ACKNOWLEDGEMENTS

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Abstract

This portfolio comprises six compositions for the following musical forces: wind quintet, brass sextet, solo organ, male voices and piano, tuba and string quartet, and chamber orchestra. The prime concern throughout has been to write music suitable for the medium, but this has not precluded experimenting as deemed appropriate. However, the musical argument, with its associated texts and characters, is the determining factor.

The supporting analyses draw attention to other important considerations, namely musical language and structure. Each piece embodies its own terms of reference, irrespective of whether there are extra-musical sources. There is, however, a general tendency to allow thematic and harmonic material to evolve from a source collection of pitch classes.

The compositions are imbued with a desire to embrace and interpret tradition, for instance, Spire Studies and Renaissances make reference to medieval sources, whilst Voluntary displays a quasi-improvisatory "French" perspective on the neo-Baroque. In terms of musical language Voluntary bridges the austerity of the modalism in Spire Studies and Renaissances and the complexity of Time Settings, Undertones and Island. Island, indeed, illustrates most clearly an overall preoccupation in this portfolio, namely the notion of structure as a variable: on the one hand an aurally-perceived entity; on the other, a static design.

The analytical essay on Roberto Gerhard’s Concerto for Orchestra (1965) takes a closer look at the above mentioned aspects of structure as applied to this important contribution to British music of our time.
IAN WHITE

PROGRAMME NOTES
SPIRE STUDIES for wind quintet (1993)

Pomposo - Allegro vivace - Andante sostenuto - Allegro energico - Maestoso - Adagio.

Spire Studies is an attempt to represent in musical terms events and themes which emerge in William Golding's The Spire. Although the novel is itself set in medieval England, the moral dilemmas confronting the main character, Jocelin, are no different to those facing many of us today. The wind quintet, with such individually coloured voices, seems an appropriate medium to convey man's inner turmoil as well as the tensions that exist within this particular community.

The six studies correspond as follows:

(I) Jocelin, the dean, is delighted that his scheme to build a spire is to go ahead, despite mounting opposition.

(II) Work begins. The crippled verger, Pangall, is murdered as part of a pagan ritual.

(III) Jocelin battles with his conscience.

(IV) The spire is completed but the evil influence continues to grow.

(V) Inquisition: Jocelin is held to account.

(VI) Coming to terms; Jocelin's death.

Hopefully Spire Studies can be appreciated as pure music. The sections are not, strictly speaking, variations, but are all related to the opening where the notes Bb-A-F-Eb are highlighted in a joyous outburst. The work is, in effect, a series of studies in writing for wind quintet, exploiting techniques and textures ranging from austere recitative to quasi-ostinato sections and an almost static, ethereal apotheosis.
RENAISSANCES for brass sextet (1993)

This piece takes as its starting point two works by one of the most important Renaissance composers, Josquin des Prés (1450-1521). The opening of the chanson Faulte d'argent is introduced by muted trumpets and serves as a background to solemn trombone chords which refer to the motet Tu pauperum refugium.

The first of the four variants is a six-part ricercare which culminates in antiphonal exchanges recalling the Venetian School and in particular Giovanni Gabrieli. A ritornello in the form of "bell effects" in the trombones (Faulte d'argent) then ushers in dance-like material (Variant II). The following variant is a scherzo in which the muted trumpet background of the introduction is further developed. This is complemented by a reflective coda (Variant IV) featuring solo flugelhorn, which is intended to evoke the ethereal quality of Tu pauperum refugium.
**VOLUNTARY** for organ (1993)

*Voluntary* is intended to convey an impression of improvisation, hence the opening *senza misura* (cadenza) and a three-note generative cell which lends itself easily to the whim of the moment. The notes G–A–C♯ in numerous transpositions suggest a series of unresolved dominant sevenths as a means of creating a sense of anticipation, thus contributing to the piece's essentially celebratory character. The proliferation of whole tones resulting from these chords suggests French influence, but, to be true to the title *Voluntary*, there are also allusions to the neo-Baroque in the shape of an alla ciacona and two gigues.
TIME SETTINGS for solo male voices and piano (1995)

Time Settings, as the title suggests, is a song cycle of poems dealing with various aspects of time. The work is framed by settings of extracts from T.S. Eliot's Burnt Norton. These, coupled with some Old Testament quotations (from Ecclesiastes 3) in the first song, present time as a universal and infinite entity. The extremes of tessitura and the whole tone passages in the piano are intended to reinforce this.

By contrast, Ralph Hodgson's Time focuses on the more down-to-earth notion of time passing "quickly". The poem's breathless quality is reflected both in the brevity of the vocal entries and the mercurial piano interjections in this scherzo equivalent.

The transience of one's existence was very much a concern of Elizabethan poets and Shakespeare was no exception. The piano prelude sets the scene for this latter-day madrigal with accompaniment. I have taken the liberty of omitting the final couplet,

"And yet, to times in hope, my verse shall stand
Praising thy worth, despite his cruel hand."

thus removing the personal element and leaving the argument at a particularly sombre point. The sombreness, however, is transcended in Henry Vaughan's The World, a radiant vision of Eternity. The purpose of the dense chordal writing in the accompaniment is to capture something of the sense of awe and grandeur contained in the poem.

The return to T.S. Eliot's Burnt Norton serves to underline Vaughan's view of the Universe.
UNDERTONES for tuba and string quartet (1997)

The public persona of a comedian often conceals a sad person. In Tony Hancock's case, however, there was also pathos in the stage rôle. The first movement of _Undertones_ is intended to convey this element, while the second movement, subtitled _Epilogue_, reflects more on Hancock's real-life loneliness and insecurity that had such tragic consequences.

The tuba, with its clumsy appearance, curiously expressive tone quality and capacity for technical agility largely unexplored, has long been associated with tragi-comedy often adding a touch of the grotesque (as in the finale of Mahler's 6th Symphony). Stravinsky's portrait of the Russian bear in his ballet _Petroushka_ and _Bydlo_ (from Ravel's orchestration of Musorgsky's _Pictures at an Exhibition_) belong to the same tradition. How fitting it is, then, that the tuba should be featured in the theme music for Hancock's _Half Hour!_
Aldous Huxley’s last novel was regarded by critics such as Cyril Connelly and Anthony Burgess (The Sunday Times and Yorkshire Post respectively, 1962) as his vision of Utopia, the antithesis of Brave New World. And yet this evocation of serenity and contentment is marred by an undercurrent of corruption and greed which in the end appears to triumph, the only escape from reality offered being drug-induced hallucination.

As with the earlier novel, there is a didactic purpose and Huxley seems to be warning us against the worst excesses of Western capitalism. The central character, Will Farnaby, a young journalist shipwrecked on this apparently idyllic Far East island, acts as an enquirer on the reader’s behalf. The plot is complex and there are different levels of consciousness with numerous flashbacks and reflections, mainly on Will’s past. These complexities are represented in the orchestra by means of textural variations.

The most important influence of the novel is its design: three proportionally related sections, each with its own specific function. Characters and the values they stand for are introduced in the first third of the novel, what we in musical terms would call the "exposition". An exploration of ideas then takes place in a sizeable portion comprising approximately one half, i.e. the "development". The final sixth (the "recapitulation") is devoted to evaluation and a dénouement, sadly resulting in the seizure of power by a young dictator who threatens the way of life of the free-thinking inhabitants. This framework and its contents form the basis of Island, the tone poem.
IAN WHITE

ANALYTICAL
COMMENTARIES
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SPIRE STUDIES for wind quintet

Spire Studies is a reflection on William Golding’s The Spire, an evocation of a medieval church community. This novel’s predominantly abstract prose tends to focus the reader’s attention not so much on the plot but on moral issues that arise as the aim of the dean, Jocelin, to build a spire becomes an obsession. Although the music is largely a response to the latter, it is nonetheless the sequence of events that forms the basis of the six studies. They correspond as follows:

I Jocelin is delighted that his scheme is to go ahead despite mounting opposition.

II Work begins. The crippled verger, Pangall, is murdered as part of a pagan ritual.

III Jocelin battles with his conscience.

IV The spire is completed but the evil influence continues to grow.

V Inquisition: Jocelin is held to account.

VI Coming to terms; Jocelin’s death.

The wind quintet, with its individually coloured voices, offers a wide range of sonorities and so is an ideal medium for (i) creating an appropriate setting and representing details of the plot, (ii) portraying the same character in a variety of situations, and (iii) conveying the more abstract areas of the novel. These were the chief aesthetic aims in writing Spire Studies. The following analytical commentary is intended to relate the compositional process to the extra-musical elements outlined above.

The four notes on which Spire Studies is based (Bb A F and Eb) were selected to represent, in musical terms, a conflict of good and evil. See Ex. 1
The "perfect" Bb and F and the tritone A and Eb (in medieval times the forbidden "diabolis in musica") combine to evoke, in non-metrical notation, an atmosphere associated with churches: bells ringing; voices echoing in a reverberant acoustic, and so on. The implied simultaneous tonic/dominant 7th harmony is also intended to convey something of Jocelin's blind optimism at the outset.

Substantial portions of Spire Studies consist almost entirely of the Lydian four-note collection (Bb - A - F - Eb): bars 1-21 (I) and the senza misura at 269 (VI) are prime examples. See Ex. 2
Ex. 2 (cont.)

In fact, most of the studies are linked by at least one of the pcs. See Ex. 3

Ex. 3

(a)

(b)

(c)
This suggests that in harmonic terms the music does not travel far. Even when the dramatic pace increases, as in II, the action is framed by statements of the four-note collection in various transpositions. In such cases its identity is preserved through the intervallic content (semitone, major third and tone) so prominent in the opening of the work. See Ex. 4

These self-imposed harmonic "limits" are intended to symbolise a closed and rather claustrophobic medieval church community. It is only in the final bar (which represents Jocelin's ascent to heaven) that there is a release.

To reinforce the "medieval" and "church" aspects, certain stylistic ingredients are introduced from time to time. For instance, a typical Burgundian cadence figure is worked into the austere and

\[ allowing also for interval expansion as in bar 32.\]
angular bassoon recitative at bar 23 (Pangall, the crippled verger) which reappears in pseudo-plainsong material in III (bar 200). See Ex. 5

But associations with detail in the plot are more significant than any superficial evocation of medievalism. At this point Jocelin, the Dean, is wrestling with his conscience: he, as a man of God, allowed a member of his parish to be sacrificed in a pagan ritual in the name of his foolhardy scheme to build a spire. Memories of the victim's plight merge uncomfortably with his Christianity, hence the juxtaposition of Pangall's recitative material with the pseudo-plainsong. Any perfect fourths or fifths in the harmony are "tainted" with dissonance and this of course stems from the opening of the work. Such is the presence of evil that symbols of good (i.e. perfect fourths or fifths) tend not to be prominent until the final stages when Jocelin has come to terms with events and is preparing for death. See Ex. 6
The tritone, on the other hand, permeates much of the thematic material, particularly in music associated with evil and victims of evil. See Ex. 7

Ex. 7

(a) [Musical notation]

(b) [Musical notation]

(c) [Musical notation]

(canonic episode based on I of bassoon material at 23. Work on the spire progresses but the community is becoming morally degenerate.)

(d) [Musical notation]

(Jocelin’s inquisitor)

Each of the main characters is identified with a particular texture or sonority (Pangall with solo bassoon, for example), or is assigned a leitmotif which is modified (often a simple chromatic alteration) as the plot develops. In order to illustrate the latter and conclude this commentary let us refer briefly to Jocelin’s music. See Ex. 8
The intention is to retain the identity of the character by means of consistent melodic contour, but at the same time reflect sharp contrasts in mood through rhythmic "distortion" and variation of tempo and texture.
RENAISSANCES for brass sextet

This piece takes as its starting point two works by one of the most important Renaissance composers, Josquin des Prés (1450-1521). The opening of the chanson Faulte d'argent is introduced by muted trumpets and serves as a background to solemn trombone chords which refer to the motet Tu pauperum refugium. The four variants which follow pay homage to various styles of writing for brass from the 16th century to the present day. They include: contrapuntal textures and antiphonal exchanges recalling the Venetian school (Variant I); dance-like material influenced by the Baroque suite (Variant II); a scherzo incorporating fanfares and chorale passages (Variant III) and a reflective coda featuring an instrument often associated with jazz, the flügelhorn. The title, Renaissances, therefore, not only refers to the source material but also to its reappearance in various guises.

Harmonic structure and its relationship with thematic material were major preoccupations in the compositional process and so this analytical commentary will focus mainly on these aspects. To begin with, some reference will be made to the source material which is taken from HAM Vol. I. ¹ Faulte d'argent appears in the Aeolian mode (transposed), but the portion deployed in Renaissances is actually in the Dorian (transposed). The Phrygian mode, often associated with solemnity, is used for Tu pauperum refugium. See Ex. 9. However, in Renaissances the Josquin fragments are often combined in various transformations, so only one mode, the Dorian (transposed) is used in the introduction. The bias towards G in the first 27 bars is complemented by a final section where C is the main tonal centre, the

intention being to contain the piece within a prolonged dominant-tonic resolution, notwithstanding the fact that the dominant chord is minor. On this point I find myself in sympathy with the view expressed by Pieter van den Toorn in his article on the harmonic structure of Stravinsky's *Symphonies of Wind Instruments*. By examining the relevance of an octatonic scale on G in a mosaic structure, van den Toorn is able to establish connections between apparently disparate areas. He reaches the conclusion that the "dominant seventh/dominant ninth" harmony so prevalent in the early stages is a preparation for a resolution in the final bar.

The modally-orientated harmonic structure of *Renaissances* is summarised in the following chart:

---

1. The presence of the Bb ensures that the chord retains its Dorian identity.
Ex. 10

G might be regarded as a tonal "axis of symmetry" between C and the next most important tonal linchpin, D. The other tonal centres tend to emerge within each variant from characteristics in the thematic material. To illustrate this I shall begin with Variant I and the ricercare subject (bars 28-31, Fig. 2) which stems from bars 14-17 and 1-6 (introduction):

Ex. 11

The layout of the exposition (bars 28-41) is, in effect, an expansion of the Lydian G- A- B- C♯ in the ricercare subject (rs): each entry appears one tone higher until the augmented 4th is spanned. Bars 44-50, Fig. 3 explore further the dissonance created in the canonic presentation of the rs in bars 29-30: the trombones play an elongated version in an enharmonic switch from C♯ minor to Db major, while the trumpets continue in the minor mode with quaver figuration based on the same material. See Ex. 12
Looking ahead to the last twenty or so bars of the variant (bars 85-107, Fig. 7) we can find a descending progression, again spanning a tritone (G#- D). This is intended to complement the earlier ascending G- A- B- C# progression. See Ex. 13

The sustained Phrygian F in the outer parts in bars 92 and 93 leads to a stretto on E. D (Dorian) is finally established in the ritornello at bar 107.

Variant II (bar 120, Fig. 10) is based on a theme bearing a family resemblance to the rs. See Ex. 14
As with each of the rs entries in Variant I, this new material is announced one tone higher. Perhaps more significantly, however, the augmented 4th first suggested in the rs is present and becomes a feature of the next 55 bars (120-175). See Ex. 15

Ex. 15

The trumpet figuration (based on 4th and 5th beats of bar 120) in the final bars (172-175) contains in embryo form the F#- C polarity which is important in the later stages of the work. There is a temporary resolution in the first bar of Variant III on F#, the tonal "axis of symmetry" between two prominent tonal centres in Variant II (A and D# or Eb). This is a representation at local level of the relationship between the tonal centres G, C and D already discussed.

The "foreign" F# gravitational pull at bar 176, Fig. 16, is designed to coincide with less obvious references to Faute d'argent. The material in this section is based on the characteristic minor 3rd interval, but the texture is often fragmented. There is a variation (which reappears at bar 236) within this variant (bar 212, Fig. 19). The triplet fanfare material gives way to ostinato quavers in the trombones (first suggested in bars 180-183) and more lyrical permutations in the trumpets:

Ex. 16
This "variation" also includes a rather "oblique" chorale-like reference (bar 218) to the Josquin Motet (Tu pauperum refugium).

Although the minor 3rd interval is still much in evidence, the tonal centre has now shifted to E. This is counterbalanced by the pull to Ab at bar 266, Fig. 24, with C emerging in the final bars as the tonal "axis of symmetry". At this juncture the Josquin fragments are juxtaposed and then compressed into two chords. See Ex. 17

Ex 17

A less tangible, though important, means of unifying material is the renaissance practice of relating sections metrically. In this case a \( \text{d} = 80 \) (the mm often used in modern reconstructions) is suggested and the relationships are as follows:

<table>
<thead>
<tr>
<th></th>
<th>1 - 27</th>
<th>28 - 104</th>
<th>105 - 119</th>
<th>120 - 175</th>
<th>176 - 242</th>
<th>243 - 272</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variant I</td>
<td>Ritornello</td>
<td>Variant II</td>
<td>Variant III</td>
<td>Variant IV</td>
<td></td>
</tr>
</tbody>
</table>
| \( \text{d} \) | 80 | 80 | 80 | 80 | 80, \( \text{j} = 160 \) | \( \text{j} = 160 \) \( (\text{j} = 0.54) \)
VOLUNTARY for organ

This piece is intended to capture something of the spontaneity associated with the late 17th century organ voluntary, hence the frequent changes of metre at the outset as a means of suggesting extemporisation. Baroque influences are also much in evidence in the texture and structure of the remaining four sections which have their roots in typical dance forms, such as the chaconne and gigue.

The musical language, however, owes rather more to French Impressionism on account of the predominance of whole-tones, both in melody and harmony. These stem from a seminal three-note cell, G A C#, which generates implied dominant sevenths particularly evident at the outset and in the closing bars. Their purpose is to create a sense of anticipation in these sections and thus contribute to the celebratory character of the piece. But the main aesthetic preoccupation in this case is the challenge of reconciling the two very different musical traditions referred to above. The technical means by which this is achieved hinges on the deployment of the three-note whole-tone orientated cell and this is dealt with in the following analytical commentary.

Ex. 18a indicates the thematic reference to the opening at the start of each section:

Ex. 18a
Ascending melodies and anticipatory, unresolved harmonies may be prominent, but the structural outline actually follows the contour of a descending sequence of minor thirds within a broad IV-I framework. See Ex. 18b

Subsidiary material and other harmony also derive from the seminal three-note cell. A prime example of the former is the Lydian cadence figure at bar 13 which becomes, in effect, an ornament in the more reflective second section (bar 21) before returning to its former role in the exuberant final bars. See Ex. 19 a-c
This figure is also the source of harmonies containing superimposed perfect fourths. Ex. 19d

The organ’s additional manuals allow the possibility of dense harmonies, as in the final section of *Voluntary*, where a whole-tone orientated row is stated melodically in the pedals and harmonically in the manuals. See Ex. 20
But this is an exceptional case since textures are predominantly thin on account of the improvisatory nature of a work in which variety of colour is largely due to registration, thus facilitating virtuoso display.
**TIME SETTINGS**

for solo male voices (c-t t t b) and piano

_Time Settings_, as the title suggests, is a song cycle of poems dealing with various aspects of time. The work is framed by settings of extracts from T.S.Eliot's *Burnt Norton*. These, coupled with some Old Testament quotations in the first song, present time as a universal and infinite entity. By contrast, Ralph Hodgson's _Time_ focuses on the everyday notion of time passing quickly, while Shakespeare's _Sonnet XV_ reminds us of the transience of our existence. Henry Vaughan's *The World*, on the other hand, is a radiant vision of heaven.

Compositional decisions tend to be dictated by the words when the source is a text. In this case each poem or extract from poem generates musical ideas on which the piano reflects, evoking a scene or reinforcing links between songs in a quasi-improvisatory manner. The following analytical commentary will take into account aesthetic considerations inherent in setting poetry to music. These chiefly concern interpretation and the task of representing verse form and various stylistic characteristics. To begin with, however, the discussion will refer to the structural role of intervals since this was a major technical preoccupation in the creative process.

The whole-tone based introduction may not be the progenitor of the whole piece, but its influence is present in substantial areas all the same and any lack of "gravitational pull" is symbolic of the vastness and perpetuity conveyed in much of the poetry. Ex. 21 illustrates the whole-tone element in _Time Settings_:
There are other intervallic connections between songs which not only contribute to structural unity but also reflect the continuity of time itself. Perhaps the most important of these stem from perfect fourths and fifths introduced because of their association with music of a more distant past to match an ancient text (Ecclesiastes 3, bar 21). Superimposed fourths are the point of departure in a response to Ralph Hodgson’s Time characterised by constantly changing harmonic patterns containing this interval. Its presence is
increased in Shakespeare's Sonnet XV through the imitative vocal writing which draws attention to particular lines in this poem. (Ex. 22c illustrates this.) Incidentally, the vocal material (bar 10) is anticipated in the piano prelude, but its origin is actually the setting of Ecclesiastes 3 which commences with a figure also consisting of a perfect interval framed by two semitones. See Ex. 22

A more subtle transformation of interval-related material occurs at "Each changing place with that which goes before" (Sonnet XV), where oscillating thirds (major and minor) first suggested in the opening bars of the previous song (Time) follow the contour of the vocal entries. See Ex. 23

The musical contexts, like the contents of the two poems, may seem quite different and yet similar harmony corresponds in both instances to a juxtaposition of opposites in the poetry (compare bars 19-20 in Time, "Both with and withershins", and bars 21-22 in Sonnet XV).
A relationship between "the present" and repeated notes usually in a dotted rhythm\(^1\) is established in No 1 (bar 2) and is referred to at various junctures in the song cycle in order to underline a change from past to present (see Sonnet XV, bar 44). Such rhythms with thick chordal textures become a feature of The World\(^2\) by Henry Vaughan in preparation for the return to T.S.Eliot's words in a modified version of No 1.

There is plenty of scope in this choice of poetry for word-painting\(^3\) as well as for paying homage to various styles, the

\(^1\)which recall those in Britten's 0 My Blacke Soule from The Holy Sonnets of John Donne.

\(^2\)Only the personal experience is a past event.

\(^3\)For instance:
No 1, bar 26 (p. 14): "a time to break down": a note-row in the accompaniment "breaks down" any harmonic stability.
No 2, bar 27 (p. 22): "Anomalously one": the only unison in the setting.
No 3, bars 21-24 (pp. 36-38): "each changing place with that which goes before": imitation and inversion in the vocal parts.
No 4, bar 16 (p. 51): "bright": striking C major harmony in the voices.
Britten allusion referred to above being but one example. The Shakespeare setting is in fact a combination of two late 16th century/early 17th century art forms, the sonnet and the madrigal. Each couplet or idea is assigned a "point" which is generally treated polyphonically (see Sonnet XV, bars 10, 16, 21, 25, 34 & 39). The character of the vocal writing, however, is often declamatory, perhaps reminiscent of Purcell, or rather Purcell as perceived by Britten in The Holy Sonnets of John Donne. This style is also incorporated in the Vaughan and T.S.Eliot settings to reflect a sense of the awe-inspired, a quality often found in the poetry of Donne.

The musical influences in Time Settings are far and wide, ranging from organum in Ecclesiastes 3 to "Lutoslawskian" controlled aleatory in No 5, so it would seem that historical context, as far as the music is concerned, is another factor in this exploration of the subject of Time.

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1 This work was one of several composed in 1945 to commemorate the 250th anniversary of the death of Purcell.

2 Henry Vaughan was a contemporary of John Donne (1572-1631).
UNDERTONES for tuba and string quartet

Undertones is a musical tribute to Tony Hancock. The title refers both to the range of the tuba, a source of sonorities often associated with the tragicomic, and to the darker side of this comedian's complex personality. The latter is the aesthetic point of departure for the piece. The first of the two movements is intended to convey something of the pathos apparent in Hancock's stage role, while the second, entitled Epilogue, reflects more on his real-life loneliness and insecurity.

"Ambiguity" and "paradox" are terms that spring to mind when referring to Hancock. They are also keywords in the concept and structure of a relatively large-scale work featuring an instrument often regarded as a comic amalgam of paradoxes (e.g. clumsy appearance/capacity for technical agility, etc.). Both movements consist of sharply contrasted sections where material stated in the opening senza misura is presented in a variety of guises. Possibly the greatest technical challenge for the composer in this situation is being able to weave such disparate strands into a cohesive whole. In order to illustrate these points this analysis will focus on the following: the senza misura material, its relevance to other sections, and its relevance to the work as a whole. There will also be some reference to individual sections, taking into account the structural autonomy and relationships which contribute to continual development.

The source hexachord (sh)\(^1\) is designed and deployed so as to suggest ambiguity and paradox. See Ex. 24a

\(^1\)Terminology suggesting the influence of serialism.
The rising tone (interval pattern 0-2), followed by a semitone (021) has the potential to create tension through dissonance, but the inverted semitone (interval class 11) in the melody introduces a degree of lyricism and allows the whole-tone (ic 2) to register aurally. See Ex. 24b. Whole-tone (ic 2) relationships become a feature of Undertones and serve to counterbalance any dissonance.

As one might expect, a different three-note cell is assigned to each of the two sonorities. But Po 4-6 is actually P8 1-3, so the tuba is in effect playing the same material as the string quartet and an aural illusion is created. See Ex. 25

A close pc relationship continues between tuba and strings despite contrasts in tempo and texture. In fact, the complex contrapuntal string texture (approximate note values) tends to derive from the strictly-notated tuba melody. See Ex. 27. Of particular interest is the interval class collection of a tritone concealed within a perfect fifth, and the interval-related \( [0\ 1\ 3\ 4] \) (two interlocking minor thirds). See Ex. 26

\[\text{the common intervals being a semitone and minor third, assuming the tritone is regarded as the sum of two minor thirds}\]
Ics 16 are reordered with an additional semitone to become ic collection 171, the basis of recurring motifs. See Ex. 29 (reference to thematic material for Scherzo, bar 244). Ic collection [0 1 3 4] appears in various forms in the rhapsodic section (bars 2-64, Fig. 6+15) and has a bearing on the overall design of the work (See Ex. 30: referential pcs).

Rhythmic patterns (see Ex. 27) provide the means of forging a link between sections (see Ex. 28) and of unifying material in areas where pc patterns are less discernible, for example, rapid repetition in a fast tempo as in the Allegro molto at bar 283, Fig 29.

Ex 28

The juxtaposition of independent tempi (see Ex. 27) offers the possibility of developing material at varying rates and levels. This can be taken to apply to the whole piece if we accept that each section (including the Epilogue) is to an extent self-contained in terms of musical argument, but also part of an on-going process. Ex. 29 shows a broad plan of the first movement (the main body of the work) with brief explanation relating to the details described above. Thematic material is represented in (a); its source is stated in (b). (C) refers to structural autonomy and (d) to any relationship between sections.

There are enough common factors in these sections to suggest the influence of variation form. However, if we regard the senza
Ex. 28

 senza misura

(A) (B) (C) (D)

bars 2-64 (nymphodic)

bars 65-143 (quasi moto perpetuo)

bars 144-170 (lyrical interlude)

bars 170-243

viola solo based on Po

viola solo based on Po

viola solo based on Po

viola solo based on Po

Exploration of Po 1-3 (whole-tone material)

Development of subsidiary material. Tuba refers to Po 1-3 in Trio. The pc pattern in (c) is typical of the whole mvt.

Thematic material consists of viola motif (l_p) and two "riff" figures (bars 406-424). There is a strong pc link between melody and harmony.

The intention is to create an illusion of new themes.

Thematic material consists of viola motif (l_p) and two "riff" figures (bars 406-424). There is a strong pc link between melody and harmony.

The intention is to create an illusion of new themes.

Tuba plays another variation on it senza misura material.

Tuba plays variation on senza misura material.

Tuba plays another variation on it senza misura material.

Tuba plays variation on senza misura material.

With the exception of bar 63, each entry of this theme appears a fifth higher or fourth lower (bars 26, 37 & 49).

A ritornello figure appearing in both melody & accompaniment.

Tuba introduces ritornello figure, itself a variation on bar 3.

The note-row based on (A) outlines the pc areas for this section, which begin as follows:

References to subsidiary material, especially synthesis

From 200 - is the basis of the virtuoso passages for tuba.
misura to bar 64, Fig. 7 as one movement, bars 65-243, Fig. 7-20 as another followed by a scherzo (bars 244-382, Fig. 20-29) and finale, then there is an affinity with symphonic structure. But this section is not wholly supported by the occurrence of referential pcs (becoming so by reiteration or isolation), even though the last two sections (scherzo and finale) are clearly delineated. See Ex. 30

Ex. 30

For the Epilogue, the tuba is positioned away from the string quartet to create a more distant visual and aural perspective. This appears to be reflected in the tuba cadenza with which the movement commences, but the decreasing intervals and note values together with the cresc. e accel. suddenly bring musical events into sharp focus. See Ex. 31a. Similarly, the entire movement, a series of cadenzas and contrasting episodes, is a journey from the apparently unfamiliar to the apparently familiar.

The source set, a note-row, has its roots in the first movement (see Ex. 31b) and the ubiquitous three-note cell 0 2 1 is present throughout the Epilogue as well, sometimes appearing simulta-
neously in melody and harmony (bar 2, Fig. 35). In order to develop and expand material, this technique is applied to a larger set as in the episode beginning at bar 34, (second movement), Fig. 38. See Ex. 31c

Ex. 31

The "distance" factor at the outset conceals connections that become more tangible so far as the listener is concerned, culminating in a direct reference to the opening senza misura (1st movement) beginning on transposition $P_{11}$. But this is where aural perception is at variance with cerebral perception. In a final example of the ambiguity and paradox that characterise this work, I refer now to the penultimate bar (66) where $P_1-6$, the source hexachord, is stated unordered (see Ex 32): arguably the more direct link with the previous movement.

Ex. 32
* all notes to be played as artificial harmonics

Jan White 1997
ISLAND for chamber orchestra

Literary sources can be interpreted by the composer in a variety of ways: for instance, a plot may serve as a basis, characters and themes can be transmuted into musical ideas, or the connection may relate to an aspect of structure. It seems that much depends on the nature of the source. A complex narrative may not be an obvious choice but musical ideas may originate from it, nonetheless. To an extent this is the case with Huxley's Island, very much a novel of the twentieth century with a strong ideological/philosophical/psychological slant.

The author seems to be warning us against the worst excesses of Western capitalism by drawing our attention to the threat posed by corruption and greed to a people whose values are predominantly spiritual. The central character, Will Farnaby, a young journalist shipwrecked on an apparently idyllic Far East island, acts as an enquirer on the reader's behalf. The plot is particularly involved and there are different levels of consciousness with numerous flashbacks and reflections, mainly on Will's past. A literal representation of such a text would, of course, be out of the question. But, as we shall see, such a source is an important influence on the musical argument in this tone poem.

As intimated in the programme note, the three sections which take their proportions (one third, one half, one sixth)\(^1\) from the novel, correspond to those of sonata form: exposition, development and recapitulation. The relationship between music and text is

\(^1\) approximate proportions which take into account musical considerations as well as varying time-scales within the plot
perhaps closest in the so-called "exposition" because the common purpose is to set the scene and introduce characters/themes. There is also a parallel between the "development" and the exploration of ideas that takes place in Island, while the "recapitulation" represents the evaluation of these ideas and a dénouement in which the threat to the free-thinking inhabitants becomes a harsh reality.

The score is intended to (a) convey a sense of uneasy tranquility as a means of (i) evoking the atmosphere of the island, Pala, and (ii) foreshadowing the antagonism resulting from conflicting values (liberty/repression, spiritualism/materialism and so forth), and (b) introduce characters and fragments of the plot. The technical means by which these aesthetic aims are fulfilled is the subject of the following analysis.

The music evolves from a note-row which is deployed freely in order to represent the details outlined above. See Ex. 33a

Ex. 33

Examples 33a, b and c can be viewed in context in bars 1-4.
Po 1-6, a source hexachord, yields most of the musical ingredients in Island. At the outset an "oriental" pentatonic collection (Po 2-5) is assigned to the strings and vibraphone as a sustained background intended to suggest tranquillity in this Far East "paradise". See Ex. 33b. Another whole-tone pairing, F# and G# (Po 1 and 6) is superimposed to create, through dissonance, a sense of unease and conflict. This combination of pcs is intended to symbolise the coexistence of good and evil, Po 2-5 consisting of two interlocking
perfect fifths (ic 7) which are "tainted" by two tritones\(^1\) (the addition of Po 1 and 6) D - G\# and F\# - C (see Ex. 33c). This relationship is a source of harmony and textures (see Ex. 33d & e), as well as the theme of the central character, Will (see Ex. 33f). The tritone is always prominent in themes associated with malevolent characters (see Ex. 33g). From a compositional point of view, a "generic code" (in this case the ic 6) can allow possibilities of development and variety whilst retaining a common identity.

Rhythm also plays an important rôle in the structure of this tone poem. The rhythmic figure in the oboe (bars 1-2) follows to the letter the opening sentence of the novel: " 'Attention,' a voice began to call, and it was as though an oboe had suddenly become articulate".\(^2\) Rhythmic patterns such as this and particular note values are associated with specific instrumental groupings (e.g., clarinets, bar 4) as a means of representing the varying time scales and levels of consciousness experienced by Will, at the same time introducing a structural device (e.g., a ritornello).

So far all the material discussed is readily discernible. But this is not so true of a group of themes corresponding to characters in the plot who belong to the same family. The diversity of melodic contour and context suggest that these themes have little in common. See Ex. 34a

\(^1\)As in Spire Studies, the medieval "diabolis in musica" represents evil.

\(^2\)Direct musical references are a feature of Huxley's style. However, to incorporate all of these into the music would be inappropriate, especially when the allusion is to a specific work, e.g., Bach's Brandenburg Concerto No 4 (pp 311-324, Island, A. Huxley)
However, the intersecting set of pcs (see Ex. 34b) reveals a close relationship. This is a pointer to the manner in which development occurs in the second section (bar125) where connections are established through the choice and organisation of pcs. See Ex. 35
An advantage of this technique is that more subtle transformations can take place in an area where, as in the novel, emphasis is on argument rather than on dramatic events. The transparent textures that predominate in this section are designed to focus the listener's attention more on pitch than on rhythm and colour.

The term "recapitulation" is by no means a wholly satisfactory description of the final sections of the novel and the tone poem, notwithstanding the reappearance of earlier material. The sequence of events in the plot suggests continuing development viewed from a new perspective (drug-induced hallucination), hence the score's blurred textures. Furthermore, the implied return to the opening scene in the final sentence points to a parabolic structure, as if the action has taken place in an instant as a figment of the imagination.

Clearly the contents of Huxley's novel have had a significant bearing on compositional decisions (themes, textures, organisation of material). But in the end it is the novelist's technique rather than the fine detail that determines musical events.
STRUCTURE IN ROBERTO GERHARD'S "CONCERTO FOR ORCHESTRA"

IAN WHITE
I have long been fascinated by the diversity of idiom and influences on style in the output of British composers and those resident in Britain. While assessing the presence of serialism in late Rawsthorne for an article on his Third Symphony (1964) I came across another Cheltenham commission, Roberto Gerhard’s Concerto for Orchestra (1965), a work that makes even greater demands on the listener and musical analyst.

Sadly (like Rawsthorne’s) Gerhard’s music has suffered neglect, notwithstanding the broadcasts and performances in connection with the composer’s centenary in 1996. However, his late chamber works and serial technique have been the subjects of recent university dissertations. But to date no detailed work on the Concerto for Orchestra has been published.

The only commercial recording of Gerhard’s Concerto for Orchestra currently available is the 1968 BBC Symphony Orchestra/Del Mar LP (coupled with Rawsthorne’s Third Symphony). One presumes this performance was sanctioned by the composer; it is, at any rate, largely a true testimony of the score.

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2 Moore, Allan, 1990: Gerhard’s Late Chamber Works (dissertation, University of Southampton); Sproston, Darren, 1991: Gerhard’s Serial Technique with Reference to his Symphonies and Concerto for Orchestra (dissertation, University of Sheffield).

3 A BBC recording (BBCSO/ Bamert) was broadcast in Oct.’96 in connection with Gerhard’s centenary.

4 The only variance with the score so far detected is at bar 742, Fig. 75, where the trombones are playing in tenor instead of bass clef.
INTRODUCTION

It seems that the British musical establishment of the early 1960s warmed to large-scale compositions calling for virtuoso display. Tippet's Concerto for Orchestra (1963) and Britten's Symphony for 'Cello and Orchestra (1963) are examples of instrumental music that readily come to mind. Opera also flourished with Tippet's King Priam (1964) and the first of Britten's operatic Parables for Church Performance, Curlew River (1964). This was the heyday of William Glock at the BBC and contemporary composers whose works reflected recent musical development, particularly those in post-war Europe, were likely to achieve recognition. Consequently, figures such as Berio, Boulez and younger British composers¹ who were influenced by the serialist/avant-garde movement came to prominence in this century.

Gerhard's Concerto for Orchestra was commissioned for the 1965 Cheltenham Festival but given its first performance earlier that year, on 25 April, in Boston, USA by the BBC Symphony Orchestra. It was largely due to Glock that Gerhard received commissions for the Second Symphony (1957)², Hymnody (1963), The Plaque (1964) and Libra (1968) and BBC exposure of other works previously neglected. But he was certainly not a mere follower of current musical trends, for his serialism has deeper roots: he had, after all, been a Schoenberg pupil in 1923-8, at the time when this technique was being formulated. However, he was no slave of theory; in fact he regarded twelve-note technique (as opposed to strict serialism) as a new approach to

¹Birtwistle, Goehr and Maxwell Davies (The "Manchester School") were among those to have benefited.

²Presumably at the instigation of Glock although he did not become Head of Music at the BBC until 1959.
the principle of tonality\(^1\) and indeed, as we shall see, there is "tonal"\(^2\) hierarchy in the Concerto for Orchestra.

The following study will focus on different types of structure, that is to say the various components and the rôle they play in creating overall momentum and closure. On the microcosmic level this can apply to a theme, pitch class (pc) centre, a texture or some other characteristic feature and their function within the section. On the macrocosmic level these sections, whilst preserving separate identities, will combine to produce a cohesive whole.

If there is any structural ambiguity in Gerhard's Concerto for Orchestra it can be traced to apparent disparity between the composer's method and aims. The material is meticulously organised, most of it deriving from a note-row (Po) stated at the outset (see Ex. 1 on p. 6). Gerhard, however, makes no reference to this in his note at the front of the score. Instead, he outlines the "three contrasting types of continuity" which provide the basic framework of this 21-minute single movement piece. In the first type of continuity "tonal\(^3\) configuration is the leading composition principle". These passages contain a good deal of activity in a brisk tempo. In the second type time is the most important element and pitch is "merely subsidiary". The third type of continuity is characterised by "the virtual suspension of metre", that is to say there is noticeable stillness. Appendix 1 contains examples of these three types of continuity and gives a breakdown of the Concerto into "continuities I, II and III".

\(^1\)See Gerhard, Roberto, 1952. "Tonality in Twelve-tone music", The Score, No 6, p. 34.

\(^2\)In this context "tonal" is intended to refer to a bias towards a particular pitch class.

\(^3\)"Tonal", that is, in relation to tone rather than pitch.
Gerhard certainly seems to be presenting his Concerto for Orchestra from the standpoint of the listener’s perception rather than from the standpoint of an awareness of the compositional process involved. Indeed, Gerhard in his assessment of the relationship between composer and audience maintained that "a piece of music is made for a listener". ¹ A listener unfamiliar with this particular score is much more likely to detect changes in sonorities, textures and tempo than the relevance of the note-row, not least because of the "high rate of eventuation" (composer’s note), a response echoed in early reviews ². All this raises a number of questions regarding the structure of the Concerto: is the structure a "fixed" abstract form ("deep structure"³)? In other words, does the score itself, the culmination of the compositional process, embody the structure? Or does the structure reveal itself to the listener by means of aural landmarks ("surface structure")? And, if these possibilities co-exist, are they related in any way?

Finally, a word on methodology. A note-row stated in the opening bars of the piece often proves to be structurally significant. For this reason the following analysis will begin, not with an overview, but with observations relating to pitch and its structural relevance. By adopting this approach emphasis is placed on the rôle of sound in the first instance, thus taking into account both the composer’s method and aims referred to above.

² For example The Sunday Times, 18.6.65 & The Daily Telegraph, 3.2.66
³ Terms used in the field of linguistics by Noam Chomsky in a discussion concerning universal grammar (Selected Readings), OUP, 1971). "The deep structure of a sentence is the abstract organisation of the physical signal". This analogy becomes more meaningful rewritten as follows: "the deep structure of Gerhard’s Concerto for Orchestra is its serial basis (i.e. the composer’s method), whereas the surface is the work as perceived by the listener without the score" (i.e. the composer’s aim.)
Set-theory analysis would appear to be an ideal means of explaining pitch relationships in the Concerto, being designed to apply to music that is not necessarily strictly serial\(^1\) (the reader will recall the assertion regarding "tonal" hierarchy). However, the rôle of tessitura in creating "tonal" hierarchy casts doubt on the suitability of a set-theoretic approach since octave equivalence is assumed for the purpose of classifying pitches\(^2\). Nonetheless, observations will be expressed, where appropriate, in terms associated with serial composition.

Consideration will also be given to the structural importance of rhythm, register and texture in the quest to find possible solutions to the concerns outlined above.

\(^1\) Allen Forte, in expounding this form of analysis (The structure of Atonal music, Yale 1973) deals with atonal rather than strictly serial music which offers an "in-built" means of analysis.

Structure in Gerhard's Concerto for Orchestra

As intimated in the Introduction, this analysis commences with a discussion of pitch organisation in the Concerto for Orchestra. The hierarchical partitioning of the note-row is a feature of Gerhard's late oeuvre and the Concerto is no exception. In order to establish the part this procedure plays in the compositional process I now refer to the first example of "continuity I" (bars 1-65, Fig. 8), where pitch is of primary importance. Appendix II gives a general picture of how Gerhard deploys the note-row announced in bar 1. The data is presented in abstract terms at this stage so that any inherent properties in Po can be revealed. Clearly Po 1-6 is a source hexachord (sh) for much of the pitch class (pc) material and Po 7-12 is generally treated as an unordered set. This allows a measure of freedom within the discipline of serialism which is reflected in the sheer variety of texture (see p. 19 and Ex. 17), and yet all the pcs belong to, or derive from Po.

The following example illustrates the strong family resemblance between the various permutations and transpositions of the sh and Po 1-6 itself. See Ex. 1

Ex. 1

1In reference to the late chamber works (Libra, Gemini and Leo) Allan Moore writes: "...certain hexachords (in particular) appear predominantly in each piece." (Moore, A. 1990, Gerhard's Late Chamber Works, diss. U. of Southampton, p. 68). Incidentally, Schoenberg treated the two hexachords of the series as separate entities as early as 1929 in his opera, Von Heute auf Morgen, op. 32, as Gerhard was among the first to appreciate.
The sh is in fact non-inversional on account of its parabolic interval structure and this creates a degree of unity as is demonstrated in bars 51-61, Fig. 6+4 → Fig. 7+6, where there is a greater concentration of serial activity. (Appendix II places these bars in context and Ex. 2 presents the detail).

Ex. 2

As already noted, I$_8$ 1-6 (bars 59/60) is Po 1-6 retrograded; further evidence of the extent to which Gerhard organises pitch in this piece. As if to underline the contrast between the sh and Po 7-12, he concludes this section by following the passage referred to above with material consisting of unordered pcs (quoted in Appendix II).

It seems that the second hexachord is not intrinsically important so far as pitch organisation is concerned and one is tempted to wonder whether the Concerto evolves from a source hexachord, i.e. Po 1-6, rather than from a series. But if we turn our attention to the second occurrence of "continuity I", at bar 151, Fig. 15, it soon becomes clear that there is no connection with the sh, Po 1-6. This is due to a change in interval content, more specifically, the strong presence of the interval pattern 032 in a series introduced at bar 151. However, this pattern is contained in Po 10-12 (second hexachord), so it would appear that Po as a whole and not just the sh is relevant to the compositional process. See Ex. 3

$^1$The final pc A is not stated.
Let us now take a broader view and consider Po in relation to the work as a whole. The ordering of Po certainly seems to anticipate the pcs that become referential either through reiteration or being sustained in the extreme tessitura during the course of the work. See Ex. 4 and Appendix III.

For instance, the first note A frames a substantial portion of the work (1/2) and appears intermittently in the double bass mainly as a pedal from bar 333, Fig. 33+5 to bar 362, Fig. 36+8 (virtually the midpoint). Of course, the "high rate of eventuation" at the outset, density of the texture at bar 147, Fig. 14+9 and choice of low tessitura for the third example cast doubt on whether the listener will be able to detect the pcs or, for that matter, be aware of their possible structural significance. Nonetheless, the composer has chosen when and in which tessitura to refer to Po, so at the very least he

1A is the highest note in the chord at bars 147-150, Fig. 14+9→12
appears to be creating a structural basis, although he may well have regarded the listener’s perception as irrelevant at these points. If so, then this is a further indication of "the apparent disparity between the composer's method and aims" (p. 3). The above comments would also apply to the low D which appears in the final section (from bar 635, Fig. 63+1) and is, like the A, placed prominently in the abstract presentation of the row in Ex. 5. G, on the other hand, usually appears as a high sustained note in the middle section (for example between bars 234 and 261, Fig. 23 - Fig. 23+28) where the tempo eventually slows down to $J = 60$, thus facilitating aural perception. This last example of a referential pc or note, since the G is now assigned to a particular tessitura, seems to be foreshadowed in the symmetrical positioning of G in the second hexachord, which itself is framed by C and C#, two pcs often juxtaposed at points where the texture changes (see Ex. 4). Incidentally, the reference to C# in bars 14 and 15, Fig. 1+647 may be regarded as an early indication of the composer’s flexible approach to serialism since it marks his first departure from Po (see Appendix II).

The observations to date suggest that each of the hexachords resulting from Gerhard’s hierarchical positioning of Po has a specific function: the sh (Po 1-6) tends, on the whole, to be associated with serialism while Po 7-12 contributes to "Tonal" hierarchy, notwithstanding the application of Po 10-12 outlined earlier. An important factor in this is the interval content: Po 1-6 consists of ics 1 and 2 (tone and semitone whereas Po 7-12 contains intervals with more symmetrical, that is, between pcs C and D: C Eb G D interval classes (ics) 3 4/4 3

Series with tonal implications are quite common, the row devised by Berg for his Violin Concerto being a prime example. See Smith Brindle, Reginald, Serial Composition, OUP 1966, p. 8.
tonal implications (for example ics 3 and 4, minor and major thirds). The very different interval content of Po 7–12 ensures that, collectively, the two hexachords produce a series that is both assymmetric and non-combinatorial. As such it embodies features of the Concerto that are already apparent. The question of the compatability of serial and tonal organisations will be addressed after consideration has been given to the role of other parameters such as rhythm.

Indeed, we now move towards a consideration of Gerhard's use of rhythm as a structural device. Like other serial composers such as Boulez, Gerhard became fascinated with the idea of a time series. In the early 1950s he experimented with this technique in the third and fourth movements of his 1st String Quartet. The quaver pulse and varying duration of "events", that is the note values, rests and bar lengths, contribute in this case to the destruction of metre. See Ex. 5

Almost every element in the above phrase is a different length, as is each of the first five bars. The silence on the downbeat of bar five means that there is a lack of definition which negates any sense of pulse. Such silences (including the ends of bars) occur seven times during the course of this forty-five bar movement (bars 5, 9, 16, 19, ...
23, 25 and 34), so metre and rhythm are not unifying factors in this case, but the combination of a time series with a note-row has the potential to create unity with variety, even though the process by which such unity is achieved is unlikely to be aurally definable.

Judging from Gerhard’s handling of Po alone in the Concerto for Orchestra, integral serialism was not part of his composition technique at this stage of his career, although certain gestures relating to rhythm are undoubtedly those of a composer whose background is serial. Nonetheless, temporal aspects contribute in the first instance to local unity in the late works, but the idea of associating a note length with a particular pc (as in the 1st String Quartet) is now extended to associating a rhythm with a pc or group of pcs. For the purpose of illustrating Gerhard’s use of rhythm and how it relates to the structure I shall refer to examples of "continuity II" in both the early and final parts of the work (selected passages from bars 66-129, Fig. 8 to 13+2 and from bars 604-629, Fig. 59+4 to 62+5 and bar 692, Fig. 69+8). With pitch being subsidiary in this type of continuity, there is perhaps more need for rhythm to be organised. The use of rhythmic patterns as a structural device is suggested near the opening in the passage for wood block and Korean block (bars 5-10). See Ex. 6:

See Ex. 6:

\[ \begin{array}{c}
\text{\textbf{6}} \\
\text{\textbf{kv.}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\end{array} \]

\[ \begin{array}{c}
\text{\textbf{6}} \\
\text{\textbf{kv.}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\end{array} \]

\[ \begin{array}{c}
\text{\textbf{6}} \\
\text{\textbf{kv.}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\end{array} \]

\[ \begin{array}{c}
\text{\textbf{6}} \\
\text{\textbf{kv.}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\text{\textbf{sf}} \\
\end{array} \]

1For instance, preceding the statement of Po with a rest of the same unit duration (triplet quaver); pointillist textures, e.g. pizz. strings, bars 36-9, Fig. 4+4-7; a predominance of small, apparently unrelated rhythmic cells, e.g. bar 66, Fig. 8: these often contribute to a negation of conventional metre and pulse, a characteristic of post-1945 serialism.

2Symphony No 4 (1967), Figures 92 to 103 is a prime example. Each part is assigned a particular pc or group of pcs and is a strict rhythmic pattern.
Recurring rhythms combined with a particular sonority serve to unify contrasted individual parts in areas where indeterminate pitch is a feature. Take, for example, bars 126-8, Fig. 12+10 to 13+1 (see Ex. 7): violin I (desks 6-8) play a strict rhythmic pattern. The col legno triplet quavers in desks 5-6 of the violas are not organised in this way, but the sonority and rhythm can be identified with this part in this context. See Ex. 7

Ex. 7

If we look at bars 604-625, a passage with even less melodic interest, we can observe that nearly all the parts are independent rhythmic patterns within varying time spans. Ex. 8 illustrates how the individual parts are organised.

Ex. 8

In this way cohesion is achieved at the microcosmic level. Furthermore, with each occurrence of this texture there is some development or expansion of rhythmic patterns and this seems to be part of an organic process culminating in the ostinati prevalent in the latter part of the Concerto. In order to confirm whether these have their roots earlier in the work consideration will now be given to three
more examples of "continuity II", beginning with bars 66 to 81, Fig. 8 to 9+5. See Ex. 9

Ex. 9

Gerhard creates, as it were, a "Klangfarbenmelodie" of continuous triplet and quintuplet quaver movement in a free non-serial passage, but one in which no pc is allowed to dominate. This continuous quaver movement is referred to in the next example (percussion, bar 103 onwards) where each pc of an unordered hexachord is allocated to a separate string part. See Ex. 10:

1Although the hexachord (C#-C-B-A-G-F) is unordered it is similar in contour to the sh, Po 1-6 and contains the tetrachord B-A-G-F which can be classified as P3-6. Note also the prominence of C# and C: one of numerous references to this pairing of pcs (the C# often being in this tessitura). Their significance will be assessed later.
At bar 692, Fig. 69+8 an ostinato is created from the independent but regular quaver rhythm in each of the six wind parts (including horn). See Ex. 11:

On this occasion a series (in which the second hexachord is III of the first) is deployed in the same manner as the pc material at bar 66, Fig. 8→ and bar 101, Fig. 11→. Each of the hexachords is identified with a particular texture (ostinato wind quavers/sustained string chords) so pitch also has a significant rôle to play in the organisation of material in "continuity II", even though it is "merely subsidiary" (composer's note). This is especially so at bar 692, Fig. 69+8 where the expansion of the two parameters under review¹ points towards a synthesis contributed to by the other examples of "continuity II".

¹Rhythm - expanded time scale, i.e. ostinati.
Pitch - more consistent use of a series.
Rhythm provides the means of recognising events and so, from the point of view of communicating, is a vital tool for a composer such as Gerhard whose idiom is so complex that other parameters such as pitch are rather less precisely definable by the ear. As we have seen, rhythm has the potential to create unity through patterning, and so may be regarded as a structural aid, delineating sections and providing aural landmarks. But do all these aural landmarks necessarily coincide with references to pc areas that may be of structural importance, for instance the sh? Up to this point the discussion has referred to the rôle of rhythm in "continuity II", where unordered sets tend to be the source of pitch. "Continuity I", being closely identified with the sh, would therefore seem to be a more appropriate starting point for the purpose of exploring the rôle of rhythm and pitch in relation to the question raised.

Po is announced in rapid triplet quavers at the outset; however, by no means do all the subsequent references to this particular rhythm correspond to Po or, more specifically, to the sh. In general the references to the latter appear to be related rhythmically through augmentation. See Ex. 12

Whether or not these non-retrogradable rhythms are intended to convey the symmetry in the source hexachord's interval content, they do

\footnote{for example bars 33 & 4, Fig. 4}
nonetheless, provide aural landmarks. This is so even in climactic passages such as bars 53-61, Fig. 6+4→Fig. 7+6 where each permutation of the source hexachord is assigned a different note value.

See Ex. 13:

\[
\begin{array}{c}
\text{Fig. 6+4} \\
\text{Fig. 7+6} \\
I_6 (I^{2-6})
\end{array}
\]

From a compositional point of view, therefore, it would appear that rhythmic and pitch organisation are designed to create unity at particular points. Nonetheless, the rapid triplets, irrespective of their pc content, have also been considered significant, at any rate, for the listener: John McCabe maintains that 'the main ritornello "theme" is the opening wind and string flourishes'.

This view opens up another line of inquiry: the structural role of more tangible parameters such as texture and register, bearing in mind the observations already made regarding pitch and rhythm. The term "flourishes" (McCabe) implies gesture and so refers to the manner in which material is presented to both the eye and ear. Texture (unison strings and wind) and register (note the wide range encompassed in the presentation of Po: C\# below the bass clef to F\#), as well as dynamics (fff) and tempo (brisk) play a part in creating an identity suggesting "virtuoso team-work" (composer's note).

One wonders, though, whether this "identity" or "ritornello theme" is particularly relevant so far as structure is concerned, since we already know that not all the occurrences contain allusions to Po. On this point let us now consider briefly the thoughts of

\[\text{Sleeve note for the Del Mar/BBCSO recording of 1968, (ARGO ZRG 553)}\]
McCabe and Gerhard himself. McCabe's use of inverted commas suggests that for him the term "theme" is not wholly satisfactory. If so, this may be on the grounds that in the Concerto the pc content varies and is often aurally imperceptible. No doubt conscious of this problem, Gerhard, in his note at the front of the score, alludes to the role of textures rather than to that of themes: "Its form largely depends upon three contrasting types of continuity". Perhaps it is hardly surprising that he also wrote at the time "it is mistaken to assume that themes are a prerequisite of all music"\(^1\), even though he was referring to a work composed in 1951. In the light of these comments, the term "Theme" appears to take on a broader meaning.

Traditionally a theme is a melody or melodic fragment which recurs at structurally important points. However, if a theme is considered to be a collection of notes (not necessarily pcs) which can be recognized when it recurs, then thematicism can be rhythmic, chordal and textural, as well as melodic\(^2\). In view of this some consideration now needs to be given to the manner in which the note-row (Po) is presented at the outset and its effect elsewhere. See Ex. 14

Ex. 14  
\[
\begin{align*}
\text{Po} & \quad 0 & \quad b & \quad b & \quad b & \quad b & \quad b & \quad b & \quad \# & \\
\end{align*}
\]

Notes for a recording of the First Symphony (HMV ASD 613)

\(^1\)A similar hypothesis is put forward by Darren Sproston in "Thematicism in Gerhard's Concerto for Orchestra", Tempo No 184, March 1993
The melodic contour of this phrase allows Bb and F to be highlighted. However, in the context of the work as a whole the pcs Bb and F are not in themselves structurally significant (see discussion of referential pcs, pp. 8 and 9), but as notes (and here we make a distinction between "notes" and "pcs" in order to take account of register) they serve not one, but two purposes: the more immediate, perhaps, is gestural owing to the wide expressive intervals created by the positioning of the Bb and F. But the resulting melodic contour also reflects the source hexachord's non-inversional property and facilitates aural recognition. This has implications further afield since much of the thematic material in the Concerto originates from the source hexachord (see Ex. 16 below for typical examples and Appendix IV for the list of the main references to the sh). The following examples illustrate the role register plays (in conjunction with pitch, rhythm and texture) in creating landmarks which may yet prove significant, not just from the listener's viewpoint. See Ex. 15
The most striking references to the opening of the work tend to be those in augmentation and scored for wind and brass. Even when intervals are expanded, as in Ex. 16(b), where the harmony is allowed to evolve from the melody and in more complex areas such as the climactic stretto in bars 56-57, Fig. 7 the melodic contour is clearly recognisable. Incidentally, the above examples demonstrate how not only register, but also pitch, rhythm and texture (which is essentially contrapuntal) combine to create a unity, albeit momentary, that derives from the first bar of the piece.

Texture, through contrast, has the potential to delineate sections and to provide an aural link especially where pcs and notes (if we are taking into account register) are not discernible because of the "high rate of eventuation", as in bars 33 and 34, Fig. 4 where the texture (a unison), rhythm and, in general terms, the melodic contour correspond to those of the opening. See Ex. 16:

This "ritornello" (McCabe) has more in common gesturally than as regards pitch since it is not related by interval content, or by permutation to Po. Nor is it a new series on account of the recurring pitch classes. The fact that there are a number of open string notes suggests that Gerhard in this instance was more concerned with facility in performance than with strict adherence to a system of composition.

There are other occasions, however, where texture does not replace pitch, but instead actually appears to underline the hierarchical partitioning of Po. Usually each hexachord is assigned to a
particular sonority or group of instruments as in bars 35-40, Fig. 4+3→8 where the flute material is based on the first hexachord \((sh)\) in transpositions \(I_2\) and \(P_6\), and the remainder of the series is deployed freely in the strings. See Ex. 17

Ex. 17

The flutter-tongued legato quintuplet quavers in the flutes could hardly be more contrasted to the pointillist texture in the strings and yet there is a unifying element in the note-row.

Curiously, in this instance register conceals the melodic contour associated with Po 1-6 (the sh). This octave transposition renders Po 1-6 in whichever permutation difficult to detect and yet a connection exists, the direct reference to Po at bar 56, Fig. 7 being all the more effective as a result. Of course, thematic metamorphosis was nothing new: there are plenty of examples in, say, Beethoven’s late String Quartets and Schubert’s piano works. By adopting this technique to his compositional needs, Gerhard forges links between apparently disparate areas.

Texture and register also combine to create variety in areas which might be regarded as subsidiary from the point of view of pitch, since the thematic references are not to the source hexachord, but to Po 10-12 (discussed on pp. 7 and 8). See Ex. 18:
Notice how in Ex. 18(c) the fleeting semiquaver triplets recall the rhythm and texture of the opening, notwithstanding the $f$f$f$ dynamic. In Ex 18(d) register is again deployed to conceal the melodic contour.

What is emerging from this discussion is the fact that all the parameters so far referred to interact to varying degrees, sometimes simultaneously fulfilling different functions. This is also true of the three types of continuity. The passage from bars 95-9, Fig. 10+7 to 11, is within a section listed in Appendix III as "continuity II" and yet the characteristic "pulsating constellation-like patterns" (composer's note) give way briefly to references to the opening of the work. P₁ 1-4 is presented in augmentation in the clarinets and brass with pcs Eb and Ab added to complete this wind/brass hexachord. See Ex 19a

Ex. 19:

\[
\begin{align*}
\text{a} & \quad \text{c} \\
\text{b} &
\end{align*}
\]

The complementary hexachord at this point contains a tetrachord related to Po (I₄ 1-4) which first appears in the strings in a harmonic texture (beginning on the upbeat to bar 93) that anticipates "continuity III" (Ex. 19b), then (in retrograde) as a woodwind figure resembling the "single-voice texture" of bars one and two (Ex. 19c). Notice that the "referential C♯ and C♯ are juxtaposed and given prominence in both deployments of this hexachord.
In the third type of continuity the virtual suspension of metre and contrasting texture (predominantly harmonic) creates a structural landmark, a cadence where the apparent lack of activity allows a relaxation of tension. This serves the purpose of clearly delineating large sections of the work. The first instance of "continuity III" of melodic or contrapuntal interest in these bars throws into relief the subsequent fragmented texture (bar 151, Fig. 15).

A more complex occurrence of "continuity III" (starting at bar 234, Fig. 23), will illustrate just how connected and numerous the cross-references can be, both to thematic material and to the other types of continuity. The recurring sustained high G, a referential pc in this area of the work, immediately causes a dispersion of metre and a release of tension: two features of "continuity III". However, in the passage from bar 234, Fig. 23 to 267, Fig. 25 a statement, of I_B 1-6 plus its complement is ingeniously woven into a harmonic texture involving bassoons and horns. See Ex. 20a

Ex. 20a
This is answered by $P_7 \ 1-6$ plus its complement in the trumpets and trombones (see Ex. 20b)

Ex. 20b

followed by two increasingly condensed statements of $I_3 \ 1-6$. See Ex. 20c & d

Ex. 20c

Ex. 20d

This time the practice of associating hexachords with a particular sonority has been applied in an area of the work where the parameter of pitch is apparently subservient to temporal and textural aspects.

The transition to "continuity I" at bar 268, Fig. 25 is barely perceptible despite the sudden increase in tempo (subito con moto $d = c. 100$) and the return to "the high rate of eventuation". The general $/\downarrow$ and sul ponticello violin writing, which emerges more as a texture on account of the close stretto entries, effect this smooth change between sections. See Ex. 21
But it will be recalled that such figuration has its roots in Po 10-12, as do the subsequent chords. The woodwind material in these bars is a clear reference to the opening of the work, being much more of a melodic entity (P6 1-6 in augmentation). What is less obvious, perhaps, is the fact that this hexachord is also alluded to in the violin figuration. See Ex. 22.

Nonetheless, Gerhard is consistent in his method of deploying both hexachords simultaneously, as in Ex. 19a and b. At bar 273, Fig. 25+5, the texture is noticeably more fragmented: individual sonorities are explored in different combinations (see Ex. 23), but the pcs are actually various transpositions of Po 10-12. Despite the contrast a link is maintained with the previous few bars in the violin chords which, of course, are also based on Po 10-12.
This discussion of bars 234-275 suggests that the underlying network of thematic allusions is designed to unify seemingly unrelated textures. Such interrelationships, which occur in the main on the microcosmic level, have a significant bearing on the overall structure or form of the piece, not least because of the ambiguity that arises: ambiguity with regard to where structural divisions occur. It seems that there is a number of solutions, but being able to classify the material as sections of "continuities" I, II and III, respectively (AppendixIII) is not destined to yield the answer on account of the complex organisation of the various components. If we accept that themes do exist, particularly as melodic fragments, then these certainly appear to be thematic landmarks in the form of ritornelli\(^1\): the view supported not only by John McCabe but also

\(^1\)see pp. 17-21
Darren Sproston. The ritornello that McCabe refers to reappears at the following points in a version close to the original: at bars 17, Fig. 2; 130, Fig. 13+2; and 758, Fig. 76+9. As we know, there are numerous variants on this ritornello, some of which are non-serial but retain the basic contour and rhythm, e.g. at bar 33, Fig. 4 (see Ex. 17) and 752, Fig. 76+3. Others resemble the rhythm (rapid triplets) and texture of the opening; these occur at bars 488, Fig. 47+6; 556, Fig. 55; 587, Fig. 58 and 600, Fig. 59. Though these examples may have little in common with Po 1-6, closer study reveals that each three-note cell is a permutation of Po 10-12 in some transposition (as in bars 268/9) (see Ex. 22). Sproston also considers the wind/brass references in augmentation to the first hexachord to be ritornello material (e.g. at bars 23, Fig. 3; 53, Fig. 6+3; 95, Fig. 10+7; 268, Fig. 25 and so on).

In assessing the relevance of the "ritornello" aspect to the overall structure of the piece, consideration needs to be given to the intervening sections. These can hardly be described as "episodes" in the traditional sense, as in a rondo or baroque concerto movement, for there is continuous development from the outset. Discussion of the rôle of rhythm in this work has referred to bars 5-10 (see Ex. 6 p. 11): these bars may be regarded as the seminal point for the predominantly rhythmic areas ("continuity II") and yet the early part of the Concerto seems on the surface to be concerned chiefly with "continuity I". But this is an early example of combining elements of different "continuities" within one "continuity". In this case the rhythmic patterns in the percussion parts are set against a background of $I_{11}$ 1-6. In much the same way the longer note values from bar 25, Fig. 3+3, which weaken the metre, could be

\[\text{Tempo No 184, p. 19}\]
described as the first occurrence of "continuity III". In the context of "continuity I", however, these bars consist of a free permutation of $P_3^{7-12}$. It would appear that the first 32 bars contain the essence of the entire work. Indeed, there is a sense of organic growth throughout the early stages culminating in a climax chord at bar 61, Fig. 7+5. Following the integrated textures of bars 1-32 and the reference to the opening in bars 33 and 34, fig. 4 (see p. 19, Ex. 16), the flutes commence an ascending sequence of quintuplet quaver patterns (see Ex. 16, p. 19): $I_2^{1-6}/P_6^3$; $P_{11}^{1-6}$; and a free permutation of $I_2^{1-6}$ to accompany the ingenious unfolding of $P_{11}^{1-6}$ (see Ex. 15, p. 18). The use of progressively decreasing note values\(^1\) (except for bar 60) in each of the hexachordal references to the opening of the work propels the music towards bar 61\(^2\). Bars 62-4 might be regarded as transitional; they also effect a release of the tension created in the climax chord.

The following section (bars 66-129, Fig. 8 to 13+2) I have categorised as "continuity II". But again, the references to the opening of the piece (discussed on p. 15) and the bars which disrupt the continuous quaver movement (bars 141-50, Fig. 14+2 to 11) appear to round off a substantial portion of the work which might be labelled "the exposition". From a compositional point of view the hierarchical positioning of the A in the cluster chord of all 12 pcs at bar 147, Fig. 14+9 may be regarded as significant (see p. 8 for discussion of referential pcs).

Examples 8, 18, 20, 21 and 23 plus their associated explanations illustrate some of the ways in which Gerhard explores the

\[
\begin{array}{c}
1 \\
3 \frac{\uparrow}{\downarrow}
\end{array}
\]

\(^2\)Appendix II and Ex. 3, p. 8 illustrate the pc organisation in this section.
material so far stated in the remaining 616 bars, approximately \( \frac{4}{5} \) of the work. Looking ahead to the later stages, the predominance of dance-like ostinati over a longer time span (for example bars 691-704, Fig. 69+6 to Fig. 71+2 and bars 714-48, Fig. 72+1 to Fig. 75+6) create the impression of a final movement or section. However, none of the so-called "ritornelli" correspond with the beginning of this part. Instead, the rhythmic element ("continuity II") drives the music towards a striking reference (in canon by inversion) to the opening of the work in the wind and brass at bar 749, Fig. 76.

See Ex 24a:

Ex. 24

\[ \text{Ex. 24a:} \]

\[ \begin{align*}
\text{Ex. 24a:} & \\
\text{Ex. 24b:} & \\
\end{align*} \]

\[ \text{Ex. 24b:} \]

\[ P_8 \text{ 1-6 is assigned to the brass and } I_6 \text{ 2-6}^{1} \text{ to the woodwind, both, typically, in augmentation. Notice how closely related these two hexachords are: } I_4 \text{ 2-5 is a retrograde of } P_8 \text{ 2-5. The final note of this declamatory utterance is sustained over a triplet quaver reference to the opening in unison/octave strings (based on } P_8 \text{ 10-12) (see Ex. 24b) and is followed by a statement of } I_11 \text{ 1-6 in bar 758,} \]

\[ \text{1It seems that } C# \text{ has been retained to preserve a link with bars 745-8 where } C# \text{ and } C \# \text{ are prominent. The rest of the hexachord belongs to } I_6. \]
Ex. 24c. All these thematic allusions are in the final twenty or so bars.

Further consideration of referential pitch classes may well produce more conclusive evidence of where the structural divisions actually occur. Let us remind ourselves of some of the observations made earlier: the first 150 bars, which I have labelled "the exposition", are framed by the pc A; there is also a recurring A pedal between bars 333, Fig. 34+4 and 359, Fig. 36+4 (incidentally, another referential pitch class, C#, appears prominently at the point where the A finishes); D (announced emphatically on the bass clarinet in bar 635, Fig. 63+1) is associated with the bass line throughout the final 131 bars. From this information it would seem that the Concerto for Orchestra is underpinned by a kind of prolonged "V-I resolution"¹ (Appendix III).

The reiterated bass clarinet Ds at bar 635 do seem to herald a new section, perhaps even a "recapitulation" to complement the "exposition". But there is no reference to Po at this juncture. However, if we glance back some forty-five bars, there is a dramatic contrast in texture akin to that at bar 141, Fig. 14+2, the first instance of "continuity III". Significantly the "continuity III" material at bar 591, Fig. 58+4 begins with the referential pcs C# and C ¹ the same pcs which appear at the start of bar 151 ("the development"?). The material at 591 is a statement of I₄ 1-6,

¹It would be misleading to suggest that the Concerto is a tonal work since the "tonal hierarchy" implied in Po recurs either at the microcosmic level and only intermittently at the macrocosmic level. But it is possible, nonetheless, that the composer has created an abstract structural basis through referential pcs that can accommodate a serially-orientated method.
but this reference to the opening would hardly be regarded as a ritornello as defined by McCabe (see p. 16); neither are these bars listed as a ritornello in Sproston's article. Nonetheless, the prominent C$\flat$ and C$\flat$ and the fact that these pcs correspond to other possible structural points suggest that this might be where the final section (the "recapitulation"?) begins. Worth noting is the presence of the pcs D and A in the double basses in the previous fifty bars, Fig. 53+2 to Fig. 56+7: perhaps a representation at the microcosmic level of the prolonged "V-I resolution" (see Appendix III). Curiously, at Fig. 55+6 C$_4$ (violin) and D$_6$ (C$\sharp$) (harp) are juxtaposed and then followed by C$_1$ (harp) a few bars later (Appendix IIIa). It seems that these two structurally significant pcs introduce a spacial dimension. All these factors contribute to the synthesis that appears to take place from bar 591, Fig. 58+4 onwards. It is the ostinato element that gives this section of the work an identity, and yet ostinati are not introduced until bar 654, Fig. 65+4: but they have their roots in the saltando and col legno effects that characterise the early bars of this section (bars 604-629, Fig. 59+4 to Fig. 62+5).

Gerhard writes of "three contrasting types of continuity" in his note at the front of the score. But as has been demonstrated,
each "continuity" is interrelated in a variety of ways. There is also a problem of establishing where the structural divisions occur; after all the melodic "landmarks" tend to appear within a "continuity" rather than at a structurally important join. The observations in the previous paragraph yield one possible solution: two outer sections of similar length framed by referential pitch classes and a middle section comprising about $\frac{3}{2}$ of the work. This structure and the handling of material point to the sonata principle: certainly the "three contrasting types of continuity" are combined more often and for a longer duration in the final stages and this produces a synthesis. However, there are few direct references to the opening row until the last twenty bars and this leads me to another solution. Sproston maintains that themes are presented "in an expositional manner and (are) similarly recapitulated in reverse order".

The layout of the main referential pcs in Appendix III suggests an arch-shape structure, a parabola. This possibility would also comprise the elements of sonata form already discussed. The parabolic structure of Gerhard's Concerto for Orchestra is actually contained in embryo-form in the intervallic structure and contour of Po 1-6 (see Ex. 1, p. 6). There is also evidence of this at local level, for instance, between bars 257 and 265 (Ex. 20b and c), where the non-inversional property of the source hexachord produces an arch shape in terms of pcs which is reflected to an extent in the contour of the melodic material.

---

1 Both in terms of numbers of bars and ontological time (Appendix IV)
It is perhaps no coincidence that main referential pcs also produce a parabola (see Appendix IIIb).

On initial acquaintance, Roberto Gerhard's Concerto for Orchestra appears to offer a number of aural landmarks for the listener which define its structure. This material, on the whole, is recognisable through textural or rhythmic association rather than by pitch content. However, with the aid of register, a melodic contour emerges (Po 1-6) which represents the greater interaction of the parameters discussed in the first part of this analysis, namely pitch, rhythm, register and texture (see p. 19). A subsequent assessment of the rôle of the "three types of continuity" suggests that this melodic contour actually embodies the overall structure. This would appear to be parabolic rather than purely sonata-principled, since the themes are restated in opposite order (see p. 31). In attempting to reconcile the composer's aims with his method the above solution embraces the concerns of both the listener and composer. Contrasts in tempo and texture are certainly important in this, but ultimately one must not underestimate the rôle of pitch in creating a cohesive whole.
APPENDIX I

I, II & III: the "three contrasting types of continuity".

I  |  [8] (figures in score)  |  bars 1 - 65
II |  [8]  |  [14]+1  |  66 - 140

I  |  [15]  |  [23]  |  151 - 234
III|  [23]  |  [24]+10  |  234 - 267

I  |  [24]+10  |  [34]  |  267 - 335
III|  [34]  |  [38]  |  335 - 381

I  |  [38]+1  |  [50]+4  |  382 - 513
III|  [50]+4  |  [52]  |  513 - 528
II |  [52]  |  [58]+3  |  528 - 590

III|  [58]+4  |  [58]+12  |  591 - 599
I  |  [59]  |  [59]+3  |  600 - 603
II |  [59]+3  |  [62]+8  |  603 - 632

II III|  [69]+6  |  [75]+6  |  690 - 748
I III|  [76]  |  749 - 766
APPENDIX II

The deployment of P0 in bars 1-65, "continuity I"

Bar 1

References tend to be to P0 1-6 (the source hexachord).
# APPENDIX IV

## Sonata principle structure

<table>
<thead>
<tr>
<th>Section</th>
<th>Duration</th>
<th>Bar Numbers</th>
<th>Source Hexachord</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Exposition&quot;</td>
<td>150 bars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4' (1/2)</td>
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<td></td>
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<tr>
<td>&quot;Development&quot;</td>
<td>341 bars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12'40&quot; (3/5)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Recapitulation&quot;</td>
<td>175 bars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4'20&quot; (1/2)</td>
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<td></td>
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## The main references to the Source Hexachord

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<tr>
<th>Bar no</th>
<th>Fig.</th>
<th>Source Hexachord</th>
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</tr>
<tr>
<td>23</td>
<td>[3]</td>
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<tr>
<td>53</td>
<td>[6]+3</td>
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<tr>
<td>95</td>
<td>[10]+7</td>
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<td>128</td>
<td>[13]</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>[13]+2</td>
<td></td>
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<tr>
<td>242</td>
<td>[23]+8</td>
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<td>[76]</td>
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<tr>
<td>752</td>
<td>[76]+3</td>
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<tr>
<td>758</td>
<td>[76]+9</td>
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IAN WHITE

TIME SETTINGS

for Solo Male Voices & Piano
TIME SETTINGS

Words from: Burnt Norton (Four Quartets)  T.S.Eliot

Time present and time past
Are both perhaps present in time future,
And time future contained in time past.

Ecclesiastes

To every thing there is a reason and a time to every
purpose under the heaven:
A time to be born, and a time to die;
A time to kill and a time to heal; a time to break down.

Time Ralph Hodgson

Spiralwise it spins
And twirls about the Sun,
Both with and withershins
At once, a dual run
Anomalously one;
Its speed is such it gains
Upon itself: outsped,
Outdistanced, it remains
At every point ahead,
No less at all points led,
At none with either strains
Or lapses in the rush
Of its almighty vanes
To mar the poise or hush.
Sonnet LX William Shakespeare

Like as the waves make towards pebbled shore,
So do our minutes hasten to their end;
Each changing place with that which goes before,
In sequent toil all forwards do contend.

Nativity, once in the main of light,
Crawls to maturity, wherewith being crown'd,
Crooked eclipses 'gainst his glory fight,
And time that gave doth now his gift confound.

Time does transfix the flourish set on youth
And delves the parallels in beauty's brow,
Feeds on the ravities of nature's truth,
And nothing stands but for his scythe to mow.

The World Henry Vaughan

I saw Eternity the other night
Like a great Ring of pure and endless light,
    All calm, as it was bright,
And round beneath it, Time in hours, days, years
    Driy'n by the spheres
Like a vast shadow mov'd, In which the world
    And all her train were hurl'd.

Burnt Norton T.S.Eliot

Time past and time future
What might have been and what has been
Point to one end, which is always present.
To Richard and Angela Thomas.

TIME SETTINGS

FOR SOLO MALE VOICES AND PIANO

© Ian White 1995
I. Words from Burnt Norton - T. S. Eliot
(Four Quartets)

With mock solemnity
(§ 6 c. 80)

Counter-Tenor

Time present - , time present - ,

Tenor

Time present - , time present - ,

Tenor

Time - , time past -

Bass

Time - , time past -

\( \text{(mf)} \)

time present

and time past

and time past

muto

poco dim.

venga
- are both perhaps, perhaps present,
- are both perhaps, perhaps present,
- are both perhaps, perhaps present,
- are both perhaps, perhaps present,

Pod.
present, present in time, time
present, present in time, time
present, present in time, time

mf

f div.

rezza

Ped. J Ped. J
(ECCLESIASTES 3)

Andante ($q = 60$)

- contained in-time past.

- contained in-time past. To every
tained in-time past.

tained in-time past.

* Pluck notes, then immediately depress the keys silently and release pedal.
To every thing there is a season - and a
thing there is a season - - - - and a
time to every purpose — under the heaven:

Fed.
serga niura (l'intense tempo)

spoken: A time to be born, and a time to die;

spoken: A time to be born, and a time to die;

Ped.
* Pluck notes, then immediately depress the keys silently and release ped.
and a time to heal;
and a time to heal;
time to break down.

mf moller dim.
A time to lose.
Molto Vivace (J. = 160)  
2. Time - Ralph Hodgson

Spiral-, spiral-, spiral-wise it spins

Spiral-, spiral-, spiral-wise it spins

Spiral-, spiral-, spiral-wise it spins

Spiral-, spiral-, spiral-wise it spins
and twirls

spins

spins

and twirls
It spins and twirls, it spins and twirls, it spins and twirls, it spins and twirls, about the Sun.
and twirls about the Sun
spins and twirls about the Sun
Both with and with-shins

Both with and with-shins

Both with and with-shins
at once, a dual run

wither-shines

at once, a dual run

wither-shines

at once, a dual

at once a dual,

at once a dual,
Its speed is such it gains upon itself:

speed is such it gains upon itself: out

Its speed is such it gains upon itself:

Its speed is such it gains upon itself:
out-speed, out-distracted, it remains

out-speed, out-distracted, it remains

out-speed, out-distracted, it remains

out-speed, out-distracted, it remains
it remains at every point
led, At none-with either strains Or led, At none-with either strains Or led, At none-with either strains Or
"bocch. mens manso"

lap-ses in the rush of its al-mighty vanes

mf cresc.

ff sord. molto dim.

49
A tempo

To mar the poise

A tempo

To mar the poise
Like as the waves
Like as the waves
Like as the waves
the waves
waves, the waves
waves, the waves
waves, the waves
make to-ward pe-bbled shore,
make to-ward pe-bbled shore,
make to-ward pe-bbled shore,
So do our
so do our mi-minutes
So do our minutes hasten to their end;

So do our minutes hasten to their end;

Minutes hasten to their end;

-, our minutes hasten to their end;
Each changing place with

Each changing

dolce
Each changing place with that which goes before, before, before, before,
In sequent toil all forwards
toil all forwards - do contend - -, contend.

forwards - , forwards do contend - , contend.
Nativity, once in the main of light.
Crawls to maturity, where-with being...
his glory fight, And time that gave doth now his
gainst his glory fight, And time that gave doth now his
And delves the parallels in beauty's brow,
Feeds on the rav-i-ties of na-ture’s truth, And no-thing, no-thing

Feeds on the rav-i-ties of na-ture’s truth, And no-thing, no-thing

Feeds on the rav-i-ties of na-ture’s truth, And no-thing, no-thing

Feeds on the rav-i-ties of na-ture’s truth, And no-thing, no-thing
stands but for his scythe to mow.
4. THE WORLD - HENRY VAUGHAN

Maestoso (\( \text{j} = \text{c.68} \))

I saw eternity - the other night

I saw eternity - the other night

I saw eternity - the other night

I saw eternity - the other night
Like a great ring of pure and end-less
light, All calm, as it was
light, All calm, as it was
light, All calm, as it was
light, All calm, as it was
days, years
Like a
day
in days,
in years,
in years,
in hours,

\[ \text{Time in years,} \]

\[ \text{Time in hours,} \]

\[ \text{Time in days,} \]

\[ \text{Dri-v'n by the spheres} \]
vast shadow mov'd, - in which the world And
Time in days, Time -
Time in years, Time - in hours, -
all her train were hurl'd.

in days,

Time — in years,

Time
5. Words from Burnt Norton - T.S. Eliot

\[\text{senza misura} \quad \text{j.c. 60}\]

\begin{align*}
\text{What might have} & \\
\text{and time future} & \quad \text{(continue repeating)} \\
\text{Time past} & \quad \text{(continue repeating)} \\
\text{Time, time, time,} & \quad \text{(continue repeating)} \\
\text{(bells)} & \quad \text{(continue repeating)}
\end{align*}
been and what has been

Point to one end, which is

\[ \text{\textit{novel}} \]
* Pluck notes, then immediately depress the keys silently and release pedal.
IAN WHITE

RENAISSANCES

for Brass Sextet
Renaissances is based on two fragments by Josquin des Prés (c. 1440-1521):

1. *Fauite d'argent* (Chanson)

2. *Tu pauperum refugium* (Motet)
A la famille Kanary

RENAISSANCES

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IAN WHITE

ISLAND

for Orchestra
Instrumentation:

2 Flutes (1st doubling Piccolo)
2 Oboes (2nd doubling Cor Anglais)
2 Clarinets in B♭ (2nd doubling Bass Clarinet)
2 Bassoons

2 Horns
2 Trumpets
2 Trombones (1st doubling Euphonium)
Tuba

2 Percussion:

1. Xylophone, Vibraphone (with Double Bass bow for arco) and Marimba
2. Large Suspended Cymbal, Bass Drum, 2 Bongos and Claves

Harp
Celesta

Strings (8.6.4.3.2)

Score in C (octave transpositions remain in Piccolo, Celesta and Double Bass)
To Mum, Jack & Virginia

Inland (after Huxley)

Ian White

* all notes to be played as artificial harmonics

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change to flute.
* applies to all string parts.
* all notes to be played on artificial harmonics.
IAN WHITE

VOLUNTARY

for Organ
IAN WHITE

UNDERTONES

for Tuba & String Quartet
To John Elliott

UNDERTONES (In memoriam Tony Hancock)
for tuba and string quartet.

Jan White

\( \text{Tuba} \)

\( \text{V1} \)

\( \text{V2} \)

\( \text{Vc} \)

\( \text{8va} \)

\( \text{flautando} \)

\( \text{p} \)

\( \text{Lontano} \)

\( \text{Surrey University Library} \)

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* approximate note values

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Largamente

II (Epilogue)

mf a piacere cresc. e accel. f 5:4 (non dim.) 1 espr.

* To perform at rear, diagonally opposite the 1st violin in order to maintain eye contact.
* ossia 8va basso to fig. 40
* The sung Bb is sustained for 4 beats.
Requiescat in pace!
To Joanna

SPIRE STUDIES
for wind quintet

Ian White

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* approximate note values.
(J. c. 72)

molto cresc.

ff

molto cresc.

ff

molto cresc.

ff

molto cresc.

ff 28

ff 28

ff 28

ff 28