Commentaries on works submitted for Ph.D. in composition

Maxwell, Michael

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Michael Maxwell
Commentaries on works submitted for
Ph.D. in composition
1982

<table>
<thead>
<tr>
<th>Work</th>
<th>Year</th>
<th>Page</th>
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<tbody>
<tr>
<td>Metamorphoses</td>
<td>1977</td>
<td>9</td>
</tr>
<tr>
<td>Symphony</td>
<td>1977</td>
<td>15</td>
</tr>
<tr>
<td>The Gardens of Dis</td>
<td>1978</td>
<td>19</td>
</tr>
<tr>
<td>Pastoral Episodes</td>
<td>1979</td>
<td>26</td>
</tr>
<tr>
<td>Sonatina for Trumpet and Piano</td>
<td>1981</td>
<td>31</td>
</tr>
<tr>
<td>Aubade</td>
<td>1982</td>
<td>38</td>
</tr>
<tr>
<td>Tape recordings</td>
<td></td>
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from it should be acknowledged.

26.JUL.1984
All the works in this portfolio were written while I was a pupil of David Lumsdaine. This period of tuition had a profound effect on my methods of composition but certain fundamental assumptions and opinions remained, and some were indeed, strengthened. I think it is important to record these, as they are part of the background to all my work up to the present time.

I believe that:

1) music can, and should, have a spiritual content. I am not prepared to speculate whether it is ---- to consider two possibilities ---- a prophetic message, or an edifying substance, or a combination of these and, perhaps, other things, but I believe it is essential to the well-being of most human beings.

2) this spiritual content cannot be described or defined verbally.

3) the content may be an ingredient of any kind of music, but it may be experienced differently by different individuals. However, the technical standard of the composition and performance must be above a certain minimum.

4) it is not possible to increase the power, quality, or extent of the spiritual content by an act of will. This increase would depend on the stage of spiritual development reached by the composer. I see my task as a composer to be the development of the technique and style which accords with my inner nature, and to accept that the quality and extent of the spiritual content of my music can depend only on the stage
reached in my spiritual development, and that this
and further stages cannot be reached by the practice
of composition alone ......

Because of these beliefs my aim is always focussed
on technical aspects, including the psychological
problems of communication. This aim is also directed
by the fact that I am stimulated --- in the same way
that I suppose Stravinsky was --- by the consideration
of media, material, and modes of construction which are
new to me. It was for this reason that I embarked on
the study of electronic music in 1979. Although I
have not yet completed an electronic work, the planning
and preparation have given me ideas for non-electronic
compositions.

It may seem strange that although these beliefs
have survived, I have, since 1975 come to a much
greater understanding and appreciation of the works
of Messiaen, and that this has been one of the major
changes in this period. I had at first thought that
Messiaen's titles, copious descriptions and statements
of intention, were either redundant or irrelevant,
but I now see that they are part of the music, and that
a performance in which the audience was unaware of them
would be incomplete. I would agree, however, that
such a performance, or an analysis without reference to
these features would be useful to illustrate the
validity of the work at other levels.

For my own work I retain a preference for titles
with certain connotations (e.g. "Sonatina"), or which
describe the main process of the work (e.g. "Metamorphoses"). The main exception is "The Gardens of Dis, as described to Persephone in the course of her abduction". I chose this title only when the work was nearing completion (see p. 23.) The structure and texture of the piece originated with the consideration of the problems posed by the instrumental combination. I believe that the title enables some listeners to assimilate the work more thoroughly, but the image conjured up by the title was not in my mind when I started the composition . . .

The scores I have submitted are intended to represent my best work. I do not regard them as perfect in detail but I think they are, each considered as a whole, strong enough to bear the flaws which I have not found a way to eliminate or conceal. It is possible that in the course of my development I shall come to perceive the nature of the problems differently or more clearly, and I may be able to revise them.

Deviations from a system do not, in my opinion, constitute flaws. Although principles of numerical or visual design often run parallel with those of musical design, and are --- as far as I am concerned --- a great stimulus, situations can arise where they diverge. I regard extra-musical principles simply as a means to an end, and when they fail in this respect they are discarded. This, however, I do only after careful consideration because, besides their value as a stimulus they are a useful factor in checking a tendency to diffuseness.
An example of an adjustment to the balance of these principles occurs in the first sixty-five bars of my symphony. The accompanying figures of eight semi-quavers were at first to have been separated by rests of a specific length, and the figures of eight quavers were to be separated by a specific number of notes in the Hauptstimme (based on the duration pattern of Section 1) (see p.186). The purpose of both kinds of figures was to throw into relief the very varied durations of the Hauptstimme; the purpose of the different modes of separating the figures was to establish relationships between the two kinds which would not be immediately aurally predictable. In the course of applying the system I found that certain features of the Hauptstimme would be obscured, so I modified the plan empirically, retaining it only when it fulfilled its functions .... Departures from the system involving pitch organisation are mainly confined to the doubling of pitches. Reasons for this are discussed below. (p.7 para.1).

The work and teaching of David Lumsdaine have been major factors in the changes since 1975. A very clear example may be seen in the studied octave relationships in the second movement of my "Aubade", which are on a different basis to those discussed below (p.6 para.1) but the more general and pervasive influence, although it is less easily discernible, is in the field of harmony and tonality. I hope, in my future work to explore this field more systematically, but aspects of it in the works in the portfolio are also discussed. (p.7 para.1).
Octave leaps are heard in the "Aubade", (p.24, bb.17-19, flute and clarinet), the Sonatina (p.5, bb.60-73) and the "Gardens of Dis" (bb.115, 119, 126, 129; harp). They function here as embellishments, and are intended to be a prominent feature. In other contexts, however, it has been my intention to avoid them. In Section M of "The Gardens of Dis" (pp.22, 23 and 24) for example, the relation in time of the pitches of the harp and clarinet is not fully determined. Octaves heard in this section might --- from performance to performance --- vary in frequency of occurrence and in prominence, and could result in what I would regard as a major incongruity. (See p.23 para.1). A different use of octave movement is seen in the second and fourth horn parts on p.33, bb. 357-8 of my Symphony. In this section (bb. 322-344) the horn chords are constructed in accordance with the note series, but the movement of the individual voices has been chosen to ensure the smoothest and most secure legato in the horns, and in bb. 357-8 this has required the use of the slurred octaves. All the pitches in the horns occur at the same time in the violas and 'cellos, (also sometimes in the second violins) either an octave above or an octave below, although the horizontal movements are purposely different. The octave slurs are intended to be unobtrusive, and the quality of the legato and the richness and density of the texture help to obscure them. Because of the two latter factors I have felt it less necessary to be so consistent
in the octave doubling in the violins. Here the second violins double the first, either in unison or an octave below, or contribute to the chords in the violas and 'cellos. The choice is made in accordance with my judgment of how best to maintain the vertical density. In general I regard octave doubling as a legitimate means of increasing the variety of timbres and the range of intensity, but on the numerous other occasions on which they appear in this and my other works I have thought it important that they should occupy long enough periods of time for the effect to be established, in order that it should not be heard as an unplanned reduction of tension or an isolated change of timbre.

The majority of works in this portfolio makes use of tonally derived chords. In many instances these are intended to function as focal points, and in all cases it has been my intention to ensure that the tonal aspect is quite explicit. In order to achieve this I have sometimes doubled isolated pitches, at the octave, in for example p. 58, bb.119-121 of my Symphony, and in the quotations in "Metamorphoses".

I do not regard the inclusion of passages in which a tonality is suggested or established, as incompatible with the use of a twelve-note series, but I believe that my future progress may lead to the necessity for modifying the use of the series, or even abandoning it for another method, if I can find one which I can regard as an advance
from my present practice and not a return to more traditional methods. This advance would be designed to lead to more clearly defined roles for harmony and tonality than I have achieved hitherto, although I think the start of a move in this direction can be seen in some of my recent works such as the "Aubade". Nevertheless I think this work can be seen as a clear boundary of the period which started in 1975.
Metamorphoses

for string quartet.

Metamorphosis is a common process in composition, and if the usual translation "change of shape" is accepted many compositions or segments of compositions can lay claim to a title involving the word.

Because music is comparatively abstract, metamorphosis --- simply regarded as change of shape --- is less charged with significance than the metamorphoses described in mythology or occurring in nature. In this composition I have aimed to attain some of this significance by using short extracts from existing works which have a clear identity and definite associations for the majority of listeners, and to present them as stages in a continuous process of change.

There are four extracts:

bb. 11-14 Beethoven. Sonata in E fl. Op. 31 no. 3. (opening)

bb. 64-67 Monteverdi. "Lasciatemi morire" (opening)

bb. 98-99 Wagner. Motiv from "The Ring". (Quoted from memory.)

bb. 148-149 Tschaikovsky. Finale of Symphony no. 6. (Opening. Slightly adapted.)

The material containing these stages is based on the note series given below. Small departures from traditional methods of using the series can be seen in the diagrams on pp. 10-11 [See also p. 7 para. 1] (The only variation in pitch order is in the Wagner quotation, where it is required in order to include the turn.)
The effect was expected to be similar to that of the quotations in Berg's "Lyric Suite", but there were only two reasons for the choice of these extracts;

a) that they should be recognised, and

b) that they should be reasonably related to the note series.

The way that the latter has been achieved is shown diagrammatically.

**Beethoven.**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Vln. 1</th>
<th>Vln. 2</th>
<th>Vla.</th>
<th>'Cello</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

**Monteverdi.**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Vln. 1</th>
<th>Vln. 2</th>
<th>Vla.</th>
<th>'Cello</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>65</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>66</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>67</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>6</td>
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**Wagner.**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Vln. 1</th>
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<th>Vla.</th>
<th>'Cello</th>
</tr>
</thead>
<tbody>
<tr>
<td>98</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>99</td>
<td>2</td>
<td>2/4 trem. 4</td>
<td>1 2 4</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vla.</th>
<th>'Cello</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 11,3,7,3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>4,1</td>
<td>1</td>
</tr>
<tr>
<td>Bar</td>
<td>148</td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Vln. 1</td>
<td>8 7 (8) 2 10 2 12</td>
</tr>
<tr>
<td>Vln. 2</td>
<td>10 (6) 12 8,7,6,12</td>
</tr>
<tr>
<td>Vla.</td>
<td>9 (4) 3 9, 4, 3</td>
</tr>
<tr>
<td>'Cello</td>
<td>11 (5) 1 11, 5, 1</td>
</tr>
</tbody>
</table>

Brackets indicate an overlap.

* * * * * * * * * * * * * * * * * * * * * * * * * *

The approach to the first quotation is based on the melodic motif in bar 11.

The unchanged elements before b.11 are the slur, the relative shortness of the second note (with one exception) and the common pitch of the second and third notes.

The changed elements are the durations, the intervals and the pitch.

The motif appears in many forms in all voices, none of them coinciding until b.6 when they pair off into two rhythmic unisons.

The Beethoven quotation follows. Its third and fourth bars (bb. 13-14) are the basis of the material leading to the next quotation. The principle is simple; but there is a long diversion in which transformations of the motif x are used as an accompaniment to other material, such as the short canons in bb. 26-29 and 33-38. The
unchanged elements in this motif are the identical pitch of those notes preceding the last. These are sometimes two in number, sometimes three. In bb. 22-42 their equal length is also preserved.

Bb. 42-63 lead to the Monteverdi quotation. The motif (x) is confined to the first violin (always starting on E but never moving to F), and the second violin always starting on C but never moving to B).

The use of the motif (x) can be summarised thus:

**Unchanged:**
- Same pitch
- Equality of duration (bb. 22-42)

**Changed:**
- Number: (2 or 3)
- Durations (in bb. 15-22, 42-63)

The Monteverdi quotation heard in bb. 64-67 is followed by bars suggesting the continuation of the quotation.

The next main section starts in b. 77.

The function of the main elements here is seen in bb. 96-97 which suggest the impending Wagner quotation.

They are:

a) Vln. 1
   - the motif

b) the tremolos
   (Vln. 2 & Vla.)

c) 'Cello
   - the motif
These elements appear throughout the section with two others:

d) a semiquaver pattern
e) a pizzicato triplet pattern.

All five occur in a variety of temporal and spatial relationships, and a), b) and c) have pitch intervals other than those heard in bb. 96-97. It is intended that these two bars shall be heard as a plausible stage in the systematic exploration of the available combinations.

The Wagner quotation is followed by material intended to suggest further transformation.

Four short sections precede the Tschaikovsky quotation. The first (bb. 102-113) and third (bb. 126-137) are antiphonal passages for the two violins and the viola and 'cello respectively. The second and fourth sections feature pairs of chords separated by short semiquaver passages. The durations in these sections were chosen in accordance with a system not used elsewhere in the work. Groups of three durations of the general form

\[ a, a+1, a-1 \]

are used. E.g. in bb. 114-117; 6(3) 7(5) 8(1) 9(6): etc.

and bb. 126-130; (all full) 6,7,5: 8,9,7: 7,8,6.

(Semiquaver units)

(This system is not applied in bars 111-112).

Observed on a larger scale it will be seen that the successive values of \( a \) at the start of each group of three durations (e.g. bb. 138-147; 9 (10) (8), 8 (9) (7), 4 (5) (3), 10 (11) (9), 6 (7) (5), 7 (8) (6),) do not contain any which recur in the same section.

* see p. 19 para. 3
The avoidance of such recurrences is the main object here, and although the values of \( a \) were sometimes derived from a cycle of numbers (9,8,4,10,6,7,5,) this was not always done rigorously.

The top voices of the chords show the connection with the quotation:

After the quotation bb. 150-152 suggest continued transformation. Bb. 153-155 recall the Beethoven extract and the Monteverdi is recalled from b. 156. The last seven bars consist of a rather less obvious reference to the Wagner motif.
Symphony

The word Symphony has certain connotations, and I believe that two of these in particular should be respected if the use of the word to describe a composition is to be justified.

i) A symphony should be perceptibly connected with a tradition: a new symphony must contain some elements which show that it is the same kind of work as the symphonies of the past.

ii) A symphony should be a significant and serious work, and it must therefore contain enough new elements to make it more than a piece cast in the mould of an earlier symphony.

Though these statements are widely different, they are fairly general, and I have aimed to interpret them in such a way that both can apply to the same work.

In respect of the first requirement I have chosen to regard it as of prime importance that the work should be organic, i.e. that each part is perceptibly relatable to the whole in accordance with a general principle.

Two factors tend to support this.

i) The three movements are related in that each is in the form of an arch or a series of arches.

ii) The same note series is used in each movement. It is used fairly strictly in the second movement, but modified in the first and third by the periodic omission of pitches.

Note series
First movement. The central section of the arch (VI) consists of an explicit pulse. This section is preceded by five others. The first of these is rhythmically and metrically complex, the second slightly less so, and the reduction of complexity is similarly reduced until section VI is reached. (See p. 123). From section VII, by a similar but not identical process in reverse, a section (XI) of complexity equal to that of the opening is reached. This is followed by a brief reference to the explicit pulse of section VI, which forms the coda.

Second Movement. The centre here is the trombone chord heard in b. 119. The opening section makes use of twelve-note chords, and the following sections, starting in bb. 12, 25, 67 and 96, use six-note, five-note, four-note and three-note chords respectively.
After the centre the process is reversed as far as the number of notes in the chords is concerned, but there are some variations. E.g.:

a) Each chord heard from b. 67 is followed by one containing no common pitches. In the corresponding section (b. 129) the chords are linked by one or more common pitches.

b) The repeated notes at b. 25 apply to the five-note chord section, but at 157 to the six-note chord section.

**Third movement.** There are thirteen sections. The odd-numbered ones use a wide variety of timbres. Towards the finish of each, instruments of similar timbre start to dominate, and the succeeding even-numbered sections feature that group of instruments.

E.g., Brass at b. 21, strings at b. 66, etc. The periods of pitch omission coincide with these sections. (Section VI is dominated by unpitched percussion.)

<table>
<thead>
<tr>
<th>Section:</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
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<tbody>
<tr>
<td>Bar:</td>
<td>I</td>
<td>21</td>
<td>48</td>
<td>66</td>
<td>85</td>
</tr>
<tr>
<td>Omitted:</td>
<td>C</td>
<td>Gsh.</td>
<td>F</td>
<td>B</td>
<td>Csh. except for two bars in the middle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section</th>
<th>Bar</th>
<th>Omitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI</td>
<td>105</td>
<td>A</td>
</tr>
<tr>
<td>VII</td>
<td>128</td>
<td>B. fl.</td>
</tr>
<tr>
<td>VIII</td>
<td>147</td>
<td>E</td>
</tr>
<tr>
<td>IX</td>
<td>208</td>
<td>D</td>
</tr>
<tr>
<td>X</td>
<td>221</td>
<td>G until bar. 239.</td>
</tr>
<tr>
<td>XI</td>
<td>235</td>
<td></td>
</tr>
</tbody>
</table>

This movement can be heard as a series of arches.

The periods of omitted pitches interact with these forms in various ways.

In the first movement they create subdivisions in the sections. E.g. the entry of the trumpets in b. 74 with
the previously unheard C subdivides section I.

In the second movement the opening B fl. and D fl. are pitches omitted from the final section of the previous movement and therefore have additional impact.

In the final movement the omitted pitches change with each of the sections and are an additional factor in characterising them. From b. 239 all pitches are represented. G, which has been absent becomes more and more prominent, finally dominating all others.

* * * * * * * * * * * * * * * * * * * * * * * * * * * *
The above descriptions are concerned with the necessity for making an organic structure. The second requirement is that the work should contain new elements.

It is, of course, impossible to be certain what is "new", and difficult to decide what combinations of existing modes of construction might be heard as "new". The only claim I can make in this respect is that I am not aware that the combination of methods and features in this work has been used before in exactly this way.

I have chosen to reject any strong reliance on tonality and to avoid any exact or extensive recapitulation, and within each movement there are two sections in which the combination of instruments is the same, except in the very infrequent tuttis.

Within the limits imposed above, I have organised the detail on a largely intuitive basis. Systems are sometimes used to achieve local coherence, but have no connection with the larger systems other than intuitively perceived appositeness.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * *

To p. 18b
First movement. Mode of derivation of duration patterns.

b. 157

\[ \begin{array}{c}
\frac{4}{4} & \text{etc.}
\end{array} \]

b. 127. Combination of pattern at two speeds

\[ \begin{array}{c}
\frac{4}{4} & \text{etc.}
\end{array} \]

b. 97. The above combination compressed into one pattern

\[ \begin{array}{c}
\frac{4}{4} & \text{etc.}
\end{array} \]

b. 66

\[ \begin{array}{c}
\frac{4}{4} & \text{etc.}
\end{array} \]

The pattern at b. 97 split between violins 1, violins 2 and violas. 'Cello part imitates V. 1 durations

\[ \begin{array}{c}
\frac{4}{4} & \text{etc.}
\end{array} \]

b. 97

\[ \begin{array}{c}
\frac{4}{4} & \text{etc.}
\end{array} \]

b. 1 a free expansion of the pattern at b. 97

Bar lines omitted.
The Gardens of Dis

for clarinet, harp and percussion.

A fundamental idea in this work is that the percussion should have a part of importance equal to that of the clarinet and harp. It was intended to require only one percussion player and for this reason the position of the instruments in relation to each other must be considered carefully. There is a suggested plan in the score.

This position will, however, favour some sequences of instruments more than others, and the impact of the timbres depends not only on their intrinsic qualities but on their context. In the central sections (see p.20) groups of instruments favoured by the plan are used, but in the first and final sections I have deliberately avoided these sequences, and the chronological order of appearance differs entirely. For this reason the percussionist requires more time: the note on p.3 of the score shows how this is arranged.

A note series is sometimes used,

\begin{music}
\begin{music}\notes{G}{e\#}{e\#}\end{music}
\end{music}

but it is not always applicable or appropriate.

The same applies to a duration series: 5,3,4,1,2. The terms in this are sometimes "full", sometimes "empty".

(E.g. 5 "full" 4 "full" 3 "empty" 2 "full"; or 5 4 3 2 1)

The glockenspiel solo in section A uses a derived series: 6,4,5,2,3, with alternate "full" and "empty" expressions.
The diagram on this page shows the outline of the form.

"The Gardens of Dis". Outline of form.

Some aspects of Sections B, D, F, L and M are considered in detail because they use procedures which differ in some respects from those used in the other works and in other sections of this work. The remaining sections are described in the Appendix on p. 23.
Section B.

The seven-note figure appears in all the parts. Its general form can be most easily deduced from the tom-tom part. Curiously, it was only after formulating it that I realised that it would be particularly suitable for the harp, using pairs of enharmonics. For this reason the pitch order is not followed, the changes being derived from the most economical sequence of pedal changes. The temporal disposition of the harp groups is based on avoidance of the tom-tom groups. The latter occupy periods based on the duration series. This series is also the basis for the disposition of the clarinet groups, but in a different way.

The selection of the forms of the figure was systematic only to the extent of ensuring that no form was exactly repeated.

Sections D, F and L.

The sound of the cymbals is varied by:

a) the use of a hard (H) or soft (S) stick,
b) the intensity of the attack, and
c) the part of the cymbal struck: Rim (R), Dome (C) or between rim and dome (B).

When two cymbals are involved other variations are obtainable.

d) the period of time between the two attacks, and
e) the order of striking; "large" following "small" or vice versa. (The intensity of the attack of the second cymbal is to be matched to the decaying intensity of the first.)
All possible combinations are covered by the simultaneous deployment of the following cycles:

a) SSHHSSSHSSSH (Eleven terms.)

b) f, p, mf, pp.

c) R, C, E.

d/e) +5, -2, -6, +1, +3, +7, -4. (Seven terms.)

(Quaver unit.)

A negative amount indicates that the large cymbal is struck first.

The interpolations of the clarinet and harp were not designed to interact in any specific way with the cymbals.

Section M.

One aspect of the harp solo is the repetition of a pattern of events which can be seen from the start of the section until the dotted crotchet after the first pause. The pause is not part of the pattern, but pauses occur in each repetition and they occur at a different point in the pattern on each occasion. It is during these pauses that most of the main pedal changes are made.

The pitches are taken from pairs of transpositions of the note series. The pairs of segments are related as in the example below.

The sequence of transpositions is chosen for economy of pedal changes. Eleven pairs of segments are
used. They change at a different point in the pattern of events in each of its recurrences.

The way in which the clarinet and percussion interact with the harp may vary to a certain extent in each performance, but I have been unable to discover any points of coincidence which would be incongruous. (see p. 6 para. 1)

Some of the sections have been designed to draw attention to the effect of similar material played on different instruments. This reminded me of Nathaniel Hawthorne's version of the Persephone myth, in which reference is made to flowers in the domain of Pluto composed of metals and precious stones. The imitation of the curves and flexibility of organic shapes, using inorganic materials, which are often jagged in shape and unyielding, seemed to me to be analogous with what I was attempting in the work, and this was the reason for the title.

Appendix. Description of the sections.

A. The harmonies and pitched percussion solos are derived from the note series. All the percussion instruments are used in this section and section N.

C. A clearly defined pulse is established in order to provide a setting for the triplet figure starting in b. 81. From b. 74 onwards the duration aspect is governed in the clarinet
and harp parts by the fact that for most of the
time they maintain between them a regular quaver
movement, and the contour of each is determined
by the fact that the harp has the same seven pitches
until the end of the section. These are varied in
register as much as possible. The clarinet supplies
the remaining pitches. The marimba pitches are
obtained from other transpositions.

E. This mainly consists of rapid scales on the clarinet,
and glissandi. The note series cannot therefore be
used. I have avoided over-complex fingering on the
clarinet, and the marimba and vibraphone are limited
to two forms of glissandi, but I have selected harp
glissandi which supplement the others in order to
give a totally chromatic effect. Other figurations
have been used briefly at the bottom of p. 15 of the
score.

G. The intention here is to show many fine shades of
balance between pairs of instruments. The intensity
of the $\text{Bm}$ reduces in bb. 151-3 as the big drum
becomes more prominent. As the big drum reduces, the
harp becomes louder. The balance is different on each
beat. The process is repeated with other pairs of
instruments.

H. This is mainly concerned with reiterated notes,
trills and tremolos. In bb. 172-9 use is made of the
duration series by the percussion.

K. This is a first a dialogue between harp and vibraphone.
The vibraphone imitates the harp within the limits
imposed by employing a different transposition and
form of the series. E.g.,
At the end of the section the clarinet and vibraphone achieve continuous variation of timbre on unisons of varying relative intensity.

L. The clarinet solo uses a modification of the inverted note series:
11,1,11,2,11,3,11,4,11,5,11,10,6,10,7,10,8,10,9,
and similarly. The duration series is used in an analogous way, retrograded and with single quavers interpolated. This gives (b.2ll):
1,2,1,1,1,4,1,3,1,5, etc.

N. The construction is generally the same as for A. but the order of appearance of the percussion instruments is different.
Pastoral Episodes

The following pitch series is used.

The figures below (semitones above middle B) show how a duration series has been derived from it. The duration series has only a minor rôle, because as the composition proceeded I found situations in which treatments of the rhythm and metre not connected with the series suggested themselves, and I found these more acceptable.

The first and last of the five movements are related by similarities of design and are described together.

I and V.

Both movements have three main ideas.

a) Each instrument is allotted six pitches. In bb. 1-13 these are nos. 1-6 in the above series for the horn and nos. 7-12 for the violin. The intrinsic pitches are retained in other transpositions. That used in bb. 4-6 is quoted to illustrate a stage in the process. The effect on the rhythm and metre varies according to the transposition chosen. (See p. 28 para. 2)

3 4 9 10 11 12
2 5 6 7 8 1
b) A figure of repeated notes followed by a higher note.

In I the ascending interval occurs several times as a perfect fourth (bb. 20-26.)

a major third (bb. 33-39.)

a perfect fifth (bb. 56-60.)

In V the interval is a minor 7th in bb. 17, 19, 21, 23, and 24. In b. 19 it descends.

From b. 31 onwards the figure appears in more widely varying forms:

b. 31 dim. 5th ascending
b. 33 tone descending
b. 35 aug. 4th "
b. 38 min. 7th "

c) Violin trills. In V some of these coincide with the figures described in b).

The above ideas occur

In I:
in a) bb. 1-13, 41-50
in b) bb. 20-26, 33-39, 56-61
in c) bb. 28-33

In V:
bb. 1-16, 39-51
bb. 22-25, 31-38
bb. 30-38.

Bars not accounted for are mainly transitions constructed intuitively within the limits imposed by the pitch series.

Rhythm and metre

The duration series is not used in V. In I it appears in an incomplete form in the violin part. From the third beat of b. 14 it is:
The deployment of the series is modified by the presence of the semiquaver rest, which, in effect, converts the preceding term to 2 (empty).

The numbers of repeated notes (see b) above) are also chosen from part of the series; e.g.

b. 20  3
b. 21  4
b. 22  7  etc.

Elsewhere durations are chosen intuitively subject to conditions such as those quoted from bb. 4-6 of I.

There is a margin of freedom, and this has been exercised in the direction of conformity with the 4/4 time signature in I and the 6/8 time signature in V.

In I the variety of note values is limited so that in each deployment of the series each pitch is introduced not less than a quaver and not more than a minim after the previous one. This, and the fact that the widely contrasted timbres of the instruments attract attention to the way that segments or single notes of the series are allotted, ensures that the rhythm and metre are never the same for one transposition as they are for another. Similar limitations have the same effect in V.

* See p.19 para3.
II

This movement is based on two main ideas:

a) the inversion of the note series is deployed cyclically, starting each occasion on C. I.e:

Starting in bar 1 5(C), 4,3, .. etc. to 6
" " 6 8(C), 7,6, .. etc. " 9
" " 9 10(C), 9,8, .. etc. " 11
" " 21 12(C), 11,10 .. etc. " 12
" " 34 3(C), 2,1,12 .. etc. " 4

These transpositions were chosen because they feature the early inclusion of E, B fl. and D fl.

b) Features of idiomatic horn writing:
   i) long notes (bb. 16, 25)
   ii) harmonic glissandi (bb. 18-20)
   iii) chords (bb. 38-40, 55-59)

The rhythm is very simple: in the passages referred to in a) above, the pattern [d] \[d\] \[d\] \[d\] is sometimes used to enhance the similarity of the beginnings of the deployed series. E.g. in bb. 1-4 and 21-24. Otherwise the rhythmic treatment is arrived at intuitively, having regard for the type of instrumental technique employed, as in the violin part in bb. 26-33.

III

The three main ideas in this movement are:

a) a passage mainly in thirds (bb. 1-7, 18-23)

b) simultaneously heard pairs of ostinati of differing periodicity (bb. 8-16 and after b. 51)

c) bravura passages for the violin, one with interjections from the horn (after b. 16), the other a solo (p.8).
a) the example below shows how the thirds were obtained.

\[ \text{\textbackslash iimage} \]

A similar, but not identical arrangement obtains in bb. 18-23. The durations in these bars and bb. 1-7 are not related to the series.

b) The pairs of ostinati occupy bb. 8-12, 12-16, 24-28 and 29-32. They are all heard again between bb. 50 and 64 in the same order. Each occurrence terminates on a third, which is prolonged and reiterated in order to recall the thirds of the opening and bb. 18-23. The coda (bb. 64-69) also recalls these thirds.

c) In the senza misura section after b. 16 six pitches are allotted to each instrument. There is no planned connection with the note series in this section. In the solo (p.8) the retrograde inversion is used in various transpositions. The change of transpositions always takes place at a different point in the bar-long pattern, so that no parts of it become associated with particular features of the note series.

IV

This is, in effect, an introduction to the last movement. It consists mainly of small and regular fluctuations of timbre and pitch. These are obtained by bariolage on the violin and variations of fingering
on the horn. Variations of pitch arise from the use of horn harmonics not in general use, the seventh and eleventh, but the pitch content conforms as far as possible to the serial order.

The durations of the first six pitches are derived, slightly inaccurately, from the duration series; 3+2, 4+2, 7+2, 1+2, 5+3, 2+2.

V has been described under the heading of I.

The title was chosen when the work was nearly complete.

Sonatina for trumpet and piano.

An important idea in this work is my personal feeling as to what constitutes "Trumpet style". The main points are:

i) no vibrato required

ii) no long passages in conjunct motion, and, therefore, frequent relatively large intervals. Trills are acceptable.

iii) no long slurred passages except trills, infrequent short slurs, and therefore, many tongued notes, sometimes staccato, and when very rapid confined to reiterations or small intervals.

In addition, I think that a work for this combination should be on a small scale because of the relatively small compass of the trumpet and its distinctive and exciting timbre.
Because of the small scale I have used the note series below in a restricted way.

In the first movement I have employed only the original, its retrograde, and transpositions of these.

In the second movement only the inversion, its retrograde and transpositions of these.

In the third movement I have employed both original and inverse forms and their retrogrades, but the constructional basis of the movement restricts the number of ways in which these can be combined.

First movement.

The structure can be seen most clearly in the pitch aspect of the trumpet part.

<table>
<thead>
<tr>
<th>Bars</th>
<th>Trumpet pitches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-8</td>
<td>G, D, A fl.</td>
</tr>
<tr>
<td>9-15</td>
<td>C, then B, A, A fl. G, F added gradually</td>
</tr>
<tr>
<td>22-49</td>
<td>All twelve pitches. As b. 48 is approached B fl. A fl. F becoming more prominent. *</td>
</tr>
<tr>
<td>54</td>
<td>D fl, D, F.</td>
</tr>
<tr>
<td>55-59</td>
<td>F sh.</td>
</tr>
<tr>
<td>60-61</td>
<td>G, C sh. G sh, C, B, F.</td>
</tr>
</tbody>
</table>

* see p.34
62-63  G, C sh. G sh. C, B,
64-65  "  "  "  "
66-74  "  "  "

It will be seen that there are three main sections:

i) in which the number of pitches is small and increases

ii) (bb. 22-49) in which all pitches occur

iii) in which the number of pitches is reduced.

In sections i) and iii) most of the trumpet pitches are fixed in register.

(The imbalance between the periods comprised by bb. 9-15 and bb. 54-59 is due to the fact that although they are corresponding parts of the process, the piano part contains the main elements in the latter period.)

Rhythm and metre.

There are two main procedures.

i) Rhythm dependent partly on pitch. In bb. 62-74 a quaver movement is maintained between the two instruments, but each part has varying durations because of the position in each transposition of the pitches allotted to the trumpet or the piano. E.g. In bb. 60-61 the pitches allotted to the trumpet are G, Csh, Gsh, C,B,F. The transposition used here (04) contains these pitches in the order

\[\text{i.e. terms } 12 \ 11 \ 9 \ 7 \ 6 \ 3 \ 1\]

The missing terms 10,8,5,4 and 2 are supplied in the piano part, and in order to accommodate them while maintaining the overall quaver movement, some of the trumpet notes are lengthened giving a duration pattern for the trumpet part (quaver units) 1, 2, 2, 1, 3, 2, (1); (there is a pause at the end of this deployment of the transposition.)
Of the transpositions used in this section (bb. 60-74) 04 is the only one giving this pattern, and it is a factor in the rhythmic shape of these two bars. The pattern of attacks on the piano is complementary to the trumpet pattern, but its effect on the rhythm is also affected by the register of the pitches, and the fact that the first one (Bfl,) is sustained. The choice of this and of other bass notes in bb. 62-72 was made empirically, taking factors other than rhythm into account. Nevertheless the pitch system can be seen to have a considerable effect on the rhythmic shape. Comparing bb. 64-65 with the above, the number of trumpet pitches is reduced to four; G Csh. Gsh. C. The use of 01 gives the order:

\[ \text{G C Csh. Gsh.} \]

\begin{array}{cccc}
\text{terms} & 10 & 5 & 4 & 1 \\
\text{durations} & 5 & 1 & 3 & 1 \\
\end{array}

(terms and on the same basis as above, the durations (quaver units).)

The same device is used, rather less rigorously, in the first eight bars.

A rather different application of the same principle occurs in bb. 39-47. Here the voices are independent of each other as far as durations are concerned. Most of the pitches are quavers, but F, Afl, and Bfl. are prolonged to four or five* times this length, and are fixed in register. Each deployment of a transposition is followed by a rest of about* six quavers. (* These variations were made empirically, in the course of realising the system.)

In each transposition the position of the longer notes
will vary, and a combination of three different transpositions, deployed simultaneously will display degrees of coincidence of the long notes which will not be exactly the same for any other combination. Frequently the transposition used in one voice omits terms occurring nearby in another in order to maintain chromaticism, and this has allowed a margin of choice. For this reason the total rhythmic effect is not uniquely determined by the system. It does, however, fulfil its function, which is to obscure the pulse to a greater degree than elsewhere in the movement.

Example: Bar 43 from F in trumpet, omitting piano g & bfl.

\[
\begin{align*}
\text{Tpt. 010} & \quad 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \quad (5^\text{th} \text{of 03}) \\
\text{Piano 03} & \quad 1 & 2 & 4 & 6 & 7 & 8 & 9 & 10 & 11 \quad (11; 10; 9; 12 \text{ of 010}) \\
\text{Piano 09} & \quad 1 & 2 & 3 & 4 & 5 \quad (3^\text{rd} \text{of 03})
\end{align*}
\]

ii) The simultaneous use of two recurring duration patterns of differing periodicity. This is best seen in bb. 27-33.

Similar procedures are used elsewhere, sometimes for short periods only, and not always rigorously. There is no planned relationship between the pairs of patterns.
Second movement.

Some of the melodic material is derived from the trumpet part in bb. 26-33. This is simplified and used in bb. 1-4.

It will be seen that this simplification cannot be represented by any one large segment of the pitch series, but a melody based on the inverse form does appear in bb. 9-12. In the final six bars the righthand chords in the piano are taken from segments of the inverse series and its retrograde, and arranged in such a way as to approximate to the opening melody.
Rhythm and metre.

A duration series is used throughout, sometimes in conjunction with some very simple accompaniment figures. The series is derived from the original pitch series shown on p. 36 by the method described on p. 26. Using, however, only nine terms. In this case it is:

(Pitch terms: 3 2 1 12 11 10 9 8 7)
Semitones above B 9 3 8 4 6 7 10 11 5.

In bb. 1-29 the unit is a semiquaver.

The unit in bb. 26-33 is a quaver (modulated by the measured trills.)

" " " bb. 13-16 is a semiquaver. The series is retrograted.

" " " bb. 18-21 semiquaver; original and retrograde series.

" " " bb. 34-39 a triplet semiquaver.

The series is also seen in diminished form in the quavers in bb. 27-33.

Third movement.

The combinations of original and inverse forms of the pitch series are selected in two main ways.

i) In bb. 1-10, 20-25 and 37-52 the trumpet enunciates segments of the series, mostly three notes in length. These are answered by the piano with segments of the inverse form which differ only by the pitch of the third note.

ii) In the piano interludes (bb. 12-16 and 30-36) combinations of transpositions of original and inverse form are selected which provide chords which are not otherwise obtainable and are of a different character.
to those in the first and second movements. An example of the method is shown below.

In the Coda (bb. 55-65) other combinations are used which lead first to a cluster (b. 56), then to a whole tone chord (b. 60), and finally to a chord built of perfect fourths. The selection in bb. 16-17, in which terms of the original and inverse appear alternately, was made to include repeated pitches or groups of pitches. In the flourish (b. 28) only segments of the original are used.

Rhythm and metre.

In the antiphonal sections (bb. 1-11, 20-27 and 37-54) the method of pairs of recurrent duration patterns is used (see p. 35 para. 1).

In bb. 30-36 and the coda (bb. 55-65) the choice was intuitive within the limits of conformity to the rest of the movement.

Aubade.

for soprano, flute or piccolo, clarinet or bass clarinet, viola and 'cello.

This work was not conceived as a whole. No. 4 was written first and was completed before I had considered how it might form part of a larger work. I wrote No. 6
while thinking that the two settings might be preceded, separated and followed by purely instrumental movements. I then decided to enlarge this scheme, and wrote No. 2. While doing this I considered that some way should be found of creating a closer relationship between the instrumental movements. The image in my mind was of the type of frame which was at one time used for displaying a number of small portraits.

The vocal movements are considered in order of composition. The poems set do not have a common theme although "Beside a bright fire" might be said to refer to the dawn of the year and, therefore to have a connection with "To morning". (For this reason I have chosen the title "Aubade" rather than "Serenade".) Otherwise I have been content simply to avoid extensive incongruities of style and subject matter. The same may be said of the settings.

I have used a note series throughout:

![Note Series Example]

but this is the only common factor in the songs.

In No. 4 I have tried to include many triadically based chords. There is no systematic construction on a large scale; I have been guided entirely by the tenor of the narrative.

In No. 6 I have aimed for a distinctive harmonic idiom on a larger scale. Segments of the series have been used in chordal configurations. This process is
at its most elaborate in bb. 26-54. The example below shows how the series, two of its transpositions and a transposed inversion are deployed simultaneously in bb. 26-38 so that certain pitches are emphasized. In the score the segments of 0 and 02 appear as written. In the viola part (011) however, each segment is retro-graded, but starts on the first written note in the diagram, i.e. 8,11,10,9: 12,3,2,1: 4,7,6,5.

I4 is divided between 'cello and flute. It appears as shown except for bb.37-38 where the order is 8,5,6,7.
After bar 54 these repetitions cease and the harmony changes more quickly, in keeping with the last six lines of the poem.

In No. 2 pairs of transpositions have been selected in such a way that the 'cello frequently echoes notes or intervals an octave below the voice part. The intervals are sometimes inverted; (e.g. in bb. 8 and 9.)

Nos. 1, 3, 5 and 7, the purely instrumental movements, are related in the following way.

Each movement contains five sections:

a) a sequence of chords
b) a solo
c) a section containing many trills or tremolos
d) a section based on a repeated pattern of pitches combined with a repeated pattern of durations of a different periodicity
e) an approximately arch-shaped melody of twelve notes.

In each movement these sections occur in a different order. The reason for this is discussed on pages 45 46. The bar numbers of the sections are given on p. 45.

1. a, b, c, d, e.
2. d, a, c, e, b.
3. c, b, e, a, d.
4. e, b, a, d, c.

The material is varied in each section.

a) The chords are of two kinds: The spacing and order of the top three notes is varied. This variation is made in order to avoid extensively disjunct movement.

* see p. 5 para 1.
They occur in many transpositions.

As far as possible total chromaticism is maintained. This is done by using overlapping transpositions and passing notes. E.g. in bb. 1-2:

<table>
<thead>
<tr>
<th>05</th>
<th>06</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

There are several ways of doing this. Each way is used more than once in the course of the work, but they are selected on a different basis in each appearance of section a) so that the order of appearance of the ways is never duplicated.

The order of the durations of these chords is similarly selected:

1. 5,5,5,4,3,4,3,2,3,5,4.
2. 2x (5,5,3,3,3,4,5,4,4,2,5.)
   i.e. 2x (terms 1,3,5,7,9,11,2,4,6,8,10 of first series.)
3. 5,4,3, etc.
   i.e. terms 1,4,7,10,2,6,8,11 etc. of first series.
4. 5,3,3,5 etc.
   i.e. terms 1,5,9,2,6,10 etc. of first series.

All units are quavers.

b) The solos are:

1. Flute
2. Viola, with 'cello pedal
3. 'Cello
4. Clarinet.
These are intended to highlight the characteristics of each instrument.

c) 1 Fast semitone trills

3 Alternating notes a minor third apart.
   Alternate crotchets and quavers.

5 Whole tone trills, accelerating.

7 Alternating notes a minor third apart, decelerating.

The duration of these events is controlled by the pitch of the lower note:

\[
\begin{align*}
&\text{E} & \text{G sh.} & \text{C} & \text{2 units} \\
&\text{F} & \text{A} & \text{D fl.} & \text{3 "} \\
&\text{F sh.} & \text{B fl.} & \text{D} & \text{4 "} \\
&\text{G} & \text{B} & \text{E fl.} & \text{5 "}
\end{align*}
\]

d) The pitch patterns are as follows:

\[
\begin{align*}
&\text{1} & \text{3} & \text{5} & \text{7} \\
&\text{F} & \text{#} & \text{D} & \text{G} \\
&\text{E} & \text{G} & \text{C} & \text{E}
\end{align*}
\]

The duration patterns are:

in nos. 1 and 5; 4,3,2,3,4,3,2.

in nos. 3 and 7; 2,3,4,3,2,3,4.

The material in c) and d) accompanies, or is accompanied by, free parts.

e) The melodic line, which is accompanied by other material in nos. 1, 3 and 5, is heard in its simplest form at the start of no. 7 where it is heard on the flute. It is simply a statement of the note series.
The other appearances are expansions of this.

1. P. Cl.

3. Pizz.

5. Cl.

OVER
Bar numbers of start of sections

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>1</td>
<td>33</td>
<td>24</td>
</tr>
<tr>
<td>b)</td>
<td>6</td>
<td>84</td>
<td>11</td>
</tr>
<tr>
<td>c)</td>
<td>17</td>
<td>48</td>
<td>1</td>
</tr>
<tr>
<td>d)</td>
<td>32</td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>e)</td>
<td>47</td>
<td>70</td>
<td>13</td>
</tr>
</tbody>
</table>

In No. 7 some of the sections overlap.

- **e)** 1-7 incl.
- **b)** 7-12 incl. Clarinet solo.
- **a)** 10-12 Chords interpolated
- **a)** 13-17 Chords continuous
- **a)** 17-19 Chords interrupted by adumbration of d).
- **d)** 17-20 Adumbrated.
- **d)** 20-25

- **d)** 26-31 Includes clarinet passage which becomes reminiscent of b).

- 32-37 Clarinet solo reminiscent of b), ending with decelerating alternating notes leading to e).

- **e)** 38 to End. Decelerating alternating notes.

* * * * * * * * * * * * * * * * * * * *

The variation in the order of the sections is experimental. It is based on the observation that the perception of events is affected by their context, so that by changing the context the event may seem to have a
different function or significance. For example section a) in 1 may be heard as a gradually accelerating introduction, but in 5 (b.24) its position between two relatively lyrical sections (in addition to the other variations) gives it an entirely different character.

Section b) in 1, the flute solo, may be heard as climactic, but in 5, the 'cello solo, it may suggest relaxation after the climax at the end of the previous section.

e), the flute solo at the start of 7 might suggest the opening of 1, which is, however, a).

These, and other changes of aspect, were hoped for but not foreseen in any detail. I cannot be certain that listeners will be generally aware of these effects, but I am confident that the variations in order will enhance the variations of the material, and that the differences between the large-scale rhythmic shapes of the movements will be apprehended to some extent.

* * * * * * * * * * *

Tape recordings.

Metamorphoses Medici quartet.
The Gardens of Dis Edward Pillinger (clarinet)
Sioned Williams (harp)
James Wood (percussion)
Directed by Peter Wiegold
Pastoral Episodes Marcia Crayford (violin)
John Pigneguy (horn).
Commentaries on works submitted for Ph.D. in composition.

1982.

Foreword. p. 2.
Tape recordings. 39.

* * * * * * * * * *
Foreword.

All the works in this portfolio were written while I was a pupil of David Lumsdaine. This period of tuition had a profound effect on my methods of composition but certain fundamental assumptions and opinions remained, and some were indeed, strengthened. I think it is important to record these, as they are part of the background to all my work up to the present time.

I believe that:
1) music can, and should, have a spiritual content. I am not prepared to speculate whether it is --- to consider two possibilities --- a prophetic message, or an edifying substance, or a combination of these and, perhaps, other things, but I believe it is essential to the well-being of most human beings.
2) this spiritual content cannot be described or defined verbally.
3) the content may be an ingredient of any kind of music, but it may be experienced differently by different individuals. However, the technical standard of the composition and performance must be above a certain minimum.
4) it is not possible to increase the power, quality, or extent of the spiritual content by an act of will. This increase would depend on the stage of spiritual development reached by the composer. I see my task as a composer to be the development of the technique and style which accords with my inner nature, and to accept that the quality and extent of the spiritual content of my music can depend only on the stage
reached in my spiritual development, and that this and further stages cannot be reached by the practice of composition alone.

Because of these beliefs my aim is always focussed on technical aspects, including the psychological problems of communication. This aim is also directed by the fact that I am stimulated in the same way that I suppose Stravinsky was by the consideration of media, material, and modes of construction which are new to me. It was for this reason that I embarked on the study of electronic music in 1979. Although I have not yet completed an electronic work, the planning and preparation have given me ideas for non-electronic compositions.

It may seem strange that although these beliefs have survived, I have, since 1975 come to a much greater understanding and appreciation of the works of Messiaen, and that this has been one of the major changes in this period. I had at first thought that Messiaen's titles, copious descriptions and statements of intention, were either redundant or irrelevant, but I now see that they are part of the music, and that a performance in which the audience was unaware of them would be incomplete. I would agree, however, that such a performance, or an analysis without reference to these features would be useful to illustrate the validity of the work at other levels.

For my own work I retain a preference for titles with certain connotations (e.g. "Sonatina"), or which
describe the main process of the work (e.g. "Metamorphosis"). The main exception is "The Gardens of Dis, as described to Persephone in the course of her abduction". I chose this title only when the work was nearing completion (see p. 20). The structure and texture of the piece originated with the consideration of the problems posed by the instrumental combination. I believe that the title enables some listeners to assimilate the work more thoroughly, but the image conjured up by the title was not in my mind when I started the composition . . .

The scores I have submitted are intended to represent my best work. I do not regard them as perfect in detail but I think they are, each considered as a whole, strong enough to bear the flaws which I have not found a way to eliminate or conceal. It is possible that in the course of my development I shall come to perceive the nature of the problems differently or more clearly, and I may be able to revise them.

Deviations from a system do not, in my opinion, constitute flaws. Although principles of numerical or visual design often run parallel with those of musical design, and are --- as far as I am concerned --- a great stimulus, situations can arise where they diverge. I regard extra-musical principles simply as a means to an end, and when they fail in this respect they are discarded. This, however, I do only after careful consideration because, besides their value as a stimulus they are a useful factor in checking a tendency to diffuseness.
An example of an adjustment to the balance of these principles occurs in the first sixty-five bars of my symphony. The accompanying figures of eight semiquavers were at first to have been separated by rests of a specific length, and the figures of eight quavers were to be separated by a specific number of notes in the Hauptstimme (based on the duration pattern of Section 1) (see p. 16). The purpose of both kinds of figures was to throw into relief the very varied durations of the Hauptstimme; the purpose of the different modes of separating the figures was to establish relationships between the two kinds which would not be immediately aurally predictable. In the course of applying the system I found that certain features of the Hauptstimme would be obscured, so I modified the plan empirically, retaining it only when it fulfilled its functions......

The work and teaching of David Lumsdaine have been major factors in the changes since 1975. A very clear example may be seen in the studied octave relationships in the second movement of my "Aubade", but the more general and pervasive influence, although it is less easily discernible, is in the field of harmony and tonality. The works in this portfolio all make use of a twelve-note series, but my future progress will lead to the necessity for modifying the use of series, or even abandoning it for another method, if I can find one which I can regard as an advance from my present practice and not a return to more traditional methods. This advance would be designed to lead to a more clearly defined role for harmony and tonality than
I have achieved hitherto, although I think the start of a move in this direction can be seen in some of my recent works such as the "Aubade". Nevertheless, I think this work can be seen as a clear boundary of the period which started in 1975.

* * * * * * * * * * * * *
Metamorphoses.
for string quartet.

Metamorphosis is a common process in composition, and if the usual translation "change of shape" is accepted many compositions or segments of compositions can lay claim to a title involving the word.

Because music is comparatively abstract, metamorphosis—simply regarded as change of shape—is less charged with significance than the metamorphoses described in mythology or occurring in nature.

In this composition I have aimed to attain some of this significance by using short extracts from existing works which have a clear identity and definite associations for the majority of listeners, and to present them as stages in a continuous process of change.

There are four extracts:

- **bb. 11-14.** Beethoven. Sonata in E fl. Op. 31 no. 3. (opening)
- **bb. 64-67.** Monteverdi. "Lasciatem me morire". (opening)
- **bb. 98-99.** Wagner. Motiv from "The Ring". (Quoted from memory.)
- **bb. 148-149.** Tchaikovsky. Finale of Symphony no. 6. (Opening. Slightly adapted.)

The material containing these stages is based on the note series given below. Small departures from traditional methods of using the series can be seen in the diagrams on p. 8.

![Diagrams of note series and inversions](image-url)
The effect was expected to be similar to that of
the quotations in Berg's "Lyric Suite", but there were
only two reasons for the choice of these extracts;
a) that they should be recognised, and
b) that they could be reasonably related to
the note series.

The way that the latter has been achieved is shown
diagrammatically.

**Beethoven. Original series.**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Vln. 1</th>
<th>Vln. 2</th>
<th>Vla.</th>
<th>'Cello</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

**Monteverdi. O. transposed**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Vln. 1</th>
<th>Vln. 2</th>
<th>Vla.</th>
<th>'Cello</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>65</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>66</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>67</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

**Wagner. O. transposed.**

<table>
<thead>
<tr>
<th>Bar</th>
<th>Vln. 1</th>
<th>Vln. 2</th>
<th>Vla.</th>
<th>'Cello</th>
</tr>
</thead>
<tbody>
<tr>
<td>98</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>99</td>
<td>2</td>
<td>2/4 trem. 4</td>
<td>l</td>
<td>1</td>
</tr>
</tbody>
</table>
The approach to the first quotation is based on the melodic motif in bar 11. The unchanged elements before b.11 are the slur, the relative shortness of the second note (with one exception), and the common pitch of the second and third notes.

The changed elements are the durations, the intervals and the pitch.

The motif appears in many forms in all voices, none of them coinciding until b.6 when they pair off into two rhythmic unisons.

The Beethoven quotation follows. Its third and fourth bars (bb. 13-14) are the basis of the material leading to the next quotation. The principle is simple; but there is a long diversion in which transformations of the motif 'X' are used as an accompaniment to other material, such as the short canons in bb.26-29 and 33-38. The unchanged elements in this motif are the identical pitch of those notes preceding the last. These are

<table>
<thead>
<tr>
<th>Tschaikowsky.</th>
<th>Bar</th>
<th>148</th>
<th>149</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vln. 1</td>
<td>8</td>
<td>7 (8)</td>
<td>2 10</td>
</tr>
<tr>
<td>Vln. 2</td>
<td>10</td>
<td>6 (6)</td>
<td>12 8,7,6,12</td>
</tr>
<tr>
<td>Vla.</td>
<td>9</td>
<td>4 (4)</td>
<td>3 9, 4, 3</td>
</tr>
<tr>
<td>'Cello</td>
<td>11</td>
<td>5 (5)</td>
<td>1 11, 5, 1</td>
</tr>
</tbody>
</table>

Brackets indicate an overlap.

The approach to the first quotation is based on the melodic motif in bar 11. The unchanged elements before b.11 are the slur, the relative shortness of the second note (with one exception), and the common pitch of the second and third notes.

The changed elements are the durations, the intervals and the pitch.

The motif appears in many forms in all voices, none of them coinciding until b.6 when they pair off into two rhythmic unisons.

The Beethoven quotation follows. Its third and fourth bars (bb. 13-14) are the basis of the material leading to the next quotation. The principle is simple; but there is a long diversion in which transformations of the motif 'X' are used as an accompaniment to other material, such as the short canons in bb.26-29 and 33-38. The unchanged elements in this motif are the identical pitch of those notes preceding the last. These are
sometimes two in number, sometimes three. In bb.22-42 their equal length is also preserved.

Bb.42-63 lead to the Monteverdi quotation. The motif \((x)\) is confined to the first violin (always starting on E but never moving to F), and the second violin always starting on C but never moving to B).

The use of the motif \((x)\) can be summarised thus:

**Unchanged:**
- Identity of pitch
- Equality of duration (bb.22-42)
- Fact of interval
- Size & direction of interval

**Changed:**
- Number; (2 or 3-)
- Durations (in bb.15-22, 42-63)

The Monteverdi quotation heard in bb.64-67 is followed by bars suggesting the continuation of the quotation.

The next main section starts in b.77.

The function of the main elements here is seen in bb. 96-97 which suggest the impending Wagner quotation. They are

a) \(\text{Vln motif} \)

b) \(\text{the tremolos (vln.2 & Vla.)} \)

c) \(\text{the motif} \)

These elements appear throughout the section with two others:  
d) a semiquaver pattern  
e) a pizzicato triplet pattern.
All five occur in a variety of temporal and spatial relationships, and a), b) and c) have pitch intervals other than those heard in bb. 96-97. It is intended that these two bars shall be heard as a plausible stage in the systematic exploration of the available combinations.

The Wagner quotation is followed by material intended to suggest further transformation.

Four short sections precede the Tschaikowsky quotation. The first (bb. 103-113) and third (bb. 126-137) are antiphonal passages for the two violins and the viola and 'cello respectively. The second and fourth sections feature pairs of chords separated by short semiquaver passages. The duration system used here is not used elsewhere in the work. The top voices of the chords show the connection with the quotation:

After the quotation, bb. 150-152 suggest continued transformation. Bb. 153-155 recall the Beethoven extract and the Monteverdi is recalled from b. 156. The last seven bars consist of a rather less obvious reference to the Wagner motif.
**Symphony**

The word Symphony has certain connotations, and I believe that two of these in particular should be respected if the use of the word to describe a composition is to be justified.

1) A symphony should be perceptibly connected with a tradition: a new symphony must contain some elements which show that it is the same kind of work as the symphonies of the past.

2) A symphony should be a significant and serious work, and it must therefore contain enough new elements to make it more than a piece cast in the mould of an earlier symphony.

Though these statements are widely different, they are fairly general, and I have aimed to interpret them in such a way that both can apply to the same work.

In respect of the first requirement I have chosen to regard it as of prime importance that the work should be organic; i.e. that each part is perceptibly relatable to the whole in accordance with a general principle. Two factors tend to support this.

1) The three movements are related in that each is in the form of an arch or a series of arches.

ii) The same note series is used in each movement. It is used fairly strictly in the second movement, but modified in the first and third by the periodic omission of pitches.

**Note series**

```
\[\text{Note series}\]
```
First movement. The central section of the arch (VI) consists of an explicit pulse. This section is preceded by five others. The first of these is rhythmically and metrically complex, the second slightly less so, and the reduction of complexity is similarly reduced until section VI is reached. (See p.16). From section VII, by a similar but not identical process in reverse, a section (XI) of complexity equal to that of the opening is reached. This is followed by a brief reference to the explicit pulse of section VI, which forms the coda.

Second movement. The centre here is the trombone chord heard in b.119. The opening section makes use of twelve-note chords, and the following sections, starting in bb. 12, 25, 67 and 96, use six-note, five-note, four-note and three-note chords respectively.
After the centre the process is reversed as far as the number of notes in the chords is concerned, but there are some variations. E.g.: 

a) Each chord heard from b. 67 is followed by one containing no common pitches. In the corresponding section (b. 129) the chords are linked by one or more common pitches.

b) The repeated notes at b. 25 apply to the five-note chord section, but at 157 to the six-note chord section.

Third movement. There are thirteen sections. The odd-numbered ones use a wide variety of timbres. Towards the finish of each, instruments of similar timbre start to dominate, and the succeeding (even-numbered sections) feature that group of instruments. E.g., Brass at b. 21, strings at b. 66, etc.

The periods of pitch omission coincide with these sections. (Section VI is dominated by unpitched percussion.)

<table>
<thead>
<tr>
<th>Section:</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar:</td>
<td>105</td>
<td>128</td>
<td>147</td>
<td>208</td>
<td>221</td>
</tr>
</tbody>
</table>
| Omitted: | A  | B fi. | F  | B  | Csh. except for two bars in the middle.

<table>
<thead>
<tr>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
<th>IX</th>
<th>X</th>
<th>XI</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>128</td>
<td>147</td>
<td>208</td>
<td>221</td>
<td>235</td>
</tr>
</tbody>
</table>
| A  |     | B fi.| E  |   | G until bar. 239. (see p. 15)

This movement can be heard as a series of arches.

The periods of omitted pitches interact with these forms in various ways.

In the first movement they create subdivisions in the sections. E.g. the entry of the trumpets in b. 74 with
the previously unheard C subdivides section I.

In the second movement the opening B fl. and D fl. are pitches omitted from the final section of the previous movement and therefore have additional impact.

In the final movement the omitted pitches change with each of the sections and are an additional factor in characterising them. From b. 239 all pitches are represented. G, which had been absent becomes more and more prominent, finally dominating all others.

The above descriptions are concerned with the necessity for making an organic structure. The second requirement is that the work should contain new elements.

It is, of course, impossible to be certain what is "new", and difficult to decide what combinations of existing modes of construction might be heard as "new". The only claim I can make in this respect is that I am not aware that the combination of methods and features in this work has been used before in exactly this way.

I have chosen to reject any strong reliance on tonality and to avoid any exact or extensive recapitulation and within each movement there are no two sections in which the combination of instruments is the same, except in the very infrequent tutti.

Within the limits imposed above, I have organised the detail on a largely intuitive basis. Systems are sometimes used to achieve local coherence, but have no connection with the larger systems other than intuitively perceived appositeness.
First movement. Mode of derivation of duration patterns.

b. 187

The pattern at b. 97 split between violins 1, violins 2 and violas.

Cello part imitates V.1 durations

b. 97

b. 1 free expansion of the pattern at b. 97

Bar lines omitted.
The Gardens of Dis

for clarinet, harp and percussion.

A fundamental idea in this work is that the percussion should have a part of importance equal to that of the clarinet and harp. It was intended to require only one percussion player and for this reason the position of the instruments in relation to each other must be considered carefully. There is a suggested plan in the score.

This position will, however, favour some sequences of instruments more than others, and the impact of the timbres depends not only on their intrinsic qualities but on their context. In the central sections (see p.18) groups of instruments favoured by the plan are used, but in the first and final sections I have deliberately avoided these sequences, and the chronological order of appearance differs entirely. For this reason the percussionist requires more time: the note on p.3 of the score shows how this is arranged.

A note series is sometimes used,

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[Music Note]
```

but it is not always applicable or appropriate.

The same applies to a duration series: 5,3,4,1,2.

The terms in this are sometimes "full", sometimes "empty". (E.g. 5 "full" ⏯️ ⏯️ ⏯️ ⏯️ ⏯️ or ⏯️ ⏯️ 3 "empty" ⏯️ or ⏯️ ⏯️ ⏯️ ⏯️ 4 "full" ⏯️ ⏯️ ⏯️ ⏯️ ⏯️ 1 "empty" ⏯️ 2 "full" ⏯️ ⏯️ )

The glockenspiel solo in section A uses a derived series: 6,4,5,2,3, with alternate "full" and "empty" expressions.

The diagram on p. 18 shows the outline of the form.

Sequences of percussion instruments not favoured by physical proximity

A

B Tom-toms. 7-note figure.
C Marimba

D Paired cymbal system.
E Glissandi.
F

H Trills, reiterated notes.

I

K Harp and vibraphone compared etc.

L

M Harp solo moving independently of clarinet and percussion.

N

Some aspects of Sections B, D, F, I and M are considered in detail because they use procedures which differ in some respects from those used in the other works and in other sections of this work. The remaining sections are described in the Appendix on p. 21.

Section B

The seven-note figure appears in all the parts. Its general form can be most easily deduced from the tom-tom part. Curiously, it was only after formulating it that I realised that it would be particularly suitable for the harp, using pairs of enharmonics. For this reason the pitch order is not followed, the changes being derived from the most economical sequence of pedal changes. The temporal disposition of the harp groups is based on avoidance of the tom-tom groups. The latter occupy periods based on the
duration series. This series is also the basis for the disposition of the clarinet groups, but in a different way.

The selection of the forms of the figure was systematic only to the extent of ensuring that no form was exactly repeated.

Sections D, F and L.

The sound of the cymbals is varied by
a) the use of a hard(H) or soft(S) stick,
b) the intensity of the attack, and
c) the part of the cymbal struck: Rim(R), Dome(C), or between rim and dome(B).

When two cymbals are involved other variations are obtainable.

d) the period of time between the two attacks, and
e) the order of striking; "large" following "small" or vice versa. (The intensity of the attack of the second cymbal is to be matched to the decaying intensity of the first.)

All possible combinations are covered by the simultaneous deployment of the following cycles:

a) SSHHSSHHHS . (Eleven terms.)
b) f, p, mf, pp.
c) R, C, B.
d/e) $+2\frac{1}{2}$, $-1$, $-3$, $+\frac{1}{2}$, $+1\frac{1}{2}$, $+\frac{5}{2}$, $-2$. (Seven terms.)

A negative amount indicates that the large cymbal is struck first.

The interpolations of the clarinet and harp were not designed to interact in any specific way with the cymbals.
Section 2.

One aspect of the harp solo is the repetition of a pattern of events which can be seen from the start of the section until the dotted crotchet after the first pause. The pause is not part of the pattern, but pauses occur in each repetition and they occur at a different point in the pattern on each occasion. It is during these pauses that most of the main pedal changes are made.

The pitches are taken from pairs of transpositions of the note series. The pairs of segments are related as in the example below.

The sequence of transpositions is chosen for economy of pedal changes. Eleven pairs of segments are used. They change at a different point in the pattern of events in each of its recurrences.

The way in which the clarinet and percussion interact with the harp may vary to a certain extent in each performance, but I have been unable to discover any points of coincidence which would be incongruous.

Some of the sections have been designed to draw attention to the effect of similar material played on different instruments. This reminded me of Nathaniel Hawthorne's version of the Persephone myth, in which reference is made to flowers in the domain of Pluto composed of metals and precious stones. The construction
of organic shapes from inorganic material seemed to me to be analogous to the contrasts in the work, and this is the reason for the title.

Appendix. Description of the sections.

A. The harmonies and pitched percussion solos are derived from the note series. All the percussion instruments are used in this section and section N.

C. A clearly defined pulse is established in order to provide a setting for the triplet figure starting in b.81. From b.74 onwards the duration aspect is governed in the clarinet and harp parts by the fact that for most of the time they maintain between them a regular quaver movement, and the contour of each is determined by the fact that the harp has the same seven pitches until the end of the section. These are varied in register as much as possible. The clarinet supplies the remaining pitches. The marimba pitches are obtained from other transpositions.

Es. This mainly consists of rapid scales on the clarinet and glissandi. The note series cannot therefore be used. I have avoided over-complex fingering on the clarinet and the marimba and vibraphone are limited to two forms of glissandi, but I have selected harp glissandi which supplement the others in order to give a totally chromatic effect. Other figurations have been used briefly at the bottom of p. 15 of the score.
G. The intention here is to show many fine shades of balance between pairs of instruments. The intensity of the Tam-tam reduces in bb. 151-3 as the big drum becomes more prominent. As the big drum reduces, the harp becomes louder. The balance is different on each beat. The process is repeated with other pairs of instruments.

H. This is mainly concerned with reiterated notes, trills and tremolos. In bb. 172-9 use is made of the duration series by the percussion.

K. This is at first a dialogue between harp and vibraphone. The vibraphone imitates the harp within the limits imposed by employing a different transposition and form of the series. E.g.:

Harp: Inv. 1 2 3 4

followed by

Vibraphone. 0 2 1 12 11 10 9 8 7

At the end of the section the clarinet and vibraphone achieve continuous variation of timbre on unisons of varying relative intensity.

L. The clarinet solo uses a modification of the inverted note series;
11, 1, 11, 2, 11, 3, 11, 4, 11, 5, 11, 10, 6, 10, 7, 10, 8, 10, 9,
and similarly. The duration series is used in an analogous way, retrograded and with single quavers interpolated. This gives (b.211);
1, 2, 1, 1, 4, 1, 3, 1, 5, etc.

N. The construction is generally the same as for A. but the order of appearance of the percussion instruments is different.
Pastoral Episodes.

The following pitch series is used.

The figures below (semitones above middle B) show how a duration series has been derived from it. The duration series has only a minor rôle, because as the composition proceeded I found situations in which treatments of the rhythm and metre not connected with the series suggested themselves, and I found these more acceptable.

The first and last of the five movements are related by similarities of design and are described together.

I and V.

Both movements have three main ideas.

a) Each instrument is allotted six pitches. In bb. 1-13 these are nos. 1-6 in the above series for the horn and nos. 7-12 for the violin. The intrinsic pitches are retained in other transpositions. That used in bb. 4-6 is quoted to illustrate a stage in the process. The use of this particular transposition also has some effect on the rhythm and metre.

3 4 9 10 11 12

2 5 6 7 8 1
b) A figure of repeated notes followed by a higher note.

In 1 the ascending interval occurs several times as a perfect fourth (bb. 20-26.).

a major third (bb. 33-39.)

a perfect fifth (bb. 56-60.)

In V the interval may also descend. It is

a minor seventh (bb. 17-25.)

and then in bb. bb.31-38 it varies in each appearance.

c). Violin trills. In V some of these coincide with the figures described in b).

The above ideas occur

In 1: In V.


in c) bb 28-33 bb. 30-38.

Bars not accounted for are mainly transitions constructed intuitively within the limits imposed by the pitch series.

Rhythm and metre.

The duration series is not used in V. In 1 it is seen in the violin part in bb. 14. et seq. expressed as alternate "full" and "empty" terms. (See p. 17, para. 2)

The numbers of repeated notes (see b) above) are also chosen from part of the series; e.g.:

b. 20 3
b.21 4
b.22 7 etc.

Elsewhere durations are chosen intuitively subject to conditions such as those quoted from bb. 4-6 of 1. There is a considerable margin of freedom, and this has been exercised in the direction of conform-
-ity with the 4/4 time signature in I and the 6/8 time signature in V.

II

This movement is based on two main ideas;
a) the deployment of the note series starting (in bb.1, 6, 9, 21 and 34) on the term which is C, and using the transpositions and forms which feature the early inclusion of E, B fl. and D fl.
b) Features of idiomatic horn writing:
  1) long notes (bb.16, 25)
  2) harmonic glissandi (bb.18-20)
  3) chords (bb.38-40, 55-59)

The rhythm is very simple: in the passages referred to in a) above the pattern \(\downarrow \uparrow \downarrow \uparrow \downarrow \) is sometimes used to enhance the similarity of the beginnings of the deployed series. E.g. in bb.1-4 and 21-24. Otherwise the rhythmic treatment is arrived at intuitively, having regard for the type of instrumental technique employed, as in the violin part in bb.26-33.

III

The three main ideas in this movement are
a) a passage mainly in thirds (bb.1-7, 18-23)
b) simultaneously heard pairs of ostinati of differing periodicity (bb.8-16 and after b. 51.)
c) bravura passages for the violin, one with interjections from the horn (after b.16), the other a solo (p.8.)

a) The example below shows how the thirds were obtained.
A similar, but not identical arrangement obtains in bb.18-23. The durations in these bars and bb.1-7 are not related to the series.

b) The pairs of ostinati occupy bb.8-12, 12-16, 24-28 and 29-32. They are all heard again between bb.50 and 64 in the same order. Each occurrence terminates on a third, which is prolonged and reiterated in order to recall the thirds of the opening and bb.18-23. The coda (bb.64-69) also recalls these thirds.

c) In the senza misura section after b.16 six pitches are allotted to each instrument. There is no planned connection with the note series in this section. In the solo (p.6) the retrograde inversion is used in various transpositions. The change of transpositions always takes place at a different point in the bar-long pattern, so that no parts of it become associated with particular features of the note series.

IV This is, in effect, an introduction to the last movement. It consists mainly of small and regular fluctuations of timbre and pitch. These are obtained by bariolage on the violin and variations of fingering on the horn. Variations of pitch arise from the use of horn harmonics not in general use, the seventh and eleventh, but the pitch content conforms as far as possible to the serial order.

The durations of the first six pitches are derived, slightly inaccurately, from the duration series: 

\[3+2, 4+2, 7+2, 1+2, 5+3, 2+2.\]
V has been described under the heading of I.

* * * * * * *

The title was chosen when the work was nearly complete.

Sonatina for trumpet and piano.

An important idea in this work is my personal feeling as to what constitutes "Trumpet style". The main points are

i) no vibrato required

ii) no long passages in conjunct motion, and, therefore, frequent relatively large intervals. Trills are acceptable.

iii) No long slurred passages except trills, infrequent short slurs, and, therefore, many tongued notes, sometimes staccato, and when very rapid confined to reiterations or small intervals.

In addition, I think that a work for this combination should be on a small scale because of the relatively small compass of the trumpet and its distinctive and exciting timbre. Because of the small scale I have used the note series below

\[
\begin{align*}
\text{\textit{Note Series}}
\end{align*}
\]

in a restricted way.

In the first movement I have employed only the original, its retrograde, and transpositions of these.

In the second movement only the inversion, its
In the third movement I have employed both original and inverse forms and their retrogrades, but the constructional basis of the movement restricts the number of ways in which these can be combined.

**First movement.**

The structure can be seen most clearly in the pitch aspect of the trumpet part.

<table>
<thead>
<tr>
<th>Bars</th>
<th>Trumpet pitches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-8</td>
<td>G, D A fl.</td>
</tr>
<tr>
<td>9-15</td>
<td>C; then B, A, A fl. G, F added gradually</td>
</tr>
<tr>
<td>22-49</td>
<td>All twelve pitches. As b. 48 is approached B fl. A fl. F becoming more prominent</td>
</tr>
<tr>
<td>54</td>
<td>D fl , D., F.</td>
</tr>
<tr>
<td>55-59</td>
<td>F sh.</td>
</tr>
<tr>
<td>60-61</td>
<td>G, C sh. G sh C B F</td>
</tr>
<tr>
<td>62-63</td>
<td>&quot;   &quot;   &quot;   &quot;   &quot;</td>
</tr>
<tr>
<td>64-65</td>
<td>&quot;   &quot;   &quot;   &quot;   &quot;</td>
</tr>
<tr>
<td>66-74</td>
<td>&quot;   &quot;   &quot;   &quot;   &quot;</td>
</tr>
</tbody>
</table>

It will be seen that there are three main sections:

1) in which the number of pitches is small and increases
2) (bb. 22-49) in which all pitches occur
3) in which the number of pitches is reduced.

In sections 1) and 3) most of the trumpet pitches are fixed in register.

(The imbalance between the periods comprised by bb. 9-15 and bb. 54-59 is due to the fact that although
they are corresponding parts of the process the piano part contains the main elements in the latter period.)

**Rhythm and metre.**

There are two main procedures.

i) Rhythm dependent on pitch. In bb. 62-74 a quaver movement is maintained between the two instruments, but each part has varying durations because of the position in each transposition of the pitches allotted to the trumpet or the piano. The same device is used, rather less rigorously, in the first eight bars.

The same principle is applied in a rather different way in bb. 39-47. Here all pitches have the value of one quaver except for F, A fl. and B fl. which last for five quavers, and this affects the rhythmic shape.

ii) The simultaneous use of two recurring duration patterns of differing periodicity best seen in bb. 27-33.

![Rhythm pattern](image)

Similar procedures are used elsewhere, sometimes for short periods only, and not always rigorously. There is no planned relationship between the pairs of patterns.

**Second movement.**

Some of the melodic material is derived from the trumpet part in bb. 26-33. This is simplified and used in bb. 1-4.
It will be seen that this simplification cannot be represented by any one large segment of the pitch series, but a melody based on the inverse form does appear in bb. 9-12. In the final six bars the right-hand chords in the piano are taken from segments of the inverse series and its retrograde, and arranged in such a way as to approximate to the opening melody.

Rhythm and metre.

A duration series is used throughout, sometimes in conjunction with some very simple accompaniment figures. The series is derived from the original pitch series shown on p. 25, by the method described on p. 23, using, however, only nine terms. In this case it is

(Pitch terms: \(3 \ 2 \ 1 \ 12 \ 11 \ 10 \ 9 \ 8 \ 7\))

Semitones above B \(9 \ 3 \ 8 \ 4 \ 6 \ 7 \ 10 \ 11 \ 5\).
In bb. 1-29 the unit is a semiquaver.

The unit in bb. 26-33 is a quaver (modulated by the measured trills.)

" " " bb. 13-16 is a semiquaver. The series is retrograded.

" " " bb. 18-21 semiquaver; original and retrograde series.

" " " bb. 34-39 a triplet semiquaver.

The series is also seen in diminished form in the quavers in bb. 27-33.

Third movement.

The combinations of original and inverse forms of the pitch series are selected in two main ways.

i) In bb. 1-10, 20-25 and 37-52 the trumpet enunciates segments of the series, mostly three notes in length. These are answered by the piano with segments of the inverse form which differ only by the pitch of the third note.

ii) In the piano interludes (bb. 12-16 and 30-36) combinations of transpositions of original and inverse form are selected which provide chords which are not otherwise obtainable and are of a different character to those in the first and second movements. An example of the method is shown below.
In the Coda (bb. 55-65) other combinations are used which lead first to a cluster (b. 56), then to a whole-tone chord (b. 60), and finally to a chord built of perfect fourths. The selection in bb. 16-17, in which terms of the original and inverse appear alternately, was made to include repeated pitches or groups of pitches. In the flourish (b. 28) only segments of the original are used.

**Rhythm and Metre.**

In the antiphonal sections (bb. 1-11, 20-27 and 37-54) the method of pairs of recurrent duration patterns is used (see p. 27, 11)

In bb. 30-36 and the coda (bb. 55-65) the choice was intuitive within the limits of conformity to the rest of the movement.

**Aubade.**

for soprano, flute or piccolo, clarinet or bass clarinet, viola and ’cello.

This work was not conceived as a whole. No. 4 was written first and was completed before I had considered how it might form part of a larger work. I wrote no. 6 while thinking that the two settings might be preceded, separated and followed by purely instrumental movements. I then decided to enlarge this scheme, and wrote no. 2. While doing this I considered that some way should be found of creating a closer relationship between the instrumental movements. The image in my mind was of the type of frame which was at one time used for displaying a number of small portraits.
The vocal movements are considered in order of composition. The poems set do not have a common theme although "Beside a bright fire" might be said to refer to the dawn of the year and, therefore to have a connection with "To morning". (For this reason I have chosen the title "Aubade" rather than "Serenade"). Otherwise I have been content simply to avoid extensive incongruities of style and subject matter. The same may be said of the settings.

I have used a note series throughout:

\[ \begin{array}{cccccccc}
\text{C} & \text{F} & \text{G} & \text{A} & \text{C} & \text{F} & \text{G} & \text{A} \\
\text{F} & \text{C} & \text{G} & \text{A} & \text{C} & \text{F} & \text{G} & \text{A} \\
\text{G} & \text{C} & \text{F} & \text{A} & \text{C} & \text{G} & \text{F} & \text{A} \\
\text{A} & \text{C} & \text{F} & \text{G} & \text{C} & \text{A} & \text{F} & \text{G} \\
\end{array} \]

but this is the only common factor in the songs.

In no. 4 I have tried to include many triadically based chords. There is no systematic construction on a large scale: I have been guided entirely by the tenor of the narrative.

In no. 6 I have aimed for a distinctive harmonic idiom on a larger scale. Segments of the series have been used in chordal configurations. This process is at its most elaborate in bb. 26-54. In bb. 26-38 the example below shows how four transposed forms are deployed simultaneously, segments of which combine to emphasise certain common pitches.
After bar 54 these repetitions cease and the harmony changes more quickly, in keeping with the last six lines of the poem.

In no. 2 pairs of transpositions have been selected in such a way that the 'cello frequently echoes notes or intervals an octave below the voice part. The intervals are sometimes inverted; (e.g. in bb. 8 and 9.)

Nos. 1, 3, 5 and 7, the purely instrumental movements, are related in the following way.
Each movement contains five sections:

a) a sequence of chords
b) a solo
c) a section containing many trills or tremolos.
d) a section based on a repeated pattern of pitches combined with a repeated pattern of durations of a different periodicity.
e) an approximately arch-shaped melody of twelve notes.

In each movement these sections occur in a different order. The reason for this is discussed on pages 38-9.

The bar numbers of the sections are given on p. 38:

1. a, b, c, d, e.  
3. d, a, c, e, b.  
5. c, b, e, a, d.  
7. e, b, a, d, c.

The material is varied in each section.

a). The chords are of two kinds. The spacing and order of the top three notes is varied. This variation is made in order to avoid extensively disjunct movement.

They occur in many transpositions.

As far as possible total chromaticism is maintained. This is done by using overlapping transpositions and passing notes. E.g. in bb.1-2:

\[
\begin{array}{c|c|c|c|c}
0 & 7 & 0 & 8 \\
4 & 8 & 2/6 & 9 \\
3 & 9 & 4 & 10 \\
6 & 10 & 11 & 12 \\
5 & 7 & 5 & 7 \\
\end{array}
\]
There are several ways of doing this. Each way is used more than once in the course of the work, but they are selected on a different basis in each appearance of section a) so that the order of appearance of the ways is never duplicated.

The order of the durations of these chords is similarly selected:

1. $5,5,5,4,3,4,3,2,3,5,4$.
2. $2x(5,5,3,3,3,4,5,4,4,2,5)$
   i.e. $2x(\text{terms } 1,3,5,7,9,11,2,4,6,8,10 \text{ of first series})$.
3. $5,4,3,\text{ etc.}$
   i.e. $\text{terms } 1,4,7,10,2,6,8,11 \text{ etc. of first series}$.
4. $5,3,3,5 \text{ etc.}$
   i.e. $\text{terms } 1,5,9,2,6,10 \text{ etc. of first series}$.

All units are quavers.

b). The solos are:

1. Flute
3. Viola, with 'cello pedal.
5. 'Cello
7. Clarinet.

These are intended to highlight the characteristics of each instrument.

3. Alternating notes a minor third apart.
   Alternate crotchets and quavers.
5. Whole tone trills, accelerating.
7. Alternating notes a minor third apart, decelerating.

The duration of these events is controlled by the pitch of the lower note:

$E$, $G$ sh. $C$ 2 units
$F$, $A$ D fl. 3 "
$F$ sh. $B$ fl. $D$ 4 "
$G$, $B$, $E$ fl. 5 "
d). The pitch patterns are as follows:

\[ \begin{align*}
\text{in nos. 1 and 5: } & 5, 3, 2, 3, 4, 3, 2. \\
\text{in nos. 3 and 7: } & 2, 3, 4, 3, 2, 3, 4.
\end{align*} \]

The duration patterns are:

in nos. 1 and 5: 4, 3, 2, 3, 4, 3, 2.
in nos. 3 and 7: 2, 3, 4, 3, 2, 3, 4.

The material in c) and d) accompanies, or is accompanied by, free parts.

e). The melodic line, which is accompanied by other material in nos. 1, 3 and 5, is heard in its simplest form at the start of no. 7 where it is heard on the flute. It is simply a statement of the note series.

The other appearances are expansions of this.

1. fl., cl.

The other appearances are expansions of this.
Bar numbers of start of sections.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>1</td>
<td>33</td>
<td>24</td>
</tr>
<tr>
<td>b)</td>
<td>6</td>
<td>84</td>
<td>11</td>
</tr>
<tr>
<td>c)</td>
<td>17</td>
<td>46</td>
<td>1</td>
</tr>
<tr>
<td>d)</td>
<td>32</td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>e)</td>
<td>47</td>
<td>70</td>
<td>13</td>
</tr>
</tbody>
</table>

In no. 7 some of the sections overlap.

- e) 1-7 incl.
- b) 7-12 incl. Clarinet solo.
- a) 10-12. Chords interpolated
- a) 13-17. Chords continuous
- d) 17-20. Adumbrated.
- d) 20-25.
- d) 26-31. Includes clarinet passage which becomes reminiscent of b)
- 32-37 Clarinet solo reminiscent of b). ending with decelerating alternating notes leading to e).
- e) 38 to End. Decelerating alternating notes.

* * * * * * *

The variation in the order of the sections is experimental. It is based on the observation that the perception of events is affected by their context, so that by changing the context the event may seem to have a different function or significance. For example section a) in 1 may be heard as a gradually accelerating introduction, but in 5 (b.24) its position between two relatively lyrical sections (in addition to the other variations) gives it an entirely diffe-
-erent character.

Section b) in §, the flute solo, may be heard as climactic, but in 5, the 'cello solo, it may suggest relaxation after the climax at the end of the previous section.

e), the flute solo at the start of 7 might suggest the opening of 1, which is, however, a).

These, and other changes of aspect, were hoped for but not foreseen in any detail. I cannot be certain that listeners will be generally aware of these effects, but I am confident that the variations in order will enhance the variations of the material, and that the differences between the large-scale rhythmic shapes of the movements will be apprehended to some extent.

*   *   *   *   *   *   *   *

Tape recordings:

Metamorphoses. Medici quartet.

The Gardens of Dis. Edward Pillinger (clarinet)

Sioned Williams (harp)

James Wood (percussion).

Directed by Peter Wiegold.

Pastoral Episodes. Marcia Crayford (violin)

John Pigneguy (horn).
symphony

michael maxwell

1977
Orchestra.

- Piccolo (3rd part)
- 2. Flutes
- 2. Oboes
- 2. Cor Anglais *
- 2. Clarinets in B♭ *
- Bass Clarinet in B♭ *
- 2. Bassoons
- 4. Horns in F *
- 2. Trumpets in B♭ *
- 2. Tenor Trombones
- Bass Trombone
- Tubas

3. Timpani
- Percussion 4 players
- Harp
- Piano
- Violins 1
- Violins 2
- Violas
- Cellos
- Double Basses *

* All instruments sounding as written except:

- Piccolo, Xylophone sounding 1 8ve higher than written
- Gluckenspiel 2 8ves
- Double Basses 1 8ve lower

---
Non mosso \( \frac{3}{4} \) = c. 80.
Tempo lento
METAMORPHOSES

FOR STRING QUARTET

MICHAEL MAXWELL
Apollo Sound
pp subito
mf
p
pp subito
mf
p
pp subito
mf
p
subito
mf
p

Apollo Sound
Molto moderato. $d = \approx 76$
Pastoral Episodes

Allegro  \( \text{\textit{I}} \)

Michael Massoer.
Più mosso. \( \text{\textit{\(\text{\footnotesize s}=\not\text{\footnotesize less Than} 240\}}} \)

Con sord.

pochissimo rubato

\[\text{\textit{\(\text{\footnotesize mp \text{\footnotesize subito} \quad \text{poco} \quad \text{\footnotesize a} \quad \text{\footnotesize poco} \quad \text{\footnotesize dim}\)}}\}

\[\text{\textit{\(\text{\footnotesize mp \text{\footnotesize cresc.} \quad \text{pp} \quad \text{\footnotesize poco} \quad \text{\footnotesize cresc.}\)}}\}

\[\text{\textit{\(\text{\footnotesize Tempo\ line.}\)}\]
PASTORAL EPISODES

Allegro  \( \text{I} \)

\( \text{I} \)
Piu mosso. \( \text{\textit{\textbf{\textit{\textit{\textit{T}}}}}} \text{ not less than } 240. \)

Con sord. pochissimo rubato

Violin
35
pp

Horn
mute

poco a poco dim.

(dim.) pp poco cresc.

(dim.) pp cresc. p

mute pppp

mp subito

mp subito

54
pp

mp subito

mp subito

mp subito
AUBADE

for Soprano, flute/piccolo, clarinet/bass clarinet, viola and cello.
Michael T. Saxon 1981

1. To morning (Blake)
2.  
3.  
4. Catullian hendecasyllables (Coleridge)
5.  
6. Beside a bright fire (Fitzgerald)
7.  
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60.  

To morning. William Blake.

Holy Virgin
Clad in purest white

Lock heavens. Golden gates and issue forth

Awoke the dawn that sleeps in heaven
Let light rise

From the chambers of the east and bring the

Honeydew that cometh on waking day

Sul G.
Radiant Morning, Salute the Sun

Roused like a Huntsman to the Chase and with Buskin'd Feet App.

Ear Upon Our Hills

Fast

Bass Clarinet

Sounding as written

Viola

Cello

('F' denotes the pitch of the written note.)
Catullian Hecate Sylables
S.T. Coleridge

Soprano: 

Hear, my beloved
An old

Flute: 

Clarinet:

in Bb

Sounding as

Mar.: 

Cello: 

M I L E S I A N S T O R Y

P high and en-

Virg.: 

Cello: 

-Bosomed in congregated laur.els
Glim-mered a temple up-on a
ISLAND off by the MOON-LIGHT, a LITTLE BOAT CAME

FLOATING CAME TO THE SEA CAVE BE—neath the BREEZY
HEADLAND WHERE AMID MYRTLES A PATHWAY STOLE IN MAES UP TO THE GROVES OF THE

HIGH EMBOSOM'D TEMPLE THERE
"In a thicket of dedicated roses oft did a priestess as lovely as a vision pouring her soul to the son of Cythe-"
PRAY HIM TO HOVER AROUND THE SIGHT

NOE BOAT AND WITH IN-VIS-IBLE PILOT-AGE TO GUIDE IT
OVER THE DUSK WAVE

UNTIL THE NIGHTLY

SAILOR SHIVERING WITH ECSTASY
* All tutti to start relatively steady (c. fp) and accelerate
THERE IS

OLD

THING

OF KNIGHTS AND LORN DAMSEL

WHILE THE WIND

SINGS

SINGS

DEARLY

subito
I never look out nor attend to the blast for all to be seen is - the leaves falling fast. But close to the hearth, like a cricket sit!
THERE I SIT READING OLD THINGS
OF KNIGHTS AND LORN DAM. SELS
WHILE THE WIND SINGS
ALL TO BE SEEN IS — THE LEAVES FALLING FAST and FALLING fast

P BUT CLOSE TO THE HEARTH, LIKE A CRICKET SIT
Sopr.
Picc.
Cl.
Vla.
Cello.

Thus then live I till mid all the gloom

Sopr.
Picc.
Cl.
Vla.
Cello.

(soft)

Mf by heaven the bold sun—

* Sounding one higher than written
THEN THE CLOUDS PART, SWALLOWS SOARING BETWEEN

THE SPRING IS A-LIVE AND THE MEADOWS ARE GREEN

I JUMP UP LIKE MAD, BREAK THE OLD PIPE IN TWAIN AND AWAY TO THE MEA-
Take flute: Start as soon as possible.

Flute: Solo: tempo giusto

Cl.: Solo: senza misura, accel.

Moderato:

Viola: rit e dimin.

Cello:
The gardens of Dis as described to Persephone in the course of her abduction.

Michael Manzei 1978

Instruments.

Clarinet in Bb. Sounding as written.

Harp

Percussion. One player.

Triangle (small)

2 Cymbals ""Small"" and ""Large"". It is important that the timbre and pitch should be distinctly different.

Gong

Low Tam-tam

2 woodblocks

Guiro or Reco-reco

Vibraphone

Marimba

Glockenspiel. Sounding 2 octaves higher than written.

4 ton-ton [indefinite pitch] 1, 3, 4

2 roto-ton 1, 2

Snare Drum

Bass Drum
Percussion.

In sections A and H all the instruments used are heard in succession. Their appearances are separated by the sign $n \times \frac{1}{2}$ which indicates that an integral number of crotchet beats may elapse before the next entry. The beat remains constant: $J = 105$.

The number of beats in these cases should be as small as possible.

The order of appearance in sections b to m is different and the intervals in time are of definite length. It is therefore suggested that the relative positions of the instruments should be in accordance with their proximity in these sections. E.g. Bass Drum, Gong and Tam-tam in section g, Tam-tam, Gong and Cymbal 2 in section m, Cymbals 1 and 2 in sections d and f etc., etc. A suggested plan is shown below.

---

![Diagram of percussion setup](image)

**Conductor**

- **Stand**
  - **Gong**
  - **Tam-tam**

- **Cym 2**
- **Cym 1**

- **Triangle**
- **Glock**
- **2 Wood Blocks & guiro**

- **3 to 6 drums**

- **Snare Drum**

- **Bass Drum** (off side)

- **4 tom-toms**
Section a
Tempo giusto \( \frac{1}{4} = 105 \) Repeat this section several times. Stop shortly after the marimba is heard (about 4 notes after)

Clarinet in Bb, Sounding as Brittle

Vib chord
P, Sempre sotto voce
Repeat this section several times. Stop shortly after the marimba is heard (about 4 notes)

Wait for cue.

Vib chord
P, Sempre sotto voce

Wait for cue.

VIBRAPHONE
PORT. VIB

BASS DRUM

as for

CYM.

as for

TRIANGLE

PORT. VIB

CYM 2

GONG

TOM-TOMS (4 + 2)

CYM 1

CL + HARP SILENT

Cl. + HARP SILENT

Repeat this bar several times. When Cl. is heard proceed immediately to next bar; 4

CL to next bar (bar 4)
Repeat several times. When GLOCKENSPIEL is
led, proceed immediately to next bar.

Repeat this bar until Snare Drum roll
finishes. Then remain silent until CUE

[CYM2] WOODBLOCK 2. TAM-TAM

GLOCK, is

GLOCK is
delicate CL + HP to bar

S.D. cue

[cue]

[Hp] CUE

[Eb Gb]

[S.D.] CUE

Segue Section b
as soon as possible.

[+ tom-toms]
Section d

$J = c \, ? \, 2$

Meno mosso. * denotes approximate intensity. As far as possible it should match the decaying intensity of the previous note.

Apollo Sound
Apollo Sound
Section e

Senza misura

Chord progression and instructions for instruments:

- **Cl.**
  - C# F#
  - MARINBA
  - VIBRAPHONE
  - GIRO

- **Hp.**
  - C# F#
  - MARINBA
  - VIBRAPHONE

- **Cl.**
  - About 1 sec.
  - Slower than clarinet

- **Hp.**
  - Slower than clarinet

- **VIBRAPHONE**

Additional instructions:
- Hard stick,
- Dim.
- ppp
-约1秒

Other notes:
- About 1 sec.
- Slower than clarinet
- pp
Section m Senza misura. Clarinet and percussion play together independently of
harp. Tempo and intensities must be determined by the rate of decay of the per-
cussion. E.g. The mf of the tam-tam near the start must be enough to
obscure the entry of the clarinet. The subsequent gong roll must not start un-
til the tam-tam mf (or mf +) stroke has reduced to pp. The clarinet must
reach or maintain a mf or f strong enough to obscure the start of the gong roll
When "stop" signal is received continue to percussion mf note, let it decay to pp, then proceed
to Section n.
Section M.  Senza misura. Start after cue. To be played without reference to clarinet and percussion parts at \( \text{L.C.} \text{F.F.} \).

with slight rubato. Never less than \( \text{mf} \), but more when necessary. To be heard clearly against other instrumental parts.

\[
\begin{align*}
\text{Cl.} & \quad \text{PPP} \quad \text{mf} \quad \text{L.v. Goff} \\
\text{Hp} & \quad \text{non arp.} \\
\text{Hp} & \quad \text{non arp.} \\
\text{Hp} & \quad \text{non arp.} \\
\end{align*}
\]
Wait for Gong, Tam-tam or cymbal 2 to become silent, then TO Section n p. 25.
Section n

Quick d = c 105

This bar to be repeated until MARIMBA is heard. Then stop & wait for
Cue. (p. 26)

GLOCKENSPIEL

TO ENTIRE DRUM

GUIRO

CYM.2

TOM-TOMS x 3

BASS DRUM

MARIMBA

Mar. & Harp stop. mp

Poco cresc.
Start anywhere in bracket music 236, end of 240. Repeat this bar several times. Stop as Cymbal cue then start at bar 236 below.

p sempre sotto voce

Repeat these bars several times. Stop at end of Cymbal cue, then start at bar 236 below.

p sempre sotto voce

TRIANGLE

CUE

in tempo

TRIANGLE

poco rallentando e poco dimin.

GONG

ROTO TOMS

metal beater

TAM-TAM

Cymbal. Cue (Clef Hp continue)

VIBRAPHONE

Soft stick metal beater

hard stick.

236 (S. c. 1/28)

240

SILENT

mf dimin.

(p) à riente

SILENT

mf dimin.

(p) à riente

SILENT

[p] à riente

VIB

[Motor off]

pp

p

mp

mf

Lunga (a riente)

Motor on . . . increase speed →

Apollo Sound