# MUSICAL METHODS OF COMMUNICATING BIBLICAL NARRATIVE AND THEMES

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#### **Abstract**

The thesis is intended to contribute to the research and contemporary understanding pertaining to musical methods of communicating biblical narrative and themes. Three new musical works were produced, the scores of which are to be consulted alongside the reading of the thesis. In each case a new work arose from an initial study and analysis of the biblical themes and texts in focus, from which overall themes were then established. In seeking to communicate these established themes, a number of compositional questions arose, which required satisfactory solutions. Research was thus subsequently undertaken into existing, relevant works (scores and recordings), and other related materials, and compositional decisions, both small and great, were influenced, modified and/or directed accordingly. This research, documented within the thesis, serves to position itself within the context of current contributions to the field. Original thought and compositional invention arising from a response to these existing contributions are also documented within the thesis, and demonstrate the contribution of the thesis itself to the field of research.

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# **List of Accompanying Material**

Title	Format
Midi Realisations	CD
Musical Methods of Communicating Biblical Narrative and Themes	CD
Psalms	Score
Rebuilding the Temple	Score
The Dove Descending	Score

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#### **Author's Declaration**

I, Samuel Thompson, the author, declare that the entire submission is my own work, that it has been undertaken honestly and fairly, and that I have, in every case and to the best of my ability, made efforts to ensure consistent academic integrity throughout the work.

This work has not previously been presented for an award at this, or any other, University.

#### The Dove Descending

#### 1. Fire or Fire

Fire or Fire is a setting of the fourth poem in Little Gidding, the last of T.S. Eliot's Four Quartets. Of particular interest was the manner in which Eliot draws similarity between hell's inferno and the consuming, cleansing, refining fire of God himself (Deuteronomy 4:24 and 1 Peter 1:6 - see footnote), sagely suggesting that man may only be 'redeemed from fire by fire'. (Allspirit website) Eliot likens the decision between good and evil to a choice one makes in the 'pyre' (combustible material), and in turn, which fire one chooses to ignite. The notion of having to make a choice between two options which, in some respects, are remarkably similar and yet in other ways are starkly different, was to undergird Fire or Fire, and musical decisions were directed accordingly.

Stravinsky's setting of the same poem, Anthem (1962), partly influenced the decision to similarly score for unaccompanied voices, but this was also for the simple reason of enabling clear communication of the text. Stravinsky's setting is split into two sections according to the two stanzas of the poem, (Stravinsky, 2007) and whilst Fire or Fire also adopts a structure built on two sections, one per stanza, it was primarily in efforts to express the inherent choice between 'good' and 'evil' pervading the text. Thus, an A A' structure was chosen whereby A' (bars 21-39) presents a slightly distorted version of A (bars 1-20). The distortions needed to be apparent enough for the listener to recognise some fundamental musical change, yet a degree of musical similarity was also required, in faithfulness to the narrative theme. In order to achieve this, distortions chiefly concerned harmony, whilst other musical parameters were made to remain fairly consistent. A comparison between bars 1-3 and bars 21-23 provides an illustration: harmonies operate primarily around E Major in the opening bars of the piece, with only the C-natural and D-natural lying outside the heptatonic major collection (in fact, within the context of the opening phrase these pitches are not felt as dissonances given that C-sharp and D-sharp are not used at all, and thus the 'consonant' collection is instead felt to be [E, F-sharp, G-sharp, A, B, C, D]). Conversely, whilst the equivalent phrase opening A' on the quaver beat before bar 21 begins almost identically, the consonant collection established in the former passage is disturbed by the

Biblical references are sourced from the English Standard Version of the Holy Bible (ESV), unless otherwise indicated.

C-sharp in the 2nd Alto, the subsequent semitonal clash between D and D-sharp which continues into bar 22, the reversion to C-natural in bar 22 and the final 'resolution' in C-sharp Major in bar 23. Although the dynamic range is here increased at each extreme, and a 7/8 bar appears in place of a 5/8 bar, other features such as the general shape of phrase, movement of parts and interaction between parts remain largely unchanged.

An additional structural decision was made, in order to further investigate methods by which a new musical idea could retain an 'essence' of one heard previously whilst also delivering fundamental change. Each of the two sections were split into two parts, which will be referred to as Parts 1 and 2 (in the A section these correspond to bars 1-12 and 13-20, and in A' bars 21-27 and 28-39 respectively). Differences between Parts 1 and 2 within a section were to be, musically, much greater and more numerous than those between comparable Parts. Notwithstanding the changes in vocal phrasing, dynamics, harmonic movement and interaction between voices (observed, for example, between bars 7-12 and bars 13-16), change was fundamentally delivered through electing two different tonal centres, E and G-sharp for Parts 1 and 2 respectively (Part 2 of A', beginning at bar 28, in fact demonstrates a succession of tonal centres, arriving at G-sharp in bar 35). The resulting question was how to draw out and 'celebrate' the inherent tonal similarities between Parts 1 and 2, such that there was felt a degree of relationship between the two Parts amid their many differences. In solution to this, a number of tonal procedures were employed to aid a gradual and 'seamless' transition between tonal centres:

1) The stressing of G-sharp, the shared pitch between the E Major and G-sharp Major triads, which 'bridges the gap' between the two tonal centres, most notably in bars 12-13. F-sharp is similarly used in bar 27 as a bridge between the unsettled C-sharp Major tonality of the previous bars and the clear, yet short-lived, B Major tonality of bars 28-31. It is worth here mentioning that the eventual G-sharp tonality, established first in bar 13, is foreshadowed even as early as the Mezzo-Soprano's opening figure, rising as it does from C (B-sharp) to G-sharp. Such maneuvers, including the decision to cadence in bar 3 and at the end of the work on the same chord (a major triad with added major 2nd) furnish G-sharp with considerable tonal 'weight' throughout the piece. This was in a deliberate attempt to allow the overall tonality of the work to hang in

true balance between E and G-sharp, thus inviting the listener to make a choice themselves according to which tonality they are naturally, or otherwise, inclined towards. This was yet another musical manifestation of the 'choice principle' which drove the setting.

- 2) Preempting any moments of change through the staggered introduction of pitches which belong to the new tonality, such that when tonal change occurred, the listener's ear would not be startled by the new pitch-collection. A-sharp appears as an example appears in bar 25 (first heard in the Mezzo-Soprano), which inclines the ear towards the brief B Major tonality from bar 28, and finds its clearest resolution in bar 28, rising to B in the 1st Alto. Following this, in the 2nd Alto in bar 29, the pitches of D and C foreshadow the passing tonal centre of G in bars 32-33, before the music settles at last in G-sharp Major in bar 35 (which is itself prepared by the Mezzo-Soprano's and 1st Alto's figures in bars 30-31).
- 3) The principle of 'expansion and contraction' was a method observed in Tavener's Song For Athene (1993), in which, during the phrase 'give rest, O Lord, to your handmaid who has fallen asleep', Tavener provides two exquisitely simple and brief movements out and away from the tonal centre of F by a semitone in either direction, to G-flat (Alto and Bass) and E (Soprano and Tenor), before these parts return to F (see Fig. 1). This principle was extended and employed in the tonal working of *Fire or* Fire; phrases generally demonstrate an 'expansion' outwards and away from a tonal, consonant sound to relative dissonance, followed by a 'contraction' again to relative consonance and tonal stability. Following the first such 'swell' in bars 1-3, each subsequent swell is permitted to depart further from its starting point and to endure for a greater length of time, since the listener's ear has been trained to expect a return. This principle also governed, to some extent, the treatment of dynamics. which similarly reflect expansions and contractions (bars 4-6 provide an example).

Particularly emotive words of the poem provided further opportunities to explore the notion of choice. 'Foreign' notes to the tonal collection were employed or omitted for these words, in such a manner as to deliberately subvert their common associations concerning dissonance and



Excerpt from Tavener's Song For Athene

consonance. One would expect, for example, dissonance on 'intolerable' and consonance on 'love', but what occurs on these particular words is the following: 'intolerable' is delivered as a light-hearted, simplistic tonal gesture in bar 30 which operates clearly within G-sharp Major; in bar 23 the word 'love' is delivered softly and 'lovingly' with its consonant C-sharp Major harmony, but in the very next bar the same word presents the fiercest dissonance in the entire piece. This process is intended to reflect the nearly-indistinguishable nature of 'fire or fire', specifically the subversion of the common associations with good and evil: 'burning pain' can be experienced as a result of the refining process of God's love, following His ways and thereby doing good; evil, on the other hand, can often present itself as the most attractive, tempting and desirable option in a given situation.

#### 2. The Lord is Here; His Spirit is With Us

The Lord is Here; His Spirit is With Us places T.S. Eliot's poem and thus, Fire or Fire, in its biblical context, based as it is on the New Testament description of Jesus Christ's baptism, during which it is recorded that 'the heavens were opened to him (Jesus), and he saw the Spirit of God

descending like a dove and coming to rest on him' (Matthew 3:16). Text was selected from the four gospel accounts of Jesus' baptism, chiefly from the third chapter of Matthew, and was on occasions modified slightly for reasons of poetry and to ensure that the libretto fitted alongside and within its musical setting appropriately. Methods of linking *Fire or Fire* with *The Lord is Here* were employed, in order that the second might be acknowledged as not only bearing musical relation to the first, but providing its very context:

- 1) Text sung by the Narrator (Mezzo-Soprano, 1st and 2nd Altos) is divided into phrases of similar length and structure to those in *Fire or Fire*, and in such a way that a natural emphasis is given to the second syllable (the exception to this rule is 'Jesus came to the Jordan' which is permitted exemption as this phrase initiates PART 2, which sets the baptism in motion). An illustration of this can be observed by comparing the opening bars of *Fire or Fire* with the Narrator's opening phrase in bars 14-17.
- 2) The word 'fire', which appears in the accounts of Jesus' baptism, plays a crucial thematic role in T.S. Eliot's poem, as previously described. This thematic link is celebrated through employment of a vocal harmony comprising the pitches F-sharp, D, C and G-sharp, which appears in bar 20 of Fire or Fire and in an identical arrangement in bar 38 of The Lord is here, both on the word 'fire'. Similar harmonic association takes place through the use of a major triad with added major-2nd, which appears in the vocals at the end of both pieces.
- 3) The pitches of the E, G-sharp and B Major triads, which serve as the established keys of *Fire or Fire* (B Major albeit briefly, between bars 28-31), are superimposed to produce the hexachord which opens and pervades *The Lord is Here; His Spirit is With Us*.

A chief concern with *The Lord is Here*, as with the *Fire or Fire*, was to ensure that the created musical environment would enable the listener to engage as fully with the words of the unfolding narrative as possible. Being as it is unaccompanied, *Fire or Fire* was permitted a flexibility in the handling of and interaction between vocal parts that *The Lord is here* could not afford, given the latter's additional forces. The decision was thus made to attempt to provide prolonged moments of 'stasis', wherein time would appear to hang suspended and unmoving. In such moments of stasis the

necessity for the listener to invest energy considering and preempting the movement of the music, is considerably reduced if not removed entirely, and thus the sung story is given the listener's attention. In order to achieve this, material provided by the instruments was to unfold in a manner which would lend the music a semblance of freedom, appearing as it would to unfold in its own time, unrestrained by the nearly-unchanging crotchet pulse. It should be noted that the decision to express the crotchet pulse clearly in the opening passage of PART 2 was quite deliberate, in order to signal the chronological and forward-moving nature of the remaining story, which is told in the present.

The absence of *any* consistent, unchanging material around which the instrumental material could unfold would, however, preclude 'stasis', given the unsettled, even agitated, nature of the resulting silence, which would serve as a distraction instead of directing the listener's attention toward the sung narrative. It was for this reason that static and stable pedal 'drones' were simultaneously employed, and since a similar feature had been observed in the opening movement of Shostakovich's *Symphony No.* 6 (1939): the strings' murmuring pedal drone provides a strongly anchored grounding below the flute's floating melody, the combined auditory effect of which is music that appears remarkably unhurried. (Shostakovich, 2010 at 10'00"-11'17") In *The Lord is Here*, the pedals serve another crucial purpose in the musical projection of the story, in that they provide the tonal underpinning of the music. Embedded within the account of Jesus' baptism are what can be interpreted as three distinct vertical 'levels':

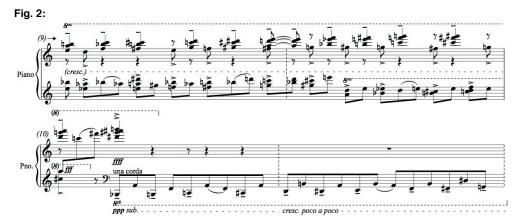
- 1) Lower: Jesus is submerged in the baptismal waters.
- 2) Upper: Heaven is torn open and the Spirit descends.
- 3) Ground: The level at which most of the unfolding story occurs.

It was this this vertical positioning that directed the chief tonal and structural decisions concerning the piece. Three distinct tonal centres, articulated by the pedal drones and separated by semitones, were to account for the three levels in the narrative. The story follows a quasi-sine-wave in its vertical positioning, as does the position of the tonal centre: beginning at Ground level, F-sharp, the music descends to F in bar 52 (on the second

syllable of the word 'baptised'), and rises beyond its original position to G in bar 70 following the words 'up out of the water' (two momentary breaks in the pedal drone signal the climax of the piece, bar 72), before returning to F-sharp in bar 87 following the words 'calling down from heaven'.

Whereas in Fire or Fire transitions between tonal areas were made to be seamless and smooth, the occurrences of tonal shifts in The Lord is here were to be made deliberately evident, in order that they may truly be 'felt' as ascents and descents and thus, that the vertical positioning at various points within the story was acknowledged. A particularly influential work was Tavener's Song of the Angel (1994), which reveals the power of a change in pedal 'drone': Given the length of the strings' D pedal which opens the work, the whole-tone descent to C is starkly clear, and serves in this work to signal the onset of a movement towards an F Major resolution at the end of the Soprano's second melismatic 'alleluia'. (Tavener, 2010 at 0'00"-1'09") Having observed this feature in Tavener's work, and given the much longer duration of the pedal drones in Fire or Fire, it was decided that additional efforts to stress the changes in pedals or otherwise draw attention to them were unnecessary, the theory being that they would naturally, and sufficiently, 'project' themselves. It is for this reason that the drones remain *pianissimo* through the first shift, which occurs in bar 52.

Despite the decision having been made to avoid deliberate efforts to project the pedals, it was nonetheless important to address the manner in which the different levels would be reached. Ligeti's L'escalier du diable (The Devil's Staircase) from his second book of piano etudes (1988-1994) is concerned with ascents and sudden descents, and therefore seemed an appropriate work to examine. Though the piece provides very fluid and continuous upward movement, the 'levels' in L'escalier are nonetheless distinctly separate from one another given the stepwise manner in which the piano's chromatic pitches are arranged. This serves to conjure a manystepped staircase not only musically, but physically as the fingers frenziedly scale the keys towards the upper end of the piano and then tumble down to begin afresh at a lower level (see Fig. 2). The principle of reflecting a desired type of movement through through treatment of the levels, demonstrated in L'escalier, was of interest, however opting for a similar 'starkness' in the separation of levels would not provide an accurate reflection of what unfolds in the narrative account of Jesus' baptism, since it forsakes the true process of smooth descent and ascent taking place:



Bars 9-11 of Ligeti's *L'escalier du diable*, demonstrating the music's continuous and fluid upward motion to the upper extreme of the keyboard's playing range, followed by a its sudden fall to the keyboard's low extreme.

Jesus is lowered into the water, then rises; heaven is opened and the Spirit descends like a dove to rest upon him. None of these are 'stepwise' motions. Distinction between the three levels was yet deemed crucial in order to provide the ear with key 'landmarks' which would aid in the interpretation of the narrative on a large-scale, but some smooth motion was also required. Given their ability to glissando seamlessly between pitches, strings were selected to perform the pedal drones. Since they were simultaneously employed to provide the tonal grounding and thus were bound to pitches separated only by semitones, it was decided that a glissando would encompass a minor-ninth and not a mere semitone (which would endanger the process of seamless movement being lost amid the more prominent parts played by the rest of the ensemble). The use of glissandi at various points throughout *Fire or Fire*, most notably in the final bar, foreshadow their important narrative role in the following piece.

Additional narrative features present in the biblical texts informed other compositional decisions within *The Lord is Here; His Spirit is With Us.* These are detailed below:

• Baptism, as revealed in the bible (specifically passages such as Colossians 2:11-12) symbolises the death of a former self, and the subsequent rising to a new, spiritual life, and in Jesus' case, foreshadows his death and resurrection. In addition to representing his submerging in the Jordan, it therefore also seemed appropriate to elect musical methods which would serve to represent Jesus' descent to death, to hell, during the 'Lower' level passage of bars 52-67. A deathly toll rings out from the vibraphone (the discordant harmony combines components of the

previous F-sharp with the new F-based tonality), and the piano's attacking, 'biting' chords (bar 55 and 57) represent 'gnashing of teeth', a phrase which Jesus repeatedly uses throughout the gospel of Matthew to describe hell (for example, in Matthew 22:13). The redemptive rise from death is expressed in the measured rising sequence of bars 61-68, during which a gradual increase in tempo and dynamics also features.

- In the climactic passage of bars 72-76, the pure, consonant 'outpouring' of sound was chosen to mirror the heavenly outpouring of the Holy Spirit. The established G Major tonality here, with the continued presence of F from the previous section, is suggested by vocal harmonies appearing as early as bar 16. For the passages at Ground level which, using the current analogy, represents the halfway position between heaven and hell, harmonies allude to both the pure, heavenly sound of the Upper level, and the deathly distortions of the Lower, operating primarily within the collection [F-sharp, G-sharp, B, C, D-sharp, E]. At times the potential for whole-tonality within the collection was brought to the fore in efforts to express an unbiassed, 'neutral' sound (such an effect had been observed in Voiles from Book 1 of Debussy's Préludes (1909-1910)), some examples being the vocal harmony in bar 25, and the combined parts of the Tenor and strings in bar 32. When God himself speaks in bars 87-89, the music at last finds a home in F-sharp Major, which appropriately leans towards the consonant sound of the Upper, 'heavenly' level.
- Another interesting narrative feature of the story is that it opens and closes with a single voice: 'The voice of one crying in the wilderness...' (Matthew 3:3) marks the story's beginning, and 'behold, a voice from heaven said...' (Matthew 3:17) marks its end. This 'bookending' was to be made apparent in the musical setting, and for this reason the text was simplified in either case to begin in the same manner in *The Lord is Here*, 'one voice calling...', and each occurrence (bars 14-17 and 82-86) has identical vocal scoring relative to the music's tonal centre (the second occurrence is hence a transposition of the first given its new context in G instead of the previous F-sharp). This invites the listener to perform a simple comparison between the voices which follow in either case: John's solo voice, though the singer is directed to perform 'Boldly' surfaces as small and weak in comparison to the broad,

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harmonically rich sound of the voice of God performed by all singers. This treatment of the voices stems from the words of John recorded in Luke 3:16, 'he who is mightier than I is coming, the strap of whose sandals I am not worthy to untie', which feature in a paraphrased form in bars 29-31.

#### 1. Lead Me on a Level Path (bars 1-92)

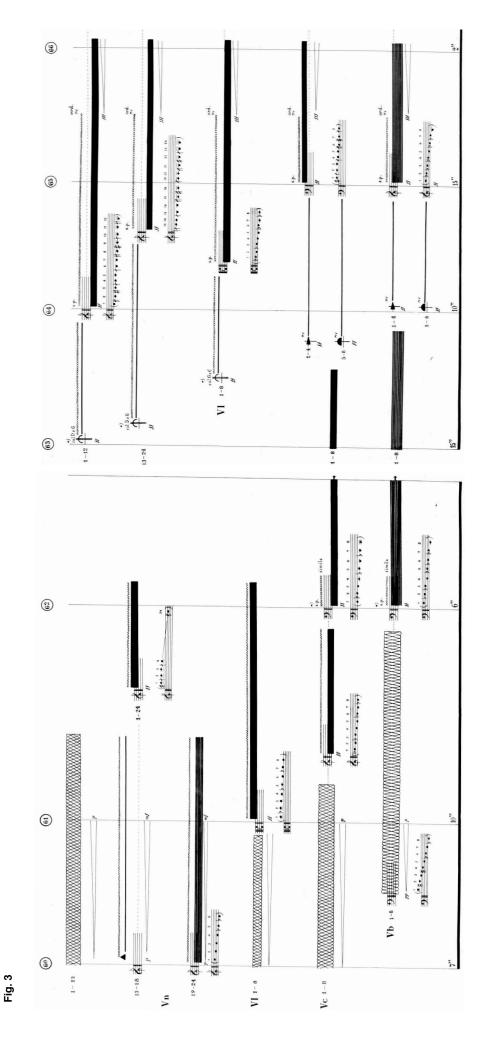
As is the case with many of the 150 biblical Psalms, the poetic expression and structure of Psalm 27 renders itself a readier biblical passage than many to set to music. One particular narrative theme, encapsulated within the first three verses of the psalm, was of principle compositional interest. King David, the psalmist, opens with a declaration that the Lord is his 'light and salvation' (Psalm 27:1), and in response to this asks of himself, 'whom shall I fear?'. What follows in the next two 'stanzas' of the psalm, verses 2-3, is a series of three fearful scenarios, which David imagines, but which are nonetheless reasonable for the reader to assume may in fact have already happened to David during the establishment of his kingdom. Firstly he is confronted by his 'adversaries and foes' (verse 2), secondly an army encamps against him (verse 3a) and lastly war breaks out (verse 3b). It is the progressive multiplication or 'intensification' of the danger and strength of the enemy forces in each of these scenarios, accompanied all-the-while by the single, simple, confident voice of David that his Lord is yet mightier than the opponent, that was to direct the musical setting Lead me on a level path. The ensuing questions concerned the means by which, musically, one might represent a progressive intensification of 'danger' whilst retaining a solo voice which is 'lifted up above my enemies all around me' (verse 6).

It seemed appropriate to opt for a strophic structure, whereby each verse would correspond with one of each of the narrative scenarios in turn. This would avail the opportunity for a repeating, simple and largely unvaried melody to stand for the voice of David, behind which was felt the successive, compounding increase of danger. It was initially decided that, as far as was possible, the libretto would be built upon text from the psalm itself, unmodified and in the correct order. In reality, however, this was not practical, since the three scenarios all appear within a mere eight lines of the psalm. Without resorting to excessive repetition or silence from the vocalist (which would not be fitting given the intention for David's voice to project above the other forces), and in order to provide sufficient lyrical material to establish a scenario before a new verse, the decision was made to graft in additional, related biblical texts, in such a way that would retain the essential meaning of each scenario. Text, therefore, from the remaining

43 lines of the psalm was selected, as was related text from Psalm 38, another of David's psalms, the themes of which are very similar to those of Psalm 27 (compare, for example, Psalm 27:9 with 38:1, 27:14 with 38:15 and 27:12 with 38:19-20). Three strophic verses were subsequently formed, and it is worth noting the inclusion of the first line of A.M. Toplady's hymn *Rock of ages, cleft for me* at the end of the second verse for its similarity in theme to Psalm 27:5, which features in the libretto immediately beforehand.

With the libretto written, the next step was to determine how best to musically interpret the intensification of danger as revealed in the psalm. The decision was made to approach this through a musical 'build-up' which would gradually and systematically unfold over the length of the movement. This 'intensification' process would, in some way, be apportioned according to the three verses, and would serve to 'endanger' the voice of David being drowned out or subsumed completely. With this in mind, existing works were examined, the first of which was Ecstasio, the third movement of Thomas Adès' Asyla (1997). The music from bar 24 demonstrates a general build-up, as motivic material is successively introduced and layered on top of the opening motif, until a climax is reached in bar 66. The effect of this is a 'layering' of sound, affording the music surprising complexity in a relatively short space of time, which, as an auditory effect, is not by any means a recent discovery (see, for example, Stravinsky's The Rite of Spring (1913) between bars 52 and 65 of the opening movement). In Asyla, however, musical motifs are driven by their own pulses and rhythmic structures, and it is the ensuing intensification of rhythmic complexity achieved through layering these motifs that is chiefly responsible for the movement's build-ups, and not the layering of musical motifs in itself. An equally striking example appears at bar 157 of Ecstasio, at which point the straight-crotchet rhythm of the strings and percussion is frustrated by the conflicting triplet rhythms of the brass and woodwinds.

Research was subsequently directed towards works which, like *Asyla*, promote the manipulation of a single musical 'parameter' as the principal method by which a climax is approached, and not those parameters most readily associated with a musical 'intensification' (for example, an increase in dissonance, dyamics, tempi, or number of instrumental forces). One such work of influence was Penderecki's *Polymorphia* (1961), climaxes of which are approached primarily through increases in timbral variation and complexity. Whilst a crescendo is



Figures 61 to 66 of Penderecki's *Polymorphia* 

observed during, for example, the passage between Figure 60 and Figure 66, it is the process of increasing variety in timbral effects which surfaces as the principal contributor to this climactic build-up, with the dynamics serving only to furnish or 'colour' the process (see Fig. 3).

Having thus observed the successful manipulation of different 'secondary' parameters to prepare for and achieve climactic musical moments in Asyla and Polymorphia (and other works), the intention for Lead Me on a Level Path became to combine the intensification of a collection of 'secondary' parameters with a general layering of sound, as the chosen method of communicating the successive intensification of danger in the narrative scenarios. Each verse would primarily focus on the manipulation of one elected secondary parameter, and later verses would require an audible 'remnant' of the previous verse(s) in faithfulness to the compounding nature of the danger (rather than three entirely separate scenarios, one builds upon the previous). Put more straightforwardly, what would take place would be a staggered layering of musical parameters, rather than of musical motifs. A simple starting point was deemed necessary, as was the general restriction of some parameters, in order that the unfolding changes in others might be clearly felt, and simply so that the music would be prevented from becoming too complex too soon. The following decisions were made:

- The verses unfold over a simple harmonic structure, with C-sharp providing a clear tonal centre.
- 2. A fairly consistent pulse, chiefly comprising groups of two and three quavers, is provided at the music's opening, and the tempo remains consistent throughout the movement.
- 3. In efforts to prevent the addition or subtraction of instrumental forces being perceived as an essential component of the long-range intensification process, a general principle that all instruments should be playing for most of the time was adopted, particularly during the verses.
- 4. An instrumental 'prelude' (bars 1-12), which reappears between verses, serves to allow the beginning of the first verse to mark a change in its chosen parameter, aids the sense of a general progression of the music

away from its starting point, provides important melodic material of the work, and alludes to the large-scale layering effect taking place over the entire movement in providing its own, simpler demonstration of layering (instruments are successively introduced between bars 2 and 12).

Three musical parameters were to undergo intensification at the onset of each of the three verses. In selection of these parameters, it was considered essential to define, or at least to interpret their 'intensification', before such application could take place. These interpretations, and consequently which parameters were chosen, were derived from the themes of each verse's scenario:

- 1) Verse 1 (bars 12-28) is concerned with the malicious, treacherous behaviour of individual foes, and while this poses a genuine threat to David's life, these attacks are comparatively 'hollow' and 'weak' when compared with the later dangers David describes. Sounds were to be made similarly hollow through the manipulation of sonority, and thus intensification was defined as the deliberate thwarting of a particular instrument's 'favourable' sonority: The percussionist is required to instantly damp the tubular bells, preventing the bell's desirable, lengthy chime; the cellist is similarly called to play pizzicato and to subsequently damp the note immediately; the vibraphone and celesta are both played without the pedal, producing a muffled, 'dead' sound; the pianist is called to reach into the piano and strum strings of the middle- to upper-register of the keyboard; the marimba is played with hard mallets, forgoing its conventional warm tone.
- 2) For Verse 2 (bars 33-52), it was intended that there should be 'walls' of sound, in efforts to express the notion of being 'walled in' by an encampment of enemy forces. For this reason, register was the chosen parameter which would undergo intensification, and this would take effect through a general increase in the use of the extremes of an instrument's playing range, and also the use of broad chords encompassing high and low registers: the cellist, celesta player and vibraphone play chords which alternate between high and low registers; the pianist's right hand is required to play at the extreme high register of

the keyboard; the marimba and tubular bells provide very broad chords encompassing the near-extremes of their playing ranges.

In efforts to retain a 'remnant' of verse 1 such that the theme of this second verse was understood to be built upon that of the first, a 'hollow' sound continues to be supplied through the piano and celesta's staccatissimo quavers, the vibraphone's non-pedalled chords, the cello's 'molto sul pont', and the continuation of the dry, parched sound of the marimba played with hard sticks.

3) In Verse 3 (bars 64-92), war has broken out against David, and the ensuing calamity and conflict were to be expressed through an intensification of rhythmic complexity both within and between parts, and the simultaneous employment of conflicting pulses. The piano and vibraphone chiefly operate within a dotted-quaver pulse, a feature foreshadowed by the chordal 'walls' of the marimba in Verse 2. Here, against the straight crotchet and quaver rhythms of the celesta, marimba and cello (for example in bars 71-75), it conjures a threatening march to war. Further conflicting pulses are supplied by the tubular bells' ostinato from bar 71, which articulates every other triplet-crotchet beat, with the marimba providing the missing triplet-crotchet beats in, for example, bars 62 and 76. Momentary semiquaver interjections in the piano and vibraphone parts (for example, the vibraphone in bar 62) provide additional rhythmic disturbance. In the midst of the tense conflict in this verse, a brief moment of relief is revealed in bars 80-82 in musical expression of the words 'my hope will remain for the Lord shall lift my head...' which appear at this point.

Remnants of the first verse's treatment of sonority exist in a continuation of the staccatissimo celesta and piano parts, the damped tubular bells (for example, bars 69-70 and 90, a motif foreshadowed in bar 62), the combination of 'molto sul pont' and damped pizzicato performed by the cellist, the non-pedalled vibraphone sections and the reversion to hard sticks on the marimba at bar 89. Remnants of Verse 2's intensification of register exist in the celesta's chords, which oscillate between high and low registers, the piano's use of both extremes of register, independently and simultaneously (for example, bars 72-75), and the marimba's quaver

pattern which flows between high and low registers (bars 76-79) and continues to supply the broad 'walled' chords of Verse 2 in, for example, bars 69 and 83.

#### 2. Deep Calls to Deep (bars 93-176)

Lead me on a level path was concerned with the gradual intensification of danger revealed in the opening verses of Psalm 27, and it was for this reason that a search was made for an accompanying biblical passage whose narrative theme demonstrated a general de-intensification, that is, one which would express a journey from complexity, danger or anxiety to relative simplicity, safety or peace. It was decided that, if possible and appropriate, this text would also be selected from the Psalms, in order to maintain a degree of contextual similarity between the two pieces, and as a method of restricting the search, at least initially. Psalms 42 and 43 were chosen (in many Hebrew manuscripts these appear as a single psalm). In the repeating refrain, which first occurs in Psalm 42:5, and subsequently reappears in 42:11 and again in 43:5, the psalmist(s) (the 'sons of Korah') describes a journey from confusion, questioning and desolation towards clarity, resolution and consolation:

Why are you cast down, O my soul, and why are you in turmoil within me? Hope in God; for I shall again praise him, my salvation and my God.

In its four lines, the refrain reflects a very similar four-stage process which is revealed within the four 'stanzas' of the combined two psalms.

- 1) The psalmist wrestles to understand why his soul is downcast. 'Why are you cast down, O my soul?' is comparable to the first stanza of Psalm 42 (verses 1-4).
- 2) As is the case in much poetic Hebrew, what follows in the refrain is a similar question, only rewritten, which serves to enforce, and to help the reader to remember, the meaning of the first line. 'Why are you in turmoil

within me?' stands for the second stanza, verses 6-10 of Psalm 42, most of the text of which reveals the same overall theme as the first stanza.

- 3) The psalmist begins to recognise that God provides the remedy for his downcast soul: 'Hope in God; for I shall again praise him' stands for the first of the two shorter stanzas of Psalm 43 (verses 1-2), in which the psalmist appeals for God to 'defend' his cause and 'deliver' him from injustice.
- 4) As per the first and second lines, the fourth line of the refrain is linked with the third, and similarly the fourth stanza with the third stanza. The renewed confidence and resolution of the psalmist in the declaration 'my salvation and my God' is reflected in this final stanza, in which the psalmist presents no further questions to God.

As a further illustration of the process of confusion to resolution, 'when shall I come and appear before God?', a question posed in the first stanza (Psalm 42:2), is directly answered in the fourth stanza, 'Send out your light and your truth...then I will go to the altar of God, to God my exceeding joy.' (Psalm 43:3-4).

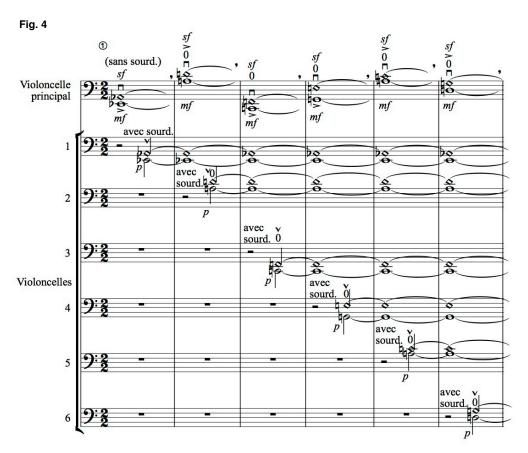
Given that Psalms 42 and 43 naturally sub-divide into four 'stanzas', Deep Calls to Deep, like Lead Me On A Level Path, would unfold over a strophic structure of, in this case, four verses. It was originally deemed appropriate to seek to relate the strophic verses of the libretto with each corresponding biblical stanza, however the decision was eventually made that the first two verses would draw text from the first stanza alone, for the reason that much text of the second stanza appears identically or paraphrased elsewhere in the two psalms (for example, 'My soul is cast down within me' (42:6) is found in the refrain, and 'Why have you forgotten me? Why do I go mourning because of the oppression of the enemy?' (42:9) appears in the third stanza). It was subsequently decided that text of the second stanza should be weaved throughout the libretto, and thus 'my Rock, why have you forgotten me' appears in Verse 3 (bars 132-134), as does '...who say 'where is your God?' all day long?' (bars 136-137). Additionally, and for reasons of poetic expression, thematic similarity and because it had an important influence on some of the instrumental part-writing (which will later be explained), Psalm 42:7 from

the second stanza was elected to appear immediately before, and connected to, the refrain in each of its occurrences. In its paraphrased form this verse became 'deep calls to deep at the roar of your sea; all your waves and breakers have crashed over me'. The libretto was subsequently written in two main 'groups' of material, one of which comprised the four verses, and the other the refrain, now rewritten and accompanied by the paraphrased verse from the second stanza.

It was intended that the two groups of lyrical material, which appear as distinct components in the Psalms, should similarly be kept distinct in *Deep Calls to Deep*. For this reason, it was decided that two musical processes should occur throughout the piece, one for each of the two groups of material, but since the Psalms' thematic journey from confusion to clarity is common to both groups of lyrical material, it was deemed important to ensure that the two processes were unified in some appropriate musical regard. The chosen method of communicating confusion to clarity was through a journey from tonal confusion to tonal clarity, from 'dissonance' to relative 'consonance', with each group expressing this journey in a different manner. Inspiration for these two expressions came in different forms:

1) One recent analysis of Stravinsky's Symphonies of Wind Instruments (1947) reveals that through subtle and calculated transformations applied to an initial octatonic harmony, the music at last arrives at a closing chord quite different in nature, a more consonant quasi-majorseventh chord with added ninth, firmly rooted in C (Thompson, 2011). A similarly subtle and gradual adaptation of a harmony, which steadily filters out the dissonant elements, was to become the chosen expression of the 'journey' for the refrain material. Bearing in mind, however, the length of time over which this process occurs in Symphonies of Wind Instruments, specifically the considerable gaps between some hearings of this chord, one may well struggle to 'feel' the large-scale process taking place, and may even question whether Stravinsky intended it to be felt at all. In order to ensure that the comparable process used in Deep calls to deep would be understood and felt by the listener, occurrences of the harmony would be suitably frequent throughout the piece, and soundings of a previous chord would, as a general rule, be heard again immediately prior to its new, transformed version, enabling

clear association and comparison between the two chords. It was decided that there would be four hearings of the refrain, and not three as present in the Psalms, and, in order to provide variety (and perhaps also in bias towards the later, more consonant sounds), each new hearing provides additional lines of the refrain, such that it is gradually built up from its shortest version in bars 108-112 in to its full length in bars 148-155. Having steadily undergone transformations throughout the four refrain sections of the movement, the harmony first revealed in bar 108 achieves its final arrangement in the very last bar, a chord securely rooted in the home key of G Major, yet disrupted by the E-flat components of its previous hearings (the pitches of E-flat and F), components which also permeate the final, most consonant verse. This was in a deliberate effort to maintain a degree of 'uncertainty' at the end; despite the fact that the psalmist has recognised the solution to his troubles, the reader is left uncertain as to whether, in fact, the psalmist acted upon these convictions.



Opening bars of Boulez's Messagesquisse

- 2) The opening bars of Boulez's Messagesquisse (1976-77) were examined during research for Lead Me On A Level Path, providing as they do an additional example of a musical build-up through the alteration of a single musical parameter, in this case pitch: steadily, new pitches are introduced by the solo cello, and continued by others of the all-cello ensemble, which intensifies the sound towards its hexachordal climax in bar 6 (see Fig. 4). Messagesquisse was, however, to exert it's greatest influence not on Lead Me on a Level Path, but on Deep Calls to Deep, in that a precisely opposite process to that elected by Boulez (the subtraction, rather than the addition, of pitches), was deemed a suitable method of demonstrating a journey from dissonance to consonance, providing that the pitches were chosen appropriately. This formed the basis for the second expression of the journey from confusion to clarity, that which would unfold over the four strophic verses of the libretto. During the composition process, however, the highly calculated process of pitch subtraction was revealed to be too contrived, and it was for this reason that the process was modified to comprise a collection of various transformations to each instrumental part during the verses. The majority of these changes, as a general rule, would occur at the onset of verses, and some can be observed in the penultimate bar (bar 175), the four crotchet beats of which provide a 'summary' of changes which take place earlier in the movement:
  - In the first crotchet beat of bar 175, as at the start of the movement (bar 93) and throughout Verse 1, the vibraphone and celesta (r.h.) present a repeating series of descending quavers consisting chiefly of major-sevenths. The upper pitches of this series are flattened at the onset of Verse 2 (bar 112) and likewise in the second beat of bar 175. The change which takes place at the third beat of bar 175 occurs half-way through it's equivalent verse (Verse 3), in bar 140, which sees the direction of the series reverse to an upward motion. At the final crotchet beat of bar 175, the minor-sevenths are extended to octaves and modified to operate principally within the key of G, a change introduced by the vibraphone in bar 152, and joined by the celesta at the beginning of Verse 4 (bar 157).

- The piano's 'moto perpetuo' semiquaver pattern, with its initial dense dissonance in bar 93 and at the first beat of bar 175, undergoes different, yet similarly subtle, alterations in its movement from tonal confusion to clarity. In bar 113 and at the second beat of bar 175, every second and fourth semiquaver is flattened in the left hand, and sharpened in the right. At the onset of Verse 3 (bar 113) and at its equivalent crotchet beat in bar 175, the first of the right-hand's semiquavers undergoes an upward transposition of a minor-third, and every first and third of the left-hand's semiquavers is flattened. Lastly, at the start of Verse 4 and at the final crotchet beat of the penultimate bar, the right-hand's third semiquaver in every group of four is sharpened, and the left hand's every second and fourth transposed up a tone.
- Changes in the left-hand part of the celesta at the second and third crotchet beats of bar 175 occur through two consecutive removals of pitches from the chord heard on every first of each group of four semiquavers (these changes are similarly heard in Verse 2 and 3, bars 113 and 141 respectively). The final change in bar 175 involves an upward transposition of the first of every four semiquavers by a tone, and the second and fourth semiquavers by a semitone, transpositions which are mirrored in bar 155 and 157 respectively.

A number of additional methods accompany and enforce the two principal, tonal, processes by which the psalmist's journey from confusion to clarity is primarily communicated:

1) Within the refrain sections, vocal dynamics are initially marked pianissimo (bar 108), and are incrementally increased during the next three hearings of the refrain, while ensemble dynamics are decreased by the same degree, beginning at mezzo-forte. 'Put your hope in him' marks the point within the refrain at which the psalmist begins to grasp a remedy for his downcast soul, and in efforts to express this gained clarity the vocal dynamics rise above those of the ensemble when these words are delivered (bar 131). A measured increase in the singer's volume is also observed within the verses, with Verse 1 marked piano, Verse 2

mezzo-piano etc., until double-forte is reached at the end of the fourth verse. During the verses, the tubular bells' G-oriented ostinato, which is subsumed by the surrounding dissonance at the movement's opening, gradually comes to the fore through a similarly staggered increase in volume with the arrival of each new verse, as does the the piano's low G which, in addition to presenting itself at greater dynamics in each subsequent verse, appears twice as frequently from bar 141. This is intended to reflect an increase in the psalmist's hope for salvation at the words 'Defend, O Lord, defend my cause...'.

- 2) Through the phrase 'Deep calls to deep' in Psalm 42:7, the psalmist claims that instead of his situation having improved, the depths of his suffering have only called to greater depths still, which conjures an image of never-ending, downward and hopeless regression. In representation of this feature, an effect based on a Shepard Scale is performed by the celesta (r.h.) and vibraphone during the verses, which provides the sonic illusion of a continual descent. The 'turning point' in the psalms is the start of the third stanza, when the psalmist gains a glimmer of hope, crying out 'Vindicate me, O God, and defend my cause...' (Psalm 43:1); at the arrival of bar 140, which is based on this verse, the 'turning point' is revealed simply through switching the scale to a continual upward motion. Another simple vocal decision, made in reflection of the 'depths' of the psalmist's suffering, was to reserve the lowest pitches of the singer's line for the words of the refrain 'all your waves and breakers have crashed over me'.
- 3) The decision to involve only the instruments from *Lead Me on a Level Path* that permitted the use of a sustain pedal was quite deliberate, influenced as it was by the notion of the psalmist being subsumed in the crashing waves and deep waters of his suffering. Pedals are kept depressed throughout the movement, which provides an appropriately 'muddied' water of sound, with previous dissonances lingering and washing over newer, more consonant sounds, such that the process of arriving at the eventual tonal stability is made to be seamlessly 'born' out of the earlier dissonances.

- 4) Psalms 42 and 43 seem to indicate that the nature and origin of the psalmist's suffering comes from external forces, in other words those beyond which he is in control. This is reflected in the singer's melody line which, during the verses, does not vary in its devotion to the home key of the work, G Major. The ensemble is thus assigned the role of the 'external forces', tossing and turning the psalmist in 'waves' of dissonance before the storm begins to settle around him. Variation in the vocal line therefore had to be approached through other musical means. To this end, it was decided that, at the outset of the movement, the structure of the vocal line would be chiefly built upon rising and falling sequences intended to represent weeping (a method employed by Roger Marsh at the opening of his work Lamentations (2011)). As the music progresses through its four verses, the singer's vocal line is less and less obliged to adhere to this framework, and thus greater variation in the line is observed in the patterns of, for example, bars 142-144 and bars 164-165, and the large intervalic leaps of, for example, bars 157-158 and bars 163-164.
- 5) The final words of Verse 4 ('and I will praise his name again'), were chosen not only as a reference to Psalm 43:4-5, but also to mirror 'I will sing and offer him praise', the closing words of *Lead Me on a Level Path*. During bars 89-92, the violent conflict ensues in the ensemble and reaches its cataclysmic conclusion in bar 92, not in suggestion that this particular war did not end in David's favour, but rather in order that *Deep Calls to Deep* might arise from a situation suitably confused and 'deep' (all instruments in bar 92 play at or near the low extremes of their playable registers). Additionally, the G component of *Deep Calls to Deep* is prepared through the infusion of G in otherwise C-sharp-dominated music during the final bars of *Lead Me on a Level Path*, specifically in the celesta's stabbed chords in bar 91, and the vibraphone and piano's final chord in bar 92.

#### Rebuilding the Temple

Rebuilding the Temple was an investigation into the ways in which a large portion of biblical history, or indeed several different passages which subscribe to an overall biblical theme or historical event, might be translated and communicated musically, principally through linking the narrative with a present-day theme or event. The texts of interest were the historic accounts and prophecies concerning the rebuilding of Jerusalem's temple between 530 B.C. and 515 B.C., as recorded chiefly in the Old Testament books of Ezra, Haggai and Zechariah, and the unfolding story would be communicated through musical and thematic association with the ongoing reconstruction of York's 'temple', the Minster.

What was of particular interest in the biblical account was the way in which God's hand is revealed to be at work in bringing about the rebuilding project in the first instance, and seeing it through to completion. The prophet Jeremiah predicts that seventy years would be the allotted time that the Israelites of Judah and Jerusalem would remain in captivity under the Babylonian regime, as punishment for their disobedience to God (Jeremiah 25:1-12 and 29:10-14). Thus, when Cyrus king of Persia issues a decree of freedom for the Israelites nearly seventy years after the first of three deportations led by king Nebuchadnezzar of Babylon in 605 B.C. (Life Application Study Bible, 2004:612 in footnotes) the writer of the book of 2 Chronicles is swift to attribute the events to the work of the Lord:

Now in the first year of Cyrus king of Persia, that the word of the Lord by the mouth of Jeremiah might be fulfilled, the Lord stirred up the spirit of Cyrus king of Persia, so that he made a proclamation throughout all his kingdom and also put it in writing: "Thus says Cyrus king of Persia, 'The Lord, the God of heaven, has given me all the kingdoms of the earth, and he has charged me to build him a house at Jerusalem, which is in Judah. Whoever is among you of all his people, may the Lord his God be with him. Let him go up." (2 Chronicles 36:22-23)

At the completion of the foundation of the temple, it is described that the Israelites 'sang responsively, praising and giving thanks to the Lord, "For he is good, for steadfast love endures forever toward Israel." And all the people shouted with a great shout when they praised the Lord, because the foundation of the house of the Lord was laid.' (Ezra 3:11). Here the Israelites ascribe to God the glory and the thanks for the preceding events, despite the fact that the physical work took place through the labour of their own hands. It is mentioned in verse 3 of the same chapter that 'fear was on them because of the peoples of the lands, and they offered burnt offerings on it (the altar) to the Lord, burnt offerings morning and evening.' (Ezra 3:3). It therefore seems appropriate to interpret the Israelites' celebration as being, at least in part, a notion of gratitude for the Lord's protection through this initial building process, but in either case they acknowledged that the work up to this point, without the Lord's help, could not have been been accomplished. In the following chapter, opposition to the work is described from 'adversaries of Judah and Benjamin' (Ezra 4:1) who, it is written, 'discouraged the people of Judah and made them afraid to build and bribed counselors against them to frustrate their purpose' (Ezra 4:4-5), and this caused work to cease for a decade.

The prophets Haggai and Zechariah are introduced in the fifth chapter of Ezra as providing the needed support and encouragement to the Israelites to recommence work after the years-long hiatus. In this instance, and throughout the books of Haggai and Zechariah, the writers are careful to attribute God's own authority to the prophets' words: 'the prophets...prophesied...in the name of the God of Israel' (Ezra 5:1); 'the prophets of God were with them' (Ezra 5:2); 'the word of the Lord came by the hand of Haggai the prophet' (Haggai 1:1); 'the word of the Lord came to the prophet Zechariah' (Zechariah 1:1); 'Then Haggai, the messenger of the Lord, spoke to the people with the Lord's message, "I am with you, declares the Lord." And the Lord stirred up the spirit of Zerubbabel the son of Shealtiel, governor of Judah, and the spirit of Joshua the son of Jehozadak, the high priest, and the spirit of all the remnant of the people.' (Haggai 1:13-14). What is clear from these biblical scriptures is that the writers agreed that the work of providing the prophets, which in turn enabled the Israelites to resume and complete work on the temple, is attributed to the hand of God.

God's own intention for the temple to be rebuilt appears explicitly in Zechariah: 'Therefore this is what the Lord says: "I will return to Jerusalem with mercy, and there my house will be rebuilt."' (Zechariah 1:16 NIV). Furthermore, it is recorded in the sixth chapter of Ezra that Darius the king issued a decree which not only supported the continuation of the building project, but exceeded the former provision of Cyrus for the work in offering, in addition to the full monetary grant, 'bulls, rams, or sheep for burnt offerings to the God of heaven, wheat, salt, wine, or oil, as the priests at Jerusalem require - let that be given to them day by day without fail,...' (Ezra 6:9), and also a threat of execution to anyone who would seek to frustrate the work and thus, betray the king's edict (Ezra 6:11-12). This is also accredited to the work of God: 'And they (the Israelites) kept the Feast of Unleavened Bread seven days with joy, for the Lord had made them joyful and had turned the heart of the king of Assyria to them, so that he aided them in the work of the house of God, the God of Israel.' (Ezra 6:22)

The overall thematic intention of the work was thus established to be the Lord Himself rebuilding the Temple, through Zerubbabel and the Israelites. Very little conversation between these three parties (Zerubbabel, the Israelites and God himself) is recorded in the bible, and for this reason it was decided that the libretto would be formed principally through an imagining of the dialogue according to the established theme. However, in loyalty to the biblical texts upon which the work is based, turns of phrases and wording used in these texts were adopted within the libretto, and further biblical passages subscribing to the theme were sought out and grafted in, in celebration of the work's larger biblical context. The structure of the work was derived as follows:

#### 1. CALLING (bars 1-62)

The Lord calls Zerubbabel to lead the Israelites in rebuilding Jerusalem's Temple. No such dialogue appears in the biblical account, but the related proclamation of king Cyrus is here adapted and proclaimed by God himself, in order to reveal the Lord initiating the work as expressed by the writers of the biblical accounts. 'Now is the time to make a beginning' (bars 46-49) is drawn from Ezra 3:8 ('Now in the second year after their coming to the house of God at Jerusalem, in the second month, Zerubbabel the son of

Shealtiel and Jeshua the son of Jozadak made a beginning, together with the rest of their kinsmen, the priests and the Levites...').

#### 2. CONSIDERATION (bars 63-114)

Zerubbabel considers the mission granted him by God, and although initially very hesitant, even reluctant, he is gradually convinced by the Lord to begin work. This section, although entirely invented, supports the overall theme by contrasting the small, feeble, ordinary nature of Zerubbabel the man, with the great size and complexity of the task that the Lord had ordained for him. The crux of the work is articulated within this section for the first time in bars 104-108 through Psalm 127:1 ('unless the Lord builds the house, the builders labour in vain' NIV). The general unfolding discussion is based on similar discussions between God and Moses as recorded in Exodus 33:12-17, and between God and Gideon as recorded in Judges 6:11-18. Zerubbabel's words in bars 94-95 are based on Psalm 39:5, and those in bars 95-97 on Isaiah 40:6-8.

#### 3. COOPERATION (bars 115-244)

This section, which is chiefly concerned with the actual physical work on the Temple from its outset to its completion, begins with Zerubbabel recollecting his discussion with God, and in so doing he convinces himself to take up the mission and 'call the men to work' (bar 124). Here the crux (Psalm 127:1) is once again articulated (bars 117-118), and the following words, 'but since the Lord is for me, who is my adversary? Who can be my foe?', is a reference to Romans 8:31.

The call of Zerubbabel to those willing to work on the Temple (bars 136-139), though imagined, was nonetheless based on passages such as Ezra 1:5, in which it is recorded that 'everyone whose spirit God had stirred to go up to rebuild the house of the Lord' rose up. A marked distinction between the attitudes of the older and younger generations of the Israelites is revealed in Ezra 3:12 and Haggai 2:3, since the older Israelites had seen the glory of Solomon's former temple and thus, their view of the new temple was tainted. This distinction was exaggerated in the work, with the older generation (fulfilled by Baritone 2 and Bass of Choir 1) likened to the proud, self-righteous pharisees of Jesus' day (see, for

example, Jesus' description of the pharisees in Matthew 23:1-7). With great pomp and pride, the older Israelites declare their 'worth' in bars 148-151, and their concealed hostility towards Zerubbabel is revealed in their snide duet which unfolds in bars 139-147, and which is based primarily on harmonic dissonance such as tritones (bars 144-145). The 'purity' and 'innocence' of the younger generation's perfect fifths from bar 152, performed by Tenor and Baritone 1, contrasts with such dissonance and likens them to innocent children, intended to reflect Jesus' description of the heirs of the kingdom of God in Matthew 18:3-4. Their thankful and humble offering of themselves in dedication to the work in bars 161-164 is based on Romans 12:1.

Bars 165-244 detail the physical work on the temple. Although inspiration for much of the libretto in this passage was sourced elsewhere (this will later be explained), biblical texts and references nevertheless feature throughout, in continued efforts to establish the work's theme and context: 'sixty cubits high and sixty wide the house of the Lord shall rise' (bars 166-169) is drawn from Ezra 6:3; 'build a strong foundation on the rock, for when winds and waters are at hand, the house on the Rock shall stand' (bars 170-173) is based on Luke 6:47-48, and use of the term 'Rock' refers to its biblical use as a metaphor and name for God; Zerubbabel's proclamation between bars 194 and 201 is based on Haggai 2:4-5 and Isaiah 41:10, and references the lengthy oppression and discouragement from Israel's hostile neighbours living in Jerusalem at the time, recorded in the fourth chapter of Ezra; Zerubbabel's second proclamation (bars 221-234) is based on Ezra 6:4, in which it is decreed that the Temple should have 'three layers of great stones and one layer of timber'.

#### 4. **COMPLETION** (bars 245-265)

The fourth section begins with Zerubbabel addressing the congregation of Israel, reminding Israel of the Lord's fulfilled promise of redemption from exile and slavery (2 Chronicles 36:20-21; Jeremiah 29:10). The events recorded in Ezra 3:10-13, despite chronologically taking place after the laying of the foundation, were expanded and included within bars 252-262 following the completion of the Temple. It is recorded that the younger Israelites praise God 'with a great shout' (verse 11) and the older Israelites

wailed loudly, lamenting the former temple, and their combined noise was so great that 'the sound was heard far away' (verse 13). The younger Israelites thus praise God on Zerubbabel's instruction, with their vocal lines evoking a trumpet fanfare in faithfulness to verse 10 of the passage, while the older Israelites grumble ungrateful responses to Zerubbabel's interjections, which all amounts to a calamitous 'shout' in bar 262. 'Establishing the work of our hands' in bars 251-252 is a reference to Psalm 90:17.

### 5. CONCLUSION (bars 266-296)

The fifth and final section simultaneously provides a reference to the Israelites' celebration at the dedication of the completed temple, as recorded in Ezra 6:16-17, and a poetic summary or 'song' of the events told in the preceding music, which bears similarity to the sung summaries of Israel's history found throughout Psalms and elsewhere in the Old Testament (for example, the song of Moses in Deuteronomy 32:1-43).

An ensemble consisting purely of period instruments for c.a. 530 B.C. was considered, however, and in light of the difficulty of establishing the exact sounds of ancient biblical instruments, it was instead decided that the ensemble would, in part, be derived from an imagination of the historic sounds. 'Antique' percussive instruments are thus called for, which hearken back to a bygone sound-world, even if by only a matter of decades instead of millennia, and 'extended' techniques are employed to present-day instruments in efforts to evoke ancient sounds: The bongos are 'muted' with a cloth, producing a muffled, 'primitive' sound relative to its contemporary clear tone; the piano, played chiefly by striking the strings with beaters, conjures the ancient sound of the dulcimer, an instrument listed only in earlier versions of the English bible (for example, in Daniel 3:10 of the King James Version).

At an early stage of the composition process, Britten's 'Parable Operas', specifically *The Burning Fiery Furnace* (1966) and *The Prodigal Son* (1968) provided useful examples of large-scale works which communicated a biblical theme, indeed, a 'sermon' through the telling of a biblical story. Important influences of these works on *Rebuilding the Temple* are detailed below:

1) In The Burning Fiery Furnace, after having processed to the stage chanting in latin, the Abbot reveals the intentions of the 'mystery' play to the congregation, following which the monks respond with the sermon's theme, 'God give us all the strength to stand against the burning, burning murd'rous world!'. The play unfolds, and when complete the Abbot once again appears to address the congregation with the lesson:

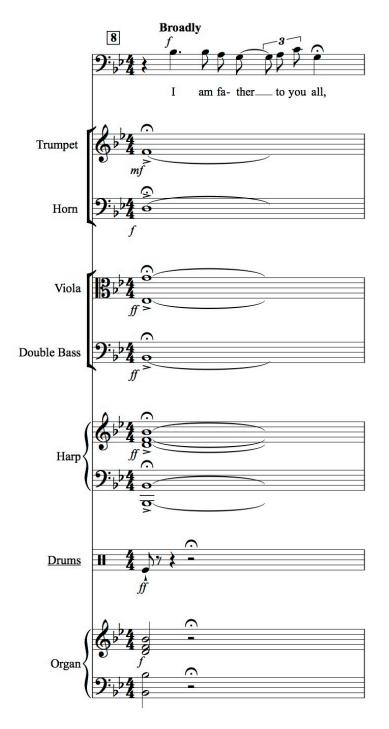
Good people, we have shown you here the burning trial of faith. Over that great city Babylon, that mighty place, a new light shines. Friends, remember! Gold is tried in the fire and the mettle of man in the furnace of humiliation. God gives us all the strength to walk safe in the burning furnace of this murderous world. Good friends, so ends our mystery.

The Abbot and monks then process out chanting, which ends the work. Similarly, the Abbot, having assumed the character of The Tempter (the devil) throughout *The Prodigal Son*, addresses the congregation once the play has completed:

O my children understand, more joy shall be in heaven over one repenting sinner than over ninety-nine with nothing to repent. Be not self-righteous, do not say "Thank God I am not like another I could name." He that so exalts himself shall be cast down. Remember the story of the Prodigal Son, remember his father's forgiveness. And may the Lord bless you and keep you.

It was decided that, in a manner similar to that in the Parable Operas, the established biblical theme in *Rebuilding the Temple* would be made clear to the listener. However, instead of 'book-ending' the work with an interpretation of the biblical story through use of an Abbot, narrator or other character mediating between the audience and the 'play', the intention for *Rebuilding the Temple* was that the biblical theme would be

Fig. 5



Entry of The Father in Britten's The Prodigal Son

Fig. 6



Entry of The Elder Son in Britten's The Prodigal Son

made clear within the story itself. It is for this reason that the theme, Psalm 127:1, is alluded to or articulated so frequently throughout the work and specifically, the reason that it concludes *Rebuilding the Temple*.

- 2) The decision to assign particular roles to singers and groups of singers found its influence in the strong theatrical and visual elements of the Parable Operas, as did the spatial arrangement of the singers. The audience is able to easily distinguish between the characters, which in turn aids the communication of the story, and with the larger Choir 2 surrounding the smaller collection of Israelites on all sides, the notion conveyed is one of protection and power of the Lord, in support of the overall theme.
- 3) In The Prodigal Son, the voice of the Father opens the play in a resounding, stable B-flat (Fig. 5). When the Elder Son enters (Fig. 6), the music operates around a different pitch-collection, settling on a chord of D, E and G-sharp, far removed from the B-flat heard moments before. The effect of this draws a distinction between the two characters, and also speaks of the stable, grounded nature of the Father relative to his self-righteous son. This influenced some tonal considerations of Rebuilding the Temple, specifically the decision to assign different pitchcollections to different characters at particular moments in the work. Choir 2 principally operate within the 'home' pitch-collection of [E, Fsharp, G-sharp, A, B, C, D], and thus when Zerubbabel enters in bar 65, his melody (supported by the Israelites' humming) operates around a markedly different collection, which centres on F. The dissonance and tonal instability produced between the vocals and the ensemble's Ecentred harmony illustrates the 'instability' and weakness of Zerubbabel's character at this point, as he wrestles with the notion of undertaking such an important task, and contrasts with the strong, anchored voice of God. When Zerubbabel is assured of the strength and power of God, and begins to trust God's claim that he himself would be working, Zerubbabel's melody begins also to operate within the home key of E. Bars 55-56 highlight this gesture, providing oscillations between E and F, and gradually the music moves towards its resounding

E Major resolution in bar 125, immediately before which Zerubbabel and God sing in harmony and rhythmic unison for the first time.

Fig. 7 (sempre **J**=42) 9 marc. Tenor Be - hold, the they have all one Chorus marc. Bass Be - hold, the peo-ple is they have all one lan-guage; one and (sempre <u>-42</u>) Violin I Violin II Violoncello

Excerpt from Stravinsky's cantata Babel

Contrabass

Stravinsky's cantata *Babel* (1944) was also influential, for the way in which the voice of God was treated. The two male voices, which move in rhythmic unison, provide a strength and breadth of sound unavailable with a single voice (Fig. 7), and it was this which both influenced the decision to use more than one voice to represent God and prompted further research into the various ways in which the voice of God is described throughout the bible. This research, which revealed a surprising variety of descriptions, was the basis for the decision to provide similar variety in the ways the voice of God was presented in *Rebuilding the Temple*:

- Bars 45-55 drew inspiration from Exodus 19:19 ('God answered him in thunder'), Psalm 29:4 ('the voice of the Lord is powerful; the voice of the Lord is full of majesty') and Isaiah 6:4 ('the foundations of the thresholds shook at the voice of him who called').
- The continuous rising and falling arpeggios of the harp in Bars 72-79, coupled with the increased movement between the voices of Choir 2 reflects Revelation 1:15 ('his voice was like the sound of cascading waters' HCSB).
- The 'stabbed' chords and piercing crescendos (particularly that of the bowed cymbal) in bars 98-102 draws its inspiration from Hebrews 4:12 ('For the word of God is living and active, sharper than any two-edged sword, piercing to the division of soul and of spirit, of joints and of marrow, and discerning the thoughts and intentions of the heart.')
- The humming of Choir 2 underneath Zerubbabel's declarations in bars 133-138 and 245-250 signifies the power of God working through Zerubbabel. Similar humming of Choir 1 throughout the second section serves to reflect Zerubbabel's earthly, human nature as he gradually 'tunes in' to God's voice.
- 'Crackling' of the bells and the erratic 'dancing' of the flute, combined with
  the grumbling tremolos of the harp and piano in bars 105-106 were
  together based on Psalm 29:7 ('The voice of the Lord flashes forth flames
  of fire'), and immediately following and connected to this, the extreme
  hush and stillness of bars 106-114 is based on 1 Kings 19:12 ('and after
  the fire a sound of gentle stillness and a still, small voice.' AMP).

In addition to the research and subsequent compositional decisions made in efforts to ensure that the biblical context of the work was understood, a variety of methods were employed to similarly ensure that references to the current reconstruction of York's Minster were equally prominent and acknowledged in *Rebuilding the Temple*. Roger Marsh's *Song of Abigail* offers a striking example of recent music which projects biblical history into the present through the use of speech accents (Marsh likens David to a

mafia 'godfather', and assigns the singer an accent accordingly). This was adopted in *Rebuilding the Temple* as a method of establishing the broader context and place within which the Minster's reconstruction occurs, with the Israelites at times directed to perform in a 'North-Yorkshire' accent.

In specific relation to the Minster's reconstruction, the dialogue between Zerubbabel and the Israelites in bars 179-217 found its origin in the Minster's museum display, which provides information pertaining to its ongoing works. Exact phrases used within the display were noted and modified to form the libretto:

#### Bars 179-185:

The basis of all the stonemasons' work is "setting out". The Master Mason leads this design process, making full-scale drawings. He uses research to recreate designs for damaged stones.

- From his drawings, the Master Mason works out the size of stones needed.
- He makes metal templates from the drawings.
- These show how to make the design work in 3D.
- The masons work from these templates and precise measurements.

#### Bars 186-194:

It takes up to four months for one mason to carve one new stone.

## Bars 195-203 (Israelites):

3500 stones are being assessed for repair or replacement.

Stones carved in the workshop must fit perfectly in the building. This complex and ancient craft is called stereotomy.

All the stones worked by the masons perform a function in the structure of the building. They all rely on careful and precise geometry.

Sometimes masons need to trim new stones to fit accurately. This technique is called paring-in.

Furthermore, the Israelites' labour 'chant' in bars 221-234 is derived from adjectives sourced from the display-boards. The phrase 'recreating a listed building' in bar 234 is formed from the word 'recreate', found within the display, and 'listed building' found on an information board outside the construction yard, and was included as the most explicit reference to the Minster's reconstruction within the libretto.

Observation and aural analysis of the Minster's various bells, and their subsequent working into the score, proved to be a fruitful 'musical' method of associating the ancient story with the Minster:

- 1) The sonorous hourly toll produced by the Minster was examined, and although the sound was discovered to be considerably more complex than could accurately be accomplished within the ensemble, an approximation was made which was deemed to retain enough of its 'essence' to be associated with the original toll. The orchestrated chord appears in bars 59 and 61, with slightly altered, extended or simplified versions featuring in bars 63-90, bar 165 and bars 290-296.
- 2) Two of the bell 'peals' heard at the Minster were recorded and examined, each of which involved a simple, repeating, diatonic descent in B-flat major (Fig. 8). These peals were observed to produce unusually dominant harmonics at the minor-third partial, sounding just after each bell had been struck. The otherwise diatonic collection of pitches was thus interrupted by the presence of A-flat, G-flat and D-flat, the minor-

Fig. 8

20/01/2013

10/02/2013

Two of the Minster's descending bell peals, recorded on the dates provided.

third partials above F, E-flat and B-flat respectively. With the D-flat omitted, and the collection transposed to the key of E, the collection became [E, F-sharp, G-sharp, A, B, C, D], upon which much of the tonal language of *Rebuilding the Temple* is based. A particularly prominent example of the use of this collection comes in bars 45-55, with the only occurrences of foreign pitches to the collection occurring in bar 48 (Bass C-sharp), bar 50 (Antique Bells B-flat), and bars 53-54 (Alto and Baritone G). Bar 262's climactic chord comprises the entire collection, in addition to G-natural (Alto), the minor-third of E and equivalent to the D-flat dropped from the original B-flat peal.

Octatonic

Tritone

Whole-tone

Scalic collection used within *Rebuilding the Temple*, illustrating some features identified as unfamiliar to the diatonic major scale.

The collection can simply be expressed as a diatonic major scale with its submediant and leading-note flattened, however a number of interesting characteristics which differed between the diatonic major scale and this scalic collection were identified, and subsequently celebrated throughout the work (see Fig. 9):

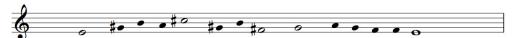
 The collection contains six consecutive pitches of the octatonic scale (E-flat and F would complete the collection). For this reason the same octatonic scales (those featuring alternating intervals of semitones and whole tones) feature in, for example, bars 23-26 (Antique Bells and Flute) and bars 139-147 (Flute and Viola).

- The five consecutive whole-tones found within the scale served as inspiration for the various whole-tone passages in the work (for example, bars 30-40, exclusively whole-tone with the exception of the piano's B-naturals, and the Solo Tenor in bars 179-188). Additionally, a bass whole-tone movement features as a motif throughout the work: bars 4-5, 136-138, 166-167, 174-176, 201-203, 245-246, 257-259.
- Tritones are twice as common in this scale as in the diatonic major scale (two feature instead of one), and this gave rise to the extensive use of tritones throughout the work but specifically in the viola part (for example in the opening four bars, and in bars 220-238).

In addition to influencing primary tonal considerations of the work, the Minster bells' descending peals themselves feature in various guises throughout *Rebuilding the Temple*, with examples occurring in the following bars: 120-121 (Piano and Harp); 125 (Antique Bells, Piano, Harp, Solo Tenor); 165-166 (Solo Tenor); 174-177 (Piano and Harp); 272-286 (Flute and Viola); 290-293 (Antique Bells, Flute, Viola, Harp, Choir 1 and Choir 2).

3) Immediately prior to the hourly toll, a brief tune is played on the Minster bells, which was scored and transposed into the key of E (Fig. 10). In bar 266 the tune is introduced by the harp, then appears as an 'echo' on the antique bells sounding two octaves and a minor-third above (in reference to the descending peal). A harmonised version of the tune is then sung by Choir 2 (bar 269), which continues underneath Choir 1 from bar 278 with its six voices each singing the tune in turn.

Fig. 10



The bell tune played prior to the Minster's hourly toll.

Other sounds, in addition to the various bells, were observed within and around the Minster, some which were of notable influence on the composition of *Rebuilding the Temple. Transcendence*, a contemporary, multi-sensory mass, is held in the Chapter House of the Minster every few weeks. Zerubbabel's declarations to the Israelites in bars 132-138 and

245-250 found their inspiration in the Eucharist at an attended *Transcendence* service, which was sung by the service leader in a similar, 'quasi-recitative' style, with harmonies shifting on specific words. The Eucharist serves as an act of remembrance of what Jesus accomplished on the cross (the forgiveness of sins), and the libretto in bars 245-250 was chosen to reflect this attribute of the Eucharist since Zerubbabel addresses the Israelites in the manner of a sermon, reminding them of what the Lord had accomplished for them (in this case the return to Jerusalem from Babylon).

One sub-theme which pervades the biblical texts, particularly those in the books of Haggai and Zechariah, is the encouragement of the people to simply get working, to apply their hands to the practical, physical, 'percussive' processes involved. This influenced the decision to involve a considerable percussion section relative to the size of the ensemble, in addition to the percussive sounds produced by the harp and piano. However, specific 'physical' sounds were available as a source of musical inspiration, at the Minster's building yard. Various construction noises were recorded, analysed and approximated into playable parts by the ensemble, specifically in bars 194-202:

- A pneumatic drill, the sound of which involved a short accelerando to its peak speed, followed by a decelerando, was approximated by the bongos. The noise of the 'ignition switch', heard immediately prior to the drill noise, was remarkably similar to that of a vibraslap, and it was for this reason that a vibraslap was included in the work in the first instance, and specifically at this point.
- A buzzsaw was heard, which, when initiated, produced a swift upward glissando of roughly an octave, followed by a longer downward glissando and diminuendo when turned off. The viola approximates this noise, beginning at the tonal centre of F-sharp, rising over a crotchet to E-sharp, and returning to F-sharp over a long diminuendo. This motif is foreshadowed in the first section of the piece, in bars 20-30, and influenced the extensive use of glissandi throughout the viola part.
- Low-pitched machine drones were heard, and aural analysis revealed a fundamental pitch of B, with a clear harmonic sounding a fifth above (F-

sharp). It is for this reason that the piano 'murmurs' its lowest F-sharp in repeated semiguavers.

- Metallic hammering noises were heard periodically, in small groups of consistent strikes. The anvil assumes this sound, providing as it does groups of between 3 and 7 dotted quavers. The piano part's 'murmurings' are interrupted by accented groups of crotchet beats, as another approximation of this construction sound. A simplified version of this feature appears in bars 5-11.
- Two lorries were also recorded reversing on site, providing series of beeps at two different pitches and speeds. The flute thus provides two 'reversing' noises, one articulating a high E every fourth triplet-quaver beat, and the other sounding the lower G on every other quaver beat. The crescendos and diminuendos here suggest the lorries moving closer, passing by and then moving further away.

Encouraged by Britten's *Noye's Fludde* (1957), which makes use of no fewer than three existing hymns, and in efforts to celebrate the legacy of congregational singing at the Minster, the decision was made to set an existing piece of congregational worship music within *Rebuilding the Temple*. Keith Getty and Stuart Townend's *Holy Spirit, Living Breath of God* (2006) was selected, harmonised and set with new text in bars 278-288. The decision to set a modern-day 'hymn' rather than an earlier one was intended to reflect the centuries-long tradition of hymn-singing at the Minster, whilst simultaneously alluding to the more contemporary expressions of worship of, for example, the *Transcendence* service. Concealed within the first four bars of this harmonised hymn is the opening melody of Roger Marsh's *Lullaby* (2009) not only as it shares a nearly identical initial phrase with the hymn, but also as a token of gratitude to Roger for his musical tuition over the years.

A further decision was made concerning the final section of *Rebuilding the Temple*, which arose from examination of *The Prodigal Son*. From Figure 71, Britten provides an example of celebration in faithfulness to the biblical text (Luke 15:23-24), when the household rejoices at the Father's command following the prodigal son's return (Fig. 11). Britten's setting of this celebration, with dancing wind instruments and 'percussive'

strings, is joyously basic, which is perhaps intended to reflect the joyful abandon of the father in the passage as he sees his son return, and also to conjure the sorts of sounds that untrained musicians might have produced using the basic instruments available to them (such as flutes and percussive instruments) at the time of Jesus' ministry. For the final section of Rebuilding the Temple, which draws biblical inspiration from the Israelites' celebration at the completion of the Temple, such a sound-world was not deemed appropriate in light of the work's associations with the Minster, within which great musical ability is fostered, and orderly worship celebrations hosted. Analysis of the third movement of Stravinsky's Symphony of Psalms (1930), which sets the final Psalm of the Old Testament, revealed that although a catalogue of festive, joyful and 'loud' (verse 5) methods of praising God are commanded by the psalmist, Stravinsky subverts this and instead selects striking calm and order between bars 163 and 204 on the words 'Laudate Eum in cymbalis, benesonantibus, laudate Eum in cymbalis jubilationibus' (verse 5 of the Psalm). This is achieved through the use of dynamics (voices are marked 'p subito e ben cantabile') and the 'rigorosamente' crotchet pulse, coupled with the timpani, harp and pianos' persistent ostinato indicates a sense of order and stability. This was an important influence in the composition of the final section of Rebuilding the Temple, as a suitably 'orderly', even subdued sound was sought in reflection of the Minster. In bars 266-277 ostinati are employed and, with the exception of the piano's chords (and the solo tenor's note which fades to nothing), all parts are marked p, pp or ppp. Even when Choir 1 takes up the hymn in bar 278, it is not the rousing, climactic outro one might associate with the closing hymn of a Church of England worship service, but stillness and calm is preserved with voices marked only up to mp.

Excerpt from the 'celebration' passage in Britten's The Prodigal Son

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