundamentally an atonal revolutionary or a tonal reactionary. The use of linear reduction also helps assess the continuity of the movements as a sequence, and the integration of the constituent source-works within each of the movements. One area of investigation is therefore the success or otherwise of the symphony as a musical whole constructed from four apparently disparate works.

A notable absence from the chapter is a section on the fugal third movement. In an analysis primarily concerned with the interaction of background levels, and the use of scales and sets, a digression into Ives' fugal technique has been covered by the study of the *Third Symphony*. This decision is mitigated by the fact that the third movement was the last to be composed, and therefore lends little or nothing to the investigation of the final movement as a resolution or "answer" to the preceding movements.

<sup>1</sup>Ives, "Memos", p.129.

<sup>2</sup>From a programme note description given to the writer Henry Bellamann for a 1927 performance of the Prelude and Comedy (second) movement.

<sup>3</sup>Ibid.

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## FOURTH SYMPHONY

### PRELUDE

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#### Introduction

Despite its brevity and relative clarity, the Prelude contains a large number of complex interacting elements: the use of a number of styles and constructional methods appears to be a genuine attempt at posing as many musical questions as possible within the limited time span, in accordance with the programmatic intent. The opening bars are therefore suitably portentous, incorporating a unison melodic line that is not only Beethovenian in dramatic impact, but also characteristic in containing the germinal motivic source of the movement.

The larger structure of the Prelude is based upon a series of tonal centres that are linked by the interval of a third. These centres gradually add pitches from the set of the “tonic” major scale, until the movement becomes essentially pandiatonic (complete scale set). In addition to this constant rotation of the entire major-scale collection, emphasis on certain members creates a plagal or dominant-tonic motion in the background harmonic scheme from D to G roots, reminiscent of the first movement of the *Third Symphony* and the anticlimactic conclusion to *The Housatonic at Stockbridge* from *Three Places in New England*.

#### General scheme

In common with many of the large orchestral works, the instrumental groups in the Prelude are used virtually independently, the orchestration delineating layers of dynamically contrasting strata that remain more or less fixed in intensity throughout their course. Of least importance, or rather, of least volume, are the harp and two solo violins that phase slowly oscillating diads and triads through the majority of the movement to create a consistent background “halo” texture. Next in intensity come the solo instruments of viola, flute and celeste that contribute motivically-related ideas and density to the scoring. In the middle of this stratification come the brass and



percussion, often used to double existing lines, and at the forefront of the texture and argument are the orchestral piano, strings and voices.

The movement opens with the motivic gesture, accompanied by a trumpet fanfare, and diminishes quickly to the background texture of harp and solo violins that incorporates the hymn tune *Bethany*. The first explicit melodic statement occurs in the solo 'cello bar 2.1<sup>1</sup>, with a modified rendering of *In the Sweet Bye and Bye* that gradually mutates to a purely chromatic basis. Extra instruments are then added and the dynamic swells towards the introduction of the vocal chorus. At the entry of the most prominently used hymn tune, *Watchman* (bar 4.1), sung in only slightly modified form, the remaining instruments (except for the brass) also join in, to launch the first climax of the movement. On the repeat, or second verse, of *Watchman* (bar 7.1) the complexity and dynamic of the orchestration reach a peak with the addition of the brass to complete the instrumentation. After a shortened presentation of the hymn the texture then thins and the background harp and solo violins become discontinuous, occurring in the gap between vocal stanzas (bars 8.2). The movement concludes with a sustained string chord and a final simplified rendering of the background “halo”.

### Motiv(ation)

Many accounts of the movement proudly state that the violin melody of bar 0.2 is an inversion of the opening 'cello line of bar 0.1, as though even isolated examples of motivic working demonstrate Ives' compositional competence. This attitude is not only misplaced but also inaccurate since further investigation demonstrates that the whole movement is in fact motivated by these opening bars. Although the second bar is an inversion of the first, it is the second that is the “borrowed” theme, familiar from the *First Piano Sonata* and *First Violin Sonata*. Its match with the last three notes of the first trumpet “question” from *The Unanswered Question* is also worth noting. This “prime” motive<sup>2</sup> resembles and modifies a certain famous Beethoven falling major third motive, adding a minor third and semitone to the interval set:

Ex. 6.2.1 Violin I bar 0.2





Viewed as a tonal device, the motive set thus encapsulates a major/minor conflict and the chromaticism of that frisson. If the upper pitches (here F and E) are interpreted as major and minor third scale degrees then the lower pitch (C#) becomes a form of tonic; bar 0.1 reinforces this interpretation, justifying in quasi-tonal terms what would otherwise be an extremely chromatic opening statement, with the Eb functioning as a chromatic flattened second degree to an implied, and later real, “tonic” D:

Ex. 6.2.2 ‘Cellos and basses bar 0.1a

0.1a

ff

maj. 3rd

semitone

semitone

min. 3rd

min. 3rd

This interpretation of the first half of bar 0.1 is confirmed by the equivalent motivic nature of the second half. The F natural that functioned as the minor third degree of a D root here becomes the major third of a Db root, with an enharmonic E natural as the minor third element of the motivic collection:

Ex. 6.2.3 ‘Cellos and basses bar 0.1b

0.1b

semitone

semitone

tone

3

min. 3rd

maj. 3rd

The interval content of this second formation is enlarged to include the whole tone between Eb and Db, the former pitch becoming the major second degree of a scale on the latter. The whole of bar 0.1 thus contains a chromatic collection spanning F# to Db, divisible as two motive-derived halves (pivoting around F natural) that emphasise roots a semitone apart, D and Db, and place the only repeated pitch, Eb, as minor and major second scale degrees of these nominal roots:

Ex. 6.2.4 ‘Cellos and basses bar 0.1

The two roots and their motives are combined simultaneously in bar 0.2, the violin 1 “prime” form emphasising an enharmonic C# root whilst the trumpet employs a version of the figure, on D, as part of a fanfare. This meeting of chromatically related motives also extends to the second half of the bar, as the same instruments form incomplete patterns that reflect potential roots on F# and G:

Ex. 6.2.5 Trumpet (concert pitch) and violin I bar 0.2

Following the introduction of the background texture at bar 1.1, the bass instruments continue with a motive-derived passage in bar 1.2. In addition to inverting the “prime” form, the unison line begins to condense and overlap the patterns in a stretto-like acceleration:

Ex. 6.2.6 ‘Cellos and basses bar 1.2

Having manipulated the motive on an almost exclusively melodic basis in the opening bars, Ives begins to expand its remit to include control of harmonic aspects of the movement. The phasing piano right-hand figuration of bar 2.1 onwards exploits the F#/F conflict of the opening bars in conjunction with an increasingly solid D pedal to create part of an unstable major/minor harmonic texture:

Ex. 6.2.7 Piano bar 2.1



The harmonic conflict between major and minor is further emphasised by the insistent E# of the flute from bar 2.6 onwards and the oscillation of the 'cello melody between F# and E# as it mutates to a chromatic basis in bar 2.8 in a phrase reminiscent of the early elliptical pattern of bar 1.2:

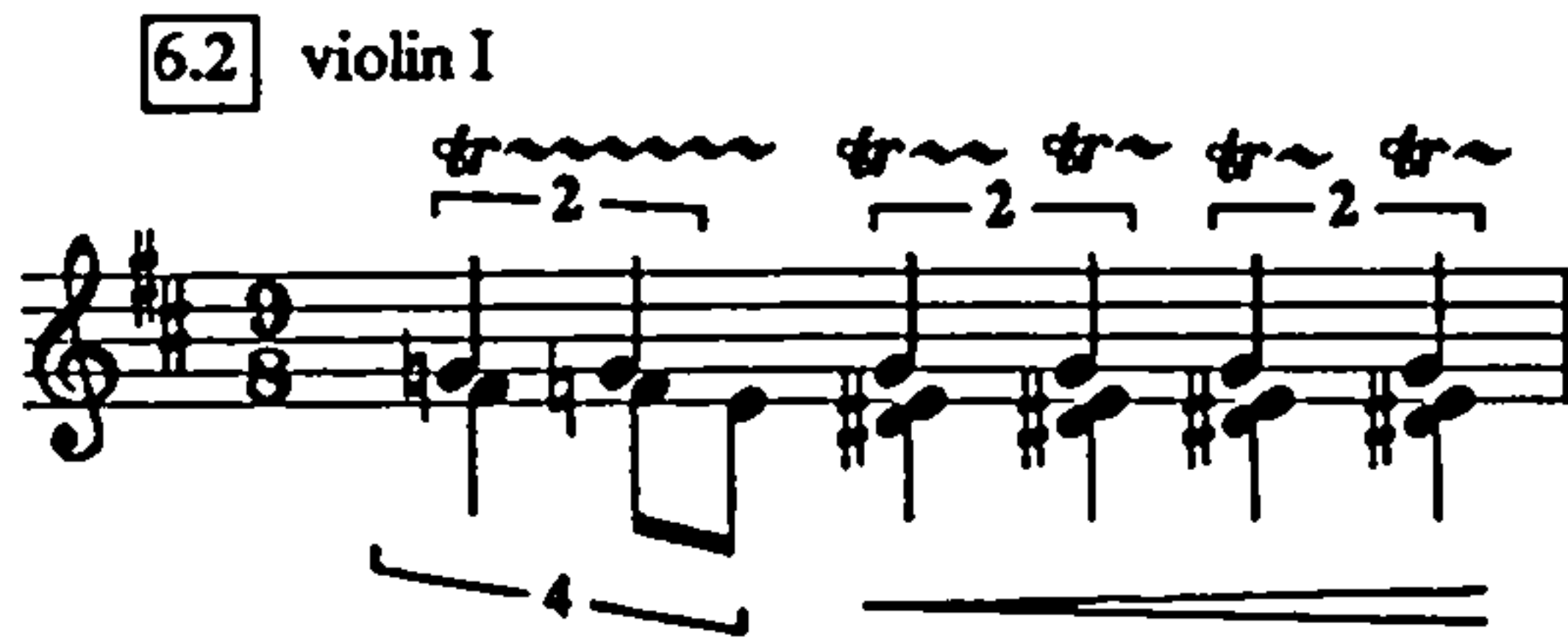
Ex. 6.2.8 Violin/'cello bar 2.7



As the texture solidifies at bar 4.1 with the introduction of the chorus, the role of the motive remains fixed as the provider of major/minor tension, particularly in the solo viola line that rhythmically modifies the piano statement of bar 2.1. The dissonant E# also arises in the context of an E9 sonority (bar 4.4) as a flattened second degree, the dissonance first employed at the very opening of the movement. Before the reiteration of the vocal melody, however, a final transformation of the motive to an exclusively harmonic device occurs in the violins. At bar 6.2 a chromatically derived “wedge” formation arrives at a vertical presentation of the motive set:

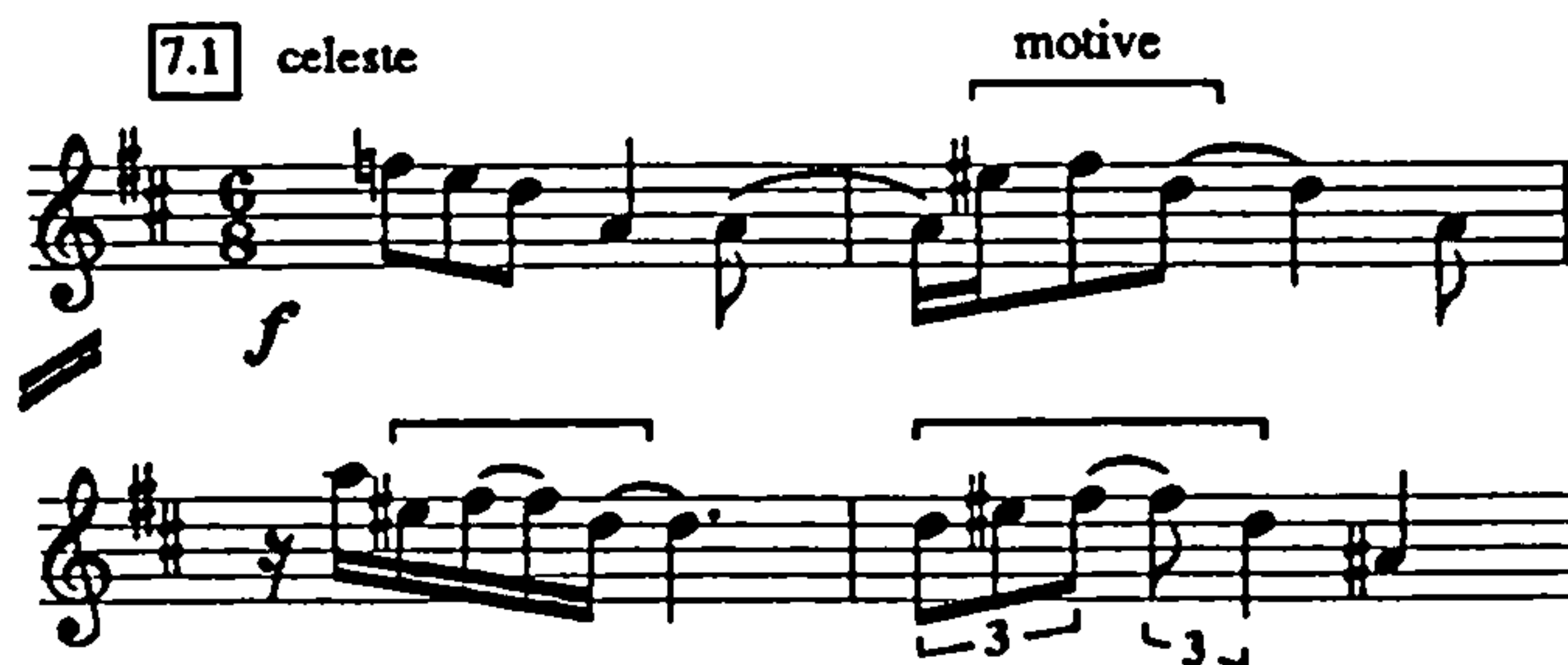


## Ex. 6.2.9 Violin I bar 6.2



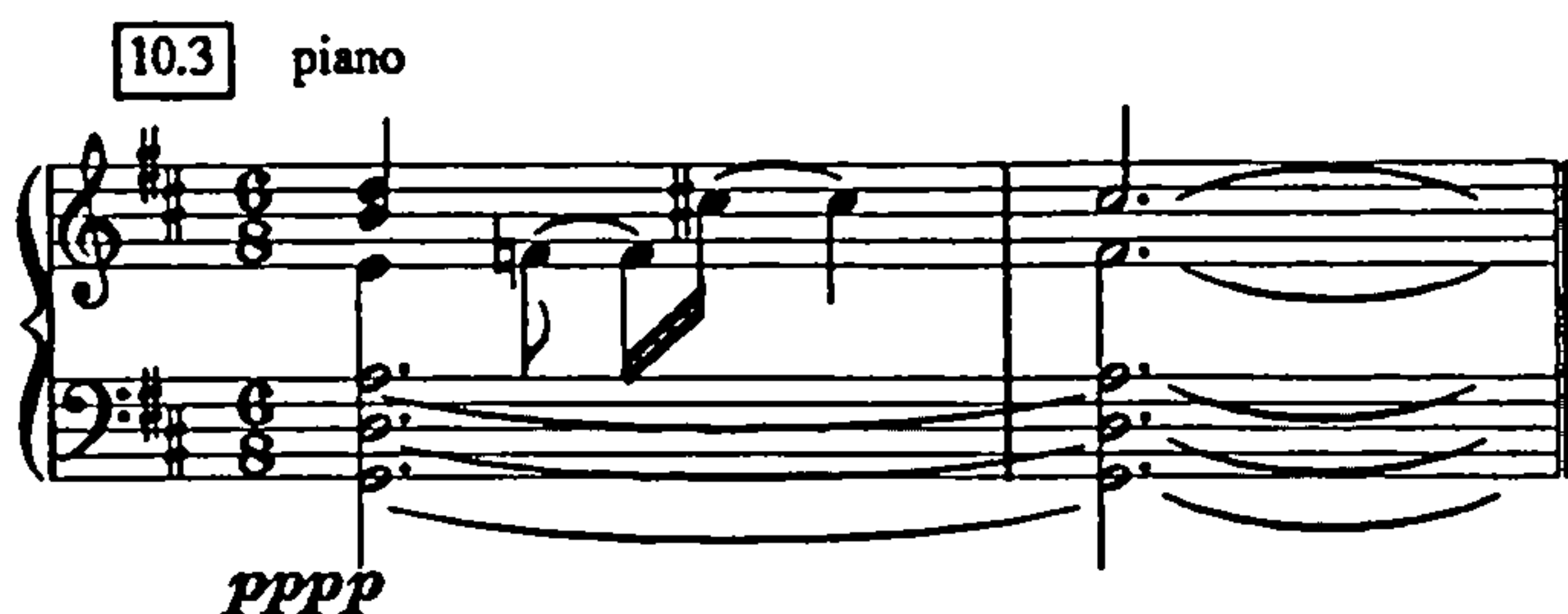
Within the borrowed source material, the motive also acts as modifier; one example occurring when the *Westminster* toll of the celeste, bar 7.1 onwards, becomes chromatically altered to resemble the set:

## Ex. 6.2.10 Celeste bar 7.1



The most prominent meeting of source melody and motive occurs, however, at the end of the movement. The main source melody, *Watchman*, concludes with an explicit inversion of the motive shape in the piano and celeste, bar 10.3, the melodic line rising to a dissonant F and C#, thus demonstrating a return to the form of the motive seen bar 0.2:

## Ex. 6.2.11 Piano bar 10.3



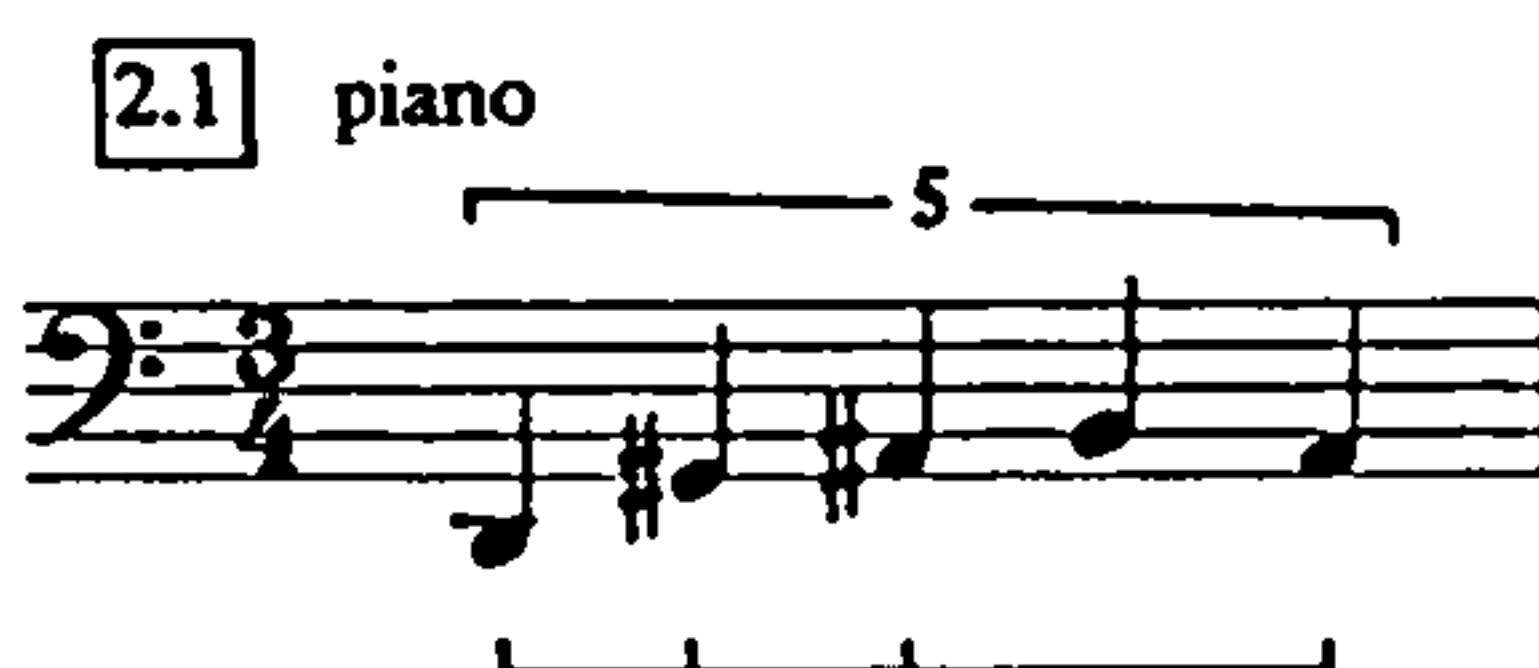
## Resultant scale types

With the dual interpretation of the Eb of bar 0.1 as both major and minor second scale degree, when the motive is employed in a quasi-tonal manner, comes the creation and use of chromatic and whole-tone scales: the motive naturally lends itself to chromatic and minor third (diminished) extension through repetition of the central intervals, but as in so many of the large orchestral works, Ives treats the diminished or octatonic element as the combination of chromatic and whole-tone scales. Characteristically, the different scale types are assigned to independent instrumental strata to be developed more or less in isolation<sup>3</sup>, but in the Prelude these elements remain separate rather than moving towards the synthesis seen in other works. The movement therefore begins with fragments of the scales, as they develop from the motive-source:

Ex. 6.2.12a 'Cello bar 0.2



Ex. 6.2.12b Piano bar 2.1



The harmonic uncertainty generated by the combination of these scales is dispelled by the arrival of the *Watchman* hymn source at bar 4.1. In this passage, the manipulation of diatonic/modal material suppresses the use of other scale types, except in the instance of a vertical formation (bar 4.6) where both chromatic and whole-tone scales preface a prominent meeting of motive-derived major and minor thirds:

Ex. 6.2.13 Orchestral reduction bar 4.6

The image shows a musical score for bar 4.6. It features two staves: the top staff is for violin 1 (labeled 'vln 1') and the bottom staff is for double bass (labeled 'double bass'). Both staves are in the key of D major (two sharps). The violin part begins with a whole note chord (A, C, E♭, G♭) and then moves to a half note chord (B♭, (D♭)⁴, E, G). The double bass part begins with a whole note chord (A, C, E♭, G♭) and then moves to a half note chord (B♭, (D♭)⁴, E, G). The bar number '4.6' is in a box above the violin staff.

In this cadential chord, two diminished sets are combined to present seven of the eight pitches of a complete diminished/octatonic scale:

A      C      E $\flat$       G $\flat$

B $\flat$     (D $\flat$ )<sup>4</sup>    E      G

} = octatonic scale

The modal quality of the harmonisation makes pinpointing the exact function of the chord difficult, beyond its role as a dominant substitute. The diminished chord on A would have sufficed in this context, and the extra pitches can, therefore, be interpreted on a purely scalar basis or as a subdominant relation to the prevailing B pedal of the piano, emphasising the B minor/D bimodality of the double bass/piano accompaniment.

As indicated previously, the link between the motive and the chromatic scale is shown most clearly at bars 6.1 and 6.2. The fruition of the whole-tone derivation occurs, however, during the repetition of the *Watchman* theme (bar 7.4): the upward scale of this bar fulfils the whole-tone potential of the piano left-hand fragment of bar 2.1:

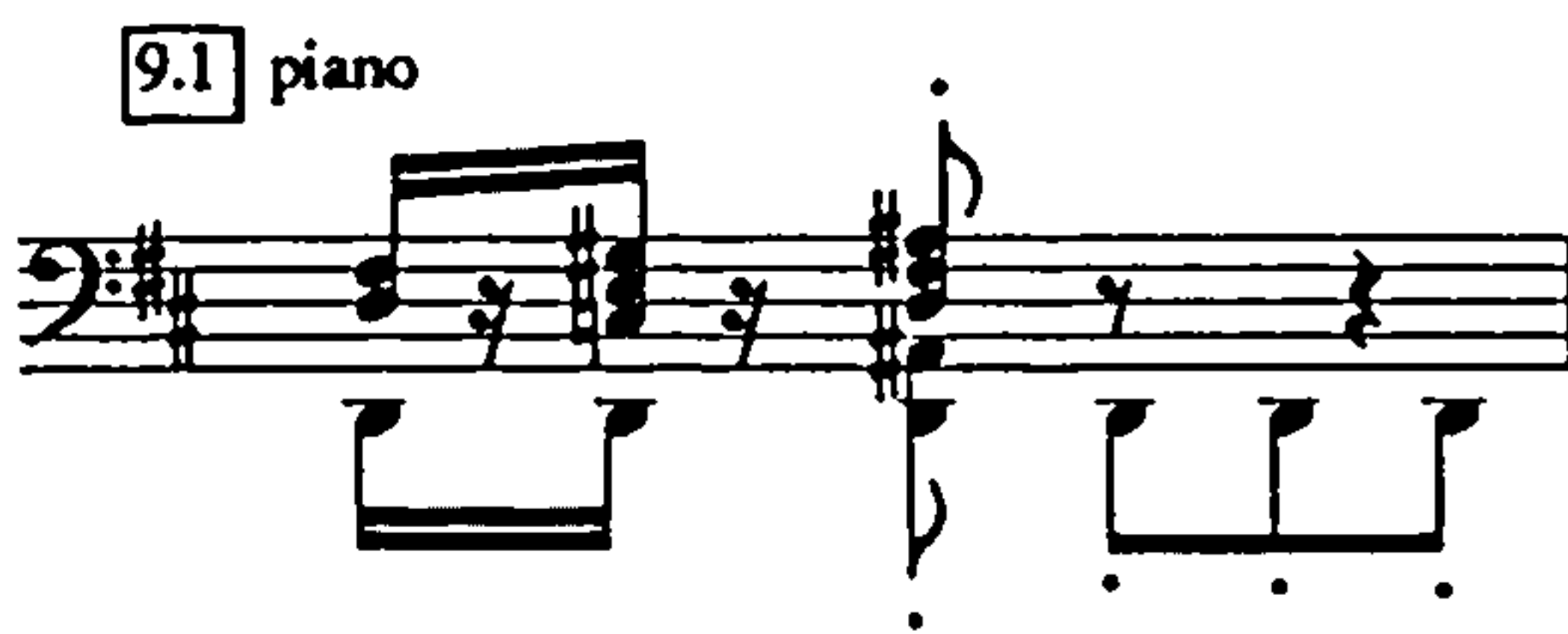
Ex.6.2.14 Piano/trombone bar 7.4

The image shows a musical score for bar 7.4. It features two staves: the top staff is for voices (labeled 'voices') and the bottom staff is for piano/trombone (labeled 'Piano/trombone'). The key signature is D major (two sharps). The voices part has the lyrics 'Is - ra - el' and a melodic line. The piano/trombone part has a melodic line with a fingering '5' above it. The bar number '7.4' is in a box above the voices staff.



The rising phrase stops short of the C natural achieved on the falling whole-tone scale of bar 4.6 that launched the diminished cadential chord, and the strings return immediately to a diatonic scale in downwards thirds at the beginning of the next passage (bar 8.1). This curtailing of the purely scalar use of the whole-tone collection and its abutting with major-scale harmony appears designed to preface the complete use of whole-tone harmony at bar 9.1. Here, the whole-tone intervals of the first three degrees of the major scale become the basis for a “wedge” formation that builds augmented chords:

Ex. 6.2.15 Piano bar 9.1



The gestural similarity between this whole-tone derived sequence and the chromatic pattern of bars 6.1 and 6.2 points to a conscious expansion of scales into harmony - single intervals duplicated and linked to form symmetrical or motive-derived chords. The appearance of these gestures is further highlighted, texturally, by the disappearance, at their occurrence, of the violin and harp background “wash” and a dramatic reduction in the density of orchestration.

### Harmonic implications of the motive

- Opening bars

The long range harmonic movement of the Prelude, from D to G roots, is prefigured in the opening four bars. As already seen, the motive has the potential to tonicise one of the members of its set, and in these bars the “tonics” of the various motive patterns prefigure the larger scheme of the movement. In the following diagram the beaming of the lower stave demonstrates this D to G middleground motion in the double basses, whilst the boxes on the upper stave enclose the stated and implied roots of the violin and trumpet motives, also emphasising the chromatic relations (C# and F#) to the D and G pitch centres:

Ex. 6.2.16 Motives bars 0.1-1.2

This musical score snippet shows three staves: violin 1 (vln 1), trumpet (trp), and double bass (dbl bass). A bracket above the staves indicates 'bar 0.2', and a bracket below indicates 'bars 0.1 - 1.2'. The violin 1 staff contains a melodic line with a trill in bar 0.2. The trumpet staff has a similar melodic line. The double bass staff features a chromatic descending line. Vertical boxes highlight specific intervals in the violin and trumpet parts.

The chromatic aspect of the motive is evident in the voice-leading of the bass line and the conflict between sets in bar 0.2. The first harmonic construction of bar 0.2 is derived, however, from the complementary third- and whole-tone interval vectors and can be understood as a stacking of motivic major and minor thirds or two Tristan sets a tone apart:<sup>5</sup>

Ex. 6.2.17 Orchestral reduction bar 0.2 first chord

This score shows a two-staff reduction of the first chord of bar 0.2. A box labeled '0.2' is in the top left. The top staff has a melodic line with a trill. The bottom staff shows a chord. An equals sign (=) is placed between the two staves. To the right, the text 'Tristan sets' is written above a diagram showing two sets of notes (F# and C#) with a plus sign (+) between them, indicating their combination.

The second chord of bar 0.2 reverts to a more chromatic derivation despite its A major/minor appearance, incorporating the pitches of the “prime” motive and the fifth-to-tritone contraction that will later become part of the background texture:

Ex. 6.2.18 Orchestral reduction bar 0.2 second chord

This score shows a two-staff reduction of the second chord of bar 0.2. A box labeled '0.2' is in the top left. The top staff has a melodic line with a trill. The bottom staff shows a chord. An equals sign (=) is placed between the two staves. Above the top staff, the text 'contraction' is written above a diagram showing two notes (F# and C#) with a plus sign (+) between them, indicating their combination. To the right, the text 'motive pitches' is written above a diagram showing a sequence of notes (F#, G#, A#, B, C, D, E, F#) with a plus sign (+) between them, indicating their combination.

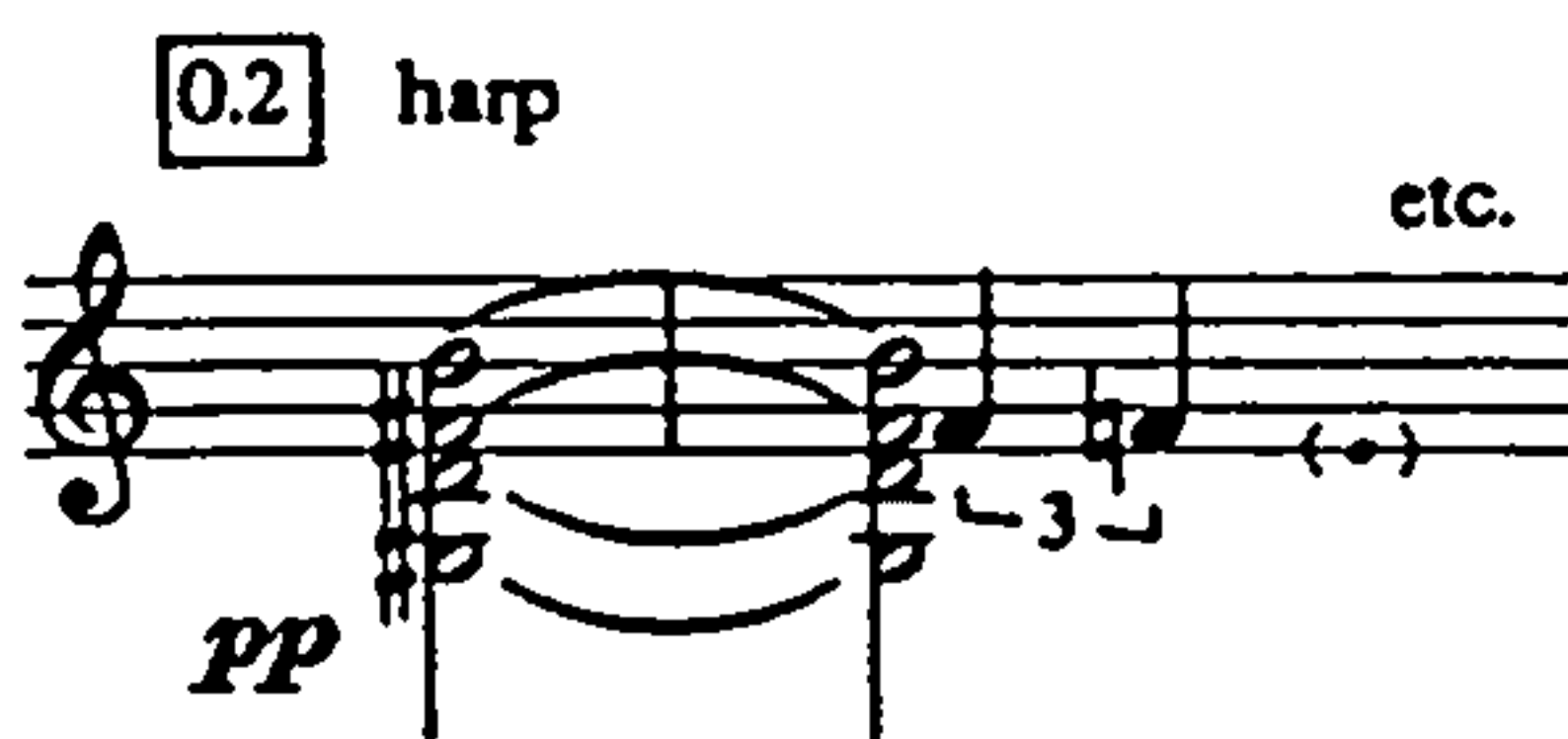


- Background texture

In those orchestral works that include a continuous accompanying texture, the relationship between stronger and weaker instrumental strata is usually a dissonant one: the background often designed to present the complementary set, within the total chromatic, to that of the foreground. The Prelude, however, deviates from this trend, utilising a background “halo” that originates directly from the motivic source of the movement, deriving its pitch classes, passing notes and harmonic content from the two bars that precede its entry.

On a superficial level, the constantly shifting major and minor third diads of the violin and upper harp lines reflect the major/minor ambiguity of the motive. In addition, the first lower harp chord comes transposed directly from the Tristan collection of the strings seen in bar 0.2, complete with the important F/E# motive-derived passing note:

Ex. 6.2.19 Harp bar 0.2



As the rotation of the background chords proceeds, the relationship of this Tristan chord to the surrounding material becomes apparent: on its repeat at bar 2.6 the G# root and E# passing note disappear<sup>6</sup>, leaving a B minor triad that echoes and supports the important piano pitches of the whole of fig. 2. The full chord of G#-D-F#-B can therefore be seen as related both to the Tristan formation of the opening string collection, and as an extension, by a third, of the pivotal B minor harmonic set of the piano. This duality of purpose between the functional harmonic use of chords and their simple melodic extension by major and minor thirds can therefore be seen as one of the “questions” posed by the movement.

The complete pitch collection of the background texture is also related to the second of the two opening string chords of bar 0.2. In this chord, major and minor triads on A are layered, translating directly into the A major scale with added minor third degree of the solo violins and harp in the following bar. Even the passing notes originate from this bar; the A#-B against E solo violin movement of bar 1.1 a reversal of the Cb-Bb against E violin I/II formation of the previous bar:



Ex. 6.2.20 Two solo violins bar 0.2



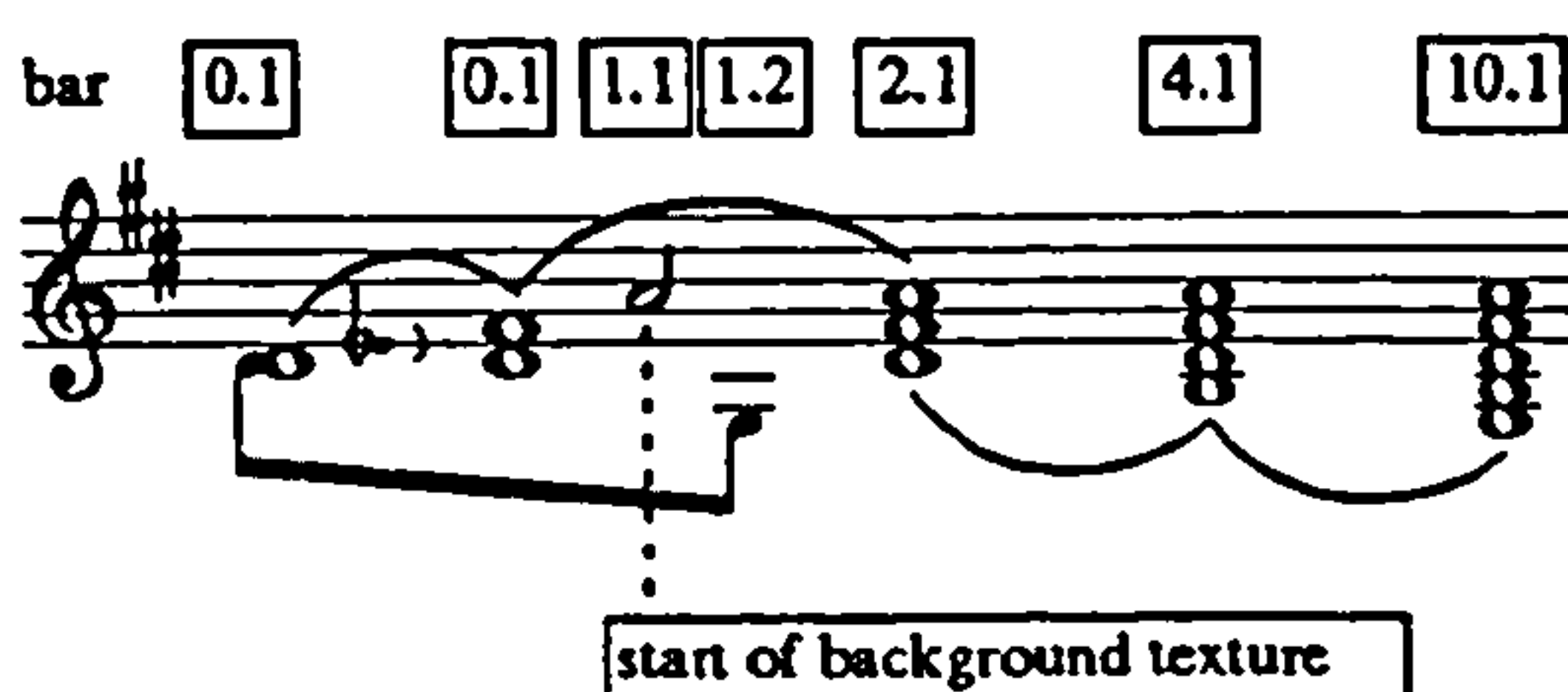
On a short term harmonic basis, the background texture can therefore be viewed as a complete scale set or pandiatonic formation centred on the scale of the dominant, A. The overall process worked upon the background, however, is one of harmonic simplification. In the two occurrences of the background once it has become discontinuous in bars 7.1 and 8.2, the upper harp diad containing C# becomes less and less prominent until it disappears in the final statement bar 10.4. This allows for the ultimate resolution of the texture with the main body of the orchestra, in a pandiatonic collection based on G.

### Large harmonic scheme

Despite the pre-eminence of the set of D major plus F natural throughout the movement, emphasis on certain pitches of the collection and the addition of accidentals creates an overall harmonic scheme based on an axis of thirds. This axis is not always directly discernible in the bass progression, which remains resolutely Dmajor/Bminor oriented, but rather, emerges from key areas suggested by source tunes and through emphasis on certain pitches within the opening motive. The expansion of the movement is therefore dependent on a variety of devices, in accordance with the avowedly polystylistic programme.

Rather than proceeding linearly from one to another, the pitches on this notional axis accumulate in the manner of an extended chord:

Ex. 6.2.21 Harmonic background



Since they emerge from an apparently chromatic motive and are separated by an Eb, the D and F# indicated at the start of the diagram are heard to be important almost in retrospect, their centrality only assured by the arrival of the bass in bar 2.1. Similarly, the short term D to G progression, beamed in quavers, is dependent on an understanding of the implied root to the motive. The arrival of *In the Sweet Bye and Bye* in the solo 'cello at bar 2.1, however, provides the first unequivocally tonal reference: despite its D major harmonisation, the melodic source is initially presented in A major, securing a connection with the dominant oriented background texture, and demonstrates the first use of bitonality in the movement. The dual harmonisation continues with the entry of the chorus at bar 4.1, the "axis chord" of the diagram extending downwards to B to represent the piano Bminor harmonisation of the D major *Watchman* theme. (The preparation for this polytonal passage can be seen in the piano from bar 2.1 onwards as it outlines the set of D major/minor with added B in the right hand.) Apart from the chromatic and whole-tone interludes of bars 6.1 and 9.1, the movement concentrates on the Dmajor/Bminor polarisation almost until the conclusion. A side-step at bar 10.1 then adds the final G root, whilst explicitly retaining the other pitches of the axis as the components of a dominant-ninth/pandiatonic sustained chord.

### Melodic sources

Whilst many of Ives' orchestral works derive their structure through the expansion of the source materials, the Prelude appears to reverse this procedure: with a strong motivic force controlling most of the parameters of the movement, the borrowed tunes seem to fall *within* the scheme, their continuation and variation often dictated by larger issues than their own internal logic. The hymn sources can therefore be broadly categorised into two areas; those that are modified by the motive, and those that revolve around the pitches of the harmonic scheme, in the manner of the piano line of bar 2.1 onwards. Amongst the former are *In the Sweet Bye and Bye* (bar 2.1 'cello):

Ex. 6.2.22 'Cello bar 2.1



and the *Westminster* chimes (bar 7.1 celeste):

Ex. 6.2.23 Celeste bar 7.1



which, as shown previously, come under the influence of the motive and evolve to a chromatic basis. The central tune of the movement, *Watchman*, belongs to the latter:

Ex. 6.2.24 Voices bar 5.3



As indicated, the melody concentrates on outlining the basic pitches of D/Bminor in bars 5.3 and 5.4. Once the course deviates from these simple triadic patterns, however, the accompaniment is quick to point out the relationship between the tune and the motive:

Ex. 6.2.25 Voices and violin I bar 6.2

6.2 chorus and violins

The hymn source *Watchman* can therefore be seen to reconcile the large scale axis with the motive, through its use of both the pitches of the harmonic scheme and the melodic shape of the motive. This observation becomes less significant, however, if the movement is considered as being derived from a single source.



## Overview

In short works such as the Prelude it is always difficult to ascertain how much meaning can be attached to a fundamental or generative structure. Since so much of his output is based on small ideas that proliferate, Ives constantly raises this problem of expressing the essence of a work, and of how far a background graph can be reduced before the origins become too generalised - the equivalent, perhaps, of noting that tonal music is based on scales.

Until now, the two guiding forces of the movement have been considered as separate entities; the motive controlling local events, the axis dictating the longer scheme. The relationship between the two is demonstrated melodically in the *Watchman* theme and the piano passage of bar 2.1, but the question of their fundamental inter-relatedness remains. In one sense the harmonic progression can be seen as a repetition of the major and minor third interval vectors contained within the motive, the extended chord of the conclusion created from the stacking of these accumulated pitches. However, the reverse of this is probably a more accurate picture: the motive expresses in the most compact form both the major and minor elements that form an ordinary extended major chord and, in closely superimposing these intervals, liberates the chromatic element of the structure.

The movement can consequently be seen as an expression of the conflict between major and minor within major scale harmony. It is mono-conceptual in the manner of many of the other orchestral works, expanding a central premise to a logical conclusion, but here creating a greater range of surface styles and detail in response to the programme. By dividing the major scale into its constituent intervals, the composer allows for the creation of octatonic, whole-tone and chromatic scales. This emancipation of non-diatonic scales, within a structure still essentially tonal, means that the Prelude can best be described as an altered- or extended-tonal work, rather than an apparently unrelated blend of the chromatic and diatonic.

The movement differs from much of the repertoire in its progression towards clarity. Much of the Ives canon begins with simple source-derived ideas that gradually become more complex and chaotic, but here the reverse is true; the most chromatic and dissonant material occurs within the opening four bars, whilst the conclusion is a point of diatonic simplicity. As the opening statement of a symphony that purports to respond to “questions” posed in its first movement, this early presentation of the argument, and the unresolved background plagal motion leave plenty to be resolved in

the proceeding movements.

<sup>1</sup>The bar number system is based on the rehearsal numbers of the 1965 Associated Music Publishers score. Bar 2.1 refers to the bar immediately after figure 2.

<sup>2</sup>A comparison exists here with the Schoenberg *Violin Fantasy* in which the *ordering* of the series is not defined until the second phrase.

<sup>3</sup>As in *The Housatonic at Stockbridge* from *Three Places in New England*.

<sup>4</sup>A characteristic “spoiling” of the set by excluding one member.

<sup>5</sup>See the “Goddess of Liberty” chord from *Putnam’s Camp, Three Places in New England*.

<sup>6</sup>The E# is replaced immediately by the flute in the same bar.



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## FOURTH SYMPHONY

### SECOND MOVEMENT

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*"Whether the listener will consider (it) an unforgettable glorious noise or an equally cacophonous horror, he will not be able to escape its almost traumatic impact."*

Kurt Stone, Musical Quarterly<sup>1</sup>

#### Introduction

Even the painstakingly laid-out facsimile score of 1965 betrays the many patchings and hand-written additions that make up the edited performing version of the comedy movement. The errors in copying are not difficult to spot - forgotten rests, misplaced accidentals, ostinato patterns that take a wrong turn - in spite of the Ives dictum that all the mistakes in his scores are intentional. The permanently provisional nature of so much of Ives' music, and particularly those pieces edited long after the composition, lends an unreality to the analytical process that is compounded in this instance by the enormous density of the writing and the sheer impossibility of hearing the entirety of the argument. It is a truism, not to mention a cliché, to say that the movement is overscored, and the question is therefore what elements are essential or inessential to the perception of the music. If one instrument is missing does the meaning and character of the piece change irrevocably? Or is this to miss the "joke" altogether?

Almost 85 years after its conception, the intended humour of the movement may seem rather improbable or inaccessible, as attested by the opening quote from Kurt Stone. That Ives purposely described the work as a comedy, rather than a scherzo, presumably has more to do with the satirical lightness of one of his suggested programmatic interpretations than the purely abstract musical content, strange ending aside. The music is certainly not slap-stick or based on thematic puns (especially those comprehensible to a modern audience), and contains nothing that could be described as "throwaway". In fact the overriding religious tone of the whole symphony is displayed here just as whole-heartedly as in the surrounding movements.



The second movement is therefore a conundrum in almost every sense; musically, programmatically and editorially. As probably the single most complex work ever written by Ives, it challenges the very idea of analytical abstraction, with a very post-modern juxtaposition of ideas and all-encompassing sound palette.

## Programme

According to his *Memos*, Ives was working on the second movement of the *Fourth Symphony* at the same time as the second movement of the *Second Piano Sonata, Concord, Mass., 1840-60*.<sup>2</sup> Both works have their genesis in the sketches for the unfinished *Men of Literature Overtures* set (which ultimately produced only the *Robert Browning Overture*), and specifically in a work based upon the writings of Nathaniel Hawthorne, drafted in September 1910. The two movements utilise the same themes and programmatic outlook, in a striking double working of the same sources. The contrasts between the two, however, indicate more than just a reworking of basic material; that both should so overtly share the same resources is unusual even for the infamously economical Ives. Perhaps then, given the composer's habit of spontaneously rewriting works when asked to play through scores, adding and deleting details at will, this would indicate an unusually sacrosanct status for the constituents of the sonata and the symphony, the hidden ur- work beneath both examples pleasing Ives enough to exempt it from the usual forces of recomposition.

Although Ives reminds us that the movement is "not something that happens, but the way something happens"<sup>3</sup>, and that no specific programme can be attached to the music, the scheme of events bears relation to selected passages of Hawthorne's *The Celestial Railroad*. A contemporary version of *The Pilgrim's Progress*, the short story describes a railroad journey towards the "Celestial City", in a parody of John Bunyan's allegory on the quest for spiritual enlightenment. The journey presents a series of wayside views for the latter-day pilgrim, constantly overwhelming his spiritual intentions with "secular" diversions, including a period where he mistakenly believes he has already reached heaven in "the pleasant land of Beulah"<sup>4</sup>, only to find himself on the wrong side of the final hurdle. The narrator finally awakes at the end of the story, as the events reaches a climax, from what has proved to be a dream. The linear and episodic character of this programme is therefore of great help in understanding the apparently schizophrenic progress of the music; the close abutting of religious and "secular" sources, the sharp contrasts of character and the hallucinatory ending. The sequence of events in the piano sonata, elucidated by John Kirkpatrick, also assists in understanding the rather complex structure of the symphonic movement since, although the plan cannot be mapped directly, the programmatic essence remains applicable.



Kirkpatrick describes the piano realisation as, “a symmetrical design: phantasmagoria - nocturne - ragtime - contrasts - ragtime - nocturne - phantasmagoria. In the central section, “the old hymn-tune that haunts the church and sings only to those in the churchyard” is twice interrupted by “secular noises” but both are drowned out “when the circus parade comes down Main Street”.<sup>5</sup> Although the symphonic movement is not similarly symmetrical, the four broad definitions of phantasmagoria, nocturne/hymn, contrasts and ragtime can help to subdivide the structure.

## Outline

The movement opens with a generative set of gestures that are as compressed and intertwined as those of the Prelude are correspondingly linear and comparatively homophonic. In the same way that the opening bars of the Prelude portended an inexorable expansion of a single motive, this opening statement prefigures the constant elision of material and the use of polytempo. Following a ghostly fanfare at fig.1, the essentially religious tone of the movement is set, with what John Kirkpatrick describes “an eerie quarter-tone hymn”.<sup>6</sup> At fig.4 this amorphous texture gives way to a more solid rhythmic motive that accretes material and crescendos until fig.7. The hymnodic mood then returns abruptly in the strings, only to be overtaken by a brass and woodwind interjection with an independent *accelerando*, at fig.8, led (in the 1965 Associated Music Publishers score) by a second conductor. The ethereal string chorale continues alongside then briefly after this interruption, but quickly mutates into a livelier ragtime section from fig.11 onwards, culminating in a pared-down clarinet and piano summation at fig.14.

The tension continues to build after this interlude, as the main syncopated rhythms are taken through various time-signature reinterpretations. Without losing pace, the emphasis then shifts to repetitive motive figures at fig.18, the complexity of the rhythmic subdivisions gradually increasing until the texture collapses under the weight of the competing patterns at fig.20. If the programme is to be interpreted literally, the spacious, polyrhythmic calm at fig.23 then represents “a take off... (of) polite salon music (and) pink teas in Vanity Fair social life”.<sup>7</sup> (At this point in Hawthorne’s *The Celestial Railroad* the narrator becomes embroiled in the pious but misguided city life that lies close to the real Celestial City.) A ragtime rhythmic element is gradually reintroduced and the score becomes ever more raucous until a climax is reached at bar 32.2.

The “contrasts” element of the Hawthorne piano movement provides the basis for fig.33. Sacred and secular themes compete for supremacy at the high point of the movement, fig.34, and culminate in a climactic quarter-tone inflected chord at fig.35.



The “pleasant land of Beulah”, the penultimate scene of *The Celestial Railroad*, is clearly pictured at fig.36 in a “phantasmagoric” combination of two main melodic lines and a dream-like quarter-tone piano accompaniment. The reverie is once again cut short, this time by the final triumph of the secular and earthly, here represented by various marching band elements, and ultimately with an interpretation of Ives’ own *Country Band March* (fig.40). As the main tune of the march returns for a third time at fig.47, the instrumental lines unexpectedly peter out, and the music “immediately disappears like a hallucination”.<sup>8</sup>

### Structural overview

On a superficial level the movement fits the prototypical scheme of an Ives orchestral work - tempi generally increase within sections, and fast tempi equate with high volume and the accretion of dense textures. There are rarely any gradual diminuendi, and quieter passages stay quiet until overtaken by louder material. Since the symphony as a whole “is in every way one of his most definitive works”<sup>9</sup> it is not surprising to find that its most rumbustious movement should exemplify most of the better known Ivesian traits, but it is the sheer scale of the piece that demands a more complex integration of these elements than that shown in the smaller orchestral sets or symphonies. Whereas the comparatively short movements of *Three Places in New England* or *Central Park In The Dark*, for example, explore a single experimental device or conceptual framework, the plethora of themes and patterns in the comedy movement demands a pluralistic approach to their organisation.

The work can immediately be segmented into alternating areas of high and low dynamic. An episodic sequence emerges of long crescendi followed abruptly by mezzo-piano/piano interludes, capped by an introductory statement and an extended fortissimo final section. The *Country Band March* sequence occupies approximately the last fifth of the movement, and maintains an almost uniform fortissimo. In contrast, the period immediately preceding it, from fig.33-38, shows the greatest variation in dynamic, abutting pianissimo and fortissimo passages in quick succession. The episodic sequence therefore reaches a denouement at the meeting of these two sections, and appears, given the “false” ending, to form the climax of the movement as a whole.

### Linear reduction

A more accurate measure of the background scheme to the movement is obtained through the plotting of a linear reduction, in the manner of a Salzerian graph. The



selection criteria for the reduction of material remain familiar despite the unusual application, with metrically and rhythmically accented pitches beamed together at each level, in conjunction with those pitches shown to be representative of repeated patterning. The traditional three levels of reduction have been retained, but in this example the only pitches examined are those of the bass, in a single line reduction. The justification for the omission of an upper line lies in the continuity obtained by looking at the only unbroken feature of the movement; since no functional upper line is always evident (and for much of the work this is exactly what is intended) the premise of a complementary melodic reduction is not very meaningful. As seen in many of the orchestral works, the melodic material often functions competitively, independent of surrounding long-term processes, and in the majority of cases does not prefigure the long term goals of the works. The surprising consistency, however, of the implied or real bass patterning demonstrates how important this legacy of tonal structure was to the composer's formal thinking. The path of the bass proves to be extremely functional in its own terms, underpinning and directing a long range harmonic motion in a work so dependent on heavy dissonance and chromaticism.

The first graph reduces the total number of bass pitches through the most obvious removal of repetition:

Ex. 6.3.1 Linear reduction - Foreground (to be read as one continuous line)

(See overleaf)



This page contains the musical score for the second movement of the Fourth Symphony, measures 1 through 47. The score is written for a string quartet, with four staves. The key signature is one sharp (F#), and the time signature is 4/4. The notation includes various musical symbols such as notes, rests, beams, and slurs. Measure numbers 1 through 47 are indicated at the beginning of each measure. The score is divided into two systems, with measures 1-30 on the first system and measures 31-47 on the second system. The notation is in a standard musical notation style, with notes and rests clearly visible on the staves.

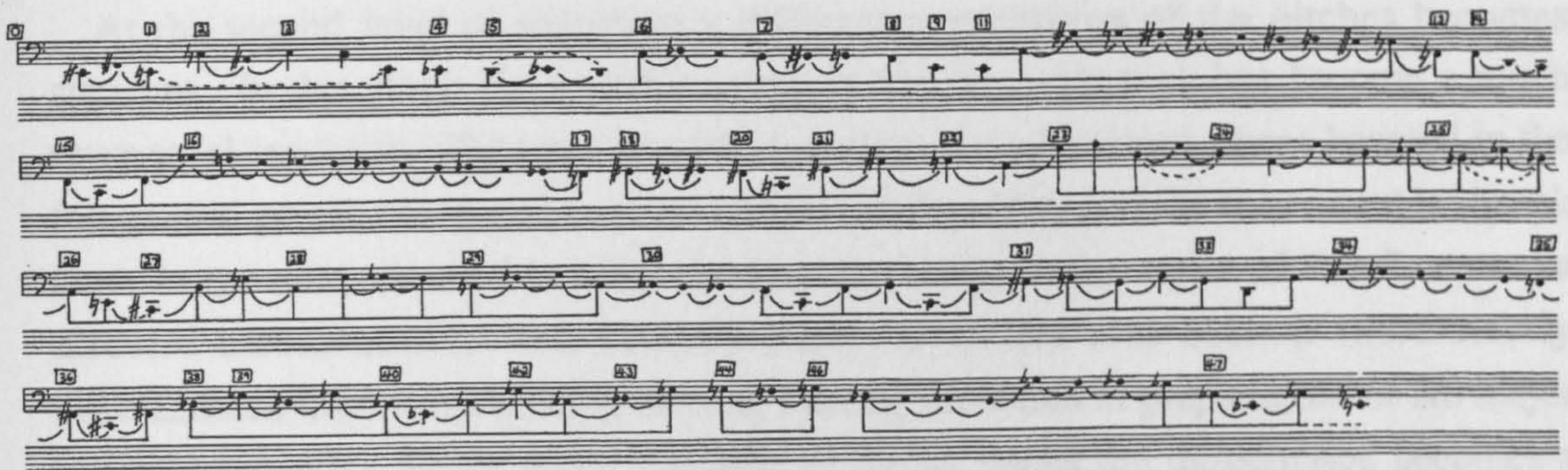


Only small portions of the movement are beamed together at this level, the links used more to indicate the central pitches (judged by the aforementioned criteria) within each section than to show the entire course of the bass progression. The patterning of the pitches is predominantly melodic in this reduction, except for the areas of functional tonal progression such as parts of the *Country Band March* figs.39, 40, 42, 47. The chromaticism of so many of the patterns is plainly discernible, particularly at figs.5, 7, 8, 11, 18 and 38, where it takes the form of an undulating stepwise motion, and at figs.12, 22, 28 and 31 where more complex, but often equally repetitive, progressions are described.

Ex. 6.3.2 Linear reduction - Middleground (to be read as one continuous line)

(See overleaf)

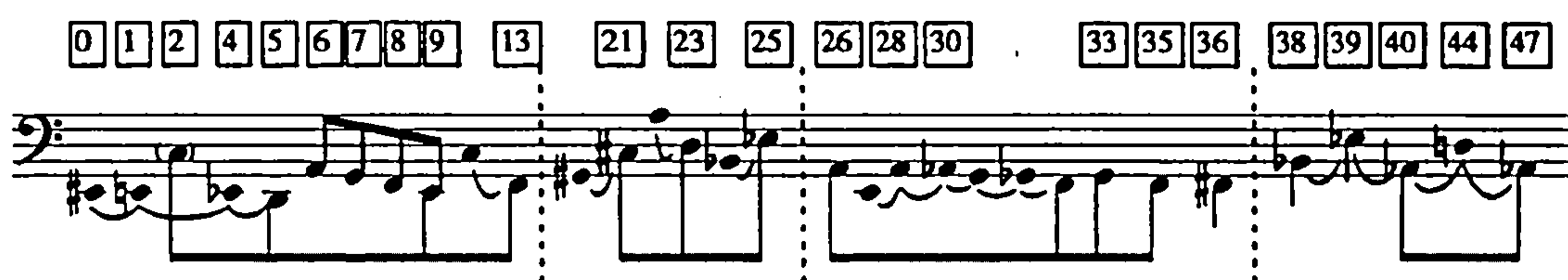






At the second level of reduction a different organisation of the pitches becomes apparent. In this graph the melodic aspect of the first reduction has become a much more tonal sequence. The most important pitches of each section (those beamed in the foreground graph) now form more functional relationships, and the movement is shrunk from forty-seven rehearsal number sections to about a dozen areas of “key” centre or directed chromaticism. The *Country Band March* has also become more clearly differentiated from the preceding section, moving flatwards in preparation for Ab major at fig.38 following the F# major interlude of fig.36, whilst the introduction becomes a chromatic descent to fig.5.

Ex. 6.3.3 Linear reduction (background)



Once the pivotal pitches of the intermediate reduction are assembled in the last stage of reduction, the background scheme can be seen to consist of four main areas divided at figs.0-17, 18-25, 26-37 and 38-47. The first, figs.0-17, contains two primary interlocked features: a chromatic descent E#-E-Eb-D and a scalar ascent C-D-E-F. These complementary derivations represent the two poles of the introductory material, so evident in the dramatic gestural contrasts until fig.5. The descent joins together the opening motive-laden page, the dramatic “awakening” chord of fig.1 and the first rhythmic motive of the movement. Correspondingly, the ascent links together the quarter-tone “hymn”, the first rhythmic motive, its re-emergence at fig.9 and the fortissimo conclusion to the opening partition at fig.13.

The second partition describes a chromatic ascent C#-D-Eb with the appropriate dominant approach to each pitch. This section covers a period of the movement rich in textural and stylistic change, demonstrating a line of continuity from the chaotic rhythmic collapse of fig.21 through the polytemporal and rhythmically free fig.23 to the syncopated ragtime stirrings of fig.25. These three areas encompass what are in many ways the rhythmic archetypes of the entire work.

The passage containing figs.26-37 is harder to describe in terms of simple scale directions, but is significantly more chromatic in its motion. The stylistic plan of the music covers the full expansion of the ragtime and “contrasts” material from the Hawthorne movement of the *Concord Sonata*. The F of fig.35, already mentioned as a possible climactic point of the movement, does however balance the corresponding pitch at the end of the first partition fig.13, itself also a point of climax.

The final section of the background graph is both the easiest to understand on its own terms and the hardest to integrate with the remainder of the work. The II-V-I progression described between figs.38 and 47 is by far the simplest and most tonal shape seen in the background but, as the conclusion to the movement, appears markedly unrelated to the preceding patterning. In analytical terms this could be viewed as the structural “joke”, a deeply rooted discontinuity in the background that allows no sense of finality or summation.

### Opening page

Apart from gesturally preparing the mood of chaotic interaction that characterises the movement, the first page of the comedy also proves as melodically and rhythmically motive-laden as that of the Prelude. The most immediate feature is probably the combination of tempi and the stratification of parts (discussed under the heading *polytempo*), but in context this disguises the fact that the majority of the strata contain important melodic motives. Principal amongst these is the double bass phrase that controls the period of the introduction:

Ex. 6.3.4 Double bass bar 0.1



The shape of the motive is clearly derived from the equivalent opening statement of the first movement, with the rising semitone and minor third of the former here extended to a semitone and major third, E#-F#-A#. The motion continues with a further semitone rise to B, and thereby establishes the pattern of two semitones separated by a larger interval, that later becomes the most important melodic shape of the work (discussed under *a melodic motive*). The major third aspect is then emphasised with a descending phrase in thirds that also covers a major third, A-F.

The second level on Ives' scale of dynamic and spatial positioning<sup>10</sup> is taken by the solo piano. The main thrust of the line is the division of a 6/8 bar into both two and three, creating a syncopated cross-rhythm that prefigures the ragtime rhythmic of fig.25 onwards. The motive of the Prelude guides the melodic aspect of the closing bars, however, at the transposition level of the double bass expanded motive:

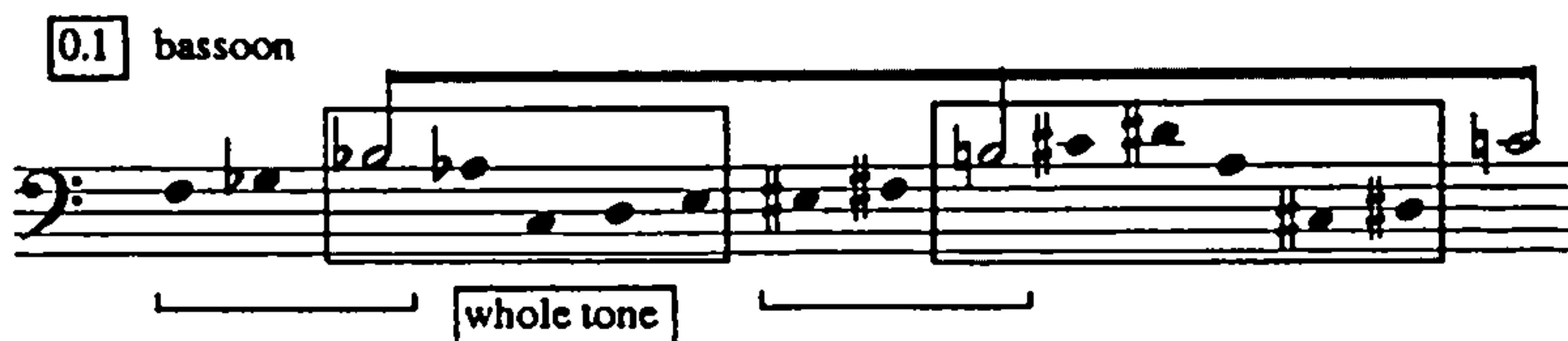


## Ex. 6.3.5 Piano bar 0.1



The next most important stratum, the bassoon line, is perhaps the most completely motivically guided, freely developing the intervallic content in an ascending line that echoes the background ascents and descents of the linear reduction:

## Ex. 6.3.6 Bassoon bar 0.1



The semitone and major third intervals of the double bass motive are used to emphasise Bb at the outset, continuing with the use of a whole-tone set based on C natural. The first two pitches, enharmonically renamed E# and F#, then begin a second motive shape, the major third this time extended to a perfect fourth, reaching B natural. This launches a second, complementary whole-tone set based on C#. The passage ends on a C natural that completes the overall background chromatic ascent Bb-B-C.

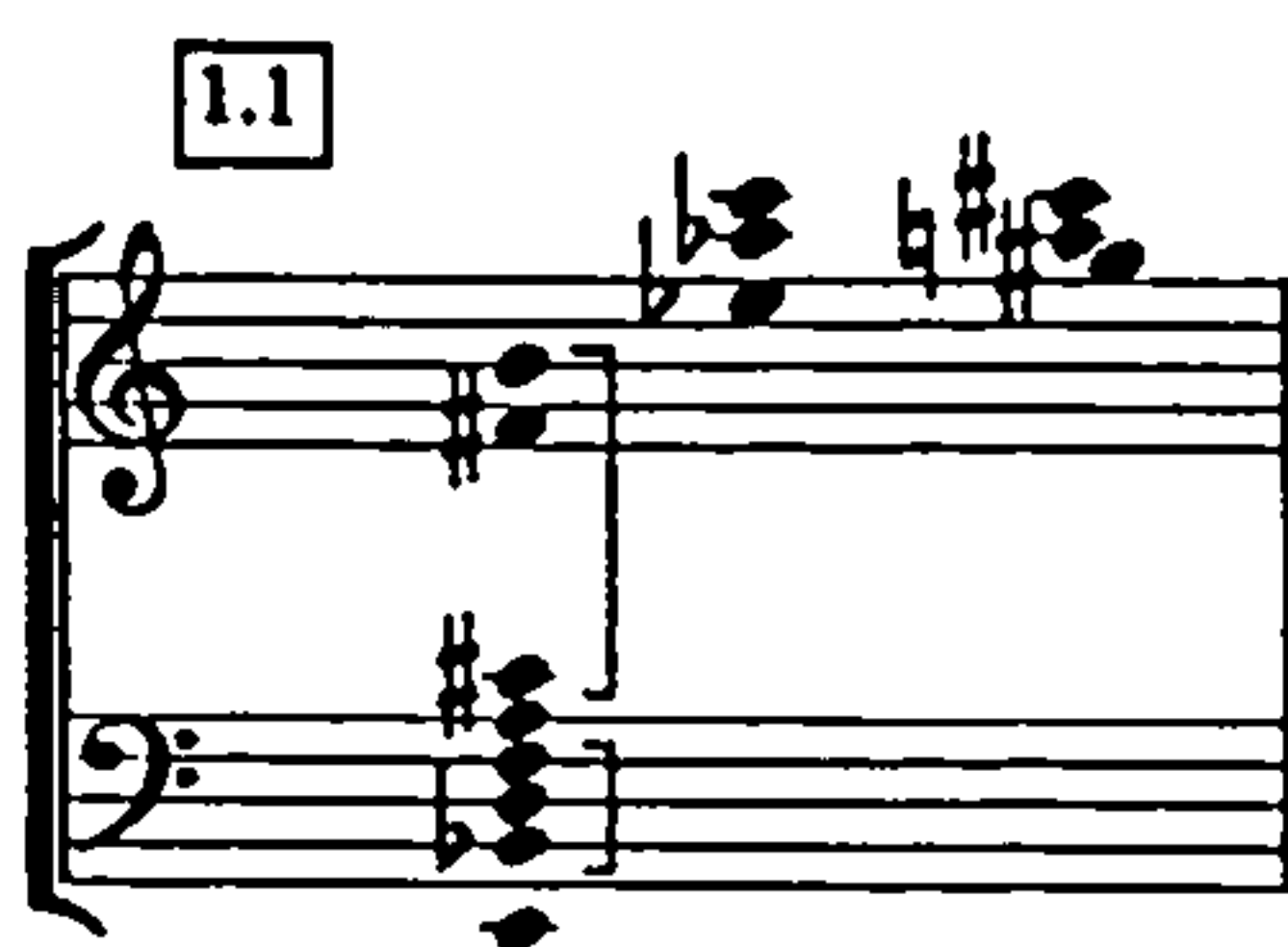
The remaining instruments combine motive shapes with fresh material in more or less conspicuous ways - the clarinets utilise the semitone and thirds as flurried grace notes to a longer melodic phrase, the secondo piano manipulates the set harmonically. The strings, however, concentrate on the first whole-tone set seen in the bassoons. The top two divisi violin lines form a six-note whole-tone chord C-D-E-F#-G#-A# split into two augmented triads, whilst the lower line begins on a B "spoiler". At the second and third bars the B is joined by G natural and D# respectively, all nine pitches sustaining to the final fermata. Since A, C# and F are present elsewhere at this point, the final chord of the introductory page is an orchestration of the total chromatic.

### Harmonic considerations

Twelve-note construction also marks the dramatic introduction of fig.1. The division of the total-chromatic into whole-tone sets, favoured in the introductory page, is here

reordered along multiple organisational axes that, in their partitioning, elucidate many of the harmonic types to be found within the movement. Since the chord itself is so texturally prominent and the orchestration so obviously split into different harmonic fields, the implication is that, following the predominantly melodic first page, the chord forms some sort of harmonic introduction and can be read as such:

Ex. 6.3.7 Orchestral reduction bar 1.1



As indicated, the main body of the chord (in the piano) combines a major triad Bb-D-F, a tritone related bass E and a chord-on-fourths C#-F#-B. Added to this are two chromatically related diads, Ab-C (piano second beat, via an Eb-G diad) and A-C# (clarinets). The trumpets and trombones emphasise the chord-on-fourths potential with C#-F#-B and the third-related A-D-G respectively. On the fourth beat of the bar, the piano traces a portion of an upward whole-tone scale. In conjunction with the initial downward chromatic sweep of the double basses, from G#-E, the bar of fig.1 therefore contains the majority of the harmonic ingredients of the movement: diatonic, whole-tone and chromatic.

It is perhaps for this reason that the construction becomes immediately quarter-tone oriented in the following bar. Having established the twelve-note harmonic palette in the preceding bars, Ives continues the introduction of new elements, this time expanding the sound-world to include twenty four pitches. Due to this constant expansion of technique it could be concluded that, in terms of harmonic construction and the presentation of generative material, the introduction to the movement lasts right through to fig.4 and the beginnings of the rhythmic development. The last principally homophonic gesture before this divide, at bar 3.4, can therefore be interpreted as a demonstration of chordal construction which uses whole-tone and chromatic voice-leading:

Ex. 6.3.8 Solo piano bar 3.4

3.4 solo piano

whole-tone, semitone

whole-tone, semitone

scale set of D maj.

A melodic motive

Of all the patterning that operates within the movement, the most persistent is a small repeating melodic phrase that runs, in various guises, from fig.18 to the end, constantly evolving to fit the changing surroundings whilst maintaining a simple recognisable identity. At its first occurrence, at the start of the second period of the linear reduction, the motive appears in the violin I in a polymetric triplet rhythm with a seven triplet-quaver period:

Ex. 6.3.9 Violin I bar 18.1

18 violin

etc.

18 19

outer limits



The pattern immediately shows the primary characteristic of all the motive developments to come; a pair of intervals, here an upward semitone C to C# and downward tone A to G, separated by a leap, initially variable in size but later to become fixed. The above reduction indicates the overall chromatic course of the repetitions, with the outer pitch limits of a fourth-related A and D.

Just as the motive is about to repeat at the same position in the 4/4 barring (in other words the polymetric permutations have been completed) it disappears momentarily at fig.19. The oscillating chromatic aspect of the pattern continues in the solo piano, but perhaps in response to the brass melody temporarily appearing to lose its way, the texture simplifies and the cross-accented rhythm is left out.

As the main melody reasserts itself at fig.20 the fundamental motive shape re-emerges in a more complex form:

Ex. 6.3.10 Violin I bar 20.1

20.1 violin I

7 7 etc.

21

patterns starting on these pitches

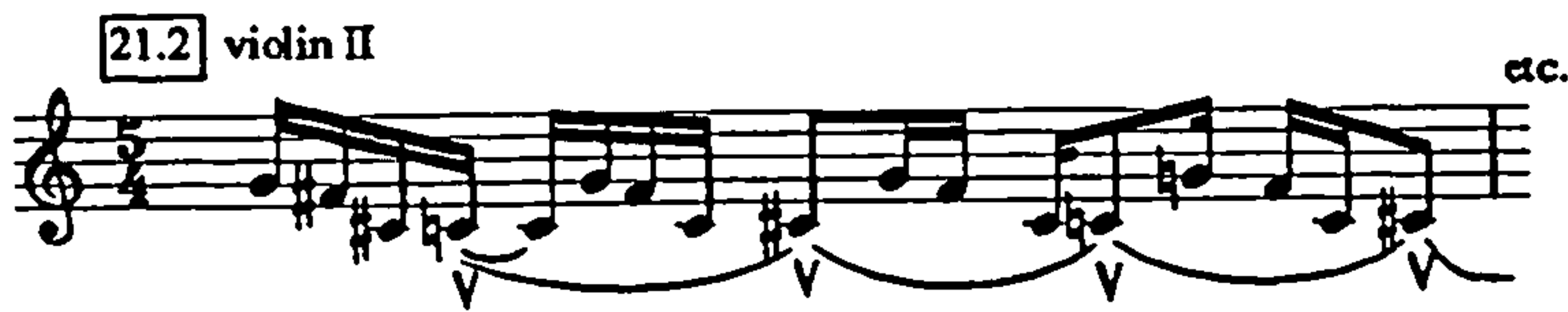
tone

semitone semitone

Again grouped in a period of seven, the motive this time subdivides the bar symmetrically into two groups of septuplets. Echoed by the accents of the violin II quintuplets at a distance of a fourth, the motive traverses a less chromatic course than previously, including some non-conjunct shifts.

At 21.2 the quintuplet violin II phrase immediately transforms into a five semiquaver pattern (2+3) that not only marks the breakdown of the entire orchestral texture, but also provides a motivic elision with the next section that begins fig.22:

### Ex. 6.3.11 Violin II bar 21.2



The motive is here presented in its strongest and most consistent form, tracing out pairs of semitones linked by a fourth and containing a complete interval vector set that includes two tritones in a symmetrical set C, C#, F#, G.

The key centre of the movement moves flatwards at fig.22 and the motive accordingly alters the F# to an F natural on every alternate repetition, shadowed by a triplet and quadruplet development in the flute. The naturalisation marks a further use of the motive to elide two portions of the movement, this time preparing the G-F tone in the extra-violin II “mobile” of fig.23:

**Ex. 6.3.12 Extra violin II bar 23.1**



The “mobile” figure encapsulates the leap and downward tone movement of the earliest pattern of fig.18, whilst the overall downward chromatic motion is condensed to cover a minor third, A to C. The period remains five semiquavers, but this time placed within a single repeating 5/4 bar.

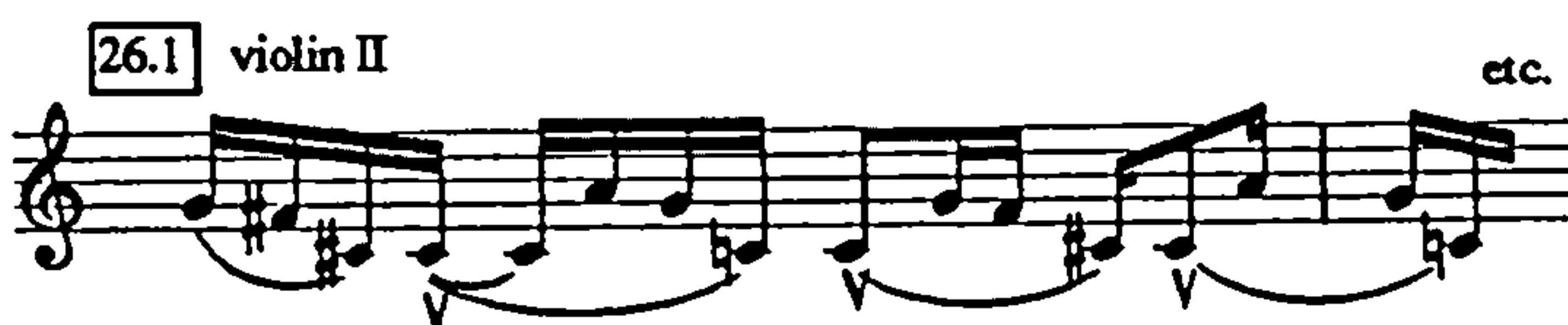
As the cue for the cessation of the “mobiles”, bar 25.2, and as a prelude to the upcoming lighter, jazzier feel of fig.26, the pitches of a further compressed form of the motive, C-C#-F-F#, are taken by the solo piano and trumpet and formed into a ragtime-like theme:

## Ex. 6.3.13 Solo piano bar 25.2



Figure 26 marks the beginning of the next section of the movement, stylistically and in terms of the linear reduction, establishing the ragtime element of the Hawthorne-inspired programme. To emphasise the new A natural bass pitch-centre another permutation of the basic motive continues in violin II, combining the falling G-F# semitone of fig.21 with the original A-G tone of fig.18:

## Ex. 6.3.14 Violin II bar 26.1



When the key centre moves sharpwards at fig.27 the motive reverts to the G-F# fall. Between figs.27 and 28 the pattern then undergoes rapid transformations as part of a dominant-functioning preparation for the next section. Although the explicit use of the motive is interrupted at the new figure, presumably to avoid competition with the seven-semiquaver period bass pattern and heavily syncopated solo piano line, it reappears at bar 30.1 in its “prime” form. Again omitted from bar 31.3 to 32.2, this “prime” is repeated at the tiny interlude of fig.33.

The climax of this section of the movement figs.34-36, taken from the “contrasts” material of the Hawthorne piano sonata movement, also dispenses with the motive pattern, for reasons explained later under polytemporal considerations. The dream-like interlude of fig.36 brings back the familiar pattern, almost as though nothing has happened in the interim, interpreting the semiquaver rhythm as four crotchets in the time of three within the 6/8 barring:



## Ex. 6.3.15 Extra violin II bar 36.1



According to the linear reduction, fig.38 heralds the last part of the movement, an introduction to the main *Country Band March* proper of fig.40. Since this juncture between the “contrasts” and the March would, on the surface, appear to be the least through-composed part of the movement, the continuation of the motive that has been sustained since fig.18 is particularly significant. It undergoes rapid transformations to integrate with the new stylistic basis, especially in the first few bars of fig.38:

## Ex. 6.3.16 Violin II and viola bar 38.1



The violin II and viola exploit the tritone content of the motive set in parallel lines that retain the five semiquaver rhythmic period whilst turning both the pairs of smaller intervals into downward motions. After seven bars the motive returns to a more familiar shape, but with new pitches in the viola:

## Ex. 6.3.17 Viola bar 39.1



From fig.40 the phrase continues in the violin II, at first maintaining the previous viola transposition but from bar 40.3 reverting to chromatic movement similar to that seen in the first incarnation of the motive:

Ex. 6.3.18 Violin II bar 40.3

40.3 violin II etc.

sequence of accents from 40.0 41.0

A process of rhythmic compression begins at bar 40.6, shortening the motive to four semiquavers in length, and then to three semiquavers at bar 41.2, in a consistent pattern that continues until fig.47:

Ex. 6.3.19 Violin II bar 41.2

41.2 violin II etc.

3 semiquaver period

4 semiquaver period

whole-tone diatonic ?

Since Ives rarely returns immediately to a pattern once it has been disrupted, it is reasonable to assume that the “errors” in the above example are genuine copyist’s mistakes, especially since the sequence they are part of lasts a further eighteen bars.

The “hallucinogenic” ending to the movement begins at fig.47 with the apparent repeat of the *Country Band March* theme. The motive exhibits one final variational flourish before stopping abruptly with the rest of the orchestra. The last viola phrase of bar 47.3 unfolds all the motivic semitone and tone pairings of the motive into a single descent:

## Ex. 6.3.20 Violin bar 47.1, viola bar 47.3

47.1 violin II

variation = Prelude motive

47.3 viola

The almost constant use of the single basic motivic shape through perhaps two-thirds of the movement implies a central importance on a par with the equivalent motive of the Prelude. The relationship between the two hinges on the expansion of the minor third element of the Prelude formant to a perfect fourth in the comedy<sup>11</sup>, viz.

## Ex. 6.3.21 Motives

Movement I

min. 3rd

II

perf. 4th

Both motives concentrate first and foremost on the single chromatic descent but employ it in conceptually differing ways. In the Prelude the semitone element of the set expresses the difference between a major and minor third in a quasi-tonal setting, and effectively condenses the set of a major triad into its smallest form. In the Comedy the large interval of the motive is stretched to a perfect fourth (in Schoenbergian hands almost the *anti*-tonal interval) so that the pairs of semitones are no longer tonally related. If the programme of the whole symphony is to be interpreted literally<sup>12</sup>, the contrast between the two is a perfect analytical picture of the supposedly eternal qualities of the tonal system, as shown in the first movement, and “man-made” atonality and chromaticism in the second.

## Quarter-tone usage

Better known perhaps, for the early use of polytempo, the comedy movement also presages another significant twentieth-century innovation, that of the quarter-tone. The two devices share their point of origin, if Ives' *Memos* are to be believed, in



experiments carried out by his father George, when Charles was a child.<sup>13</sup> Both techniques often continue to share, therefore, the same representational and programmatic flavour that Ives senior is reputed to have imbued in all his dabblings; often used less for their objective, quantifiable value and more for the simulation of the poor rhythmic articulation and inaccurate intonation found in a small-town band in New England.

The notation employed by Charles to describe the quarter-tone pitches is therefore based upon the modification of the existing chromatic, rather than on the assumption of a complete system of 24 pitches to the octave;<sup>14</sup> the square noteheads of the score function only to sharpen the conventional written note. This simple system, that omits a symbol for a flattened note, could perhaps have originated in a two-piano method of producing reliable quarter-tones chords discovered by the composer whilst an organist in New York, between 1900 and 1902. There Ives discovered a pair of pianos in the Sunday school of his church, tuned accurately, but a quarter-tone apart from one another. Having the twenty-four pitches physically separated may therefore have led to his conceptual separation of the 24-note chromatic into two interleaved ordinary chromatic scales. The actual note names of the two scales would have been shared by both keyboards, with only a single modifier necessary to indicate the pitches of the sharp keyboard; a practical, if not systematic, approach to the problem.

The movement contains four separate quarter-tone passages, the first, and most significant, occurring at fig.2 in the strings. This chorale-like passage combines a limited set of quarter-tone chords, favoured from his earliest experiments at the two pianos<sup>15</sup>, with chords built on the interval of a fourth that contain the members of diatonic scales:

Ex. 6.3.22 Strings bar 2.1 (square noteheads = quarter-tone sharp)

[2] strings

(pitches joined by lines  
are in-filled by  
quarter-tone scales)

The voice-leading of the opening collection of fig.2 moves from the static chord of fig.1, through a combination of quarter-tone, chromatic and whole-tone shifts. The resultant set sharpens the written minor third and minor seventh degrees of a chord on C, through quarter-tone inflection, towards the major third and major seventh degrees. This alteration of the most commonly inflected scale degrees in jazz, lends the chord an unusually “blue” flavour,<sup>16</sup> and, perhaps more importantly, demonstrates a further expression of the major/minor conflict within the central motive of the Prelude. The process of quarter-tone and chromatic voice leading forms the chords of bars 2.1 and 2.2, contracting and expanding the basic set of the opening bar in a predominantly stepwise manner. The chord-on-fourths potential of the second chord of the first bar extends the set downwards, to introduce the low G# in the violas.

The quarter-tone and chromatic shifts continue to motivate the voice leading of the inner parts in the subsequent bars, in conjunction with chords built on fourths that contain the partial scale sets of B major (bar 2.3, minus E) and C major (bar 2.5, minus F and D). An exception to this pattern occurs at the end of bar 2.3, when the lower strings form an augmented chord, centred on C#, to support the accompanying whole-tone flute phrase. The passage concludes with a return to the first set, at the end of bar 2.6.

The sepulchral calm is disrupted at bar 2.7 with a fortissimo piano interjection that immediately alters the harmonic direction. A pandiatonic set on D is supported by a low A# to provide an almost complementary set of pitches to the C oriented quarter-tone hymn. An emphatic B-A in the right hand, however, acts as a form of completion to the meanderings between B and quarter-tone A# of violin I, the low A# in the piano left hand a resolution of the quarter-tone inflection back to the ordinary chromatic. Also included in the first set is an E minor triad over the A#/Bb root, a striking reversal of the Bb major triad over an E root of the corresponding piano chord of fig.1. This harmonic link with the earlier figure, in conjunction with the melodic completion of the quarter-tone passage, indicates the first use of abrupt stylistic change coupled with more subtle analytical elision, a characteristic of the movement as a whole - sequences of large gestural changes that often herald not so much new material but a reinterpretation of existing processes.

The quarter-tone workings then recommence at fig.3 with a repetition of the opening bar of fig.2. The pattern deviates quickly, however, concluding with a rising quarter-tone scale/glissando that supports a now diatonic flute phrase:



## Ex. 6.3.23 Strings and flute bar 3.1

3 strings and flute

flute

The next example of quarter-tone use is much simpler. In the passage of figs.7-10 the double basses of the first andante orchestra slowly oscillate between G and G#. The 'cellos double this line, but fill the chromatic gaps with quarter-tones. This idea is repeated in the violas at fig.14, with two chords a semitone apart linked by a third quarter-tone chord:

## Ex. 6.3.24 Viola bar 14.2

14.2 viola

And similarly at fig.34 in the violins:

## Ex. 6.3.25 from score violin I and II

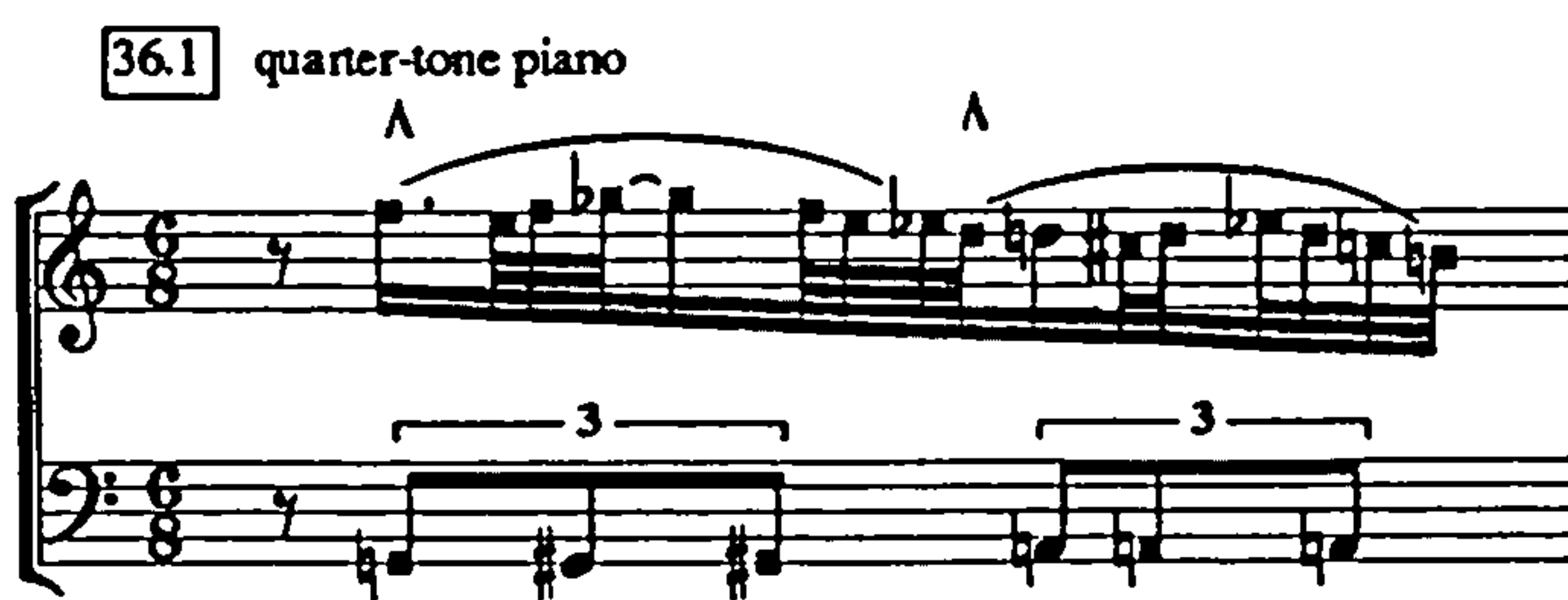
34.1 violin I

The peak point of the movement, and the last climax before the self-motivated *Country Band March*, consists of a C major pandiatonic chord (plus an errant C# in the secondo piano) distributed across all the instruments at fig.35. It forms the only static moment of the work that uses the entire orchestral resources, and provides one of the greatest moments of contrast as the dynamic immediately drops from fff to ppp at fig.36. The



string pitches of the chord, containing all the members of the set, are inflected up and down by a quarter-tone at the mid-point of the bar, or, as Ives requests, a slight rise and fall in pitch<sup>17</sup> not necessarily precisely intoned. The use of quarter-tones at this important juncture to inflect a powerful, homogeneous chord is quickly paralleled in the following bar by a much lighter melodic use. In what amounts to a solo, despite the low dynamic, an extra quarter-tone piano displays the first use of non-conjunct quarter-tone motion, to create a repetitive, freely shaped “halo” sonority:

Ex. 6.3.26 Quarter-tone piano bar 36.1



The pitches move stepwise within each pattern, creating the glissando-like effect seen on all the previous occasions, but leap from quarter-tone B to quarter-tone F at the beginning of each repetition. The precise pitches become less important, however, as the pattern thins out at bar 36.6, preserving only the overall shape of the phrase by bar 37.2.

## Polytempo

Of the many problems associated with the editing of the first published score of the *Fourth Symphony*, perhaps the most interesting were the rationalisation and realisation of the rhythmic intricacies of the second and fourth movements. The scores and sketches donated to the Library of the School of Music at Yale University after Ives' death contained all the necessary material to construct a performing edition, apart from the practical details of how to negotiate certain complex passages of polyrhythm and polytempo. With a first complete performance imminent, to be undertaken by Leopold Stokowski and his newly formed American Symphony Orchestra in April 1965, the decision was taken, by Theodor Seder<sup>18</sup>, the senior editor of the Associated Music Publishers project, to partition the score for two conductors, assigning certain instrumental strata to an assistant where necessary. This has led to the comedy movement, in particular, becoming singularly famous for its use of multiple conductors and, consequently, the implied complexity of the rhythmic material. The editorial

decision to stratify the score was, naturally, an interpretation based partly upon the projected abilities of the conductor and ensemble and, more importantly, upon the editor's personal understanding of the music. That the work is now routinely performed with just one conductor would indicate that not only has orchestral musicians' familiarity with difficult rhythms improved in the last thirty years, but that the distinction between cross-rhythm and true polytempo in the score is more clearly understood.

The score in fact contains only three points of scored polytempo in approximately eight suggested two-conductor passages, the remainder coming under the umbrella heading of polyrhythm. The distinction drawn here between areas of polytempo and polyrhythm is that the latter always contains a rhythmic lowest common denominator. It is possible for both polytemporal and polyrhythmic passages to contain no simultaneities, but a polyrhythmic combination must contain some factor, however small, that can subdivide all the constituents. In more complex examples this often means that the subdivision remains unstated because of its small duration. Correspondingly, a polytemporal combination does not need to maintain a fixed relationship between the constituents, and thereby avoids being termed merely an extended polyrhythm.

The opening page of the score contains four such unsynchronised instrumental lines: the bassoon at crotchet=70 with rubato, double basses at crotchet=80, solo piano at dotted-crotchet=50 with free accelerando, and the remaining instruments at a fixed dotted-crotchet=50. If the parts were to be played without rubato, in the exact marked tempi, they would all reach the double bar of fig.1 simultaneously, but since the majority end on fermata markings to be held until the basses begin their descent to fig.1, the implication is that the relationships should remain free and polytemporal. The overall internal tempo relationship of the introduction could be said to be quantifiable, however, due to the restriction of beginning the next rehearsal letter simultaneously in all parts after a fixed period.

The next occurrence of polytempo dispenses even with this restriction. At fig.8 the orchestra divides into two, the strings and the majority of the percussion following conductor I, the woodwind, brass, timpani and pianos, conductor II.<sup>19</sup> Orchestra I maintains the preceding adagio whilst orchestra II accelerandoes to allegro over the course of nine bars. Once the allegro has completed its written course it disappears immediately, leaving orchestra I to continue at the slower speed until fig.10. Since the end point of the combination of layers is not predictable, the result can be described as not only polytemporal but polymetric; in other words the overall *period* of the combined passage is not set.

The third and final episode of interacting tempi consolidates the features of the two previous examples in a remarkably early set of "mobiles" or freely repeating



unsynchronised rhythmic segments. In the description of “polite salon music... in Vanity Fair” at fig.23 the tempo is split into two components, one *andante* the other *allegro*. Within the faster tempo the low bells and extra violin II repeat a single 5/4 bar an unspecified number of times, stopping only at a cue in bar 25.2. Still marked *allegro*, but slightly slower than the short “mobile” and additionally marked “freely”, a solo viola contributes a much longer phrase, barred in 3/4, that is again repeated until bar 25.2. The central voice against which these patterns rotate is the slower and more rubato solo piano. The barring of the piano forms the standard against which the other instruments pull, despite its indicated freedom of execution, since other lines such as the timpani later accompany it in tempo. The overall effect is therefore one of rhythmic heterogeneity, the overall period of which is defined by the solo piano. The difference between this and the previous example of polytempo is that neither the interaction of the layers nor the amount of material contained within the period is completely predictable - if the piano plays particularly slowly more repeats of the “mobile” may occur and vice versa. A definite progression can therefore be seen through these three examples of independent tempi: the first occupies a fixed period of time, contrasting rubato with constant tempo elements, the second occupies an indeterminate length of time and overlays a set tempo with an *accelerando*, whilst the third has an unfixed duration and contains an unquantifiable amount of material.

All of the above examples are very literal descriptions of polytempo and are derived from the indicated relationships within the written score. The number of *perceived* occasions of polytempo is probably far greater than this, especially when relationships between rhythmic layers become more complex. This is particularly the case when the metrical grouping of the constituents of a polyrhythm are organised independently of the main pulse. One of the earliest and clearest examples occurs at bar 5.6:

Ex. 6.3.27 Primo piano and basses bar 5.6

[5.6] primo piano and basses

The musical score for bar 5.6, titled 'primo piano and basses', is presented in three staves. The top staff, representing the Primo piano, shows a sequence of eighth notes with triplet markings (3) above them. The middle staff, representing the basses, shows a sequence of eighth notes with triplet markings (3) below them. The bottom staff, also representing the basses, shows a sequence of eighth notes with triplet markings (3) below them. The score is marked 'etc.' at the end, indicating that the pattern continues.



The chords of the primo piano occur every four triplet quavers, giving the effect of a duplet meter, but in a tempo relationship of 3:4 with the crotchet of the remaining parts.

Despite the fact that this perception of polytempo through polymeter has almost unbounded potential for creating rhythmic complexity, Ives often reaches an instinctively understood saturation point in the fully scored areas of the movement beyond which the texture can only simplify or collapse. In fact, it is often the case that the larger pulse of the music becomes more clearly delineated at points of greatest tension, the chaotic effect generated through such polymetric organisation.<sup>20</sup> The transition from bar 19.5 to 20.1, in particular, demonstrates this increased clarity of pulse, shortly before the texture collapses to the “mobiles” of bar 23.1. Following a passage in which the bar is divided unequally, with dotted crotchets in the strings, irrational triplet placement in the high bells and ordinary crotchets in the primo piano, the minim division becomes suddenly clearer at bar 20.1, despite smaller scale increases in pace to septuplets and quintuplets in the strings. The minim remains clearly defined even with the addition of heavily accented triplet crotchets in the percussion at bar 21.1, but it is here that the rhythmic competition becomes too great to sustain. Significantly, it is when the percussion triplets are dislocated by a crotchet, straddling the middle of bar 21.3, that the section finally disintegrates.

The densest point of rhythmic organisation in the movement, figs.34 to 35, also adheres to the principle that when the loudest or most penetrating instruments begin to subdivide the bar irrationally then the passage is nearing its end. At bar 34.1 the conductoral duties are split into a 4/4 against 3/2 relationship, the majority of the orchestra, with the exception of the snare drum, clearly defining the 2 4/4 minims or 3 3/2 minims to a bar. Polymetric cross-accents aside, the first deviation to this comes as the saxophone divides the bar into five at 34.3, and this is then taken up by the bassoon, tuba and violas two bars later, to launch the climactic quarter-tone inflected chord of fig.35.

The unexpected ending to the movement supports this idea but in reverse. Between the first and second statements of the *Country Band March* theme, particularly figs. 44 and 45, the combination of a primo piano “mobile” and a quintuplet-divided bassoon would indicate that an end to the passage was imminent. Towards the beginning of the incomplete final statement, however, the bar divisions become more stable, and at fig. 47 itself the orchestra is almost completely crotchet divisible. That the movement should then suddenly disappear, just as the rhythms simplify, presumably only adds to the surprise value of the gesture.



## Overview

The most important analytical question addressed in this movement is the interaction of tonal and chromatic construction. As an American distanced from the self-knowing advances of European chromaticism, Ives' distinctions between the various stages of twelve-tone hierarchy (from tonality to chromaticism to serialism) were presumably much more fluid and less "scientifically" defined than for many of his foreign contemporaries. The conceptual leap from atonality to dodecaphony espoused by Schoenberg would have interested him, but not in the form of the dogmatic "truth" that it became to others. The link between tonality and the emancipation of the chromatic was to Ives much more of a two-way street, neither area superior to, nor the logical consequence of the other. For this reason, many who have examined Ives' sketches, amongst them Elliott Carter<sup>21</sup>, have speculated on the fundamental organisation behind the larger dissonant works, looking for a functional tonal background that would root the composer firmly in the past, or an organised chromaticism to compare to European developments. The technique of linear reduction employed in this study shows in fact that both these traditionally exclusive organisations direct the form, but at different levels within the structure.

The surface level is most definitely chromatic, not only in the sense that the patterns are not obviously key oriented, but also that many of the pitches form strings of conjunct semitones. Many areas of the movement display a simple oscillation between two or three pitches (eg.fig.28), whilst others take a simple stepwise phrase and transpose it through a larger but similarly conjunct pattern (eg.fig.12). The middleground graph then demonstrates that these areas of apparently meandering chromaticism form about a dozen quasi-tonal groupings once unaccented and subsidiary pitches have been removed. The implication is therefore that tonal constructs are just below the surface, covered only by simple melodic ornamentation. The background graph reveals, however, that these patterns, in turn, do not describe a larger scale tonal scheme, but are guided by an ascending and descending scalar sequence. This sequence is neither completely chromatic nor diatonic and consists of stepwise tones and semitones within each of the four formal partitions, each linked to the next by a leap. It would therefore appear that these three reductive levels side-step the historical question posed earlier regarding Ives' modernity or reactionism, and instead demonstrate a seamless and unselfconscious integration of the old and the new.

The apparent lack of continuity in the background, especially towards the final *Country Band March* derived partition, invites comparison with the use of "spoiler" notes in the foreground - one of the many features that shapes Ives' melodic and harmonic language is the use of pitches alien to an established set (e.g. C# in a C major scale set) to disrupt and confuse simple procedures.<sup>22</sup> There is no reason, therefore,



why this style of disruption should not operate at lower levels, interrupting the otherwise smooth progress of a background scheme, or, as in this case, creating the structural “joke” of the comedy movement.

In a work that is so densely wrought, the discontinuous background is probably as immediately perceived as much of the foreground detail. The multiplicity of competing elements begs the question of how essential the analysis of surface elements such as the main melodic motive really is to an understanding of the music, when much of the detail will never be heard. The answer probably lies in the perception of a moment by moment developmental logic, defined by the individual surface procedures, and shaped into more coherent forms by larger gestural pattern, and the middleground scheme in particular - the use of a constantly developing melodic motive to elide, and thus provide continuity, between different sections of the movement is just one example of this process. The comparatively simple background can be seen to assist in the comprehension of each formal partition in isolation, whilst emphasising the stylistic divides between them in its fundamental discontinuity.

The appearance of polytempo and quarter-tones amongst the compositional tools marks the movement as something of a tour de force in terms of technical plurality. Both features appear individually in previous works but are brought together in the comedy movement in one of the fullest displays of Ives’ “advanced” techniques in a single work. Despite often becoming isolated as the focus of historical debate about Ives’ originality, the devices emerge quite spontaneously in the course of the music. The quarter-tone “hymn” of fig.2 occurs after two separate interpretations of a twelve-note chord have exhausted the possibility of further chromaticism, and continues the perceived passage of the introduction as gradually preparing the harmonic material of the movement. Similarly, the dividing line between polytempo and the closely related concepts of polymeter and polyrhythm is initially quite blurred but becomes clearer as the movement progresses, finding its ultimate expression in the historically prescient “mobiles” of figs.23 and 43.

<sup>1</sup>Kurt Stone, “Ives’ Fourth Symphony: A Review”, *Musical Quarterly* 52, no.1, January 1966, p.14.

<sup>2</sup>Charles E. Ives, “Memos”, p.66.

<sup>3</sup>From “Hawthorne” passage in “Essays before a Sonata”.

<sup>4</sup>Nathaniel Hawthorne, “The Celestial Railroad”, from *Selected Tales and Sketches*.

<sup>5</sup>From the Preface to the AMP score of *Fourth Symphony*, 1965, p.viii.

<sup>6</sup>*Ibid.* p.ix.

<sup>7</sup>*Ibid.* p.ix.

<sup>8</sup>*Ibid.* p.ix.

<sup>9</sup>*Ibid.* p.vii.

<sup>10</sup>See “Conductor’s Note” from AMP score of *Fourth Symphony*, p.13, for an explanation of Ives’ theories on dynamic perception.

<sup>11</sup>This simple expansion is similar to that seen between the two versions of the trumpet theme to *The Unanswered Question*.



<sup>12</sup>See Introduction to this study of the *Fourth Symphony* (Chapter Six).

<sup>13</sup>“Memos” p.108.

<sup>14</sup>Although Ives did speculate on this and other more complex systems, “Memos”, p.108/9.

<sup>15</sup>“Memos”, p.110.

<sup>16</sup>Ives describes the sound of this chord in “Some Quarter-tone Impressions” from “Essays before a Sonata”.

<sup>17</sup>“The quarter-tone notes in the strings at Sec. 35 may not be taken exactly; a slight rise and fall in pitch, less than a semi-tone (sic), will do.” C.E. Ives, from the “Conductor’s Note”, p.12, AMP score.

<sup>18</sup>Curator of the Fleisher Music Collection of the Free Library of Philadelphia.

<sup>19</sup>“During this passage it may be advisable to have one of the players in the upper orchestra act as a separate conductor.” Ives, from “Conductor’s Note”, p.12, AMP score.

<sup>20</sup>See *Putnam’s Camp* from *Three Places in New England*.

<sup>21</sup>Carter saw Ives increasing the level of dissonance in later transcriptions of early works - Vivian Perlis, “Charles Ives Remembered: An Oral History”, New Haven, Yale University Press, 1974, p.138.

<sup>22</sup>A complementary procedure to his use of emphasis by exclusion.

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## FOURTH SYMPHONY

### FOURTH MOVEMENT

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*"The last movement... seems to me the best, compared with the other movements, or for that matter with any other thing that I've done..."*

Charles E. Ives<sup>1</sup>

#### Introduction

When Ives described the fourth movement of the *Fourth Symphony* as "an apotheosis of the preceding content, in terms of something to do with the reality of existence and its religious experience"<sup>2</sup> he was probably referring to a more high-minded synthesis of ideas than just recomposition of the preceding movements. The quote does demonstrate, however, that the fourth movement is one of the few orchestral works in his mature, more experimental style to acknowledge the integration and development of material in anything approaching a traditional symphonic pattern. Some of the smaller tone-poems, such as *Putnam's Camp*, show a form of development through the elision of entire self-contained works, but this technique often has as much to do with the recognition of common features within the constituents as with any classical, organic rigour. The fourth movement was clearly a long time in gestation, dated either 1910-16 or 1911-16 in early sketches and scores, and consequently overlapped the composition of all the other movements with the possible exception of the fugal third, which Ives tells us was "written just before the entire thing was finished..."<sup>3</sup> In spite therefore of having a large amount of material from the Prelude and second movement to distil, Ives' constant reuse of old pieces led him to include a further substantial source-work in the form of the lost *Memorial Slow March*, an organ piece from 1901.<sup>4</sup> Although this extra source occupies a major space within the scheme, the fundamental elements of the fourth movement, in terms of motives, background structure and other source melodies, remain directly consequent upon the first and second movements, in an attempt to resolve the musical "questions" posed in the Prelude. The movement is therefore an amalgam of many of the abstract processes

of the symphony and an exploration of the more ethereal and spiritual effects of the material they generate.

The following subheadings examine the formal consequences of the percussion battery (sic) and bass line elements of the score and the interaction between them. In so doing, a connection is made between the abstract patterning of the former and the more tangible perceptual effects of the latter, a connection that provides a good model for the balance of “substance” and “manner” within the symphony as a whole.

## Linear Reduction

Using a similar process to that outlined in the second movement, the larger formal scheme of the fourth movement can be mapped onto two reductive levels. In the second movement three graphs were necessary to describe the interaction of chromatic, tonal and scalar control, but the more condensed plan of the fourth is better served by a comparison of a chromatic/motivic surface level and quasi-tonal background. This simpler basis is due in part to the relationship between the background to the Prelude and its resolution in the fourth movement. In the Prelude the background consists of a progression from D to G roots that creates, in effect, an unresolved plagal half-cadence. The background graph of the fourth movement demonstrates that one of the long term goals of the movement is the symmetrical completion of this cadence, starting from the G and moving back to the D tonic.

The foreground graph contains the majority of the bass pitches similarly to the equivalent diagram of the second movement. The removal of basic repetition and the inclusion of simple beaming divides the bass line into areas of motivic transposition, chromatic patterning, pedal-points and long descending scales:

### Ex. 6.4.1 Foreground linear reduction

(see graph overleaf)



0 Percussion

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84



The foreground graph opens at bar 1<sup>5</sup> with the oscillating whole-tone and minor-third intervals of the hymn-source *Bethany*, that formed the melodic basis to the accompanying harp and violin “halo” of the Prelude, this time emphasising an A# pedal. This pitch then elides the hymn-source to the first of several motivic patterns at bar 5. In the Prelude the first note of the main motive (D natural, bar 0.1) was shown to be the most important of the pattern, “tonicised” by both its metrical position and the shape of the motive, but here an ambiguity is immediately perceived between the A# that occupies that same position and the strength of the D at the peak of the phrase. In context this is probably due to the effect of the preceding minor third G-Bb/A# interval, that defined the A# root of *Bethany*, that is then transposed to B-D during the motive, the A# reinterpreted as a chromatic lead into the strong minor-third shape. In terms of the larger developmental goal to reinterpret the preceding movements, this uncharacteristically organic device can be seen as the first important step in altering the perception of existing material.

From bars 5 to 12, four principal repeats of the Prelude motive occur in quick succession. The first, bars 5 to 6, retains the shape of bars 0.1-0.2 of the Prelude but transposes it down a major third. The answering phrase of bar 7 then transposes the equivalent pattern, of bar 1.2 of the Prelude, up a major sixth (or, octave transferred, down a minor third). The major and minor third intervals contained within the original Prelude motive can therefore be seen to operate linearly, on the transposition levels of the motive when it is presented in the fourth movement. The bass descent from bars 7 to 8, first interpreted at the opening of the symphony as the lead into a definite D root (Prelude bars 1.2 to 2), is used in this context to demonstrate again the conflict between the A#/Bb and D pitch-centres of bar 5 - the descent concludes on a Bb at the start of bar 8 but instead of being retained as a tonic or pedal as in the original, the line falls a fifth further, to Eb, as the chromatic introduction to a further motive statement, this time at the original Prelude transposition:

Ex. 6.4. 2 Double bass bar 8 and Prelude motive

[8] double bass

Prelude bar 0.1



Following this complete question and answer motive-pattern in bars 8 and 9, a downward glissando between C and D launches a further repeat at bar 11 of the opening to the Prelude, here transposed down a tone. The complete pattern is compressed, however, missing out the two held notes seen in bar 9, and jumping straight to the answering phrase, in bar 12, that reverts to the original transposition level of the Prelude.

The transition from the motive-oriented portion of the foreground to the first pedal-point is achieved through the cutting short of the final motive statement in bar 12, thereby prolonging the G that fulfils the small motive shape marked on the graph, but omitting the expected chromatic descent that completes the overall melodic phrase. The G is sustained for approximately seven bars and is then disrupted at bar 18 by a chromatic ascent, reordered G-G#-Bb-A-B-C. The chromaticism continues between bars 20 and 24 in a line whose fundamental shape oscillates between C and C#, filled in with portions of chromatic scales disrupted in a similar fashion to those of bar 18. The reason for this up-and-down ordering becomes apparent at bar 23 when the C to C# oscillation expands to include one of the forms of the enlarged motive within the second movement, C-C#-F-E. A second pedal-point area is then introduced that moves between the pivotal pitches of D and G and again back to D at bar 26.

At bar 27 the chromatic patterning returns, but this time directed downwards towards A natural at bars 29 and 30. In conjunction with the supporting harmony at this point the tonal implications are of a second inversion tonic rather than a dominant chord, which in the larger scheme reflects the avoidance of any dominant features until nearer the end of the movement. The chromatic side-step, Cb-Bb-Eb-D, between bars 7 and 8 that was earlier shown to link two motive phrases, is then writ large in a descent from the A natural to Ab and then Db and C. The Db emerges as a five bar pedal-note at bar 35 and introduces the passage thought to have been derived from the lost *Memorial Slow March* at bar 40. The further descent to C at bar 42 demonstrates the last of the foreground pattern mentioned earlier, that of long falling scales. The link between Db and C pedal-notes is built upon a continuous fall (octave transferred at bar 42 back up to the higher C) in semitone and tone steps. The sequence of pitches changes throughout the course of the descent, but between bars 41 and 45 the set becomes fixed, with the accidentals F# and Bb added to the scale of C major. The resultant set is therefore the 'acoustic' scale, with its harmonically ambivalent sharpened-fourth and flattened-seventh degrees.

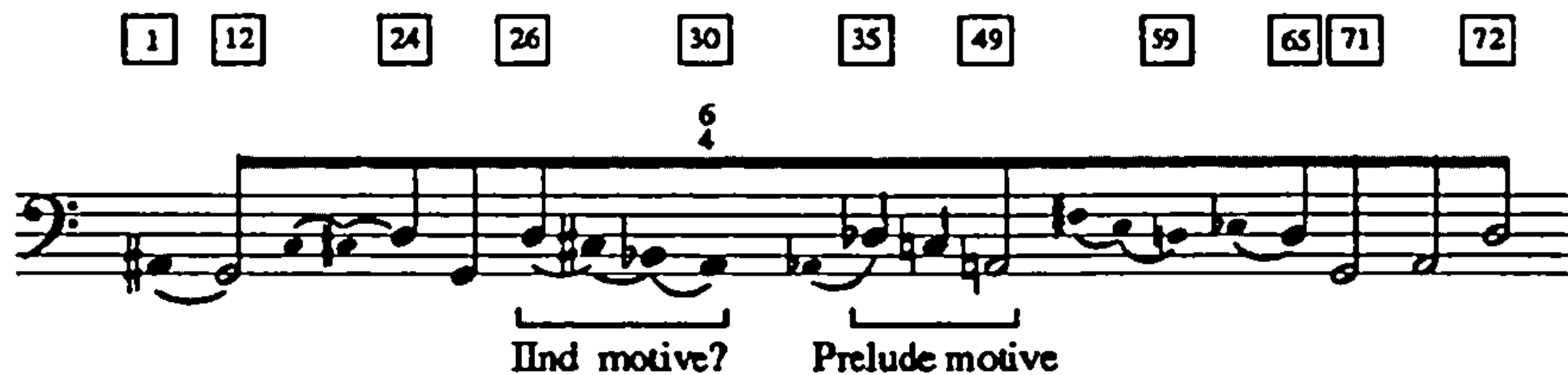
These two scale types, here elided into a single descent, are then separated to provide the basis of the dominant and tonic formations that conclude the movement. Following the C pedal at bar 48, a true dominant scale on A emerges between bars 50 and 56, again falling continuously, with an octave transfer mid-way to maintain the register. At bar 56 this descent is interrupted by a tonal sequence that brings the bass line to E



natural at bar 59. The E is used as the starting point for repeated small chromatic falls that culminate in a neapolitan Eb at bar 64. The final part of the movement is then launched, in a long, whole-tone, downward scale on D that covers six bars. The use of whole-tones naturally precludes any possibility of a dominant A natural emerging in the bass and this is remedied by the cessation of the descent on an extremely simple but powerful IV-V-I cadence at bar 71. Having firmly established D as tonic, the whole-tone scale continues, until a final D pedal-point is sustained over the last eleven bars of the movement.

The second level of reduction focuses the short-term chromaticism and scale patterns into longer tonal shapes, and demonstrates the resolution of the background “question” contained within the Prelude:

Ex. 6.4.3 Background linear reduction



The introductory oscillations of *Bethany* and the transpositions of the motive-pattern, between bars 1 and 12, are interpreted on the background graph as a prolongation of the opening A# of the movement. Although this passage is obviously more intricate than the suggested single note implies, the destination of the foreground detail is clearly the G pedal-point of bar 12, where the link with the inconclusive G ending to the Prelude is made clear. The chromatic link C-C# to the D pedal at bar 24 and its progression to G and back to D at bar 26 asserts the two pivotal pitches of the reduction. The lack of any dominant formation at this stage, however, maintains an equality between the G and D, neither interpreted as a conclusive tonic. The inclusion of the first and second movement motives at the background level is perhaps not so surprising given the compact size of the movement, but it does demonstrate the thoroughness with which all the aspects of the “apotheosis” are integrated - the first of the motivic shapes reflects the expanded form used in the second, comedy movement and links the D of bar 26 with the A of bars 29 and 30. The lower pitch is still not presented as a dominant, however, and as mentioned earlier, represents a second inversion chord. The second motive, in the original Prelude form, does take the background graph to the first definite dominant area at bar 49 but remains unresolved through the interruption of a “modulatory” sequence. This sequence diverts any sense of cadence at bar 56, by

reaching a tonic D via F# and E before taking a side-step to a neapolitan Eb at 64. The climactic downward D whole-tone scale at 65 is therefore not completely prepared by the foregoing structure and requires the rather more definite IV-V-I cadence of bar 71 to establish D as tonic.

Due to this equivocation about establishing the tonic, of the two main dominant areas shown on the graph, bars 49 and 71/72, only the latter becomes part of a full-close. Since the first returns to the subdominant at bar 71, this indicates that the larger tonal plan of the movement is dependent on the perfect cadence of bar 72 to provide final resolution. In this sense the whole movement, until the cadence, is therefore a prolongation of the subdominant G at the start of the movement, in a symmetrical reversal of the background to the Prelude.

### **Battery Unit (percussion group)**

From a foreign perspective, some eighty years after the composition of the fourth movement, it is difficult to know whether Ives' misspelling of the word *batterie* (meaning a percussion group) as *battery*, is an anglicism or an intentional pun. As a keen sportsman Ives would have been well aware that the term *battery* also denotes the pitcher and catcher combination in a baseball team and, in so describing the background rhythmic propulsion of the movement, perhaps wanted to equate the central importance of these sporting positions with the pivotal role of the percussion group. The pitcher and catcher in a baseball game operate as a single unit, controlling the play through a system of signals. Although part of a larger team, the effectiveness of their co-operation determines the course and speed of the game, more or less independent of the other players in the team. This sporting model of a small controlling element within a larger whole is therefore a good analogue, intentional or otherwise, for the self-contained percussion section that plays throughout the movement, integrating apparent metrical independence with less obvious formal control.

The musical battery unit consists of a snare drum, small timpani or medium drum, cymbal and bass drum, and gong. The hierarchy of high to low sounds corresponds, in a manner similar to that of a gamelan, with the relative complexity of the lines - the higher the sound, the faster the rhythmic pattern. The four lines operate as a phasing system composed of three different meters, the small timpani and cymbal/bass drum lines working to the same period. Since the patterns are extended and polyrhythmic they can be simplified as follows:



Ex. 6.4.4 Snare drum bar 1

1 snare

etc.

=

etc.

(one crotchet represents five semiquavers)

The shortest metrical period belongs to the snare drum, in a simple crotchet and quaver pattern distributed across  $2\frac{1}{2}$  bars of 4/4. Since this rhythmic unit not only phases against the rest of the battery but also against the bar divisions, the pattern only returns to a downbeat on every fifth bar.

Ex. 6.4.5 Small timpani bar 1

1 small timpani

etc.

The polyrhythmic element of the next highest line is emphasised in the metrically clear but over-complex notation of the small timpani part. Although the triplet grouping that straddles the fifth and sixth bars appears to be an irrational subdivision of the bar, the pattern actually fits within a simple crotchet pulse. The whole line contains both triplet and quadruplet subdivision and consequently a small rhythmic lowest common denominator. The effect of the subdivisions is that of a written out accelerando throughout the pattern, the durations going through a process of reduction from minim to triplet-minim (3:2) to dotted-crotchet (4:3) in the first three bars and from crotchet to triplet-crotchet (3:2) to dotted-quaver (4:3) in the fourth to sixth bars. The fundamental organisation of the whole pattern is therefore based on simple rhythmic ratios, but creates the perception of a gradual increase in tempo.



Ex. 6.4.6 Cymbal/bass drum bar 1

1 cymbal




bass drum

The simplest pattern of the battery unit belongs to the cymbal and bass drum. Only a single crotchet stumble in bar 3 disrupts a sequence of continuous minims. The period of seven bars is the same as that of the small timpani line.

Ex. 6.4.7 Gong

1 gong



boxed numbers = no. of crotchet rests      unboxed numbers = length of beat

crotchets = 10 2 7 1 4 1 13 2 12 2 12 2 5 1 6 2 12 2 12 1 13 1 6 1 6 1 13

9 5 14 14 14 7 7 14 14 14 7 7 14

14

The comparison with a gamelan orchestra continues in the use of a gong for the largest pattern of the battery. Despite its infrequent appearance, the gong eventually establishes a regular pattern that reduces to crotchet and quaver ratios over a period of 56 beats. This large pattern is almost identical to that of the snare drum but scaled up to a period of 14 bars of 4/4.

In characteristic style, only one of the four patterns starts at the beginning of its rhythmic cycle, although the battery plays a solo “ad lib” introduction to the movement. John Kirkpatrick describes the purpose of the percussion in terms of the consistent noise of a city-scape<sup>6</sup>, and if this programme is to be interpreted literally, then the lack of a synchronised start becomes a calculated attempt at picturing the continuum of sound - the implication is that the movement shows just a small glimpse of a much larger scheme, the phasing of the patterns starting at some point in the past, and only moving to the foreground as the work begins. This interpretation even extends to the use of the minim rest at the very opening that immediately moves the rhythms away from any downbeat.

The battery unit continues in 4/4 throughout the movement, against time-signature changes in the main body of the orchestra. The orchestral time changes remain crotchet

divisible and therefore the rhythmic relationship between the two elements remains close; the separate barring of the battery is strictly unnecessary<sup>7</sup> since the tempo changes happen to both strands and the complexity of some of the orchestral lines far exceeds that of the percussion.

The only deviations to the patterns, once established, occur in the small timpani and gong. The timpani expands the scope of its subdivisional ratios during bar 27,<sup>8</sup> to encompass quintuplets, sextuplets, and ultimately septuplets at bar 31. This increase in activity accompanies a brief orchestral piano flurry, unsupported by the remainder of the orchestra. The perceived effect of the further subdivision is again that of a seamless *accelerando*, and the pattern returns to normal at bar 32, in the same phase that it would have occupied without the elaboration. The deviation to the gong line occurs in a similarly metrical manner, the longer pulse of the pattern remaining constant whilst the subdivisions change. Confusingly, the first example occurs within the first four bars of the movement, two seven beat “quavers” repositioned to nine plus five beats. At bar 70 the seven beat “quaver” of the archetype is then divided into three plus four with the insertion of an extra attack, and at bar 76 the combination of a fourteen beat “crotchet” and seven beat “quaver” is reordered as twelve plus nine. The example at bar 70 will later be shown to coincide with a significant formal juncture whilst the following one occurs either to enhance the metrical clarity of a complex orchestral bar, or, since no extra notes are added, perhaps even as the result of a copyist’s mistake. The possibility should not be discounted, however, that Ives intended all these alterations as the rhythmic equivalent of melodic and harmonic “spoilers”, adding small flaws to an otherwise perfectly ordered background texture.

Given that the four lines of the battery unit maintain their respective periods, despite the changing subdivisions mentioned above, the instruments are guaranteed to arrive back in phase at certain points in the movement. Since the patterns are not quite synchronised at the opening of the work, the best reference point can be taken as bar 1 (the introduction notated as bar 0) at the moment when the orchestra joins the battery. Here the snare and cymbal/bass drum are at the beginning of a cycle, the small timpani either at the beginning or one bar in (if the pattern actually begins again at the *pp* marking, bar 4), and the gong at some undefined point due to its irregular shape early in the movement. The combination of the five and seven bar periods of the patterns puts the lowest common multiple, or the beginning of each complete phase, every thirty-fifth 4/4 bar. The fourteen bar cycle of the gong may seem to mitigate against such a short phase period, but since its pattern takes a longer time to establish, and divides easily into two seven bar halves, this means that in practice the overall phase of the battery is established by the other three lines. In addition, it should be noted that a gong attack actually appears in the correct position at each point of phase repetition.



The first complete phase ends halfway through the nineteenth orchestral bar. The formal significance of this point lies in the cessation of the G pedal in the basses and the consequent end to the introductory sequence of the movement. This juncture also marks the beginning of the long range motion from the G bass down to the final D tonic, in the striking reversal of the tonal plan of the Prelude. The next phase completion occurs at bar 42 and roughly marks not only the start of a new “key” area, working towards the C pedal of bar 45, but also the beginning of a section apparently based on the lost *Memorial Slow March*, that covers approximately bars 40 to 63.<sup>9</sup> The final meeting of the percussion phases marks a further pivotal formal device during bar 72. The possibility of a final D tonic has been assumed from bar 65 onwards, in a striding whole-tone descending bass line launched by a neapolitan Eb, but the final cadential proof of the tonic comes at the start of the last percussion phase, bar 71/72, in the unequivocal IV-V-I progression. The clarity of the gesture is enhanced by the continuation of the battery unit through an orchestral G.P. (marked “halt”) as the harmony hovers between dominant and tonic. The movement ends shortly before the next repetition of the opening phase, as first the orchestra and then the battery fade to nothing, leaving the small timpani and cymbal/bass drum in mid-pattern.

The points of percussion battery phase synchronisation can be added to the background graph of the linear reduction as follows:

Ex. 6.4.8 Background reduction and percussion phases

## Overview

One of the most successful compositional aspects of the movement is the integration of the *Memorial Slow March* into the overall scheme. Despite apparently being introduced in the middle of a long bass descent at bar 40, the subsequent C pedal-point and dominant scale on A of the source-work join the previously established Db pedal, of bar 39, in completing a large scale motivic pattern. On a more local level, the combination of dominant and whole-tone scales within the long downward scale-passage on C, bars 42 to 45, also provides the basis for the separation of these sets into



the unresolved dominant passage of bar 50 onwards and the final whole-tone descent of bars 65 and 72. The lack of resolution following the dominant passage is achieved through a diversionary tonal sequence culminating in the neapolitan Eb at bar 64, leaving the following whole-tone descent on D requiring the strong perfect cadence of bar 71 to establish the tonic fully. Ives therefore achieves a characteristic reversal of standard procedure, by not resolving a simple tonal sequence and then resolving an “atonal” whole-tone passage.

The interaction of the background scheme and the percussion battery exists at the level of pre-compositional planning. The battery can be thought of as the ticking of a clock; almost inaudible, but still influencing or marking the temporal scheme. Despite the probable disappearance of the percussion within the orchestral texture during much of the movement (even more so the points of phase completion), the programmatic effect of the battery, in its seemingly endless sequence, reinforces the perception that all the foreground events are part of a larger, hidden plan.

<sup>1</sup>Ives, “Memos”, p66.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

<sup>4</sup>Composed for the Central Presbyterian Church, New York, during the same period as his exploration of quarter-tones on the Sunday-school piano.

<sup>5</sup>In the 1965 Associated Music Publishers score a bar 0 is given to the introductory percussion patterns.

<sup>6</sup>From the Preface to the AMP score p.ix.

<sup>7</sup>Programmatic or editorial?

<sup>8</sup>The bar number refers to the orchestral, rather than the percussion barring.

<sup>9</sup>According to John Kirkpatrick in the Preface to the AMP score p.ix.

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## FOURTH SYMPHONY

### OVERVIEW

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*"...once I showed a page... to a well known musician. He said it was a beautiful, artistic masterpiece of penmanship - "Oh, but such awful music!"."*

Charles E. Ives<sup>1</sup>

Ives justifies the heterogeneity of the movements of the *Fourth Symphony* programmatically, as an episodic sequence of solutions to an opening conundrum. The actual musical direction of this picture is slightly confused, however, since the composer sometimes described the second, third and fourth movements as "answers" to the "question" of the Prelude, and at other times claimed the fourth movement as an "apotheosis of the preceding content". The actual path of the symphonic argument is therefore not as linear as first suggested in the *Memos*, and proves to be a more symmetrical scheme, under the influence of an overarching background plan. Stylistically and analytically, the hardest movement to integrate into the larger scheme is the fugal third. Although as interesting in its own terms as the other movements, the rigidity of the fugue framework, in its representation of clarity and objectivity, prevents the use of the unifying elements that link the Prelude, comedy and finale together. In this sense, it functions in a similar way to the "spoiler" elements often found in Ives' harmonic and rhythmic sets.

The unity or "through composition" perceived in the remaining movements can be demonstrated in three principal areas: technical devices, melodic motives, and background structure. Under the first of these headings come items such as continuous accompanying textures, polytempo/polyrhythm, and quarter-tone construction. Some of these occur only in the outer movements, framing the comedy movement, and others arise in all three.



## Technical devices

The outer movements both contain an ostinato-texture that appears to proceed independently of the main body of the music. In the Prelude it takes the form of a textural “halo” that contains phasing violin and harp major and minor third diads, whilst the fourth movement includes a continuous percussion “battery” that also contains a phasing system. Both systems disguise their relationship with the main argument through the use of polyrhythm and polymeter. Analysis of the actual effect of the two systems demonstrates, however, that both have a symbiotic relationship with their surroundings, in ways appropriate to the main developmental thrust of the movement. In the case of the Prelude this means that the first harmonic set of the “halo” is derived from the Tristan chords of the opening orchestral bars and proceeds, in a gradual reduction of the pitch material, from a basis in the scale set of the dominant (A major) to that of the subdominant (G major) at the conclusion. In terms of the harmonic goals of the first movement as the prolongation of a plagal cadence (D to G) and the explication of Tristan chords as collections of major and minor thirds, the accompanying texture therefore reflects both the constituents and the direction of the harmonic development. In a similar manner, the percussion battery of the finale contains both the essence of the rhythmic material of the movement and the clues to its use. The main source-work of the finale is thought to be the lost *Memorial Slow March* and consequently the percussion rhythms are simple martial crotchet and quaver patterns, heavily disguised by polymetric re-barring. The completion of phase cycles within the battery then also coincides with significant points in the formal structure of the movement, including the resolution of the background scheme begun in the Prelude.

A common feature of all three movements is the use of polyrhythm and its gradual development into polytempo. The first movement introduces multiple rhythmic subdivisions (e.g. quadruplets against quintuplets) but retains a consistent barring of the patterns. In the second, the rhythmic freedom is extended to the emergence of three forms of true polytempo, the first delineating a fixed period of time, contrasting rubato with constant tempo elements, the second occupying an indeterminate length of time and overlaying a set tempo with an accelerando, whilst the third presages the use of “mobiles” and has an unfixed duration and contains an unquantifiable amount of material. A consistent pattern of development is therefore evident from the opening of the symphony to the beginning of the fourth movement, from comparatively simple cross-rhythm to freely independent, repeating segments. The percussion battery of the last movement then completes the circle of rhythmic development, integrating the perceived independence of the “mobiles” with the creation of large structural “barlines” at the periodic resolutions of the phase cycle.



The use of quarter-tones within the second and fourth movements is also based on the extension of existing material. On almost all occasions, quarter-tones are used as further subdivisions of the chromatic scale, continuing the upward or downward motion of a scale passage, or deviating and returning from a peak note, in the form of a controlled glissando. Their use is preceded in the Prelude by two total-chromatic chords across the full orchestra, the second accompanied by a chromatic fall and glissando in the double basses. The conceptual leap to notating the gaps between the semitones is therefore not as great as might be imagined, especially given Ives' discovery of quarter-tone pianos some years earlier in New York. The fact that Ives also speculated on more complex micro-tonal divisions of the octave in fact makes the simplicity of quarter-tone use quite surprising. Their application in the *Fourth Symphony* is restricted almost to a programmatic demonstration of poor intonation, and is not as fully explored as the rhythmic aspects of the work.<sup>2</sup>

### Melodic motive

The most important unifying element of the work, and ironically also the most traditionally symphonic, is the melodic motive presented at the very opening. In the first movement the motive is employed as the basis of the harmonic construction, allowing the creation of Tristan chords and bitonal passages through the expansion and duplication of the major and minor third intervals of the vector-set. The extension by thirds of the tonic triad to a dominant-ninth chord on the subdominant, over the course of the movement, also informs the overall plagal motion of the background scheme. The emphasis returns to melodic use of the motive in the second movement, expanding the basic shape of the Prelude set from three pitches with one chromatic interval to four pitches grouped into semitonal pairs separated by a fourth. Whilst the semitone element of the Prelude set expressed the difference between a major and minor third in a quasi-tonal setting, the larger central interval of the comedy ensures that the pairs of semitones are no longer tonally related, creating a purely chromatic foreground. The motive regains its earliest form at the beginning of the fourth movement, manipulated on a larger scale to define a background scheme that links an opening A# pedal to a G prolongation via the by now ubiquitous third. This final motivic usage therefore integrates both the inherent chromaticism of the pitch set on a local level with its ability to control larger background schemes.



## Background structure

As mentioned previously (p.123), the Prelude contains a background level that, although complete in the pandiatonic presentation of the tonic scale, is unresolved tonally - a tonic D established near the opening proceeds to a final subdominant G through motivic expansion of the harmony. The second movement then follows a chromatic path, controlled tonally only at a middleground level, whilst the third traces a more conventional fugal development. Following a motive-laden introduction, the fourth movement proceeds from the point where the Prelude ended, eventually returning to the original tonic. Although this would seem to reflect an overall symmetry based on the prolongation of a plagal cadence, the resolution in the fourth movement is achieved via a final perfect cadence, implying a sequence I-IV-V-I, that is only completed at the very close of the symphony.

Whether the plagal or the perfect cadence prolongation is taken as the fundamental plan, it is perhaps more significant that the symphony contains a fundamentally tonal approach to the entirety of the background structure whilst relinquishing local tonal control of the constituent movements. Rather, the Prelude could be described as quasi-tonal or diatonic, the third movement as extended-tonal and the second and fourth movements as chromatic/atonal.

## Conclusions

The conflict between Ives' descriptions of the symphony as being both motivated by the first movement and developmentally directed towards the fourth movement, is resolved in the relationship between foreground and background plans. Whilst the small scale motivic, harmonic and melodic tools of the work are indeed to be found in the Prelude, and subjected to reinterpretation in the subsequent movements, an overall resolution to the larger scheme of the symphony is obtained through the cadential function of the last movement. The second movement exemplifies this coexistence of tonal and atonal, chromatic and diatonic, control in a multi-level organisation, and the third fugal movement perhaps represents the ever present "spoiler" element seen at every level, from alien notes in pitch sets, to the Country Band discontinuity in the comedy movement, to the inclusion of a traditional tonal movement in an otherwise harmonically advanced symphony.

<sup>1</sup>Ives, "Memos", p65.

<sup>2</sup>For possible psychological and historical reasons behind this see Stuart Feder, "Charles Ives: 'My Father's Song' - a psychoanalytic biography", Yale University Press, New Haven and London, 1992.

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# CHAPTER SEVEN

## ROBERT BROWNING OVERTURE

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*"[The Robert Browning Overture] is a kind of transition piece, keeping perhaps too much (it seemed to me) to the academic, classroom habits... But the themes themselves... were trying to catch the Browning surge into the baffling unknowables, not afraid of unknown fields, not sticking to the nice main roads, and so not exactly bound up or limited to one key or keys (or any tonality for that matter) all the time. But it seemed (I remember when finishing it) somewhat too carefully made..."*

Charles E. Ives<sup>1</sup>

*"If you must play a chromatic scale, play it like a man."*

George Ives<sup>2</sup>

### Introduction

Following his marriage to Harmony Twitchell in 1908, Ives worked on a number of overtures for a series entitled *Men of Literature*. The works were to be character portraits of the newlywed couple's favourite authors and poets, amongst them Walt Whitman, Matthew Arnold, Emerson, Whittier, Henry Ward Beecher and Robert Browning. However, as Ives himself later recorded in the *Memos*, only the *Robert Browning Overture* ever reached the stage of full scoring, the other sketches becoming absorbed into the many significant works of this period, amongst them the *Second Piano Sonata* with its named "literary" movements. Even *Browning*, redesignated a "Tone Poem" since it "got out of the overture shape", remained part sketch, part score for some twenty years following its composition, only subsequently seen as "...natural and worth copying out".<sup>3</sup> Ives' equivocation about the worth of the piece, and its isolation within the *Men of Literature* series, carries with it an uncharacteristically even-handed evaluation of the music, far removed from his often bullish defence of other works, and the sarcastic comments reserved for the "Rollo's" or those unprepared to stretch their ears. The implication behind his reluctance to finish the scoring is that the means and effect of the work were somehow at odds or, to paraphrase one of his



own definitions, the “manner” outweighed the “substance”. In other words, Ives perhaps saw the developmental processes of the work as wrongly motivated, drawn too closely from a rigid, technical plan than from purely musical imperatives, a shortcoming far more heinous, to a Transcendentalist such as himself, than merely being uninspired.

In a thesis concerned with separating the musical and analytical from the programmatic and descriptive, the occurrence of a piece that, even by the composer's own admission, can be said to have failed in its intent, is of particular interest and provides an almost ready-made antithesis, and therefore inverted rationale, to the works deemed successful. When so many of the orchestral works employ so-called “experimental” processes, either in the means of proliferation or through the use of exotic devices such as quarter-tones, the following of a fixed method in itself cannot be held responsible for Ives' dissatisfaction, when he obviously viewed most of his experimental output as compositionally self-motivated and stylistically unforced. Rather, the basic materials or the influence of method upon material must have appeared unsatisfactory, stepping over into what he termed “academic” territory.

The sonority of the piece confirms this subtle shift in emphasis with a very uncompromising level of dissonance, even by Ives' usual standards - the highly severe manner lets through few of the characteristic moments of humorous relief. This departure from the norm is due in part to the revelatory use of total-chromatic melodic material; that is, lines that move through all twelve pitches without repetition. Although these lines are not subsequently moulded by anything approaching a thorough “serial” method, the step from the uncomplicated and often interchangeable source-tunes of both earlier and later works obviously greatly influences the perception of high dissonance. The emphasis, seen in the majority of the other works in this study, upon simple intervallic relationships to unite the source-tunes with every level of the formal construction, is dispensed with in favour of almost obsessive intervallic repetition, in a process that leaves little room for the customary “memorable” melodic fragments. The intensity of the intervallic working is seen from the very start in a formative gesture that, although characteristically motivic, is somehow more arid and less poignant than, for example, the openings to the *Third* and *Fourth Symphonies*. However, the immediate start to the developmental process does reflect the smooth, organic building of the main elements of the work, subsequent formal divisions defined more by style, tempo and density than differences in material or compositional process. Perhaps this is what Ives meant when he described the *Overture* as “too carefully made”?

Whilst other studies treat Charles Ives' brush with dodecaphony as a historically prescient but logical consequence of his constant experimentation, this chapter will show that in fact his manipulation of the total-chromatic set has little to do with the technique of serialism. As a demonstration of the limits to the Ivesian technique this

examination of the *Robert Browning Overture* consequently also emphasises the success and integrity of his more “ordinary” methods of construction, and the achievement of equally complex musical results through rather simpler, less prescribed means.

## Form

As mentioned in the introduction, the formal divisions of the *Overture* are based as much upon contrasting style as thematic content. That is to say, each discernible large scale unit employs a slightly different method of construction from its neighbours, be it chromatic (i.e. conjunct semitones), quasi-serial or altered-tonal, but all contain the same emphasis on semitone repetition and the quick rotation of the total-chromatic. The progress of these sections can initially be viewed in two ways, either as a balanced, almost symmetrical ABCDB<sup>1</sup>C<sup>1</sup>E pattern, pivoting around a central set of variations, D, and not unrelated to traditional symphonic plans (though nothing to do with sonata forms) or as a rotating, endless succession of items, given the exact repetition of bars 37-118 as bars 230-311, and the possibility that the closing bar indicates a return to the central variations as if to continue the work ad infinitum.

The sequence of constructional methods defines the formal divisions in the following order:

- A - “introduction”: altered tonal (centred around pedal notes but intervallically ordered)
- B - “transition”: atonal
- C - “exposition”: chromatic (predominantly conjunct semitone movement)
- D - “variations”: altered-tonal (key centred but intervallically ordered)
- B<sup>1</sup>
- C<sup>1</sup>
- E - quasi serial/chromatic/altered tonal (the potential “row” is finally presented)

The complete presentation of the total-chromatic “row”, that has been hinted at throughout the work, finally materialises at the beginning of E. All the previous motives and intervallic processes can be viewed as derived from this one construction, both its interval content and chromatic coverage uniting the various stylistic areas described above. On this basis, a third possible interpretation therefore paints the piece as a smooth developmental process directed towards this point, and comes closest to the Second Viennese School use of a central, generative pitch- and interval-set.



Since the *Overture* is ultimately a synthesis of all three schemes, terms to describe the constituent sections are necessarily limited. For these purposes, bars 0-35 will be called the “introduction”, bars 36-54 the “transition” (*allegro con spirito*), and bars 55-140 the “exposition”. Although the latter two carry with them connotations of a sonata form that is not applicable here, the terms are retained in the absence of better words to denote the main body of the work and its clear restatement (verbatim in this case).

### Bars 0-35 Introduction

Tight intervallic control of both melody and harmony is demonstrated from the very opening of the work in a homophonic string gesture that outlines both a thematic melodic descent and the use of mono-intervallic construction:

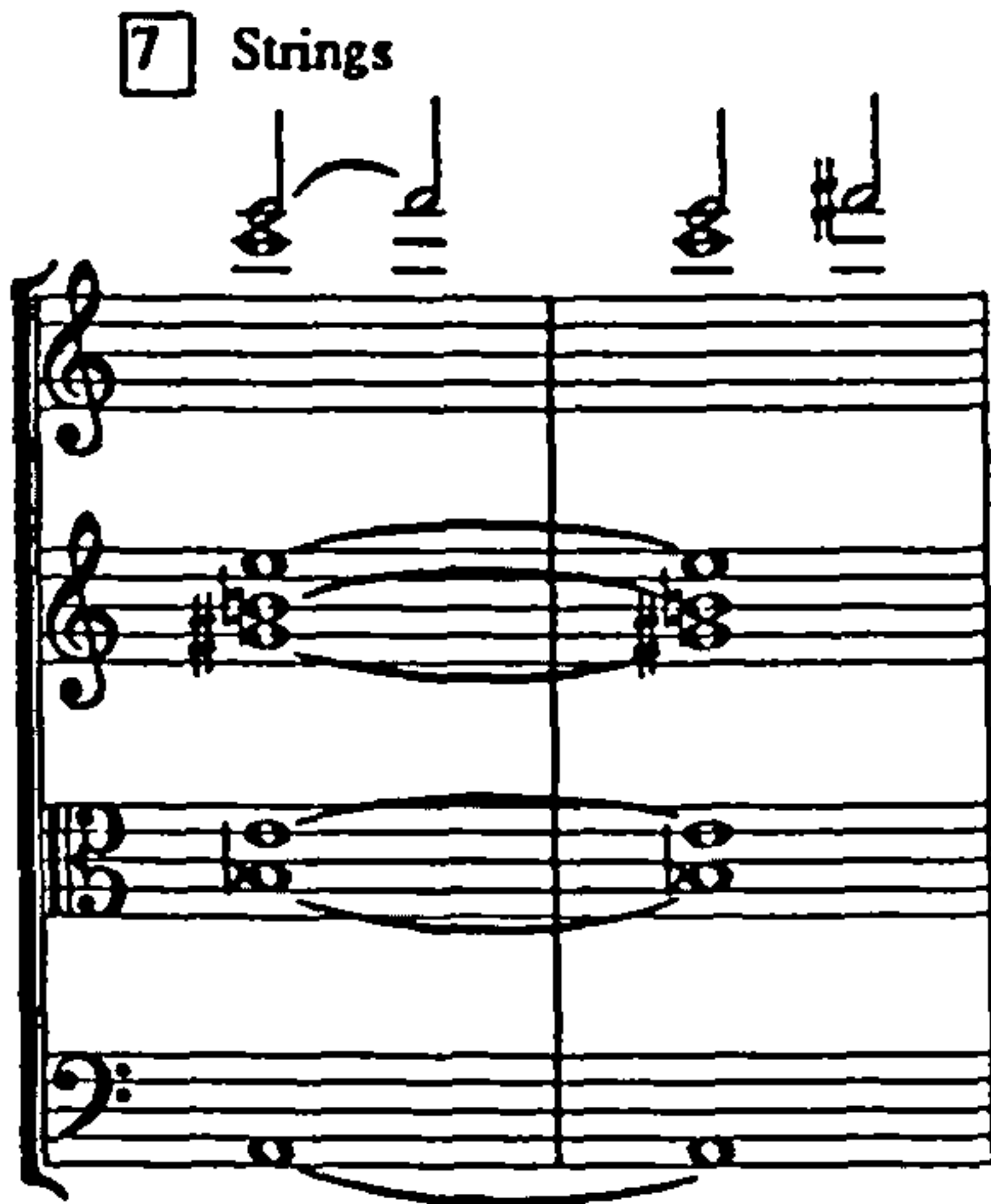
Ex. 7.1.1 Strings bar 1



The upper violin line maintains a whole-tone basis whilst the lower is chromatic, incorporating a continuous descent, Db-Bb. The two lines begin by holding chromatic and minor third relationships with the pedal E of the lower strings and a major third one to another. The major third contracts to a minor third as the lines fall to the last quaver of the bar, prefiguring the conflict between major and minor and the use of combined major/minor sonorities throughout the *Overture*, particularly in the calmer variations (D) at the centre of the work. The second crotchet of bar 2 then fleetingly emphasises E (minor), which is to form the underlying tonal basis of these earlier sections of the piece, before the intervallic content moves on to again encompass compound<sup>4</sup> semitones and major and minor thirds on the final quaver.

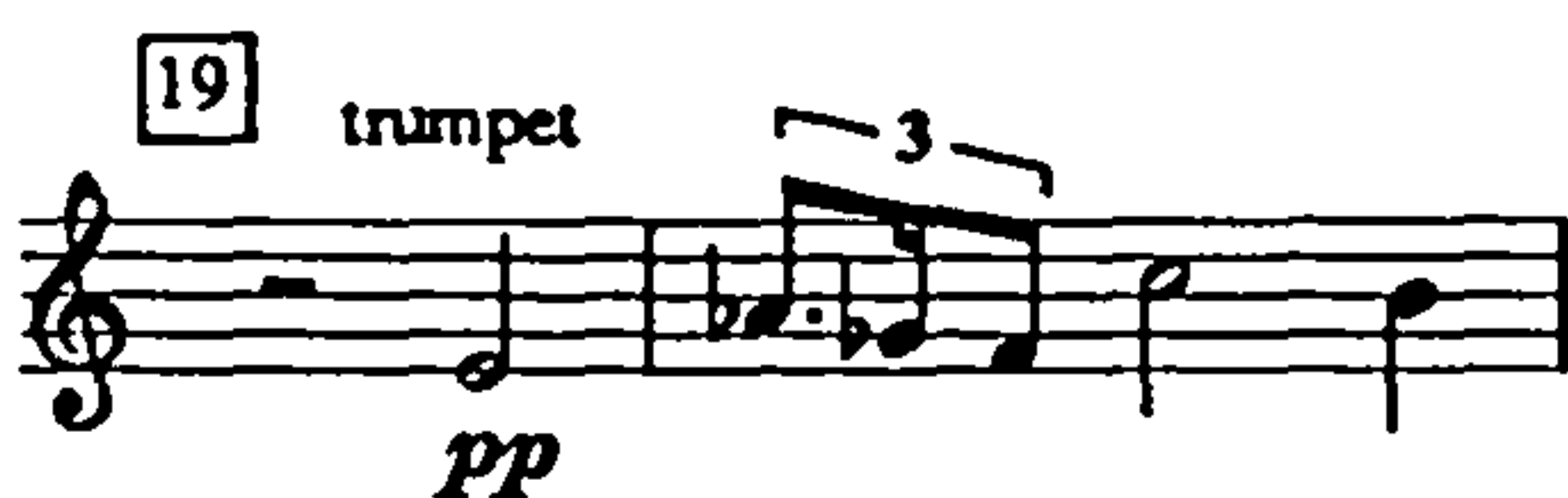
The concentration and integrity of the opening intervallic statement is emphasised by its relative brevity and isolation<sup>5</sup> - the following passage, from bar 7 onwards, is repeated verbatim at bar 209 to form a link from the central variations back to the passage of direct restatement. On its first appearance, however, the violin I at bar 7 continues the same intervallic development, by presenting a rising semitone and tone consecutively, E-F, E-F#:

## Ex. 7.1.2 Strings bar 7



The melodic contour descends again from bar 13 to the E root, surrounded by oscillating F and D# chromatic relations in the bassoon, before launching a germinal version of one of the later themes, played by the trumpet:

## Ex. 7.1.3 Trumpet (concert pitch) bar 19



The E, Ab/G# and B of the trumpet reinforce the centrality of the pedal E in the lower strings, as an E major triad, whilst the F and C function as chromatic relations to the root and fifth degrees, a feature later to be exploited in “spoilers” to root, third and fifth triadic degrees. The tone-semitone, Ab-Gb-F, reverses the interval order of the string melody at bar 7, avoiding any major/minor implications that might have arisen from the use of G natural as a passing note and thus beginning the move to the purely intervallic, “atonal” system that occurs once the pedal points are removed.

The final build up to the transition (*allegro con spirito*) returns to the homophonic presentation of intervallically controlled lines. The semitone and tone intervals of the opening statement are integrated into a passage that both descends chromatically and ascends in tone steps:



## Ex. 7.1.4 Woodwind (concert pitch) bar 27



The upper lines, given to the flutes and oboes, are placed a fourth apart, whilst the lower, on the bassoons, remain a fifth distant. Vertically, the inner and outer parts both span a compound tone, Ab-Bb, Eb-F. This shows further correspondence between the intervallic construction of each unit and the intervals of transposition.

Bars 36-54 Transition (*Allegro con spirito*)

Although Ives would probably have described bar 36 and the *allegro con spirito* as the point at which the work “gets going”, in formal terms it supplies a seamless link between the E based introduction and the purely chromatic exposition of bar 55. Following a prefatory semiquaver ascent that again utilises chromatic pairs, now grouped across the prevailing meter and linked by intervals of tones and thirds:

## Ex. 7.1.5 Double basses bar 36



the trumpet extends its phrase of bar 19, continuing the pattern of chromatic expansion, but also introducing non-conjunct movement in the octave displacement of the line Db-C-B, of bar 42, into minor-ninth and major-seventh leaps. (The major-seventh leap at the beginning of ex. 7.1.5 is presumably only the result of the limits of the double bass compass.)

The reason for the gradual removal of the E pedal and the increasing complexity of intervallic movement becomes clear at bar 46 in the prominent bassoon solo:

## Ex. 7.1.6 Bassoon bar 46



It is at this point that the intervallic control of the introduction begins to be directed towards the creation of a “row” or total-chromatic sequence. In this instance, the bassoon only covers eight pitches before it repeats the first G natural (via a major third that will later be shown to be a consistent “spoiler” interval), but the stringent use of compound perfect fifths and a single tone strongly implies that the process could be completed were it not for the reversion, in bar 48, to conjunct semitones and the re-entry of the trumpet motive in the horns.

## Bars 55-140 “Exposition”

After the many changes in density, tempo and affect at the beginning of the work, the period between bars 55 and 140 appears as a single gesture of unfolding melodic lines and almost unrelenting dissonance. Four competing intervallic processes are divided amongst the orchestral groups; the upper and lower strings follow two similar chromatic procedures that are unsynchronised both rhythmically and metrically, whilst the woodwind and trumpet add a similar lack of synchronisation to expanded versions of the trumpet motive of bars 19 and 39. As representative of the lower strings, the double basses follow an ascending and descending line of conjunct semitones interspersed with a leap each time the pattern repeats at a new transposition:



## Ex. 7.1.7 Double basses bar 55-92

double basses

55

etc.

N.B.

79.5

N.B.

etc.

The above diagram reduces the transposition of each small pattern of conjunct semitones to a longer picture of chromatic ascent and descent. (The diagram has been rebarred according to the patterns for clarity.) This longer scale motion shows a descent until bar 86, marked on the lowest stave of the diagram as an N.B., at which point it begins to rise almost without interruption until bar 140 and the end of the exposition. Whenever the process deviates from purely chromatic movement, the leaps are invariably by fifths and fourths and are indicated by the boxes. The jumps from pattern to pattern, across the readjusted barlines, also conform to these intervals, creating a progression similar to a modulatory tonal sequence (perhaps the Ivesian equivalent of a "cycle of fifths"). The connection between the larger plan of the double basses and the quasi-serial theme seen earlier in the bassoons is therefore demonstrated in the integration of fifths and semitones, the bass line moving chromatically on a small and large scale but leaping by fifths on the intermediate level, whilst the theme conversely moves by fifths to cover the total-chromatic.

Employing the same conjunct motion, but at a slower minim pace, the upper strings move through nine-note homophonic chords:

## Ex. 7.1.8 Violins and violas bar 55

55 violins and violas etc.

Each instrument maintains a constant set that is transposed chromatically downwards. The octave displacement of the chromatic motion inverts the intervals between chords into spans of minor ninths and major sevenths, reminiscent of the trumpet motive of bar 38.<sup>6</sup> The longer path of the strings, described in terms of the pitches of the top line, is that of an overall descent to the G an octave lower, before rising again from bar 60 to the D an octave and a fifth higher, and then falling to C a ninth lower, bar 74. The fifths relation of C, G and D is again a reflection of the importance of fifths upon the large scale construction:

## Ex. 7.1.9 Violin I bar 55

55 violin I etc.

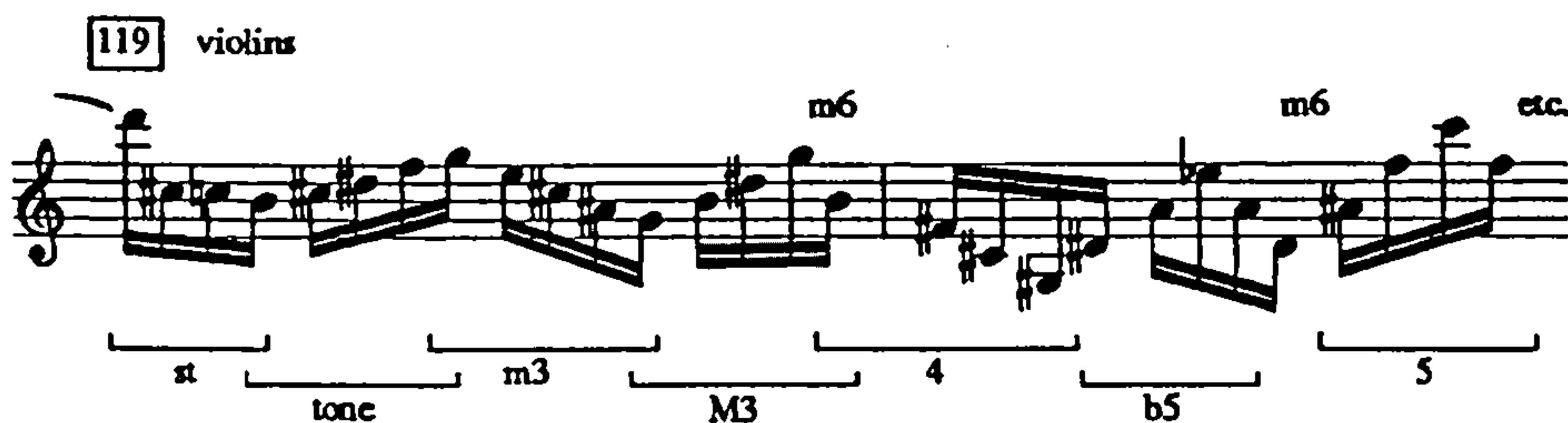
Harmonically, the three note chords assigned to each instrument also interact chromatically. At the start of bar 55 violin I holds a C minor triad, the viola a C# major inversion, and the violin II what could be described as a B minor 4-3 suspension. Since the upper and lower triads are so clearly diatonic it would imply that the middle chord is altered both to increase the dissonant effect through, in the first example, the combination of C#, D and E, and also to create further fourth and fifth intervals within the full chord.

In the remainder of the exposition the upper strings follow three further paths, the first an expansion of the trumpet motive, in parallel moving chords, beginning bar 75, the second a unison development of the fifths theme first seen in the bassoon, bar 110. At bar 119, however, the point at which the repeat of the exposition stops short (bar



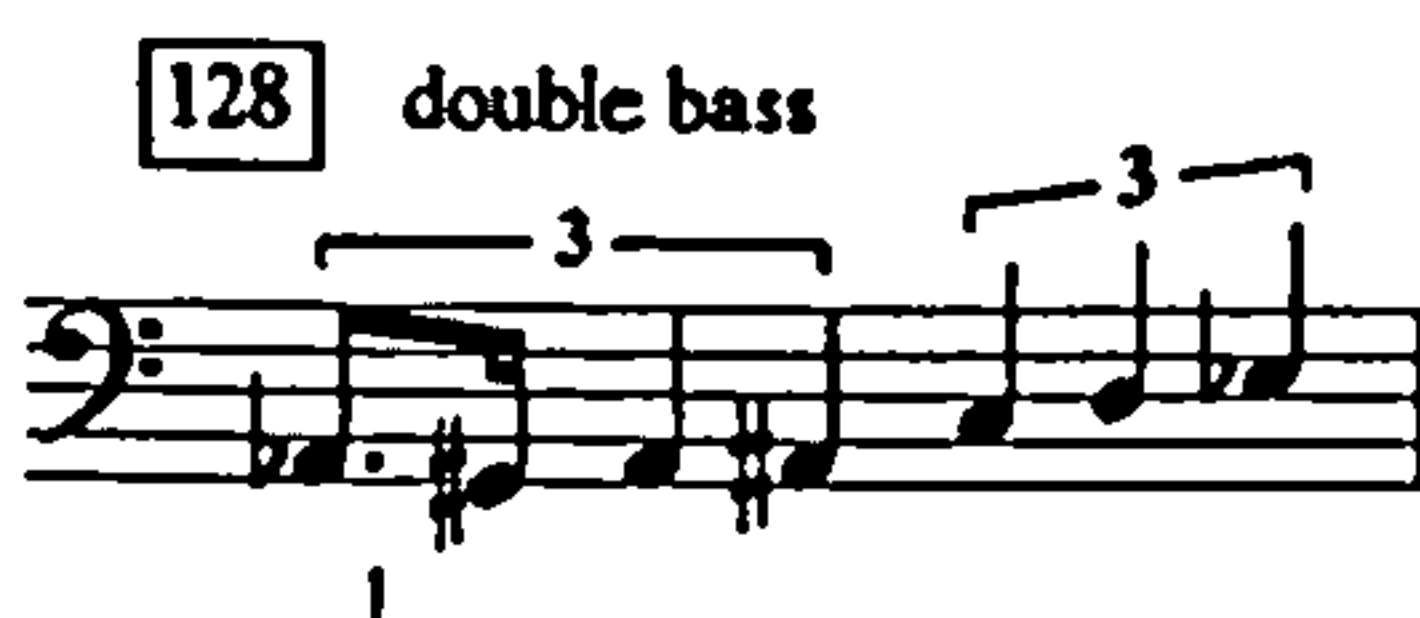
312), the violins switch to running semiquavers that trace a pattern of increasing and decreasing intervals:

Ex. 7.1.10 Violin I bar 119



The interval size increases sequentially from semitones to perfect fifths, interleaved across the crotchet semiquaver groupings. From a maximum perfect fifth leap the intervals reduces again back down to semitones, these two outer limits again reflecting the important fifth and semitone motivic intervals. As indicated on the diagram, the occasional minor sixth is interpolated, as a “spoiler” disruption to the rigorously ordered flow. A further unintentional “spoiler” can be seen in the bass line whilst the violins are following the above intervallic pattern:

Ex. 7.1.11 Double bass bar 128



Although the odd notation is obviously a printing error, this example does serve as a reminder of the difficulties in establishing what are intentional disruptions and unintentional errors, especially in a score so reliant on the expansion of clear intervallic processes.

### Bars 141-207 Variations

The respite, bars 141-248, between the end of the exposition and its exact repetition, begins with a set of variations before a reworking of part of the introductory material. Bars 141-207 take an eight bar harmonised melody through several reinterpretations of differing length and complexity, concentrating on the melodic descent of the model and

the major/minor sonority of its opening bar. The first statement (or model) interprets the predominant conjunct-semitone motion of the work initially as a simple, falling melodic step G#-G:

Ex. 7.1.12 Strings bar 141-148

The musical score for strings, bars 141-148, is presented in two systems. The first system (bars 141-144) shows a string quartet with a treble and bass staff. Bar 141 is marked with a box containing '141' and the word 'Strings'. Bar 144 is marked with 'etc.'. Below the staves, harmonic analysis is provided: bar 141 is labeled 'I', bar 142 is labeled 'Im IV maj/min.', bar 143 is labeled 'I', bar 144 is labeled 'V7', and bar 145 is labeled 'I'. The second system (bars 145-148) shows a string quartet with a treble and bass staff. Bar 145 is marked with a box containing '145'. Below the staves, harmonic analysis is provided: bar 145 is labeled 'maj/min.', bar 146 is labeled 'I maj/min', bar 147 is labeled 'V alt.', and bar 148 is labeled 'V alt.'. A bracket labeled 'symmetry?' spans bars 145 and 146.

In conjunction with its melodic use in the chromatically moving inner parts, the semitone is also exploited harmonically as “spoilers” in what would otherwise be diatonic or simple altered chords, creating major/minor sonorities (e.g. bar 143) and chords that contain strong chromatic clashes (e.g. bar 145/6). The overall harmonic movement is essentially functional beneath these chromatic additions, concluding on an altered dominant B, bar 148, for the transition back to the tonic E of the first variation, bar 149.

The range of transformations performed during the first variation, bars 149-156, is limited, confined predominantly to the adding of chromatically related “wrong notes”, extra lines, and small changes in the orchestration. As one of the few explicit examples in the Ives canon of variation worked upon a fixed portion of melody and harmony, the style of manipulation remains very similar to that already seen on a smaller scale in most of the other orchestral works. In essence, the method makes more complex the



features already present in the construction, through the addition of intervallically defined extra pitches and the subdivision of rhythmic values.

The next passage, starting at bar 157, shortens the first two bars of the original to one, before extending the use of the descending melodic shape over a passage of superimposed triads centred on a downward "key" transposition to Eb; from bars 162 to 168 the guiding major/minor quality of the episodes is interpreted as the collision of major chords and minor chords a tone apart, split between two sections of the strings. The sequence traces a simple I-IV-V-I progression. In the first instance the minor chord is added to the major chord after a minim:

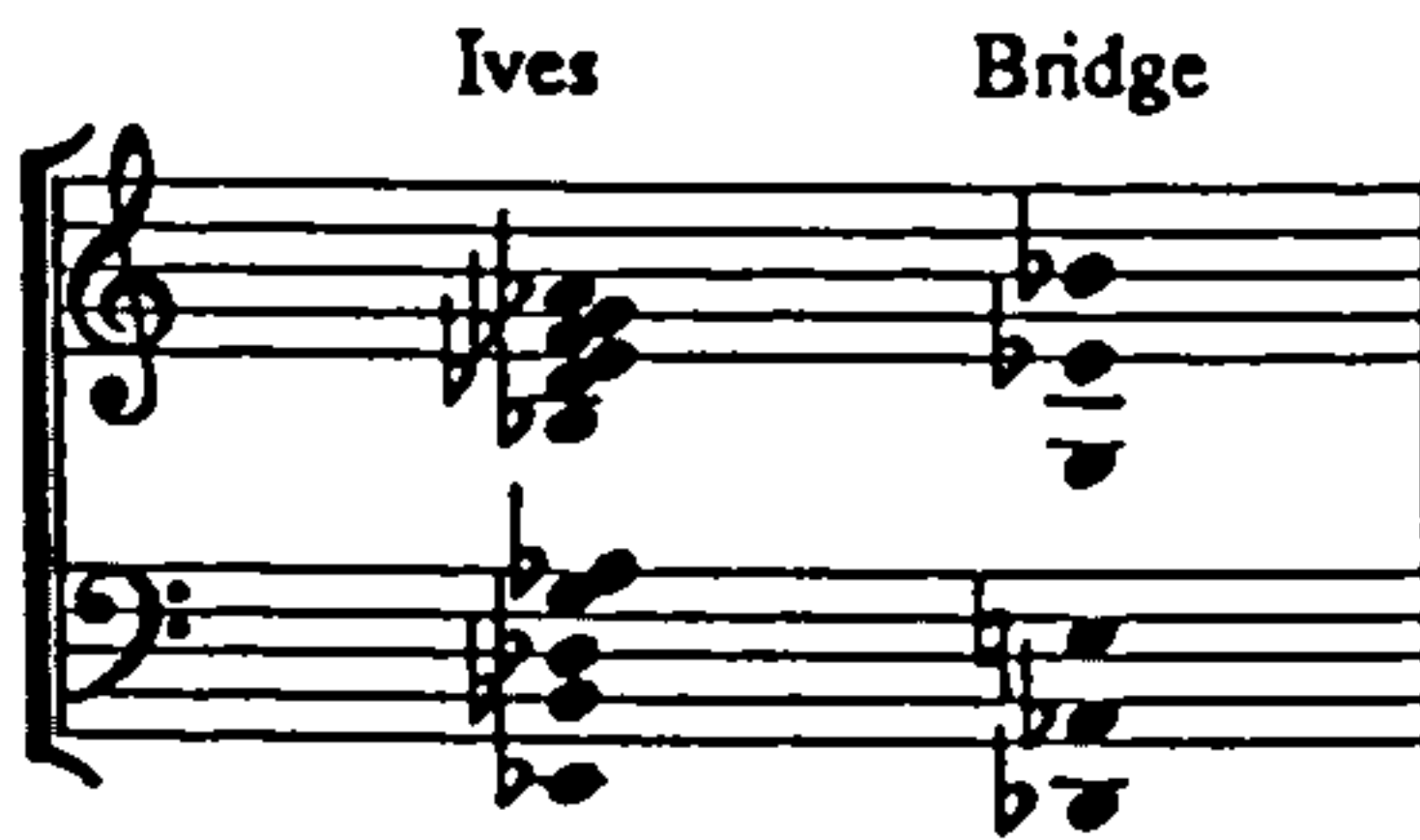
Ex. 7.1.13 Strings bar 162

162 strings

The musical score for strings, bar 162, illustrates a bi-chord formation. The top system shows the strings playing a C# minor triad (C#, E, G) in the first half of the bar and an Eb major triad (Eb, G, Bb) in the second half. The bottom system shows the strings playing a C# minor triad (C#, E, G) in the first half of the bar and an Eb major triad (Eb, G, Bb) in the second half. The chords are labeled 'C# minor' and 'Eb major'.

The placement of the string pitches is arranged so that the maximum chromatic interaction occurs and evinces a development of the string chords from the exposition and their relatively consonant presentation. By way of historical comparison, precisely the same bi-chord formation is found throughout the orchestral works of Frank Bridge. Instead of interleaving the two constituent chords, Bridge more often separates them widely to generate a comparatively consonant sonority, but in a comparable way to Ives, utilises the interval-vectors of the resultant set integrally within the piece.<sup>7</sup>

## Ex. 7.1.14 "Bridge" chord



At bars 176-178 the descending semitone theme is presented as C#-C within an A major/minor chord, returning the underlying harmonic scheme to a "naturalised" but indeterminate key area. Whilst this sonority is repeated at bar 180, the flute begins a repeating chromatic pattern that although written as syncopations across the crotchet beat reduces to a simple six note phrase:

## Ex. 7.1.15 Flute bar 179



The "spoiler" element to this ostinato comes at the end of bar 188 as the expected repeat of the pattern becomes just a C#-D-D# ascent, before re-establishing the flow on the down beat of bar 189. The long term goal of the flute line, however, is seen in a final flourish at bar 197 and an ascent to F#, the leading note of the last variation or episode:

## Ex. 7.1.16 Flute bar 197



The final variation, bar 198, reverts to the shape of the original, presenting the falling melodic semitone as major and minor third degrees in the new key of G. Added to this is an intervallically controlled passage of semiquavers in the violin II, uniting the final variation with the first occurrence of the line at bar 119 in the exposition:



## Ex. 7.1.17 Violin II bar 198



The violin II intervals increase and decrease in size sequentially, from a semitone to a perfect fifth and back as before, these outer limits again reflecting the two main intervals of the quasi-serial theme to the work.

## Bars 230-311 Restatement

Between bars 230 and 311, the end of the transition (*allegro con spirito*) and the entirety of the exposition (bars 37-118) are repeated verbatim. Where the violins launched an expanding intervallic sequence at bar 119 after the first presentation of the exposition, initially in semitones and expanding to perfect fifths, the violins and viola reverse the pattern at bar 312, starting with the fifths and contracting to semitones. (The viola echoes the violin at the fifth lower.) The change in emphasis to the larger interval can be seen as preparation for the later full expansion of the fifths-derived, quasi-serial theme at bar 331. This fulfilment of the many processes involving fifths and semitones is first displayed in a trombone solo that passes through all twelve pitches, predominantly by leaps of a compound fifth:

## Ex. 7.1.18 Trombone bar 331



The additional intervals of a tone and minor sixth have all proved important earlier in the work, interacting with the fifths and semitones from the opening bars and as spoiler elements respectively. Or alternatively, it is perhaps at this point in the piece that the central motive that spawned all the intervals is finally displayed in its entirety. The tone, the only part of the “row” that does not proceed by a leap, can be seen to have always been used as a conjunct interval from its strong melodic use at bars 8, 22-30 and

on most subsequent occasions. The conversion of the semitone to a major seventh is representative of the upper string motion throughout the “exposition” and, as already mentioned, the final minor sixth has formed the only deviation from the violin intervallic sequences of bars 119 and 198.

Once the total-chromatic version of the motive has been presented, the line is transposed and passed amongst the orchestra canonically from bar 349. Bars 343-346, for example, invert many of the intervals but retain the same ordering:

Ex. 7.1.19 Horn (concert pitch) bar 343



The close of the *Overture* sees the restatement of previous material, including the conjunct chromatic bass line of the exposition, the expanding intervallic sequence of the violins, and various woodwind presentations of extracts from the “row”, all occurring simultaneously at bar 389. The final bar follows a quadruple-forte chord with a return to the opening semitone fall of the variations before fading to silence.

## Overview

The process of intervallic repetition that informs the majority of Ives’ orchestral works also provides the basis for the creation of the total-chromatic “row” in the *Robert Browning Overture*. Despite retrospective evidence that the twelve-note melody of bar 331 subsumes all the foregoing material, the chronological unfolding of the work sees the “row” as the culmination, rather than the formant, of the predominant semitone and fifth motivic intervals. This developmental direction can be seen as the reverse of a true serial process that presents a generative set early on in the work, from which all pitch-classes are derived through permutation. Where the permutative method demands that pitches are not repeated before the series is completely rotated, the Ivesian version is more concerned with constant repetition of the intervals of the set to provide coverage of all twelve notes. In common with the source-tunes usually favoured by the composer, the *Browning* “set” is derived from a minimum of intervals; the fifth, compound semitone, tone and compound major third. Of these, the latter three occur only once in the “row” and the final major third is very much relegated to the role of “spoiler”. The expansion of the set is consequently very similar to that employed in other pieces, but based on fifths and semitones rather than the familiar



major and minor thirds of diatonic sources. In particular, it is the fifth that takes the *Overture* away from an easily recognisable Ivesian sonority - where the repetition of thirds retains a basis in the set of the diatonic scale and consequently offers a fundamentally diatonic grounding<sup>8</sup>, the addition of fifths, and by inversion fourths, extends chromatically. That the full pitch-set of bar 331 consists of all twelve notes is thus almost a fortuitous by-product of the choice of the fifth as the central interval of the source. The work as a whole can therefore be said to be representative of the two poles of tonality and serialism without fulfilling the criteria for either. Epigrammatically, the *Overture* could be said to be built from fifths but not tonal and built from semitones but not serial. More positively, the creative tension of the piece could be said to originate in the conflict between the key defining potential of the fifths and the key denying chromaticism.

Ironically, it is perhaps the lack of a fully realised serial system that makes the *Overture* less successful than it might have been, the music often limited by the rigorous application of chromatic repetition, in a process that leaves little room for the endless textural variety usually associated with Ives' orchestral works. By way of comparison, Berg's *Lyric Suite* utilises a row that is also permuted on occasions to two hexachords built entirely from perfect fifths. Through rather more dextrous manipulation, Berg manages to balance the competing chromatic and tonal pulls of the set, fulfilling, rather than denying, many of the latent implications of the material. It is probably the corresponding lack of fulfilment within the Robert Browning Overture that caused Ives to describe the work as too "academic" and "carefully made".

<sup>1</sup>Ives, "Memos", p.76.

<sup>2</sup>Ibid. p.44.

<sup>3</sup>Ibid. p.76.

<sup>4</sup>Compound interval meaning the smallest interval when inverted (i.e. compound tone includes tone, minor-seventh, major ninth etc.).

<sup>5</sup>In the same Beethovenian manner as the opening to Ives' *Fourth Symphony*.

<sup>6</sup>"In some of the piano pieces, ...there are wide jumps in the counterpoint and lines. ...by playing the chromatic scale in different octaves, and seeing how fast you could do it... And gradually, as the ears got used to the intervals, I found that I was beginning to use them more and more seriously, that these wide-interval lines could make musical sense.", "Memos", p.44.

<sup>7</sup>Cf. Bridge's *There is a Willow Grows Aslant a Brook*, for chamber orchestra.

<sup>8</sup>See the Prelude of Ives' *Fourth Symphony*.

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# CHAPTER EIGHT

## CHICKENS, LIONS AND CONSISTENCIES

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*"(to conclude)... these Rollos are like the chicken fancier who has seen nothing but chickens all his nice lifetime, and has never seen a lion. And so, on seeing a lion enter, he says, 'He's built all wrong - no feathers, wrong color, too long, too many feet - he's not like a chicken.' Creator, that's poor workmanship! You see above, Rollos, I rather seem to tend to compare my music to a lion, and the music you like to a chicken..."*

Charles E. Ives<sup>1</sup>

Charles Ives would have made a good subject for a novel by Jules Verne; the outwardly conservative, insurance-broker in hat and tie during the week, but the heroic musical adventurer and dilettante at the weekends. This widely accepted picture of Ives has always carried with it the unspoken assumption that the weekend composer broke all the rules whilst the business man invented them. The contrast has always been similarly maintained between his formal studies at Yale and the lessons of his father, the maverick musical inventor. The *Second Symphony* demonstrates, however, that Ives' own radical experimentation was derived just as clearly from the theoretical and historical background provided by Horatio Parker at Yale as it was from his father. The superficially reactionary appearance of the first movement of the symphony, in its use of archaic 'fugal texture' and contrapuntal manipulation, disguises the fact that the most important lesson taken from his studies of Brahms, Schubert and Beethoven was the use of ambiguity in the tonal and harmonic schemes. Retrospectively, this supports the view of Ives the radical, homing in on the issue of ambiguity amongst so many other possible lessons. The first subject, in particular, mirrors the nineteenth century use of harmonically ambivalent melodic patterns, and emphasises both the tonic major and relative minor keys. During the development, the conflict between the two keys is maintained through the modulation of both areas to their respective dominants, and a further shift of the dominant of the relative minor to its relative major, to complete the transpositional circle. Ives then prolongs this final key area to emphasise its dual relationship with the opening subject, thus dwelling on both the local harmonic and



larger tonal ambiguity generated from the simple, opening cell. The surface 'chaos' of tonal ambiguity can, therefore, be shown to be subject to an underlying discipline, since these keys subscribe to a consistent pattern. Thus even in this, the most most 'traditional' of the works under consideration, the basic premise of Ives' music in general is discernible. Whilst the use of ambiguity or uncertainty clearly plays a crucial part in the modernist, experimental works, its discovery in this last purely tonal, symphonic work helps to fill in the areas of Ives' musical development between the juvenilia of the nineteenth century and the 'mature', twentieth century sound-collages. From a historical perspective, this makes the dissonant revisions to the symphony, undertaken in the 1940s, appear all the more unnecessary and unmotivated, except possibly in the eyes of a composer concerned that his place in history was going to be judged on the merits of an early tonal, European-sounding work.

Although *The Unanswered Question* and *Central Park in The Dark* were written only a few years after the *Second Symphony*, they represent the more familiar 'experimental' side of Ives' output. Whilst both pieces are more the size of chamber works, their inclusion in a study of the large-orchestral repertoire demonstrates, on a small scale, the use of the polytemporal and consistent intervallic construction that motivates the more complex *Fourth Symphony* and *Three Places in New England*. Indeed in terms of characteristic pluralism, both chamber works represent a kind of standard by which other pieces can be measured. With an approach to form derived from simple programmes, both show the elevation in importance of fixed intervallic repetition over functional harmonic outcomes. The use of unsynchronised rhythmic and melodic patterns removes the possibility of absolutely predictable local harmonic correspondence, whilst the consistent internal construction of all the competing elements, through the manipulation of simple pitch-sets, provides the necessary overall homogeneity.

Returning again to a symphonic statement, the *Third Symphony* shows the final vestiges of a traditional approach to form and sonority, in conjunction with an increasingly motivic style of construction. In comparison with the *Second*, the overall unity of the three movements shows Ives' increased ability to sustain large forms. The archaic element of fugue is still present in the first movement but is used specifically as a means of transposing and permuting motivic cells, and building an ambiguous tonal scheme that contrasts central and 'diversionary' key centres. The movement also reveals that although much of the intervallic and melodic material is derived from a well-known hymn tune, Ives manipulates the source so deftly that no impression of the original remains, effectively silencing those critics who objected at the time to his use of vulgar 'street tunes' and hymn sources.

The movements of the *First Orchestral Set* or *Three Places in New England* present a digest and continuation of many of the previously examined techniques, in three quite

different programmatic vignettes. The first, *The 'St. Gaudens' in Boston Common*, utilises diatonic pitch-sets and tight motivic expansion to generate a fundamentally atonal texture or sonority, supported by a simple, slow-moving, background bass progression. The characteristic use of 'spoilers' or alien elements to add 'wrong notes' to the diatonic sets is also presented as the means to much of the humour found in Ives' music. Perhaps most surprising is the observation that these rogue elements are not as random as their effect might suggest. These 'spoilers' are as carefully controlled as all the other motivic devices, often derived from particular 'spoiler' interval sets. In *Putnam's Camp* the collision of two pre-existing works enables the meeting of apparently contradictory technical means in the diatonic/atonal outer sections and whole-tone derived middle section. Ives achieves this through subtle adjustment of scale-types to bridge the stylistic divides. The clearest example occurs at the perceived central point of the movement, in the so-called 'Goddess of Liberty' chord, that can be partitioned as both an extended diatonic-set and a whole-tone set, to elide the material that lies either side. In this movement, a form of gestural analysis is presented as a means of examining the perceived proportions of the music. By segmenting the score in terms of events or gestures, the extra 'musical time' filled by harmonic, melodic or rhythmic instability is shown to be balanced by simpler, more extended material, to enhance the perception of well formed proportions. Ives' control of musical time-scale and his instinctive understanding of how to pace musical events to maximum effect is a significantly influential feature of his compositional style. During the final movement, *The Housatonic at Stockbridge*, the overall move from diatonic consonance to chromatic dissonance is also heard as a very gradual process achieved through definable changes in the constituent pitch-sets. The movement presents a long, central melodic strand and hymnodic accompaniment in conjunction with sinuous, independently organised, textural lines. The tonal standard of the opening is first subverted through the use of bitonality in melody and accompaniment and this, in turn, then dissolves to purely motivic, chromatic organisation, as the formerly separate melodic, accompanimental and textural lines achieve a chromatic synthesis in the final twelve-note chord.

Ives justifies the heterogeneity of the four movements of the *Fourth Symphony* programmatically, as an episodic sequence of solutions to an opening conundrum. The first and last movements provide the real question and answer sequence in a background cadential pattern that spans the entire symphony, whilst the inner movements explore very different compositional territories. The second movement is by far the largest and most complex of Ives' published works, combining all the experimental techniques seen so far with further devices such as quarter-tones and wide varieties of polyrhythm and polytempo. Beneath all the surface pandemonium, however, a large proportion of the movement is supported by a simple melodic motive



that is gradually altered, according to its harmonic surroundings. Whilst this motive is essentially atonal, the main building block of the outer two movements is a related but diatonically applicable pattern that is presented at the very opening of the Prelude in a final gesture towards the symphonies of Beethoven and Brahms. The fugal third movement is by far the hardest element to integrate. Although the predominant plagal harmony is related to the large-scale plagal background scheme of the Prelude, the Fugue can be understood as a demonstration of a contrasting, purely tonal style, or perhaps less programmatically, as the use of a 'spoiler' element on the largest scale. Given its surroundings, however, it will feel much less traditional than it might appear in isolation, again demonstrating the awareness of context on Ives' part.

The process of intervallic repetition and manipulation that informs the majority of Ives' orchestral works also provides the basis for the creation of the total-chromatic 'row' in the *Robert Browning Overture*. Rather than exploiting the sequence as a opening generative source, the total-chromatic melody appears as the culmination of an extended period of chromatic, or rather, conjunct semitonal, scalar sequences. The harmonic direction of the work, building towards this total-chromatic conclusion, is therefore more akin to a work such as *The Housatonic at Stockbridge* than any European chromatic or serial equivalent. The use of the intervals of a fifth and a semitone as the main constituents of the 'row' show a move away from the previously noted Ivesian preference for thirds and whole-tones, and consequently deviates from the diatonic subsets that provide much of the perceived consistency within chaos of many of Ives' orchestral works.

As can be seen, the weekend adventurer and dilettante was therefore much more systematic in his composition than has been traditionally maintained. The surprising features are not so much the novel experiments, which can be found in many of his student 'take-offs', but what could perhaps be described as the more intangible qualities, such as the control of 'musical time' and the perception of consonance and dissonance, that are often of greater importance than any amount of radicalism. Having elucidated some of these analytical consistencies in Ives' large-orchestral works, it is, however, worth remembering Schoenberg's rather telling comment upon seeing a Schenkerian reduction of the *Eroica*; "Where are my favourite passages? Ah, there they are, in those tiny notes." Ironically it is perhaps the chaos, rather than the consistency in his music, for which Ives will be most readily remembered.

<sup>1</sup>Ives, "Memos", p.91.



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