TONIC

The Journal of the ROBERT SIMPSON SOCIETY

Vol 7
Winter 1995

EDITORIAL

John Pickard

May I begin by embarrassing one of the RSS's most stalwart and hardworking members? Bob Hill is not only a canny Treasurer and a seasoned lobbier on behalf of the Society, but over the past few weeks he has proved himself an equally skillful manipulator of the wordprocessor, heroically typing the entire text of this edition. Were it not for his efforts, *Tonic* would not now be in your hands. Very many thanks to him for his hard work. (If this paragraph seems less fulsome in its praise than it ought to be, that is because he had to type this out as well and may have sub-edited it due to unnecessary modesty!)

This edition of *Tonic* features two important new analyses by Dr. Lionel Pike. Their simultaneous appearance is intentional, as both works under discussion make widespread use of an unusual musical technique which has fascinated Robert Simpson throughout his career: the palindrome. Simpson is one of very few twentieth century composers to have written palindromes within a tonal context and the technical difficulties of doing so are discussed in detail in the two essays.

That the publication of Dr. Pike's analysis of the *Variations and Finale on a Theme of Haydn (1948)* should coincide with its premiere recording on Raymond Clarke's astonishing CD of the complete solo piano music is a happy accident. The disc itself has been issued to celebrate the composer's 75th birthday on 2 March and it has already been hailed by some Simpson aficionados as perhaps the finest release yet in Hyperion's marathon cycle (17 discs so far) of the complete works. One of the disc's most notable achievements is the moving demonstration that the 'early' *Sonata (1946)* - Simpson's first published opus - far from being an immature work is in fact a fully characteristic piece of Simpson and music of enormous dynamism, muscular power and originality.

The recording also emphasises a fact which should have been faced some years ago: that Raymond Clarke is one of the most underrated performing artists of his generation. In an age in which the success of a performer seems increasingly dependent upon every criterion imaginable except the one which really matters - the musical - Clarke's refusal to compromise his integrity by empty display has led to his superb artistry being overlooked by some promoters who ought to know better. The release of this disc confirms Clarke's stature as the foremost interpreter of Simpson's piano music: he is the only pianist to have performed it all, including the *Piano Concerto* (a work he has played twice in public and on which he is currently writing an article for the next edition of *Tonic*). Let us hope that he will soon have an opportunity to commit his interpretation of the Concerto to disc.

Finally, I am sure every member of the RSS will join me in wishing our composer a very happy 75th birthday. Dear Bob, we know you don't like birthdays but please indulge us: accept our warmest congratulations as a token of our admiration and love.

ACKNOWLEDGEMENTS

The music examples are copyright Alfred Lengnick and Co. and are reproduced by kind permission.

Thanks to Phillip Maund for typesetting the music examples.

TOWARDS A STUDY OF MUSICAL MOTION: ROBERT SIMPSON'S *VARIATIONS AND FINALE ON A THEME OF HAYDN*

[An article first published in the Music Review]

Lionel Pike

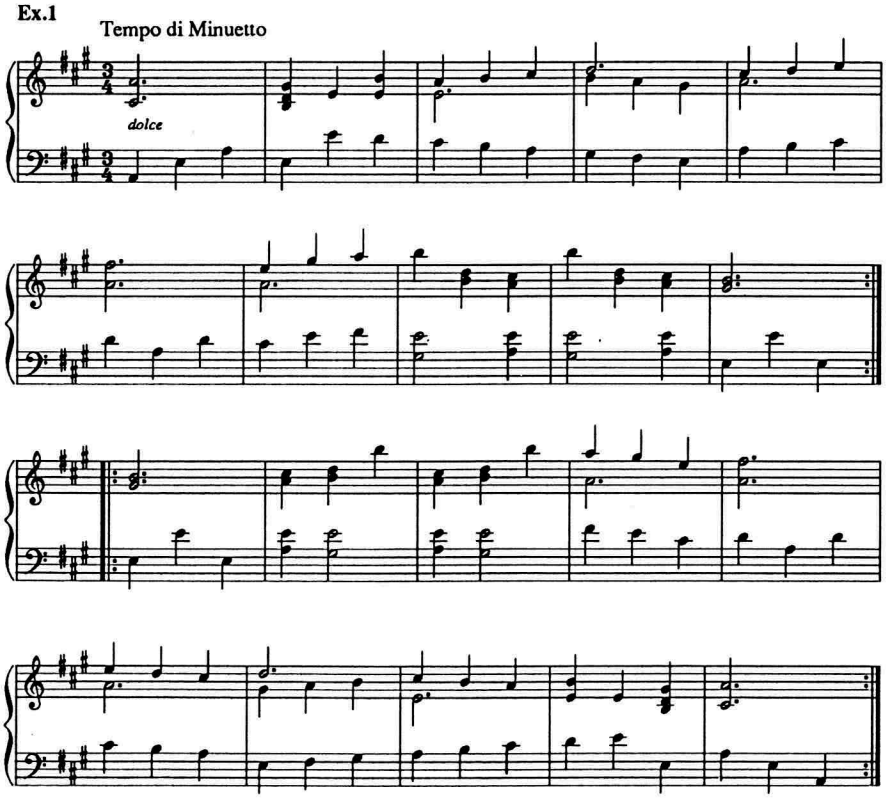
The mighty String Quartet No 9 (*32 Variations and Fugue on a theme of Haydn),* which Robert Simpson wrote in 1982, may well have overshadowed the much earlier set of piano variations on the same theme: indeed, Simpson himself did nothing to discourage this when he appended to the score of the Quartet the comment, "I first tried my hand at variations on [Haydn's Minuet] in 1948, for the piano, and it was looking at these that prompted enough shame to provoke the present attempt". But the 1948 variations are much more than just an interesting fore-runner of the Ninth Quartet, even if it is true that the piano work can give much guidance as to the manner in which we might approach the later piece. Though an early work, the set of piano variations deserves consideration as fascinating music of great imagination and immense skill: as we shall see, it was here that Simpson first explored the nature of one of his abiding interests: musical motion, especially that generated in the works of the Viennese classical composers.

Tovey once said that composers of variations can be divided "into those who show that they know their theme and those who show that they do not"(1). The listener, too, would do well to get to know the theme supremely well if he or she is to appreciate Simpson's variations to the full, for it is quite clear that Simpson is one of those composers who knows his theme intimately. Some time spent in examining the theme will therefore be vital to a study of the variations that follow.

The Theme

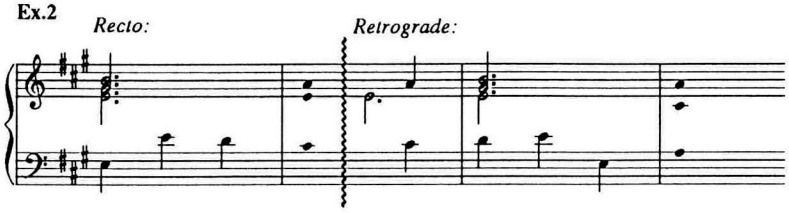
The theme for these variations (see Example 1) is a particularly fascinating one. Haydn used it twice: once in Symphony No 47 in G, and once in the Piano Sonata No 26 in A. It is a Minuet in the more-or-less conventional 3/4; but almost nothing else about it is conventional. In a regular Minuet the phrase structure would have been regular, with 4 bars + 4 bars repeated, then a longer second part consisting of a different 4 bars + 4 bars, leading to a repeat of the opening 8 bars: the second section would then have been repeated. This structure, which the listener of Haydn's time would be expecting, is abandoned in favour of two ten-bar phrases, each repeated: the second 10-bar phrase is a retrograde of the first, including not only the melodic line but everything else as well, for rhythm and harmonies are also exactly reversed.

Ex.1



Palindromic writing is extremely hard to arrange in tonal music, because certain progressions are end-directed, and thus lead the ear to expect a cadence. Such progressions cannot be reversed successfully: the conventional IV-V-I cadence must be avoided in palindromic writing, for I-V-IV is a much more uncomfortable progression. Any (short) note occurring at the strongest point of a bar in the *recto* version will find itself in the weakest place when reversed: bars 8 and 9 demonstrate this very well, for the long dominant on a strong beat and short tonic on a weak beat become a short (but strong) tonic and long (but weak) dominant in the second half. A dotted rhythm becomes a Scotch snap when reversed (only a rhythm such as quaver-crotchet-quaver produces the same result in both directions): and any counterpoint that is not strictly note-against-note will have different pitches sounded together when played in one direction than when reversed. Since Haydn avoids this problem by writing almost entirely in note-against-note style it is not possible to provide an illustration from the theme as it stands: but if one were to imagine the right-hand of bar 2 as a triad of E major (a dotted minim in length) rather than the melodic line g#'-e'-b' (2) then the e-e'-d' of the bass would form a counterpoint against it (see Example 2). When reversed the E chord would still be struck at the beginning of the bar, but with d'-e'-e sounding against it. The d' is now treated more like a harmony note than a passing-note. (Haydn in fact avoids the feeling that d' is an accented upward passing-note in the reverse form of the theme by suggesting a hemiola rhythm at the end.)

Ex.2



Dissonances pose certain problems in palindromic writing, for they conventionally resolve on the following sound, and often they do this by shifting down a step: the tension of the dissonance and the fact that it gives the impression of seeking release in a consonance gives the feature a feeling of forward motion, and one that is not necessarily reversible. Byrd's *Diliges Dominum*, an eight-voiced piece in palindromic form, avoids the problem by dispensing with both primary dissonances. Haydn does not go quite as far as this, but he does minimise dissonances - a treatment that is in keeping with the Minuet style. d' and d'' are the only notes used as dissonances, and in a sense this helps the ear to hear them as being collectively resolved at the end of the piece: the continual use of only one dissonant pitch-class helps maintain a sense of forward flow to the point where the less-obviously-resolved dissonances finally fall to a consonance. But there are also more conventional treatments. In bar 2 the d' on the first beat is transferred to the bass on the third beat, resolving on the first c# of bar 3: in the retrograde version (bar 19) that d' falls directly to c#' in a much more conventional cadential fashion, as befits the end. The d'' in bar 4 proceeds to a c#'' whichever direction the music is played in. The d''s in bars 8 and 9 are problematical: clearly they resolve on c#'' in both bars, but in the retrograde version (bars 12 and 13) the first resolves (on c#'' in bar 13) while the second has no obvious resolution. One might argue that the ear supplies a c#'' to complete the chord at the start of bar 14; but the ear would be more likely to carry the dissonant effect over to bar 17, where d'' occurs as a dissonance again, this time resolving conventionally. There is a subtle end-directedness about this long-unresolved d'', and it gives an airy 'lift' to the second half, as well as a feeling of forward flow. This is all part of that sense of musical movement - not always dynamic, and sometimes quite subtle - that has fascinated Simpson throughout his life.

To avoid the difficulties raised by counterpoint, Haydn writes mainly in note-against-note style in the Minuet: he also avoids the IV-V-I cadence, for reasons mentioned above. Yet the note-against-note style does not in this instance result in simplicity, for many subtleties are worked into the piece. Basically the first 10-bar phrase - after a short initial descent - rises until the cadence, when it briefly falls again: the second 10-bar phrase, naturally, reverses this procedure. Scalic passages abound, some of them used in sequence, but some given in contrary motion between treble and bass (parallel thirds and tenths, incidentally, are frequent in the piece, and Simpson makes much use of them in his variations). Naturally the idea of contrary motion suggests invertible counterpoint, for the rising treble and falling bass of the first part becomes a rising bass and falling treble in the second, The sequence, by contrast, picks up the opening melodic idea (a'-g#'-e') and uses it upside-down in the first half: the second half, therefore, also contains the figure in both rising and falling versions.

At the centre of Haydn's Minuet - the point where the mirror is held so to speak (the place that corresponds to the 'r' in "Able was I ere I saw Elba") - there is a dominant chord: the repetition of this E-major chord helps the ear to recognise the important structural place at which the music is put into reverse: and the octave leaps in the bass also draw attention to this point, making it a much clearer structural feature than the the letter 'r' in the sentence above. Such clear sign-posts are a great help to the listener, and Simpson also provides them in the variations that follow. A further detail is that the bass that emphasises the opening chord with its rising A-e-a is developed in the melodic line of bar 2 (the triadic g#'-e'-b').

The variations: structure.

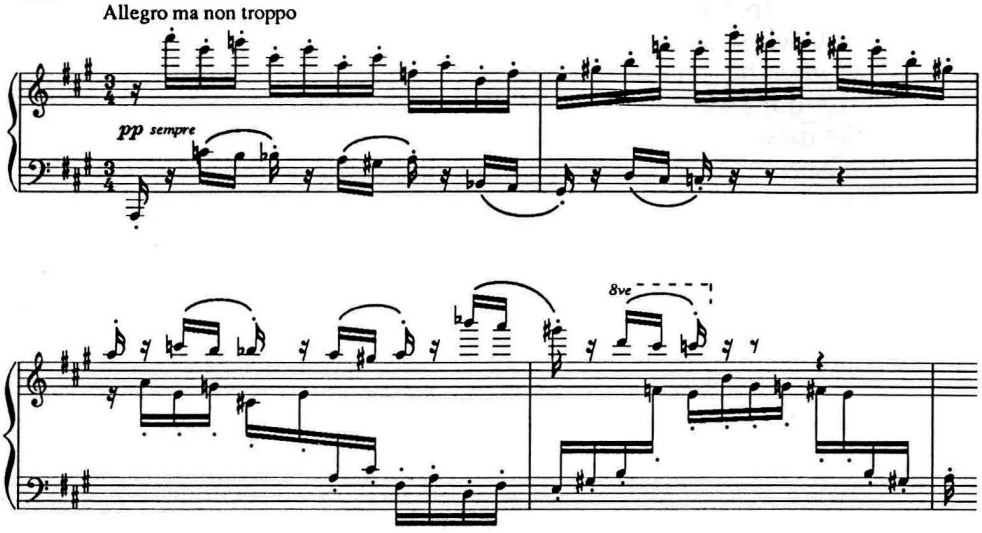
In many sets of variations the listener need do no more than follow the theme as it is gradually embroidered with more and more embellishment. Clearly, if the theme itself is no more than simply a tune, that approach is perfectly reasonable. But Haydn's theme is rather more than simply a tune: palindromic; with melodic sequences; including a touch of invertible counterpoint; with a subtle treatment of Ds that helps maintain a sense of rhythmic floating and flow; containing melodic inversion within the first half itself; including the rhythmic interchange of short and long, weak with strong, elements - the list seems endless. To treat such a theme as fit only for melodic embellishment would be to do it a grave injustice - and Simpson, that great lover of Haydn, is scarcely likely to do that.

He provides twelve variations and a finale: since the theme is palindromic, Simpson has also made all the variations palindromic (3): the finale, however, is not reversible. We need not take seriously Simpson's remark, "Writing palindromes saves a great deal of time: you only have to write half the music, because you just copy the rest out backwards". The writing of successful palindromes in tonal music requires enormous skill; but Simpson has pointed out that there are great benefits. He has observed that hearing music in forward and reverse form is like making the same journey in two different directions: the scenery looks quite different on the return journey from the way it did on the outward leg: and he has further observed that when writing palindromes it is useful to include little figures that are themselves palindromes, so that the melodic line does not sound contrived when heard backwards. On the other hand, if the structure is to be understood, there must clearly be such features as the listener can readily identify as being reversed - features that are acceptable in mirror form without themselves being palindromes, yet obvious to the ear as being played backwards (4).

The variations fall into three groups: Nos 1-4 are all (more or less) quick, and each has a central double-bar and a repeat of both halves. Nos 5-8 are slow, in the minor (a change foreshadowed by the major-minor conflicts in the bi-tonal fourth variation), and without either central double-bars or repeats: they form a discrete slow movement, all being based on the slow chords of variation 5 (5), with variations 6-8 playing continuously in a logically-expanding contrapuntal web. Variations 9-12, which return to A major, form a kind of scherzo: each variation has a central double bar with the two halves repeated (6), and the central dominant chord of the mid-point is sometimes displaced by a semitone, becoming F natural.

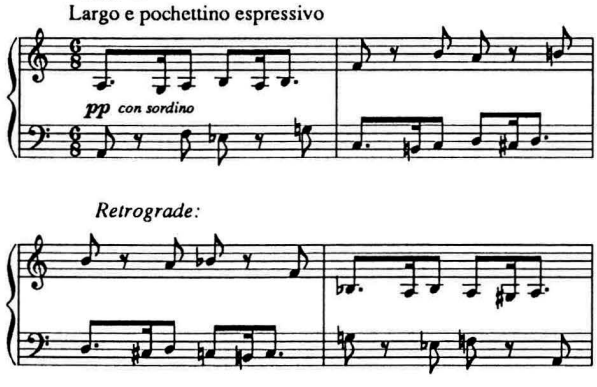
Haydn's suggestion of invertible counterpoint is expanded in the variations: thus it sometimes seems as if Simpson is applying a mirror horizontally in addition to the one that occurs vertically at the mid-point. Variation 1 raises the matter briefly (in bars 9 and 10), but the invertible counterpoint is stated in the passage before the first double-bar rather than being spread (as in Haydn) across the two halves: the invertible counterpoint therefore recurs - melodically reversed - in the second half. The idea is expanded in variation 2, where the first two bars are immediately given in invertible counterpoint as bars 3 and 4 (see Example 3).

Ex.3 VAR. II
Allegro ma non troppo



It is not until variation 6 that the device is heard again, and here an additional rhythmic 'mirror' is applied in each bar, for the rhythm ♩.♫ ♪ followed by ♪ ♫. results in a cohesive variation whose underlying rhythmic type does not change when the first half is reversed (see Example 4).

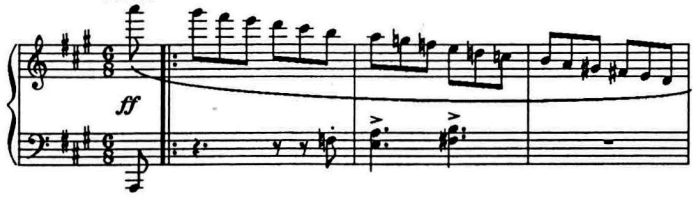
Ex.4 *Recto:*
VAR. VI
Largo e pochettino espressivo



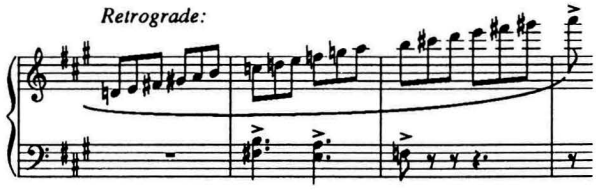
This cohesion helps the central 'slow movement' set of variations to provide a point of repose in which the ear is not continually pressed to relate the forward and reverse versions.

The final two variations make a different rhythmical point while continuing to use invertible counterpoint: variation 11 begins with a very short tonic note on the weakest pulse of the bar - an up-beat of the briefest kind; the accompanying figure in the left-hand (bars 1-2) also starts on the very weakest pulse - a similarly brief up-beat (7). In reverse, however, these two upbeats become strong down-beats, for what is to the left-hand of a bar-line on the outward journey is bound to be on the immediate right-hand side of the bar on the return passage: the change from weak to strong provides a very satisfying resolution to the variation (see Example 5).

Ex.5 *Recto:*
VAR. XI
Presto

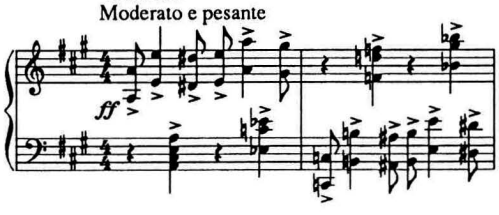


Retrograde:

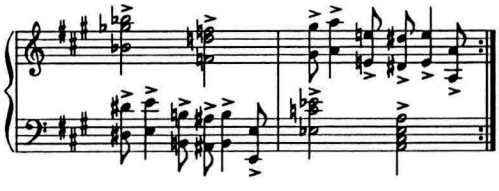


Variation 12 expands this idea: the quaver-crotchet-quaver of each half-bar is the same when given in reverse, providing an overall uniformity for the variation; but the chords that accompany this shape, which are on the off-beats in the first half (i.e., they occur on the second and fourth beats in 4/4), are, of course, on strong beats (beats one and three) in the second half, so again providing a nice sense of resolution (see Example 6). (The crotchet chords of the first half are given as minims in the second half, though the difference in performance is negligible given that all chords are marked with a *sforzando*.)

Ex.6 *Recto:*
VAR. XII
Moderato e pesante



Retrograde:



We have already noted the use of parallel thirds which derive from those in the theme: other harmonic derivations also occur. Variation 6, which opens and shuts like a fan, makes much harmonic use of the open fifth (see Example 4): this sound is a verticalisation of the horizontal movement of the opening of the bass part in the theme. Variation 2 is clearly built on the harmonic scheme of Haydn's Minuet - indeed, most of the variations are loosely built upon that harmonic scheme, at least insofar as the central point tends to be a dominant sound of some kind. The central point of each variation tends to stand apart from the remainder of the writing; by changing the style, however slightly, when the 'mirror' is reached Simpson draws clear attention to the important point at which the music goes into reverse.

The Variations: Dissonance.

The palindrome presents a problem for any composer concerned with musical movement, for how can forward motion be achieved when the obvious end-directed progressions must be avoided, and when dissonances (which normally have a feeling of movement towards a resolution) must be handled with caution? It hardly needs to be pointed out that dissonance and resolution have different connotations in the twentieth century from those at work in Haydn's Minuet. A brief example can show how the treatment of dissonance can contribute to a sense of motion in

Simpson's music.

Example 6 shows the first two and last two bars of variation 12. In bar 1 the octave A in the right hand sounds a tritone against the octave Eb in the bass, and it resolves in a classical fashion onto G (G being a consonance, as is required by convention). But in the final bar, because the music is now moving in the opposite direction, that same octave A 'resolves' down a fourth onto a dissonant E-natural - a much less conventional treatment, and one that is more pungently abrasive. Why is it that the more conventional treatment occurs at the start of the variation rather than at the end? Should not the end have a sense of relaxation so that the foregoing clashes are 'resolved'. just as the syncopated chords of the *recto* version are 'resolved' so that they sound on the main pulses in the retrograde?

One of the answers is found in the mixture of Eb (D#) and A major in this variation - a conflict foreshadowed in variation 6 (see Example 4): that mixture is such that the listener perceives the final bar of variation 12 in a different manner from its first bar. In the last two bars of variation 12 the Ebs (one chord has C rather than Eb in it) that sound on the strong beats are drawn back towards the home tonic: the first octave E-natural of the final bar is part of the process, and the D#-E-A of the last minim beat rounds the process out neatly. The more gritty dissonance treatment of the final two bars as compared with the more conventional opening leads to a greater sense of tension as the Bbs are dragged back to A major, and the maintenance of that grittiness up to the last moment is a splendid device for indicating that idea is not yet played out, and that more music must follow. Indeed, a conflict between A major and Eb is to play some part in the finale.

A palindrome may seem an odd choice of piece in which to explore forward motion: but the very fact that the most obvious means of creating end-directedness must be avoided makes the writer explore other, less obvious, devices for creating musical movement. Not surprisingly, perhaps, the conception of dissonance has moved, within this variation, from a straightforward and conventional treatment in which the tritone resolves down onto a major third, to a more global attitude in which pitches remote from the home tonic must be brought back within that tonic. Clearly, the more remote the 'dissonant' pitch, the more power will be required to force it back into the realms of the tonic. The seeds of a large-scale handling of dissonance, with all that that implies for the long-range organisation of motion, are encapsulated in this little example; for a 'tonal dissonance', such as is provided by Eb within a piece on A, must create a feeling that a resolution is required, and it will point towards that resolution so as to give - if only subconsciously - a sense of movement towards a tonal goal. Dissonance has become dynamic.

The variations: use of melodic material.

Since the casual listener will probably be more aware of the melodic material than of the matters discussed above, it is worth spending some time exploring that element: for although invertible counterpoint and rhythmic inversions are the very stuff of this set of variations, Simpson also uses Haydn's tune (and its accompanying bass) in a thorough fashion.

Let us begin by taking the most obvious element - the scale passages: Haydn uses a complete descending scale (e'-e) in the bass of bars 2-3. with shorter rising scalic figures elsewhere in the first half. Simpson begins Variation 1 with the descending scale (in the right hand) counterpointed against the four-note ascent that has been used in sequence in the theme. Variation 3 has scales at its mid-point. Variation 4 has left-hand scales which are slightly ornamented with a turn phrase taken from variation 3. The bass of the variation in slow chords (variation 5) is almost entirely scalic, and the scales become something of a joke in variation 9: variation 9, indeed, is like a pianist practising scales in octaves, adorned only with a cadential formula taken from Haydn's central cadence, but abruptly cut short: the octave scales do much to break the spell of the flowing, ever-thickening counterpoint that precedes them, just as the 'comic march' (to quote Brian Duke (8)) of variation 3 provides relief from the invertible counterpoint that precedes it. The idea of a pianist practising scales persists into variation 10, where the player apparently uses scales in thirds as well as octaves (the parallel thirds derive from the theme): and variation 11 has massive scales spread over many octaves. Parallel thirds, a prominent feature of the theme, are a large factor in three variations; 1, 8 and 10.

The A-e-a-e-e' figure in the bass of the opening of the theme contrasts markedly with the more conjunct motion of the bass later: its striding nature is of immense value to Haydn in providing a rounded-out cadence for the second part. It is variation 3 that first picks up this leaping character, though it turns it into a piece of soft galumphing broken only by the much higher central scales. Clearly this ballet for tortoises and gnats provides relief from the complications - the invertible counterpoint, etc. - of the first two variations. The striding figure is one of the elements in variation 6 (see Example 4): it is combined with the semitone rise and fall which happens in the bass of bars 8 and 9 of the theme. Both elements - the I-V-I and the semitone rise and fall - are very clear in variation 12 (see Example 6).

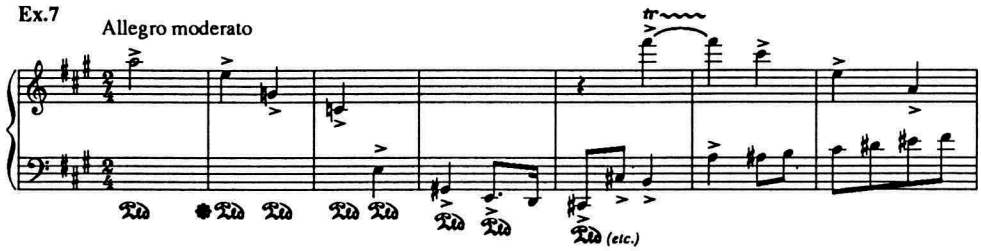
One figure remains to be discussed: the a'-g#'-e' of the opening of the theme, a figure of which Simpson makes much wider use in the Ninth String Quartet. Although the shape crops up fairly frequently, it is most obvious in the right hand of variation 4, in the bass of variation 5, and in the horn-like material that accompanies the scales in variation 9 (see the left hand of Example 5).

The Finale

The finale is a large one, and, being free of the constraints of palindromes, Simpson is free to use non-reversible material in it, It balances the preceding variations so that the overall feel of the complete piece is of a sonata-like structure consisting of first movement-slow movement-scherzo-finale. Basically the form of the finale is that of a double fugue, though there are passages that use a non-fugal, more sonata-like, musical idiom. The subject of the first fugue is utterly memorable: it is a great striding theme, starting with a high trill and leaping downwards - like some enormous bird of prey hovering and swooping - by large intervals, covering the majority of the keyboard. Its dramatic nature and dynamism show that we have here a composer fully conversant with the late piano fugues of Beethoven and such works as the *Grosse Fuge*. The leaps, being of fourths, fifths and sixths, echo those found in the Haydn Minuet, and the first leap has been foreshadowed by the descending chords of the end of the last variation. The tonic and dominant of A, which start the subject, reflect the overall tonal scheme of the first part of the Minuet, but the use of V and I in C major to follow it gives a dynamic feel to the subject such as has been discussed above. The effect of this is to make the subject sound as if it might possibly be in A minor, the key of the central set of variations.

The same intervals as are found in the subject also govern the pitch of the entries in the first exposition, for they are on a'', f#''' and c#'''. There is no regular counter-subject, but various ideas much used in the variations are tried against this subject, an upward scale and a series of parallel thirds being prominent. The contrary motion is, of course, virtually dictated by the nature of the subject; but it is worth noting that contrary motion also derives from Haydn's Minuet (see Example 7).

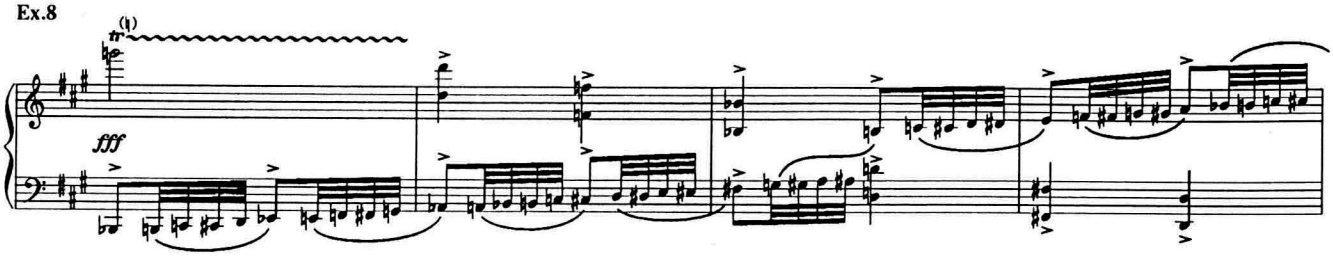
Ex.7



A much more relaxed theme appears in bar 24: it is used in *stretto* imitation, and leads the tonality into F major for the first real cadence: this modulation recalls the fact that, for some of the variations in the 'scherzo' section, the pitch used at the mid-point had been shifted from the dominant to F natural. The new theme turns out to be an episode, the main leaping subject returning at bar 33, now with entries a tritone apart (b flat'' and e'''), and this time with a more regular counter-subject that consists of a rising scale played in a dotted rhythm running in contrary motion to the subject. The dotted rhythm has derived from the preceding episode, and that episodic material soon reappears, the dotted-rhythm scale being inverted and treated in sequence (a treatment that recalls the sequences of the Minuet).

A series of trills vainly attempts to re-start the fugue subject, though at bar 65 that theme appears in a series of inversions (on B, G, C) which lead to a *recto* statement on g'''. This last, in bar 84, is accompanied by a new counter-subject, again built on scales but in a different, far more tumultuous, rhythm. The contrary motion between the subject and this new counter-subject not only refers back to Haydn's Minuet, but it does much to raise still further the already hot temperature of the music (see Example 8).

Ex.8

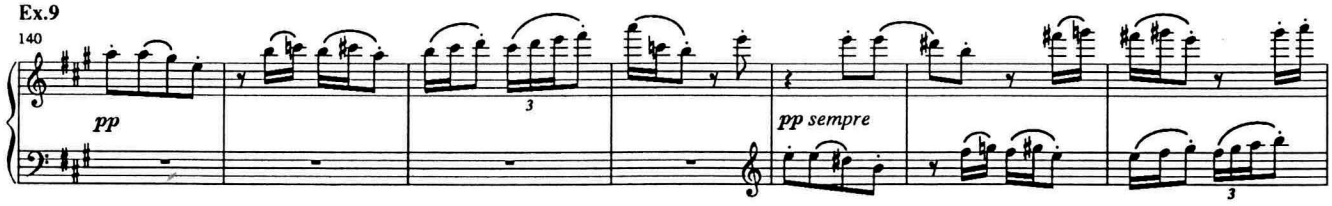


The resulting increase in tension leads to a diminution of the fugue subject (at bar 96) whose downward leaps are doubled in thirds: these recall the parallel thirds of Haydn's theme.

For the time being the main fugue subject ceases to play a part in the finale, and Simpson moves to a non-fugal section in which, over a running bass derived from variation 2, various tattoos of repeated notes are sounded: they are on g#'', a'' and C''' - a shape derived from the opening of Haydn's theme - but they home in on E as if indicating that the central point of some further palindromic variation has been reached, rapidly-repeated dominants indicating the point at which the reversal happens (as the Es do in the middle of Haydn's Minuet). Close examination of the music shows that there is certainly an element of the palindromic around this high E tattoo: the preceding statements of it in the treble are transferred to the bass in the passage that follows this conjectural 'central mirror', but the feeling that the passage might constitute a 13th variation - with the counterpoint inverted in the 'mirrored' section is weakened by the fact that the running bass before the supposed 'mirror' becomes a set of virtuoso scales in the right hand after it. This is not, then, a further variation within the finale - the ear does not hear it as such, even if the analyst might be tempted to see it in this light - and the rapidly-repeated notes turn into repeated chords which lead to three abortive starts of the main subject. When all three attempts have failed, a new fugue takes over (in bar 110).

The second fugue subject is much less dramatic than the first; its head uses the first three notes of Haydn's Minuet, and the rest uses the fifth and sixth leaps from that theme as well as the motion up and down a step that happens in bars 8 and 9 of the theme (see Example 9).

Ex.9



The fugue is closely worked, using *stretto* and *per arsin et thesin* (9) entries, and - after some considerable time and after much development of the parallel thirds - there is also a diminution of its head (at bar 216). An attempt to combine the two fugue subjects begins at bar 224, but the combination will not, for the moment, settle: first the original subject is syncopated, then - when it occurs on the strong pulses - the second subject evaporates. The time is not yet ripe for the expected combination that will turn this piece into a double fugue, and from bar 246 Simpson develops the second fugue subject in a sonata (rather than a fugal) style, building to a great climax. At bar 278, at last, the combination of the two subjects is effective, their power in counterpoint being enhanced by the blazing tonic major in which they are announced. Their contrasting natures complement each other perfectly, but the combination is only momentary, for the tattoos soon swamp the texture and lead the music away from the fugal style yet again.

A *stretto* on the first three notes of Haydn's tune leads to a pause on a low B - the pitch-class often used at the central point of the variations: it is followed by a rising C-major scale that reflects the momentary diversion into that key during the first fugue subject, but it turns into Eb at the top. There follows a reminiscence - as if from a great distance - of the beginning of the Minuet: it is a cloudy reminiscence, for it is in Eb, the farthest tonal point from the one so strongly established by the contrapuntal combination of the two fugue subjects in the preceding bars; Eb, - and other flat areas - has nevertheless been foreshadowed earlier in the fugue as well as in variation 12 (10). The E natural that so frequently marks the 'mirror' has, evidently, been shifted down a semitone to Eb, just as the dominant had been shifted up a semitone to F natural in some of the 'scherzo' variations. Eb, then, counters the F naturals of those final variations. The e' flat - b flat of bars 302-3 (in the bass) helps the listener to identify the connection between this descent of a fourth and the opening of the main fugue subject; and the following note, a-flat, makes a link back to the tonic by becoming g#. After some use of the episodic material of bars 23f, a final statement of the main fugue subject sounds majestically through the final tonic chord, ending - for the only time - on the tonic and relating the G-natural and C-natural to the chord of A major that cocoons it.

This early work not only tells us much about the further variations that occur in the Quartet No 9, but it is the initial stimulus for an interest in palindromes that has remained throughout Simpson's composing life. The variations in the second movement of the Quartet No 1 (1951-2) and the second movement of the Symphony No 2 (1956) owe their character to this interest (11). Even more far-reaching, though, is the indication given in the 1948 variations that Robert Simpson has begun to explore the miracle by which music is made to convey a sense of muscular movement that is much more dynamic than simply running on the spot or hopping from one foot to the other. It was an interest that was to remain with him for the rest of his composing life.

NOTES

1. Donald Tovey, *Beethoven*, Oxford University Press, London etc., 1944, p.124.
   See also the comments in Donald Tovey, *A Musician Talks, I: The Integrity of Music*, Oxford University Press, London etc., 1941, pp.91-2. There is a discussion of the Simpson variations in Brian Duke, *Two Early Piano Works by Robert Simpson*, Tonic, Vol.1 No.1, pp.13-15.

2. This article describes pitches according to the Helmholtz system, whereby the 'cello's lowest note is C and the seventh degree above that is B; the viola's lowest note is c (rising to b a seventh above), and middle C is c'. An octave above middle C is c'', etc.

3. "A good palindrome is easy to hear, once you've spotted it", he said in the talk given after the recording of his Ninth Symphony (Hyperion CDA 66299).

4. The information given in this paragraph is taken from a lecture given to music students at Royal Holloway College (University of London): when asked to talk on palindromes, Simpson wrote back, "O.K: palindromes. I'll walk in backwards". The lecture was repeated during a seminar at Simpson's home in Killelton, Eire, in July 1989.

5. Variation 5 may well have been conceived under the influence of variation 20 in Beethoven's Diabelli Variations.

6. In variation 10 the repeats are written out in full, and the double bars omitted; but the effect is virtually the same as if the variations had been written out with double bars and repeats.

7. Variation 10 is written out in full so that the repeat of the first half can be shifted forwards in the bar by one crotchet as compared with the first playing.

8. Duke, Op Cit., p.14.

9. i.e. entry of the subject with strong beats displaced by weak beats.

10. A contrast of A and Eb seems to have fascinated Simpson about this time: he had heard Nielsen's *Sinfonia Espansiva* in 1947, and thus knew of the way in which Eb is coloured by two wordless solo voices which draw attention to that key - the farthest point of travel from the 'home tonic' of A. Simpson's First Symphony (1951) and the String Quartet No 1 (1951-2) both embody a conflict between these two areas. The tritone was, incidentally, used as the distance between the entries in bar 33 (b'' flat) and 38 (e''') of the finale of the 1948 variations.

11. It is worth pointing out that the palindrome operating in the slow movement of Symphony No.2 behaves slightly differently from the other examples of this technique in Simpson's work. Here, the mirror is placed at the centre of the whole movement (in the middle of variation 7), so although it is still a set of palindromic variations - like the ones studied in these two essays - there is just one big mirror, rather than several smaller ones. If anything, this technique is even more difficult to handle successfully [Ed].

SIMPSON'S STRING QUARTET No 1 - AN ANALYSIS

Lionel Pike

This Quartet, dedicated "To Georges Enesco, in deepest admiration", was written in 1951-2: it followed hard on the heels of Simpson's First Symphony (1951), a work that had been submitted for the degree of Doctor of Music at the University of Durham; Simpson's First must be the only Symphony in the repertoire to have started life as an academic exercise. Two features of the Symphony have particular relevance to the First String Quartet: one is the handling of rhythm, the other the handling of tonality. The First Symphony was written in one movement; or rather, it was written in one basic pulse over which a sense of fast movement/slow movement/fast movement is achieved by the use of longer or shorter note-values within a basic pulse that remains constant throughout. I, for one, do not know of any previous work conceived on this plan. The keys of A major and Eb vie throughout the Symphony: the fact that these two keys are a tritone apart makes them ideal opposites, for Eb is at the farthest remove tonally from A. At the end of the Symphony A major is regained despite the pull towards Eb. The composer's involvement with music written on a single pulse partly derives from an abiding interest in the handling of rhythm by Viennese classical composers, though his love for Sibelius would also have made him aware of the extraordinary fusion of fast and slow tempi in the first movement of that composer's Fifth Symphony. The tonal working of the Quartet, in which Eb is opposed by A and in which A is eventually triumphant, not only derives from Simpson's First Symphony, but also clearly owes much to Nielsen, another composer much admired by Simpson, and one whose music he discovered while writing his own First Symphony.

The first performance was given by the Element Quartet at the Midland Institute, Birmingham, on 30th March 1953. The printed programme, incidentally, gave the two movements as *Moderato semplice* and *Adagio non troppo, grave.* It was well received by the few critics who attended.

FIRST MOVEMENT. Allegro moderato, semplice.

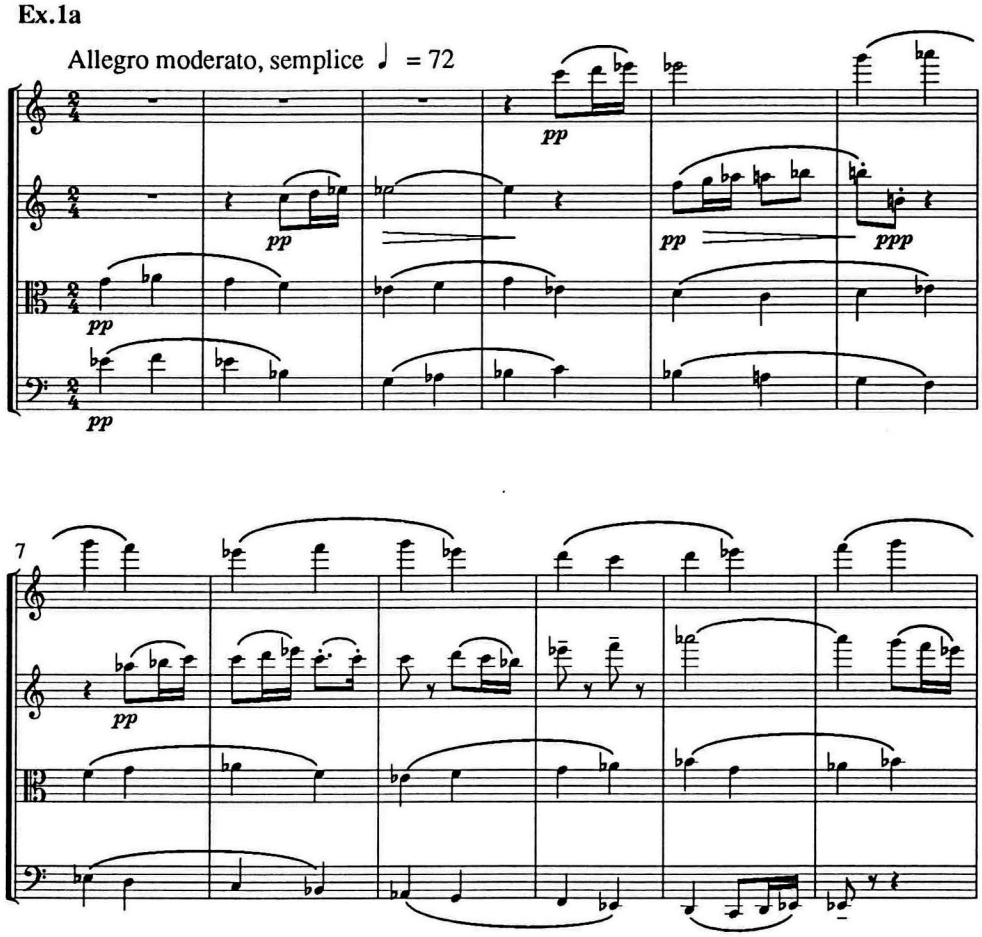
The composer's programme note (1) says

> The first movement is in a kind of contrapuntal sonata form. It begins softly in E flat but soon becomes active. At its centre is a determined *fugato* that pulls the tonality round to A, at which point a recapitulation begins. Gradually, however, the key of A loses its hold and E flat regains control. The movement ends with a sense of conflict.

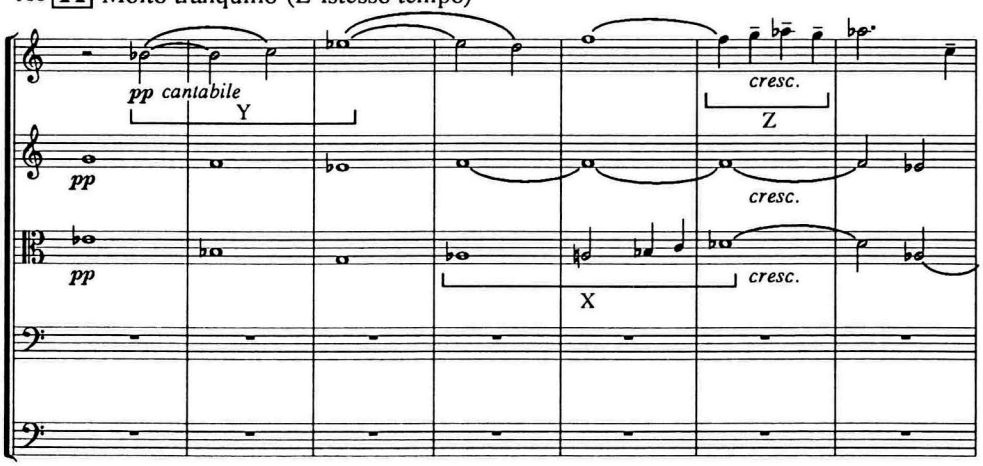
There are two movements in this String Quartet, and it is in the first that the increase and decrease in apparent speed is handled by using longer and longer and shorter note-values: the listener can follow much of the argument by attending to this facet. The Quartet starts with a motif rather like that of Haydn's 'Lark' Quartet, Op 64 No 5 - or like the opening of *Das Lebewohl* in Beethoven's Piano Sonata in Eb, Op 81a *(Les Adieux)* - though Simpson says it was consciously borrowed from the middle section of his own First Symphony (compare Example 1a and 1b): in the Symphony this theme had been an inversion of a preceding *fugato.* The use of the material from the Symphony is in itself an indication that Simpson wishes to explore further the ideas proposed in that work.

The First String Quartet begins with a basically crotchet pulse, and flows along in a quietly serene fashion: the pulse is maintained for some time, with figures using the rhythm quaver-semiquaver-semiquaver placed against it without upsetting the serenity and simplicity of the flow. This serenity is much increased by the mellifluous nature of the writing, the crotchets being largely cast in two-part writing that uses sixths and thirds as harmonies (though the harmony consisting of two fifths superimposed - in bar 2 - is important, for the fifth is to be a prominent melodic interval in the movement). The use of thirds is also evident in the material that accompanies the steady crotchets, many of the phrases outlining a third (see example 1).

Ex.1a



Ex.1b

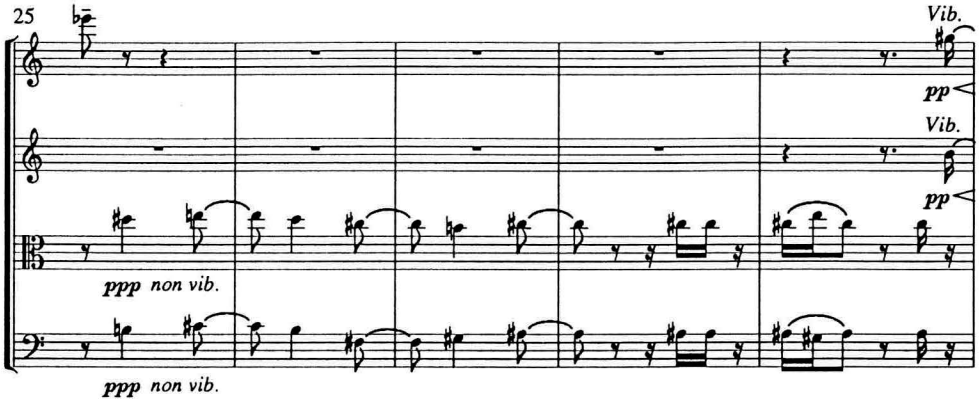


The vocal quality of the writing - a quality found also in the slow Eb central section of the First Symphony - adds to the serenity. The first note outside the key of Eb points to the future course of the piece: this note is A natural, a pitch that occurs in the second violin and cello of bar 5; little notice, however, is taken of it at this early stage. As I have pointed out elsewhere (2) , it is normal for the first chromatic note in a Beethoven Symphony to give a firm clue as to the tonal evolution in the work that follows: Simpson's deep knowledge of Beethoven may have led to him using a similar device, though it is also true that any work that is thoroughly unified must *ipso facto* maintain the use of the unifying elements throughout its whole length.

One other tiny feature is also a pointer to the forthcoming evolution: the dotted-note figure on a single pitch (C) in the second violin in bars 8-9 conflicts wildly with the stepwise vocal-style flow of the surrounding music, and when that figure returns in the viola in bars 15-23 it not only attracts the cello to join it (in bars 16 and 22-23) but it stops the flow of the music. The cello moves up to Gb, a pitch that has been prepared in bars 17-18: its arrival is quite logical since it is another manifestation of the minor third that has already played such a large part. Here, however, the interval is sounded above the tonic in place of the minor third below the tonic of which the listener has already heard a great deal. The viola's Eb and the minor third Gb stutter along in disjointed rhythms (and a little repeated-note stutter derived from it) in a manner that completely undermines the stability engendered by the opening.

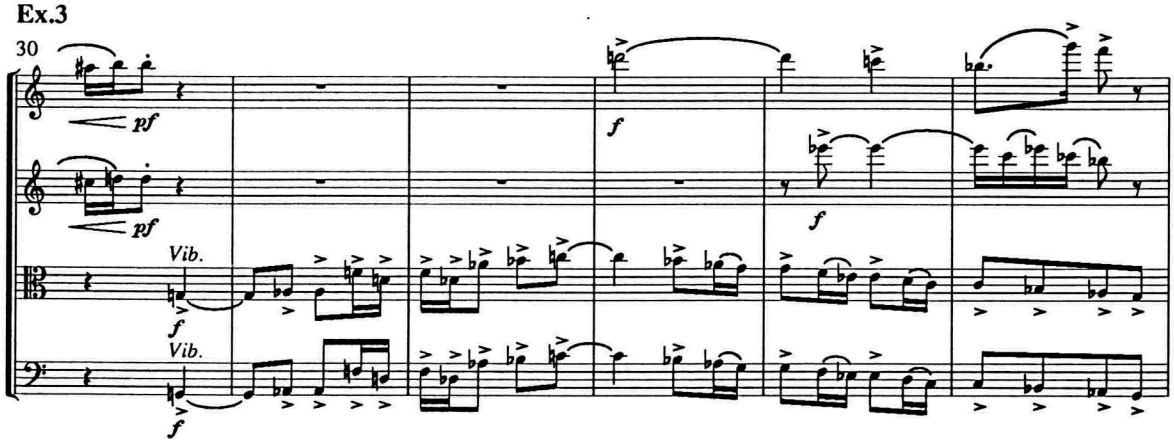
So much is that stability undermined that Gb is taken as a dominant and Eb is spelled enharmonically and taken as a major third instead of a tonic. The opening is distantly recalled (*ppp, non vibrato*), but in the remote key of B major, a key whose root has been prepared as early as bar 6, and the crotchet motion is this time used only in syncopation (see Example 2).

Ex.2



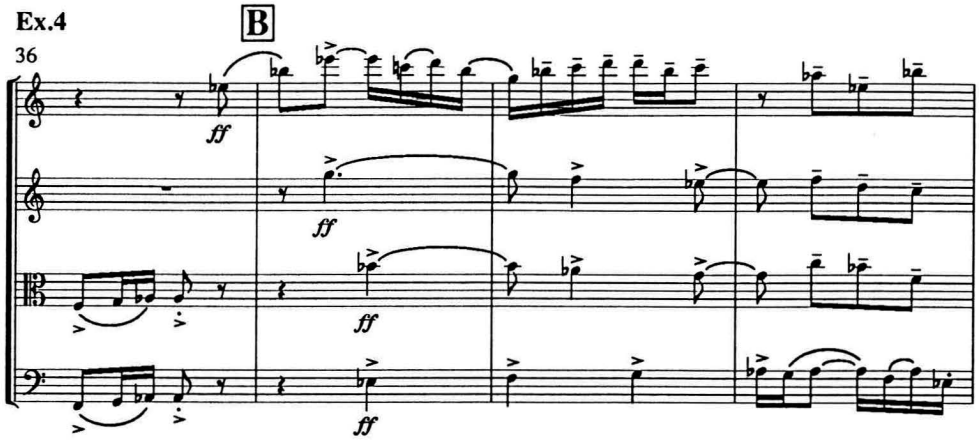
The third of the first subject's ideas reacts to this instability and to the remote reminiscence of the opening theme: it is a striding line in octaves in the viola and cello. quite unvocal and employing an underlying quaver pulse (with some use of semiquavers) rather than the preceding crotchets. There is a rhythmic palindrome at its opening, with dotted-crotchet/two quavers/two semiquavers being immediately reversed: this builds on an idea already briefly proposed, for the quaver-semiquaver-semiquaver rhythm had been used in reverse form at bars 19, 29 and 30. The result in the new thematic idea is much more dramatic, and the striking change of texture gives the impression that this is the second subject - yet the tonality is still basically Eb. The leaps of a third (F-D natural-F-Db) are clearly a version of the thirds in the opening material, but the filling-in of the Db-Ab fifth with these thirds (see Example 3) is of significance because of its treatment later on. That line in bars 31-32 is, indeed, roughly echoed by the second violin in bar 35 - a line that prefigures an important later element.

Ex.3



While this is happening, the viola and 'cello return to stepwise motion, using the quaver-semiquaver-semiquaver rhythm of the opening but inverting the shape of a third used earlier. The mellifluous flowing polyphony of the opening has, meanwhile, turned into a much more dissonant type of contrapuntal writing in the two violins in bars 33ff, and the pulse now clearly moves in quavers rather than crotchets. At letter B all four instruments engage in a piece of dissonant polyphony that clearly uses the various foregoing elements: the stepwise rise and fall through a third, the interval of a fifth (both direct as well as filled in between G and D, both of them in the first violin), and the somewhat 'wedge-shaped' figure from Example 3 (in bars 39-40: see Example 4).

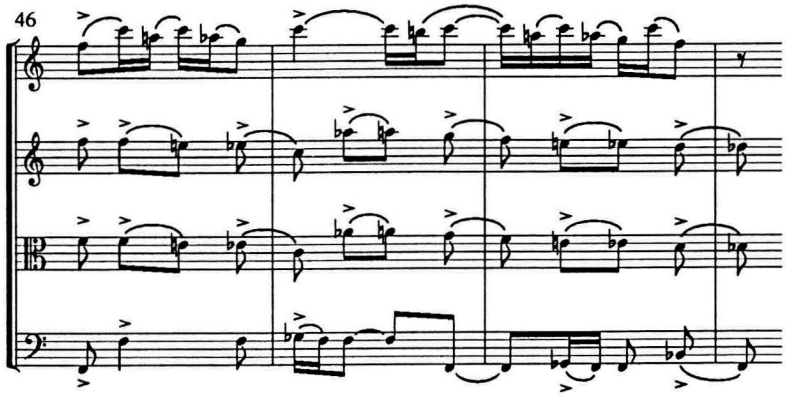
Ex.4



The concentration on smaller note-values leads logically to a diminution of the quaver-semiquaver-semiquaver figure of the opening, though now the rise of a third is inverted (bars 42-44): this diminution is a preparation for the wider use of short note-values that is to follow.

The new-sounding theme at bar 46 derives from bars 35ff: it has an upward leap of a fifth that is subsequently filled up with a stepwise descent, that descent forming a wedge shape in conjunction with the repeated upper note of the fifth. Although developed from earlier material, the idea now attains the shape in which it is to reappear frequently in the remainder of the work. The theme is built of several elements already encountered: the fifth, the descending stepwise line, the interval of a third, and the retrogradable rhythm quaver-semiquaver-semiquaver (see Example 5).

Ex.5

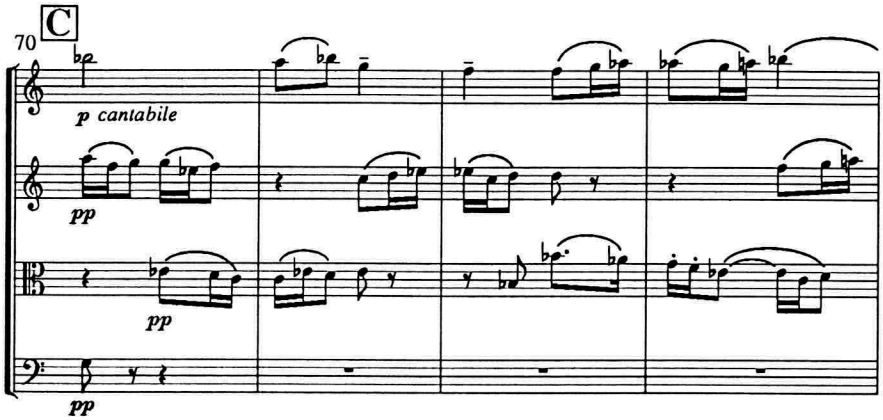


At the same time the 'cello uses a variant of the dotted-rhythm theme, though it is made more insistent by sounding the little note a semitone above the main note. The inner parts - in a chromatic version of the filled-in third - are bowed so that a sense of syncopation results. The growing excitement of all this leads to more diminutions, and these overflow into a passage in which the instruments scurry around in demi-semiquavers which break in upon the stretto version of the theme shown in Example 5 and swamp it. That theme returns in D major at bar 57, while the upper strings insist on a series of pedal notes that grind against it. To make them more powerful, the pedals are given in syncopated repeated notes - a further development of the dotted-rhythm figure. The instruments gather together in fast scalic runs (beginning at bar 63), and stress marks on the notes D, C, Bb and A indicate an underlying stepwise pattern of descent that inverts the stepwise rise

heard at the very opening. The stresses are on beats a dotted crotchet apart, so destroying any feeling that the regular crotchet motion might be continuing. D major gives way to Bb, and as it does so, the scurrying scales melt away, and the style of the opening returns just before the second subject appears.

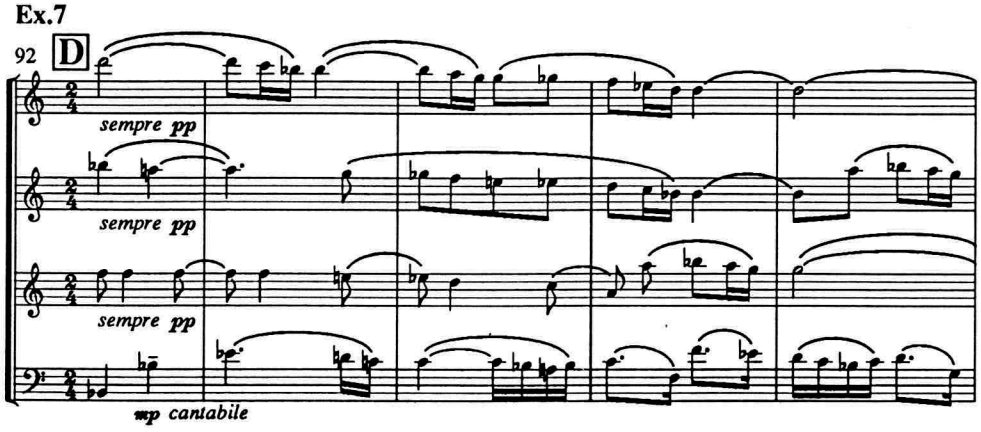
At figure C (bar 70) the second subject begins in the dominant. While this is the classically correct key for the second subject, the feeling of contrast with the opening that would also normally attend the second subject is absent, for the texture is much like that of the first subject. Indeed, the preceding 'new' themes of bars 30f and 40f have much more obviously provided the kind of contrast one associates with a second subject. The crotchet pulse returns at figure C, though with rather more of the quaver-semiquaver-semiquaver rhythm than before (along with its retrograde, the combination of the two giving the impression of faster movement than at the opening); as at the opening, the material makes use of the thirds filled in by step, though they are both rising and falling this time (see Example 6).

Ex.6



One thing that is bound to be different here is that A-naturals are far more in evidence than in the similar passage at the opening of the first subject. This becomes more self-evident still as the second idea of the second subject is reached, at letter D (bar 42; see Example 7), where E-naturals also appear.

Ex.7



As I have said, semiquavers are more prominent here than at the opening, and - as before - the music again overflows into scurrying demi-semiquaver runs, along with some dotted rhythms obviously derived from those of bars 15-24. They pull strongly towards E major and A major, and take on the shape of an alternation of a minor third up and down (though there are also some minor thirds filled in by step): this interval derives from the opening, and the resulting alternation of a third up and down is one which Simpson frequently uses in later Quartets. A struggle between Eb and sharper keys is clear in bars 105-119, where the wedge-shaped theme is used in *fugato* fashion in each of the instruments against the demi-semiquaver background, the entries being in the keys of E, A, D and Bb. The pedals in the violins, often of a dotted crotchet's length, attempt to undermine the regular crotchet pulse which is the basis of the movement. An intense climax is reached at the

end of this passage: here the quaver-semiquaver-semiquaver rhythm of the opening theme is most obviously used in retrograde, and is combined with the dotted rhythm. The *fugato* is the spring-board for what Elgar would call 'the devil of a fugue', and the retrogrades in a similar fashion prepare for the palindromes of the second movement.

This 'devil of a Fugue' fills up most of the Development section, and - as we shall see - its influence is felt beyond it and into the Recapitulation. (There is a regular countersubject in the Fugue's exposition). It is the upward leap of a fifth at the start of the Fugue subject that makes it so memorable. It is vital that the listener should clearly identify the beginning of the subject because of the rhythmic points made by the entries: these are discussed below. The figure that rises stepwise through a third and the dotted rhythm (though not here used on a single pitch) are also found within the Fugue subject, as are the scurrying demi-semiquaver scales. The first four statements are on D, C, Bb and Ab, a series of keys that shows a striving back towards the flat key areas. Each entry starts a quaver later within the underlying pulse than its predecessor, so that the feeling of regular crotchets is further undermined: this use of 'syncopation' was prefigured by the pedals at bars 105ff.

If this progression were to be continued, the next key would be Gb: there is, indeed, a shift towards that area in bars 132-3, though it provides no statement of the Fugue subject, acting only as a phrygian preparation for the entry on F in bar 139. At this point a form of *stretto* occurs, for the entries now arrive a quaver earlier in the bar with each instrument. The keys used are F, Eb and C minor, the expected Db being omitted: the countersubject disappears gradually during these entries, being replaced by a pedal on each new tonic. The viola's C pedal at letter F leads into a *fugato* theme from bar 106, now tried out as a fresh countersubject. The 'cello's high Db pedal in bars 147ff makes up for that missing Db to some extent: there is an F pedal in parallel with it on the viola, and these two - like the preceding pedal - move off into the *fugato's* material.

Db can, of course, be taken as C#, and the fact that the music introduces strong Es and As soon afterwards is an indication that the music has crossed over from its progressive flatwards leaning, having gone far enough to return as sharps. The shift from flats to sharps is symbolised by a technique often used in Baroque counterpoint: from bar 149 to bar 153 the violins alternately scurry upwards towards a high note; each high note is a step above that reached by the other instrument a bar earlier, so that each 'caps' its predecessor. Bb, C, D, E and F are approached in this way - a scalic form that derives from the opening theme of the work as well as inverting the descending scale formed by the entries of the Fugue subjects - and then, as the material changes, G and G# follow. The last entry of the subject in the Development section arrives almost simultaneously with G#, and it is in E, with the opening leap of a fifth turned into a descending fourth. The strength of this entry is increased by using the viola and 'cello in octaves, and the syncopated pedals in the violins help to make for a powerful climax in which the crotchet pulse has been utterly swamped by the torrent of little notes.

The powerful E major entry of the Fugue subject leads to A, and the torrent of little notes stops as that key is reached, uncovering the steady flow of crotchets which the listener now realises must have been going on in the background, unheard, all through the Fugue. The quiet rumination of the opening returns, too: although the point of Recapitulation is traditionally the most exciting event in sonata form, the nature of Simpson's first subject means that less dramatic devices must be used in this instance. (A similar problem faced Beethoven in the first movement of the *Pastoral* Symphony). The A major Recapitulation clearly means that many more open strings are available to the players, and that a more 'open' sound will result than in the Eb version at the beginning: this may well have been a factor in the choice of those keys as antagonists. The stepwise nature of the main theme has been well prepared by the organisation of the preceding bars into a contrapuntal maelstrom in which the two violins vie with each other in striving ever higher, each new climax reaching a step above its predecessor.

The dotted-note figure, though it reappears in the Reprise, does not stop the flow of the music this time: indeed, for quite some while the regular crotchets are so much in evidence that very little other rhythmic activity is heard at all. The four-note phrases which make up the quietly flowing crotchet passage from bar 190 to bar 222 are bowed so that there is continual dovetailing of the parts, and the stepwise four-note phrase - E-F-E-D is typical - is often used in retrograde.

In order to try to change this long-maintained flow of steady crotchets, the Fugue subject returns in a form that is rather like an echo of the end of the Development: the first entry is in A major, but with *pp* dynamics, and there is an immediate *stretto* entry in Eb which halts the A major version in its tracks. The result of this argument between A and Eb is that the Fugue subject is cut up into small portions separated by rests, and announced with the portions a tritone apart. The Fugue subject has, in effect, replaced the dotted rhythm as the feature that attempts to undermine the regular flow of the crotchets. Indeed, the Fugue resumes at bar 222 with entries on E and A (both at the same point of the bar), then on Bb and Eb (each a quaver later in the bar than the preceding entry). Despite the reappearance of the Fugue (sometimes with its countersubject) the flowing crotchets are not entirely submerged. The concentration of accents on the second and fourth quavers of the bar just after letter J (bar 234) as well as the use of the 'wedge-shaped' theme with its bowing marked so as to produce a syncopated effect (bars 239-245) try to undermine the steady crotchets at the same time as providing a struggle between sharp-side keys (in the second violin and viola) and Eb (in the 'cello); and eventually the second subject reappears in Eb at letter K (bar 246).

The use of the tonic for the second subject in the Reprise is correct according to classical precedents: but what is unusual about this second subject is that it is enhanced at the Recapitulation - an idea to which Simpson was to return quite often in his later music. Not only are the dynamics loud this time, but the Fugue subject is used an a accompaniment to the second subject, twice in Eb and once - slightly later - in Db. The second idea of the second subject, also in Eb this time, is again interrupted, though here it is by dotted-note rhythms that seem intent on destroying the flow of the music. These rhythms had upset the flow of the first subject in the Exposition, but in the Recapitulation they have had no effect until now. From letter L the trilled pedals (with repeated notes sounded on weak pulses) and the versions of the head of the Fugue subject that scurry off into prolonged hemi-demisemiquaver runs all help to destroy any feel of underlying pulse. Only after much high-speed scalic writing in octaves does the music settle onto a D, and lead to the Coda, which starts at letter M (bar 301).

D is a good pivot in this work, for it can act either as the subdominant of A or as the leading-note of Eb: and it is to Eb that the Coda moves first of all. The 'wedge-shaped' theme is used *pp* in *tremolo* style, bars 304ff sounding like part of the *Theme Russe* of Beethoven's first Rasumovsky Quartet. This material continues for a time as if in a very quiet but fast Fugue, breaking away only at bar 324 when an unexpected E minor chord is sounded. Thereafter sharp keys attempt to take over, and a crescendo results. The viola and 'cello soon enter in octaves with the 'wedge-shaped theme in Eb (this passage, at bar 330ff, is derived from bars 57ff: the instruments are here attempting to emphasise the tonic, just as they had done in E major at bar 155. Hemi-demisemiquaver runs yet again result from the conflict, and - as at bars 63ff - the accents draw attention to a skeleton pattern of descending steps that lies behind these runs: the notes Eb, D, C and B-natural are placed on beats a dotted crotchet apart, further upsetting any notion that steady crotchets might be providing a background. This headlong rush leads first to an inversion of the 'wedge-shaped' theme (bar 341) in B minor with accents and bowing which try to hide the main pulse, and then to a cadence in D# (=Eb) minor. A further *fugato* on the 'wedge-shaped' theme is accompanied by inverted pedals which, by denying the sense of strong pulses, attempt to undermine a feeling of forward motion: a written out General Pause, in bars 358 and 359, then has a similar effect. In the final bars it is only with a struggle that the second violin, doggedly maintaining its regular crotchets against the syncopations surrounding it, finally drags the other instruments back to the main pulse. Crotchet motion returns at bar 364, and - with a couple of ejaculations in the viola and 'cello recalling the Fugue and leaning towards the tonic minor - Simpson rounds the movement off with a single detached Eb major chord, "stolen from [Beethoven's] Op 127", as he says (3).

Now that the overall shape of the movement is clear, a further influence on the Quartet emerges. Hans Keller described the Finale of Haydn's 'Lark' Quartet (Op 64 No 5 in D major) as:

> "...a complex, monothematic ternary form with a fugal middle section wherein the brilliant, stressedly homophonic theme suddenly discloses its contrapuntal potentialities (4)."

But that is not all: whereas the most obvious Nielsen influence on the Quartet as a whole is in the so-called progressive tonality (5), in the first movement it is the rhythm that, despite an obvious debt to Sibelius, has a more covert debt to Nielsen. In Nielsen's Fifth Symphony the side drummer is

directed to improvise "as if at all costs he wants to stop the progress of the orchestra". It seems to me that the influence of that idea can be felt here, for the flow of the basic crotchet movement is interrupted, and eventually swamped, by syncopations and faster rhythms, the basic pulse trying at times to reassert its authority and eventually doing so - almost too late - just before the end. This point serves to remind us of a comment of the composer's: he has said that in so-called 'progressive' tonality a key is something to be striven for and aimed at; the rival tonalities cannot be easily attained, but must be the result of a certain struggle (6). That struggle can most easily be read in the present movement in the treatment of rhythm: Simpson's idea of using conflicting speeds over the same basic pulse was carried to extremes many years later, in the First String Quintet (1987).

SECOND MOVEMENT: Andante, grave.

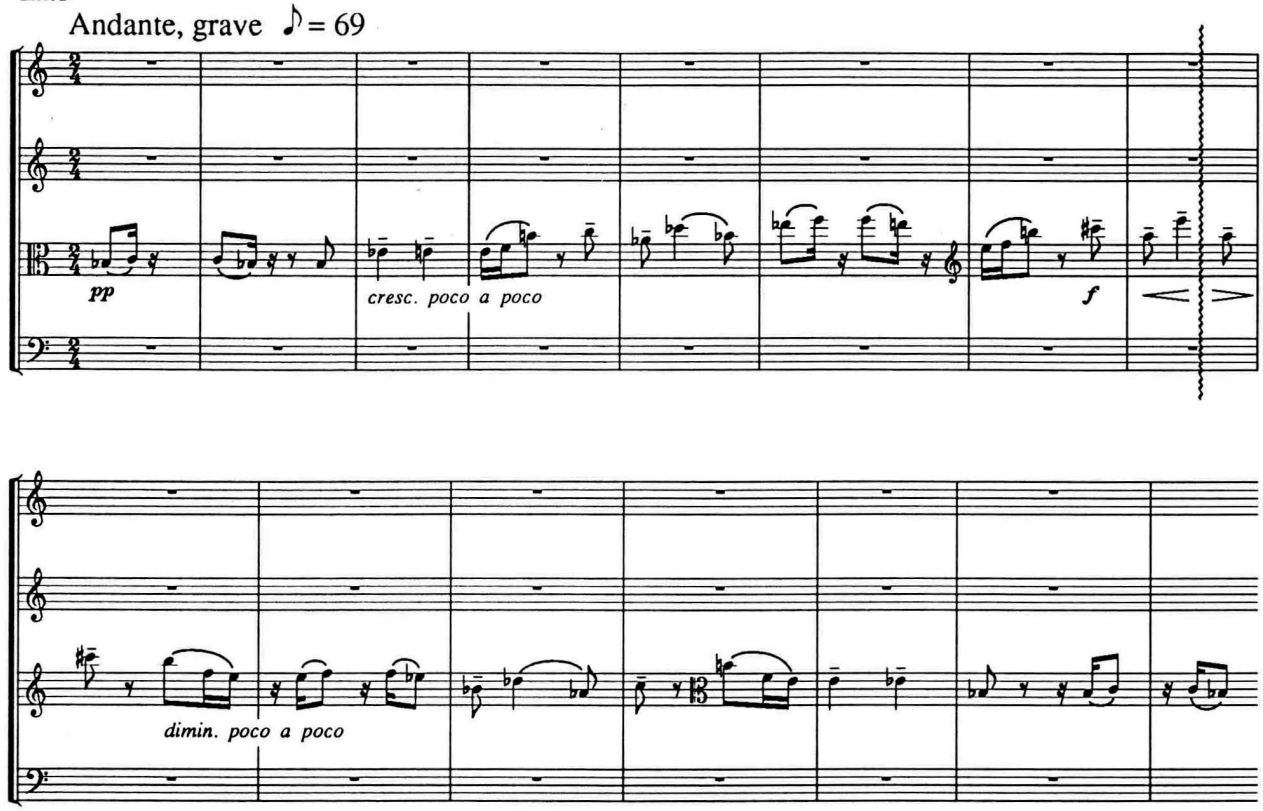
The rhythmic palindromes which Simpson uses at times in the first movement prepare the ground for a much more far reaching use of that device in the second movement. As we observed in the previous essay,the composer has had a lifelong fascination with palindromes as applied to tonal music. The writing of palindromes in atonal music does not really present problems: but in tonal music, where rhythms, pitches and harmonies are directed towards a goal, they are not readily reversible. The IV-V-I cadential progression, for example, has no cadential effect when reversed, and the dotted rhythm becomes a 'Scottish snap': anyone can hear how difficult it is to reverse tonal music by trying a simple experiment - that of playing a hymn tune backwards. Part of Simpson's fascination with mirror forms is due to the fact that - as he puts it - the view one gets when travelling in one direction on a journey is quite different from the view one gets on a return journey.

The composer has provided the following programme note:

> The second movement is a set of variations on a theme for solo viola. This theme has the same tonal outline as the whole first movement - it starts in E flat, rises to a climax in A and falls sadly again to E flat. Each of the seven strict variations follows this course and the effect is of a continual effort to reach and hold the key of A, each attempt baffled. The tension rises through the variations until a severe crisis is created; at this point the music breaks out of the bonds of the variation-form. This time it really achieves its A major and the first violin, as if released, flies into excited running passages. The whole then subsides calmly into a soft coda in A major, containing a naive and gentle dance, formed from all the themes in the quartet (7).

Robert Simpson does not mention palindromes in this programme note, but elsewhere he has pointed out that when writing palindromes it is useful to include little figures that are themselves palindromes, so that the melodic line does not sound contrived when heard backwards. On the other hand, if the structure is to be understood there must clearly be such features as the listener can readily identify as being reversed - features that are acceptable in mirror form without themselves being palindromes, yet obvious to the ear as being played backwards. We can examine these points in the theme (see Example 8).

Ex.8



The wavy vertical line in the example shows the position of the mirror - the point at which the music is reversed. For a short while on either side of that mirror the melodic line makes a clear statement of A major; it is the highest point reached by the theme, the place where the perfect fifth (the largest interval used in the theme, and one that was prominent in the first movement) is attained after various smaller intervals (including the tritone) have been used, and the place where the most 'open' and straightforward tonal statement is made. The climax of the theme vies with a rhythm that is the same when reversed, but the melodic line at that central point - though still triadic - is a little different after the mirror (E-A-C#, as compared with C#-A-E in the *recto* version).

That climax is obviously an A major version of the four-note figure found at the end of bar 4 and in bar 5, where flats are used: this earlier figure - much nearer to Eb - is also reversible rhythmically. The sense of emergence into light as the climax is reached is the more striking because of the expansion of the earlier figure into a clear triadic one that is nearer to the open strings.

There are other derivations. The falling thirds of bars 4-5 are derived from the thirds of the first movement, and the fourths of bars 5 and 6 follow up the one between bars 2 and 3. The first four notes - a figure which this time is reversible melodically rather than rhythmically - is developed in bar 6, and the three-note figure at the start of bar 4 is repeated an octave higher in bar 7. This latter figure has great importance, for the tritone enshrined in it is a readily identifiable feature that helps the listener to follow the music when it is given in mirror form. That figure, more than anything else, is the active ingredient in demonstrating the logic to the audience; yet it has a further function in that its tritone represents the distance between the antagonistic keys, even though it does not use the roots of those keys.

But there is also a more subtle derivation than this, for the three-note phrase Eb-Eb-E natural (bars 2-3) is immediately given in diminution and retrograde as E-F-B (bar 4): this use of a retrograde within the 'outward journey' itself helps to ensure that the mirror form heard on the 'return journey' does not sound contrived. Moreover, it leads to a realisation that one further factor is at work: there is a feeling of onward progression in the 'outward journey' which is provided by the diminution and

by the rise in pitch. The dynamics help, too, as does the fact that the top of the viola solo is placed very high in the instrument's compass (8). There is thus great increase in tension during the outward journey; and this increase is helped by the feeling of pushing onwards which is evident when one compares bars 1-4 with bars 6-8. Not only is the pitch higher in the later version, but the first four notes are turned into a chromatic rather than a diatonic line, and the slower version of the three-note figure that follows (Bb-Eb-E natural) is omitted from the second version, so 'short-circuiting' the argument.

By contrast, the 'return journey' falls from a climatic high point in a way that the composer, in the programme note quoted above, describes as 'sad'. Naturally this sadness is partly the result of the falling line, partly the result of the move back from the 'open' and bright A major to Eb (a key which is less natural for the strings), and partly the result of the slowing down within the melodic line that is bound to result from the reversal of the onward-pushing nature of the outward part of the journey. But one other feature is of vital importance in achieving this effect of sadness, and it is intimately connected with the way in which goal-directed melodic lines change their character when reversed. Bars 9 and 12 have the three-note figure B-F-E, with F on a stronger pulse than E. The mirror form changes the pulse on which the notes appear, since a short note on the left-hand side of a bar line is in the weakest possible rhythmic position, whereas a short note on the right-hand side of a bar line is in the strongest possible position. Naturally, a similar upsetting of the rhythmic strength holds good when notes at other positions in the bar are given in palindrome form. If one imagines a vertical line dividing the bar in half, then the quaver to the left of that imaginary bar will be weak rhythmically, whereas the quaver to the right of it will be strong.

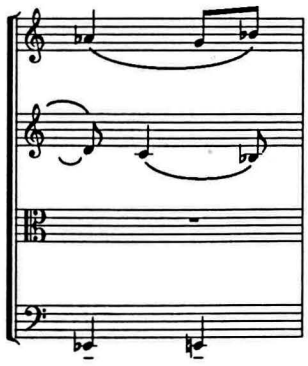
From this it follows that, whereas the figure E-F-B in bars 4 and 7 minimises the impact of F natural, its mirror form B-F-E in bars 9 and 12 places much more weight on F, so giving a phrygian inflection to the progression. This phrygian quality is a powerful factor in creating the feeling of sadness in the second half of the tune (9). The same change in relative strength happens on the larger scale: the Eb-E natural of bar 3 becomes E natural-Eb in bar 13. Here the result is that Eb is much more clearly the tonic in bar 3 than it is in bar 13, for the latter makes E-natural so much stronger.

The rhythmic nature of the argument in the first movement, then, is carried over into the second: and it is of some relevance for us to note that the continual repetition of the theme during the variations provides an impression rather like that of the ground bass - it would feel like a passacaglia if the piece had been in triple time - so producing a kind of inexorable forward tread to the music.

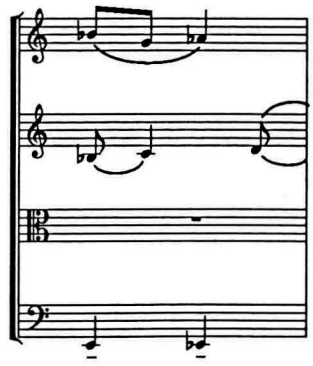
Variation 1 begins at bar 15. Despite the ground bass (or passacaglia) feel of the movement, there is none of the four-squaredness that sometimes accompanies that form, since the 'mirror' is placed half-way through a bar, resulting in variations of an odd number of bars in length: furthermore the note-values of the theme are of wide-ranging lengths, everything from semiquavers to crotchets being included. Indeed, the sense of steady pulse which underlies the first movement is absent from the theme and its seven variations in this one.

In the first variation the two violins add harmony to the 'cello's statement of the theme (the first and last five notes are an octave higher than an exact copy of the theme would produce, since the cello cannot produce a low Bb two octaves below the viola's first note). The two accompanying parts are in a flowing contrapuntal style, and they begin before the theme has finished, so producing half-a-bar of dove-tailing between the theme and the first variation. The provision of harmony of the flowing type immediately raises a serious problem if it is also to be given in mirror form, for suspensions (or other dissonances) and their resolutions cannot be treated in the time-honoured fashion. If in the *recto* version dissonances move down by step onto consonances, then in the 'mirror' consonances will move upwards by step onto dissonances. Simpson does not try to avoid this problem, as composers before him have had to do (10), but he addresses it immediately. Bar 17, for example, has what seems to be a double suspension on the first beat (see Example 9a).

Ex.9a



Ex.9b



The dissonances resolve at different speeds, the seventh in the second violin moving down to a consonance on the second quaver, and the dissonance of a fourth in the first violin moving down to a consonance on the second crotchet beat. In both instances a dissonant note resolves, in time-honoured fashion, by moving downwards by a step. But we cannot take it that such classical treatment of dissonances forms a regular part of Simpson's normal style. Example 9b shows the 'mirror' version of the same passage, and this demonstrates how the composer can make use of the fact that the weak pulses in the 'recto' statement become strong pulses in the 'mirror' version, and *vice versa.* The last quaver of bar 17 has dissonant Bbs whose tritone against the bass passes without attention being drawn to the clash: this is because those Bbs are placed on such a weak pulse. In bar 27, in mirror form, the same tritone dissonance is necessarily transferred to the first beat of the bar where it is in a very strong rhythmic position: because it is much more powerful in this form the ear expects it to resolve; this it does (though not by step down in either of the upper parts) on the second quaver. The two suspensions in bar 17 have their ultimate resolution to the right-hand side of an imaginary line that would mark the second crotchet beat: in the 'mirror' form (bar 27) this becomes the second quaver (to the left-hand side of that imaginary line), and the first violin then moves up to Ab (a fourth above the bass) on the second crotchet. The six-four chord that results in the 'mirror' is a consonant sound in Simpson's language, and the other dissonant note in that palindromic version (D in the second violin) arrives on the very weakest quaver - the last quaver - of bar 27, so avoiding the creation of any primary dissonance by sounding like a passing-note.

Simpson makes two other points in variation 1. Firstly, the series of dotted rhythms in the second violin (bars 18 and 19) is bound to become a series of 'Scottish snaps' when given in mirror form (bars 25 and 26): and secondly, the two violins cease to provide independent contrapuntal parts at the climax, instead emphasising the arrival of the A major triad by converging into parallel octaves at that point. It is as if the interruption in the style of the variation is made as a gesture of welcome to the key of A.

Variation 2 begins at bar 30: whereas variation 1 had started in the bar in which the theme had ended, variation 2 begins a bar after the end of variation 1. The viola, which has been silent throughout the first variation, re-enters here: the first violin takes over the theme, though the latter migrates to violin 2 at the climax (bars 35-39). A new feature of variation 2 is a figure of four semiquavers like a series of raindrops: since these four semiquavers straddle the bar, the figure itself provides a rhythmic palindrome. Otherwise the material of variation 2 is an arrangement in invertible counterpoint of variation 1, with the necessary change that the material has to migrate between the instruments as the climax is reached because the theme itself migrates at that point. Here the figure of four semiquavers moves up from the 'cello - the instrument that has it for most of the variation - into the first violin: at the climax, though, the figure ceases as A major swamps the texture.

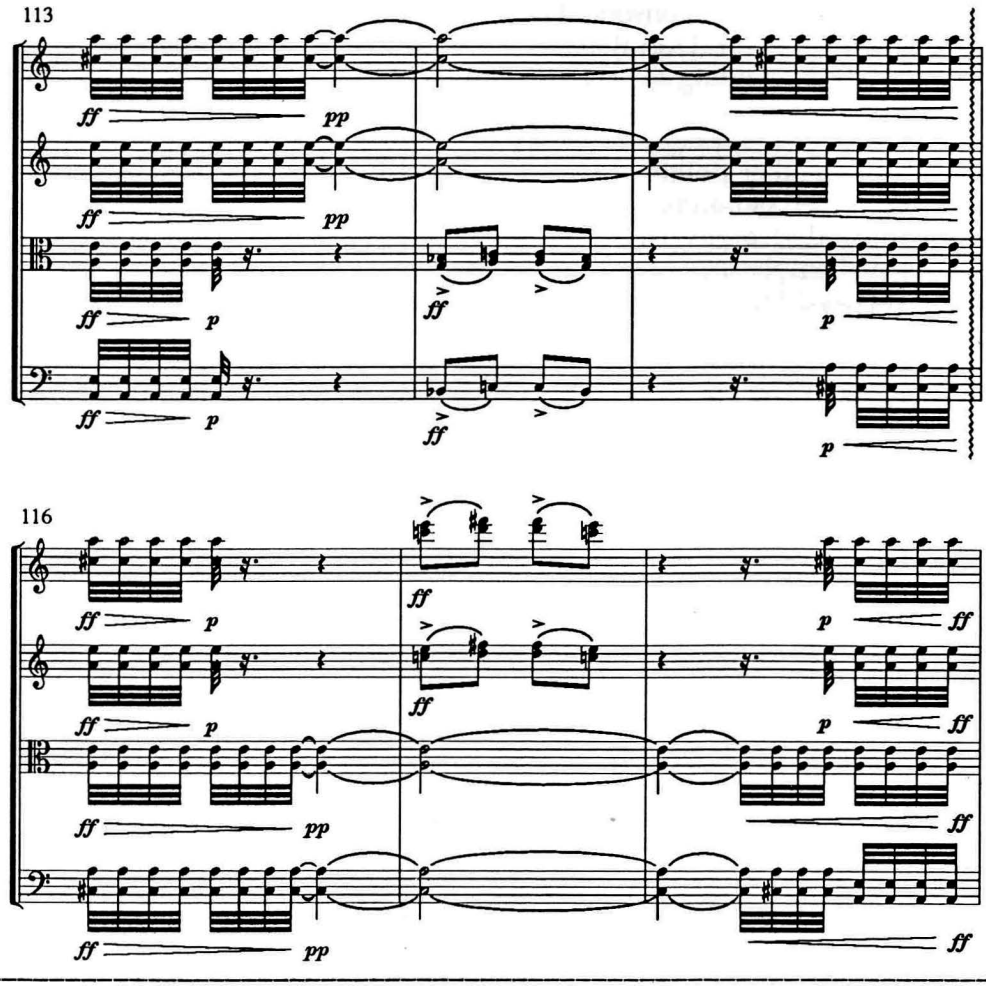
In variation 3 the first violin has a free paraphrase of the theme: this violin part is a *cantilena* consisting entirely of equal semiquavers. The tonal background of Eb-A is stated by the long-held open fifths in the lower instruments, and the additional material which is sketched in (using the 'palindrome' rhythm semiquaver-semibreve-semiquaver) also draws attention to the tonal struggle by using those two key areas. There is a clashing of the two key centres in this variation rather than a movement from one to the other and back again. A link is made into the next variation by

extending the *cantilena* for a bar. Variation 4, in which the progress of the theme is much more clearly identifiable, has its material arranged in layers, and suggests some imitation. The piling-up of parts in imitation inevitably gives an impression of increasing tension, or 'build'; however, the music unwinds itself after the central point where the 'mirror' comes into effect. The limpid quality of the music at the A major centre of the variation contrasts markedly with the surrounding imitation, and again marks out that key as something special. Variation 5 develops the ideas found in variation 4, but it uses a different imitative theme. these two imitative variations begin to suggest that the palindrome form is a trap, because any instance of 'build' that occurs in the first part will necessarily be unravelled after the 'mirror'.

In variation 6 most of the bars contain a rhythm that is itself a palindrome, though melodically the clear rise at the start of the variation is mirrored by the fall at the end, again drawing unmistakable attention to the trap that is set by the palindrome form. There is, however, an attempt to break away from the constricting fetters of that form, for the end of the variation has an *accelerando* and a *crescendo* that do not mirror the start of the variation. Clearly any sense of build through the set of variations is impossible if each one has to return to its point of departure in every element; and here - though the actual pitches and rhythms are given in exact mirror form - the composer's wish to build tension from variation to variation results in him breaking the mould by applying different dynamics and an accelerando during the 'mirror' version of the variation.

Variation 7 continues the idea of making many of the bars themselves rhythmic palindromes, and some are additionally melodic palindromes. It begins by extending the stepwise descent of the end of variation 6 for a further octave, effectively concealing the point at which the one variation ceases and the next begins: this is a further indication that the music is attempting to break free of the trap set by the palindrome-variation plan. The attempt to break out of the mould is yet clearer at the climax of variation 7, for the A major chord is held at first by the upper instruments while the viola and 'cello play the opening four-note phrase of the variation theme against it: after the mirror, however, there is an oblique interchange of elements, the chord being held in the lower (instead of the upper) instruments while the two violins use the opening four-note phrase (see Example 10).

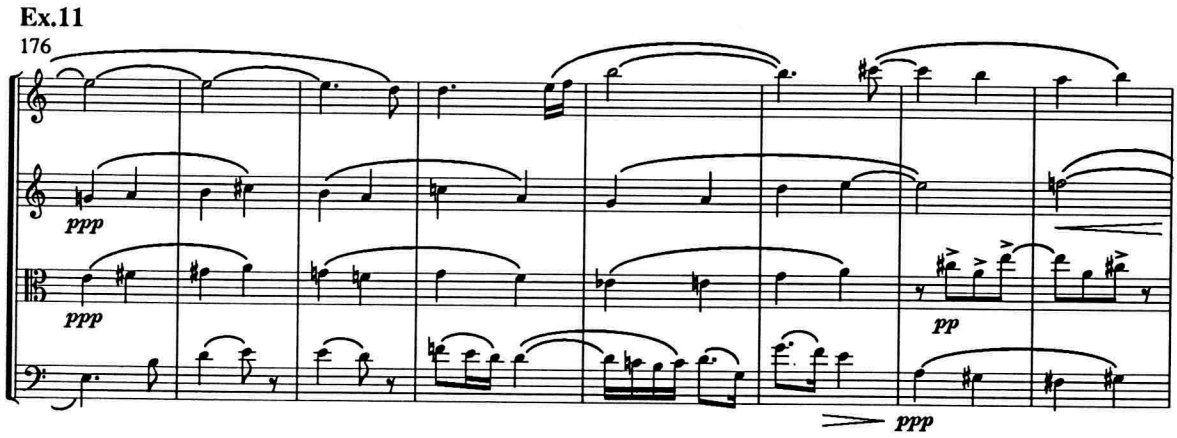
Ex.10



The pitch-classes of the phrases in bars 114 and 117 are not the same: the change indicates a further desire to break out of the mould as well as a desire to increase tension. An exact retrograde would have been 'static' as to the level of tension, for not only would the pitches have been the same in forward and reverse motion, but the two statements would also have been rhythmically identical, since the four-note figure is itself retrogradable. The version with changes of pitch - it does not change the rhythm - thus creates more tension than would an exact repeat. The changes are nevertheless readily heard as mirror versions, for the general shape and the rhythm are both easily identifiable in the retrograde. The evident 'breaking of the mirror' by using it in an oblique fashion results in the A-major area of the climax of the variation having particular attention drawn to it.

This is the final variation, for the music at last breaks out of the straight-jacket. At letter G (bar 126) a long Coda begins, starting with strong imitations based on the opening of the palindrome variation theme, the V-VI-VI-V and the tritone leap being particularly prominent. The large leaps and the use of instruments playing loudly high in their compass make for a very intense sound, and the conflict between flat and sharp keys and the *stretti* also do much to intensify that feeling. From bars 131-137 the steady crotchet motion of the opening movement returns: this motion had been swamped in that piece, and only returned at the end when it was really too late to make its presence felt. Indeed, at bar 135 of the Finale the viola and 'cello even use the key and shape of the chordal background of crotchets that had opened the first movement: little by little, then, the material that seems to refer to Haydn's 'Lark' Quartet is re-emerging. As in the first movement, smaller notes - hemi-demisemiquavers at times - are used in opposition to the steady crotchet movement, and add a further element to the counterpoint. The outcome is that A major is firmly established at last, and the music this time remains in that key: the first violin is clearly so delighted at such a happy turn of events that it scurries around in a cadenza (bars 158-164). Indications that the first movement's material is about to return have been getting stronger - the first violin cadenza has referred to the three notes rising by step as well as to the theme of the variations, and the flowing crotchet background of the first movement's opening has also just been used - and the point has now been reached when the opening material reappears.
The recapitulation of the first movement theme begins at letter I (bar 168), though it has an important change as compared with its earlier appearances, for a new element helps to integrate it into the Finale. That new element is the palindrome theme of the variations, phrases of which are used in the 'cello in bars 177-178, the first violin in bars 179-180, and the viola in bars 182-183: because of this the passage sounds like a further variation - variation 8 - on the Finale's theme (see Example 11).

Ex.11



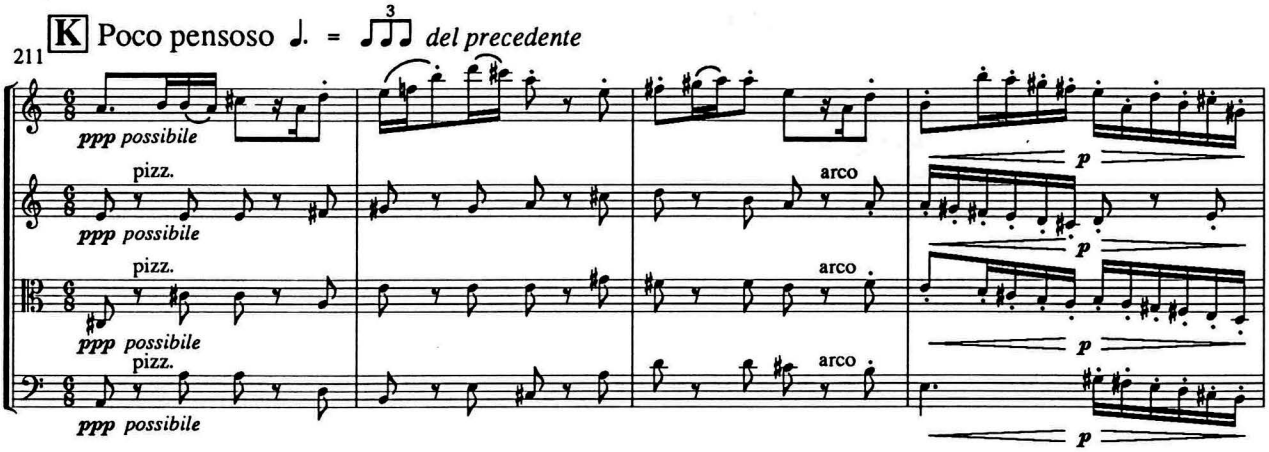
The introduction of the first movement's material into the Finale at a point where A major is eventually settled upon is yet another indication that special attention is being accorded to that key.

The recovery of the first movement theme for a time leads to a passage entirely in crotchet motion, along with an attempt to move back towards Eb: but the pedal E natural will not shift, and once again A ousts its rival, the opening theme of the whole Quartet reappearing at letter J (bar 193). Here the material in the first violin quotes elements of the palindrome-variation theme before moving off into a *cantilena* in sextuplet semiquavers that contrast with the underlying pattern of crotchets. The sense of lightness and freedom of this cadenza-like pattern is diametrically opposed

to the fettered variations, and it is a freedom that soon infects all the instruments, even though elements of the palindrome theme are still present in the music.

Perhaps it is inevitable that the lightness and airiness with which the music has now been infused, along with references to the opening material of the 'Lark" Quartet, should lead Simpson to make further references to Haydn, whose String Quartets he so much admires. He says that he remembers lying in Regent's Park one lunch-time while working for the BBC, and since he was feeling rather good he wrote that feeling into the Haydnesque passage that starts at letter K (bar 211): it is a glorious tune that exorcises all the tensions built up by the palindromic variations, with their 'mirror' trap and Eb-A conflict. Nevertheless, in a sense this tune is yet another variation on the palindrome theme - variation 9 - though like the passage described above as variation 8 it does not use the palindrome shape (the composer has remarked that the tune was purposely written so as to include all the melodic material of the preceding music). The first four notes of the palindrome theme become I-II-II-I, the rising fourth is included, and the E-F natural-B phrase that was the most memorable shape of the whole variation theme is quite obvious (see Example 12, and compare Example 8).

Ex.12



The composer has pointed out that at letter L (bars 221-224) the pattern of thirds is derived from the *Ode to Joy* in Beethoven's Ninth Symphony - a clear indication as to the meaning of this final passage of the Quartet: while admitting borrowing from the *Ode to Joy*, he says that a composer must be careful not to copy his model too directly (11). The flowing semiquavers, with their occasional veerings towards Eb that never succeed in dislodging A, are punctuated by references to the stepwise rise through a third - a feature of the opening theme of the first movement - and the Finale ends with a slow cadence in A major, as if presenting a quiet version of the climax of variation 6 (bars 97-98). The upper parts of the final cadence round out the whole work by using a palindromic version of the C-D-Eb that had opened it (bar 2 of the first movement): not only has the material of the first movement invaded that of the second, therefore, but the palindrome idea of the second has, in turn, acted upon the material of the first movement. As in the versions of the C-D-Eb motif that are much used in the music just preceding the final cadence, however, A major replaces Eb, indicating how completely the opening has been turned round.

NOTES

1. Programme book for the Brunel Philharmonic Society's 1980 Simpson-Beethoven Series, 3rd May 1980.

2. Lionel Pike, *Beethoven, Sibelius and 'the Profound Logic'*, Athlone Press, London, 1978.

3. In a seminar held at his home at Killelton, Eire, in July 1989.

4. Hans Keller, *The Great Haydn Quartets*, Dent, 1986, p.164.

5. Although 'progressive tonality' is a term frequently used in discussions of Nielsen, Simpson himself prefers to use the term 'emergent tonality'.

6. In a seminar held at his home at Killelton, Eire, in July 1989.

7. Programme book for the Brunel Philharmonic Society's 1980 Simpson-Beethoven Series, 3rd May 1980.

8. After sight-reading the first rehearsal, Dorothy Hemming beckoned Robert Simpson over, stuck her viola under his chin, put his little finger on the top string, and then yanked it up a fifth.

9. The matter is discussed in detail in Lionel Pike, *Tallis - Vaughan Williams - Howells: reflections on Mode 3*, Tempo No 149, June 1984, pp2-13.

10. The Haydn palindromic Minuet will be discussed below, along with the treatment of Simpson's String Quartet No 9: Byrd's *Diliges Dominum* is entirely consonant, as is the palindromic Anglican Chant in C by Crotch.

11. In a seminar held at his home at Killelton, Eire, in July 1989. Simpson also commented, "composers can sometimes quote too literally".

Editorial Dr John Pickard, c/o Department of Continuing Education, University of Bristol, 8-10 Berkeley Square, Clifton, BRISTOL, BS8 1HH, England; E-mail: john.pickard@bristol.ac.uk
Typesetting - Text Robert Hill; - **Music Examples** Phillip Maund. **Sub-editing** Robert Hill.
Printing Gaydon Graphicset Ltd., 25 Trowers Way, Holmethorpe Industrial Estate, REDHILL, Surrey RH1 2LH, England.

General communications to the Society and enquiries about membership, subscriptions etc. should be addressed to the Secretary, Brian Duke, 24 Regent Close, FLEET, Hampshire GU13 9NS, England. Record orders should be sent to Mr Robert Hill, 20 Warren Road, REIGATE, Surrey RH2 0BS, England.