Matyas Seiber’s Permutazioni per Cinque

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‘..... It remains the tragedy of the uprooted composer to substitute polyglot versatility for the security of a national tradition. ..... The violent cross-currents of artistic influences ..... may easily result in a creative deadlock or in an encyclopaedic prolixity of style. Seiber manages skilfully to steer clear of both dangers, but only at the expense of musical substance .....’ (Redlich 1954, 148).

These smug, patronising comments from the then Professor of Music at Manchester University can easily be ‘deconstructed’, viewed from the perspective of 50 years on. Nevertheless, Redlich was undoubtedly right about Seiber’s ‘polyglot versatility’. It’s just that in an age of trans-national biographies, polyglot versatility has come to be viewed much more positively in 2004 than in 1954.

Even in the context of the huge variety of expression of which Seiber was master, and the many different types of works which had come from Seiber’s pen by the time he turned 50 in 1955, Permutazioni per Cinque represents something of a departure, and certainly does demonstrate his ease with ‘polyglot versatility’.

To turn from the intense melodic espressivity of Seiber’s Third String Quartet, written in the early 1950s, to the chirpy rhythmic bounce of Permutazioni per Cinque for wind quintet, written in 1958, is to turn to a completely different world: from autumn to spring, from darker shades to bright colours, from serioso to giocoso, from a quasi-symphonic work to a divertimento. Nevertheless, it was not in Seiber’s compositional personality to treat the composition of such a divertimento as a trivial matter. Even such small productions had a full measure of care and attention lavished on them, and, as we shall see, Permutazioni manifests quite a few interesting new turns in Seiber’s musical development.

In terms of cultural lineage, Permutazioni also represents a turn from a style which we could term ‘post-Bergian’ to a ‘post-Webernian’ one. This is not to suggest that Seiber’s style is merely epigonal, in either case: merely to give an impression of the particular genealogy of its style in terms of the compositional practice of the previous generation. Moreover – to pursue the genealogical analogy further for a moment – it takes only a little scratching below the surface to discover additional admixtures of genes in Seiber’s style, taken as a whole, as my remarks below on certain quasi-Stravinskian approaches to form in Permutazioni indicate.

To be sure, one of the features of the style of Permutazioni is the brevity of all of its principal motifs, and the way they are put together to form phrases and textures surely recalls that dialogue of sound and silence which the rising generation of composers after World War II found so novel and so suggestive in Webern’s music, and one of the several features which lead to the dubbing of the 1950s by some historians as the
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‘post-Webern’ era. Indeed, in what follows I shall have occasion to make specific references to particular passages in *Permutazioni* and compare them to particular passages in certain works by Webern. Perhaps one could go further and suggest that like many forward-thinking composers of mature years (though he was, of course, only in his mid-fifties in 1958) of our – or any other – time (Haydn and Stravinsky come to mind in this regard), Seiber was simply learning from what the younger generation were up to, but recasting what he learned in terms which were very much his own.

Hugh Wood suggests that this little work anticipates new directions which Seiber’s work might have taken had he lived a few years longer.

In fact, the light, divertimento-like nature of *Permutationi* masks the considerable potentialities of the ideas on which it was founded; and, alas, these ideas were never to be worked out in his work. (Wood 1970: 890)

To be sure, the works written immediately after *Permutationi* (such as the Violin Sonata, Improvisations for Jazz Band and Symphony Orchestra and the ballet *The Invitation*) show few signs of the new directions to which Wood refers, but Seiber had only two more years to live and a longer gestation period might well have permitted the realisation of the conceptions hinted at in *Permutationi* in a more thorough-going way.

One of Wood’s ‘considerable potentialities’ – indeed, one of the most immediately-striking aspects of *Permutazioni*, and something which makes the work quite different from *Ulysses* and the *Third String Quartet* – is its approach to form. The instrumentation, preoccupation with rhythm, and formal idiosyncrasy of *Permutazioni*, taken together, surely call to mind that most influential of twentieth-century works from the formal point of view, Stravinsky’s *Symphonies of Wind Instruments*. Edward Cone’s celebrated article in the initial 1962 issue of the journal *Perspectives of New Music* on the formal procedures of the *Symphonies* (Cone 1962) points to several features which immediately also strike the most casual listener in *Permutazioni*. For example: an idea is initiated, but before its characteristics are fully developed, it is interrupted by a second idea, and perhaps by a third. Ideas thus ‘left hanging’ are later taken up again as material for variation, truncation, extended recapitulation, transformation into new ideas, or interpenetration with ideas already heard, and so on. Seiber’s own description, quoted by Wood, conveys something of this:

> The various elements constantly enter into new connections with each other so that at every moment different musical situations, so to speak, arise in a rather unpredictable way. (Wood 1970: 889)

The result is a ‘non-linear’ form, in which the thread of continuity follows a tortuous, winding course, which some writers (Pierre Boulez, amongst others) have designated as ‘labyrinthine’. More recently, following up some hints put forth by Stravinsky himself, Richard Taruskin (1996) has shown that the form of the *Symphonies of Wind Instruments* may derive from certain aspects of the Russian Orthodox Funeral Service (*Symphonies* was, after all, written *in memoriam* Claude Debussy). Nevertheless, Cone’s analysis still stands as a convincing account of the formal aspect of the work. *Permutazioni*, likewise, may suggest some kind of mysterious ceremony, but not, as far as I can ascertain, a traditional one of this kind: perhaps some kind of imaginary modern dance routine. On the other hand, its light-hearted character, bordering at times on the humorous, is, of course, completely different from the rather sober, funereal expression embodied in the *Symphonies*. 
Nevertheless, I hope to show that the labyrinthine form of *Permutazioni* is not simply a messy collage, or an illogical mosaic of bits and pieces, but is constructed with a controlling sense of coherent shaping. The fact that we cannot easily categorise its patterns according to formal stereotypes should not preclude *a priori* an account which demonstrates such coherence. In order to do this, I shall attempt a blow-by-blow account of the way in which I hear this piece. This may not be quite the same as the way in which it was composed, but Seiber’s notes on the structure of *Permutazioni* in the Seiber Archive in the British Library (including a fair copy of the score in black ink, with annotations in brilliant red ink written upon it) do seem to lead us along a trajectory of thought which give us a pretty good sense of the compositional process, at least in a general way. My sense of the purpose of these annotations is that maybe Seiber wanted to have by him an *aide-memoire* to which he might later refer, when he composed other pieces, and if that is so, Hugh Wood’s 1970 conjecture about the new compositional directions implied in *Permutazioni* was indeed correct, but Seiber simply never lived to realise them.

Herewith, then, is a blow-by-blow account (but with several asides, prompted by curious and interesting things which rise to attention as we proceed!) through *Permutazioni*. For the purposes of my argument, I have divided the work into ten sections. This is probably not the only way in which the work could be partitioned, but it seems to me plausible.

**Section One (bars 1–10)**

The work begins with a two-phrase musical idea. Since these phrases answer one another (in a sense we shall describe below), I shall use the traditional nomenclature to describe them: antecedent and consequent. But these phrases are framed by a kind of fanfare – a call to attention – which is laid out according to the following rhetorical format: Fanfare > Antecedent > Fanfare > Consequent > Fanfare.

The fanfare also provides the principal harmonic motif of the piece. One might thus compare the fanfare’s role in the piece to that of the first 5 bars of Beethoven’s *Fifth Symphony*. As in *Beethoven 5*, the role of the fanfare is to provide a point of demarcation: to announce a new section or the end of an old one, to provide material for development and then to form the basis of the peroration with which the work ends. Given that *Permutazioni* is scored for 5 wind instruments, it is idiomatically appropriate that such a principal harmonic motif should take the form of a 5-note chord played by all the instruments in rhythmic unison. Distinctive also is its three-repeated-note (double-upbeat) rhythm, and finally, this principal harmonic motif is distinctive in its idiosyncratic combination of intervals and voicing. Reading from the bottom up, we have intervals of 8, 7, 6 and 5 semitones:

\[
\begin{array}{cccc}
& f& f\flat& f \\
G & C & D & E \\
\end{array}
\]

Example 1: *Permutazioni*, bar 1

In addition to these intervallic (8, 7, 6, 5, 4) and textural (rhythmic unison) characteristics, we should also call attention to its features of articulation (staccato) and rhythm (three repetitions). These four features are sometimes modified as the piece goes along, but enough of them are maintained at its many recurrences for us...
to be able to connect the varied manifestations with the original motif.

We know that the character of this motif was at the forefront of Seiber’s mind when composing *Permutazioni*, for his manuscript notes in the Seiber Archive in the British Library show that he wrote down all 24 permutations of the voicing of the four intervals 8, 7, 6, 5, eliminating as he went along those which produced octave replications. The succession 8, 7, 5, 6, for example, was rejected for this reason, and all other permutations in which the intervals 7 and 5 are adjacent. This reduced the possible voicings to 18, most of which are used at some point or other in *Permutazioni*.

In the passage under discussion, as we have already observed, the fanfare initiates and terminates the section, and provides a divider between its two phrases (antecedent and consequent). We shall now call this section as a whole (bars 1–10) the principal theme.

The relationship of divider and terminator to the initiator is that of truncation and expansion respectively. The divider takes the same rhythmic pattern and textural format (rhythmic unison) and the same staccato articulation, but applies them to a single interval (of 4 semitones). The terminator expands the original idea by adding an upbeat and spreading the initiator’s series of intervals (4, 5, 6, 7 and 8 semitones) over two different chords (interval-structures, respectively, reading upwards: 4, 5, 6 and 7, 8, 8, 7).

The result is, clearly, a 4-chord sequence built from (respectively) four different adjacent intervals (5, 6, 7 and 8), then from one (4), then from three (4, 5 and 6) and finally from two (7 and 8).

A different kind of grouping principle (which nevertheless also involves groups of 1, 2, 3 or 4 items) informs the shaping of the antecedent/consequent pair which is framed by this fanfare. In this chapter’s opening remarks, I referred to the embryonic post-Webernian character of *Permutazioni*. One could even relate the opening to a specific passage in Webern: that of the celebrated *Concerto for Nine Instruments*, which likewise begins with a concatenation of four tiny elements (trichords in Webern’s case: the *locus classicus* of what Milton Babbitt had designated as a ‘derived series’, where one hears, in succession, four forms of the same trichord summing to a twelve-tone series).
In the initial antecedent phrase of the first theme *Permutazioni*, the four elements are motifs of 4, 3, 2 and 1 notes, respectively. One might even interpret Seiber’s passage as ‘taking Webern off’ in an affectionately humorous way, given the use of rests to frame each tiny motif in a halo of silence. Humour or not, the phrase also relates to the *fanfare* motif in a structurally significant way. Consider the intervals of these motifs, and firstly the 3-note motif of the clarinet (intervals: 10 and 9) and the two-note motif of the bassoon (interval: 11): in sum, large intervals, complementing the medium-sized ones of the fanfares (4, 5, 6, 7 and 8).

We might thus anticipate that the remaining motif (the flute’s 4-note figure triplet figure) would complement these figures with the small intervals (1, 2 and 3), and thus complete the aggregate of all 11 interval-classes. In the consequent phrase which is to follow, that is indeed what Seiber writes. Just here, in the antecedent phrase in bar 1, however, he places an exceptional (‘wrong’) form of the 4-note motif (intervals: 4, 3 and 11), brought about partly by octave displacement: a wry, humorous gesture of transgression, perhaps? Or perhaps merely an exception designating the motif’s *incipit* status? At any rate, the motif reverts to what, in the context of the work as a whole, we can regard as its normal form (intervals: 1, 2 and 3) in the following consequent phrase (bars 5-9).

Let us turn now to the consequent phrase, firstly in terms of its intervallic structure:
- Flute and Bassoon 4-note triplet motifs: intervals 1, 2 and 3.
- Clarinet 3-note motif: intervals 9 and 11.
- Horn 3-note motif: intervals 7 and 5.
- Two-note motifs (clarinet > horn > oboe > bassoon): intervals 6, 10, 8 and 4.

In rhetorical terms, the consequent phrase presents an expanded variant of the antecedent. The antecedent consists of one motif of 4 notes, one of 3, one of 2 and one of 1, whereas the consequent consists of one motif of 1, four of 2, two of 3 and four of 4. The two phrases are parallel in that, in broad terms, they sweep down...
from the upper register to the lower in both cases. They are parallel – but retrograde-related in rhetorical shape – as the following summary demonstrates.

Antecedent motifs: 4 notes (flute) > 3 (clarinet) > 2 (bassoon) > 1 (horn)
Consequent motifs:
(a) Principal line: 1 note (oboe) > 2, 2, 2 and 2 (clarinet > horn > oboe and bassoon) > 3 and 3 (clarinet > horn) > 4 (bassoon)
(b) Accompanying contrapuntal ‘descant’: 4, 4 and 4 (all flute).

![Example 5: Permutazioni, bars 5–9](image)

This summarises most of the main structural aspects of the principal theme, which – overall, because of its antecedent/consequent pairing of phrases – seems to follow essentially a classical *period* pattern. We have not thus far mentioned its general character, except by implication. We shall refer to it as the *giocoso* theme in order to contrast it with what ensues as the work unfolds.

**Section Two (bars 10–21)**

Immediately following comes a contrasting theme, based on variants of a new motif. This new motif also consists of 4 notes. To distinguish it from the triplet motif of the *giocoso* theme, we shall call it the *cantabile* motif. Its characteristic rhythm, also new, is crotchet > quaver > crotchet > quaver. This new 4-note motif is given out by the bassoon. Its intervals are 9, 10 and 11 semitones. Its shape is also important: rising and falling, an ‘inverted parabola’.

![Example 6: Permutazioni, bars 10–11](image)

But although this is a new motif, the two tiny development phrases which follow and are built upon it – developments of the kind we might call *unfolding* developments (*entwicklungen*) – share with the first theme a structure of small overlapping units, along the lines of the opening of the Webern *Concerto* (cf Example
3, above). Indeed the Webernian character could be said to be even more marked here, as the four units are overlapping transformations of the bassoon motif. By that I mean that they share the bassoon’s rhythmic motif, but have different intervallic characters:

The different intervallic characters, taken together, sum to an intervallic aggregate structure, as we can see if we tabulate the intervallic characteristics of each:

**Phrase 1 (cf Example 7): four versions of the motif (of 4, 4, 4 and 3 notes respectively):**

- **Flute:** Cantabile motif, contour inversion, intervals 9, 10 and 11
- **Clarinet:** Cantabile motif, intervals 6, 7 and 8
- **Oboe:** Cantabile motif, contour inversion, intervals 5, 4 and 3
- **Horn:** Cantabile motif truncated (3-note version), intervals 2 and 1

**Phrase 2, in which the motif is heard in reduced 3-note form (‘liquidated’, to use Schoenberg’s term) passed amongst all 5 instruments:**

- **Flute:** Cantabile motif, varied and truncated, intervals 11 and 10
- **Clarinet:** Cantabile motif, contour inversion, varied and truncated, intervals 5 and 6
- **Oboe:** Cantabile motif, contour inversion, varied and truncated, intervals 9 and 8
- **Bassoon:** Cantabile motif, varied and truncated, intervals 7 and 4
- **Horn:** Cantabile motif, varied, truncated, and elongated, intervals 3 and 1

This use of intervallic aggregates is, of course, something which this second cantabile theme shares with the opening giocoso one.

At this point we pause for an aside, since another way of looking at the intervallic aggregate of the second part of Example 7 (bars 12–14) is as a flute motif passed to clarinet, then oboe then horn, undergoing a character-change in the process (because of the contrasting intervals assigned to each instrument). This may remind us
Example 7A: Elliott Carter: *Second String Quartet*, bars 286–297
of a similar process of instrumental characterisation which appears in (for example) Elliott Carter’s *Second String Quartet* – composed in the same year (1958) as *Permutazioni* – and later developed by Carter in much more elaborate and extensive ways. Our example is the beginning of the slow movement of Carter’s quartet (see Example 7A).

Phrase 1: The movement begins with a 5-note rising figure in the viola, grouped as 1+3+1. This figure is imitated by the cello: again a 5-note rising figure, grouped 1+3+1, but outlining a different succession of intervals. Note that the pattern of dynamics (crescendo-decrescendo) is also shared. The last three notes of the cello’s figure are then imitated by the first violin: same shape and rhythm, different intervals.

Phrase 2: a 3-note *falling* figure (grouped as 2+1), descrescendo, passed from viola to second violin to first violin.

Phrase 3: a descending, decrescendo 2-note figure with an expressive emphasis on the first note. It is passed from viola (descending tritone) to first violin (descending minor third) to cello (descending minor seventh) to second violin (descending major third).

Phrase 4: a three-note figure, rising and falling, crescendo-diminuendo, but each instrument is characterised by very different intervallic and rhythmic features.

Of course, Carter’s concept of musical discourse as a kind of dramatic dialogue of instrumental characters depends ultimately on differentiation of behaviour in a more extensive sense than in this small excerpt, but indeed Seiber’s sense of dramatic dialogue in *Permutazioni* also becomes more extensive as the work proceeds. It progressively calls into play more extremes of rhetorical differentiation, a process which reach its zenith in the cadenza passage (bars 140–169).

Returning to our passage in section 2, we may note that this little unfolding process is then cut short by what we shall call a third motif: its role of bringing an unfolding process to a conclusion suggests that we should call it a *cadence* motif. The motif consists of a flourish (a rapid 8-note *gruppetto*) in octaves and multiple octaves between flute and bassoon (bar 19). Despite this octave doubling, the variation between single-octave doubling and multiple-octave doubling allows the contour of flute and bassoon parts to differ, thus enabling the intervals of the two parts to be either similar and different. The result is: flute 6, 5, 7, 8, 9, 10, 6, 11 and bassoon 6, 5, 5, 4, 3, 10, 6, 11.

This *cadence* motif is, however, followed by an afterthought (*anhang*), which completes the set of intervals outlined in the cadence flourish: a chord on horn and clarinet (interval 4) and a scrap of melody, which is a reminiscence of the flute’s 4-note triplet motif from theme 1, but with the *cantabile* character of the motif on
which theme 2 is built (intervals 3, 2 and 1).

Example 9: *Permutazioni*, bars 19–21

I have analysed this *flourish* motif and its *afterthought* in terms of its complementary intervallic content, in the light of the structure of both the *giocoso* theme and the *cantabile* one, which seem to be conceived in such terms. However, it is probably significant that the flourish also consists of eight different pitch-classes: a truncated pitch-class aggregate in fact. Subsequent developments of this flourish motif suggest that we should think of it as an embryonic twelve-tone aggregate to complement the twelve-interval aggregates on which we have been focussing attention. Most of *Permutazioni* is not conceived in twelve-tone terms, but twelve-tone aggregates – or even, as we shall later see – twelve-tone series (ie ordered series, not just collections of twelve items) do occasionally emerge.

To conclude this discussion of the second theme, we may notice that its overall shape seems to follow a classical *sentence* pattern (statement of an idea > ‘liquidation’ of its main features > cadence phrase) with an added *afterthought*: quite different from the first theme’s *period* pattern of balancing antecedent and consequent phrases. The two themes are thus contrasted in structure as well as in character.

**Section Three (bars 21–35)**

The stage is now set for a dialogue between the various motifs and characters (*fanfare, giocoso, cantabile, flourish*) which have been exposed in the course of putting together these two themes during the work’s first 21 bars.

The third section, starting at the change of tempo (crotchet = MM 90, in the second half of bar 21), begins with a development, or more precisely another *unfolding* (*entwicklung*), this time based on versions of the motifs heard during the course of the *giocoso* first theme. The unfolding is built upon a selection of very short rhythmic motifs, and a limited set of intervals: material which is laid out by the bassoon phrase which initiates this section (bars 21–23). Four motifs are exposed, all of them derived from the *giocoso* theme, and the phrase is also built on a selection of 5 of the 11 possible interval-classes. The 4 motifs (a, b, c and d) and the intervals 6*, 5, 4*, 7 and 3* (compound intervals, in the case of the three asterisked intervals) are indicated in Example 10:
This use of compound intervals for the *giocoso* material is pretty well new: only the interval 6 (in bar 6) was compound in the first appearance of the *giocoso* theme at the beginning of the work (bars 1–10). These compound intervals in bars 21–31 accentuate the *giocoso* character, that is – appropriately, for an *unfolding* section – the *unfolding* process intensifies the character of the material on which it is based.

The *unfolding* section builds up from this single voice (bassoon) to two voices (add clarinet), to three (add oboe) to five, although the five-voice culmination is of ‘3+2’ texture: 3 voices in rhythmic unison (oboe, clarinet and bassoon), with the other 2 voices (flute and horn) counterpointed against them. The two counterpointing voices are in close rhythmic canon at the distance of a quaver: a Webernian characteristic which can be compared with the opening of Webern’s *Saxophone Quartet*, and which will be taken up more extensively later in *Permutazioni*:

This *unfolding* section treats both the rhythmic motifs and the interval-class succession in certain quite precisely-composed ways. Thus, if we annotate the bassoon’s opening rhythmic-motif succession as a–b–c–d and its intervallic succession 6*–5–4*–7–3*, as in Example 10 above, the clarinet phrase which enters in bar
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24 states the following permutations: a–c–b–d and 7–6–4–5–3* and continues at bar 26 with c–d–a–b and 6–4–5–8–3* (the ‘8’ is an ‘oddball’ exception) while the oboe enters with c–b–a–d and 6–7–4*–5–3*. In other words we have here a kind of *invention* based on permutations of 4 rhythmic motifs and permutations of a succession of 5 intervals.

At this point, the flute and horn enter and set up a ‘3+2’ texture (bars 29–31): a double-layered textural dialogue with the three instruments already playing:

(i) The flute/horn layer comprises 2-voiced counterpoint in close rhythmic imitation; both flute and horn present the motif-permutation d–c–b–a with the interval-permutation 6*–7–3*–4–5* (flute) plus 4*–5–6*–3*–7* (horn).

(ii) For the oboe/clarinet/bassoon layer we have a 3-voiced rhythmic unison; all three instruments present the motif-permutation c–d–a–b with the interval-permutation 3*–5–4*–6–7* (oboe) plus two irregular successions for clarinet and bassoon: 3*–6–4*–5–8* and 3*–7–4*–4–9 respectively (possibly due to misprints in the score?).

But despite certain deliberate or inadvertent transgressions of the formation-principle behind this passage, we can see from the following table that essentially just 6 of the possible 24 permutations of the 4 motifs are actually used. Some of the others appear in later passages, however.

<table>
<thead>
<tr>
<th>Bar</th>
<th>21 ff</th>
<th>24 ff</th>
<th>26 ff</th>
<th>29 ff (‘3+2’ texture)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flute</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>d–c–b–a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6*–7–3*–4–5*</td>
</tr>
<tr>
<td><strong>Oboe</strong></td>
<td></td>
<td>c–b–a–d</td>
<td></td>
<td>c–d–a–b</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6*–7–4*–5–3*</td>
<td></td>
<td>3*–5–4*–6–7*</td>
</tr>
<tr>
<td><strong>Clarinet</strong></td>
<td>a–c–b–d</td>
<td></td>
<td>c–d–a–b</td>
<td>c–d–a–b</td>
</tr>
<tr>
<td></td>
<td>7–6–4–5–3*</td>
<td>6–4–5–8–3*</td>
<td></td>
<td>3*–6–4*–5–8*</td>
</tr>
<tr>
<td><strong>Horn</strong></td>
<td>a–b–c–d</td>
<td>a–d–c–b</td>
<td></td>
<td>d–c–b–a</td>
</tr>
<tr>
<td></td>
<td>6*–5–4*–7–3*</td>
<td>6*–5–4*–7–3*</td>
<td></td>
<td>4*–5–6–3*–7*</td>
</tr>
<tr>
<td><strong>Bassoon</strong></td>
<td>a–b–c–d</td>
<td>a–d–c–b</td>
<td>c–d–a–b</td>
<td>c–d–a–b</td>
</tr>
<tr>
<td></td>
<td>6*–5–4*–7–3*</td>
<td>6*–5–4*–7–3*</td>
<td></td>
<td>3*–7–4*–4–9*</td>
</tr>
</tbody>
</table>

From this table, one can see that what we have here in section 3 is a passage which complements what has taken place during sections 1 and 2 in various ways. The use of a different kind of development is one such way: in place of the *unfolding* process (*entwicklungsprozess*) which we have had hitherto, characterised by a concentration on ‘motivic narrative’, as the term *unfolding* implies, at this point the themes are led through some dramatically different new contexts (*durchführungen*). The appearance of more obviously cumulative shaping of material is another change indicative of this new level of development process.

More specifically important for later sections of the piece is the idea of a passage based on a restricted bunch of interval-classes (3, 4, 5, 6, 7) in place of sections based on aggregates of all eleven interval-classes.

In this respect, the passage suggests compositional thinking related more specifically to those of other works of this mid-1950s period. Another work based on the interplay of aggregates of intervals and restricted interval-bunches is Milton Babbitt’s *Second String Quartet*, composed in 1954, in which a sequence of passages based on different restricted bunches of intervals precede and lead up to a culminating passage where an all-interval
Example 12B: Milton Babbitt: *Second String Quartet*, bars 1-3

\[ \text{Example 12C: Milton Babbitt: *Second String Quartet*, bars 93–96} \]

\( \text{Example C: Milton Babbitt: *Second String Quartet*, bars 9–96} \)
series emerges. Seiber and Babbitt knew one another quite well; they were, for example, both delegates to the ISCM in 1952, Babbitt as the American representative, Seiber as the British one, and ten years after Seiber’s death, when *The Musical Times* ran a series of tributes *in memoriam Matyas Seiber*, Babbitt was one of the contributors. So it is quite possible that this structural feature in *Permutazioni* was more than a matter of the general structural *zeitgeist*, and a quite conscious relationship to a particular composer and work. However that may be, Example 12A shows the eventual all-interval series of Babbitt’s *Second String Quartet*, as it occurs at bar 266:

![Example 12A: Milton Babbitt: Second String Quartet, bars 266–268](image)

Compare this with Example 12B, the quartet’s opening (bars 1–3), which is based entirely on the first interval of this series (the interval ‘3’) only, and Example 12C, the ‘slow movement’ section, based entirely on the extracted tetrachord (interval-sequence 5–9–1) formed by notes 3 through 6 of the series.

This *unfolding* passage is then terminated by another framing appearance of the original *fanfare* motif. Here we see most of the features of the motif from its original form: note the same rhythmic figure and staccato articulation with intervals, reading upwards, of 5, 6, 7, 8, although one can also notice that the horn component has been rhythmically displaced by a semiquaver (picking up, perhaps, the feature of close canon from the climactic passage of the immediately-preceding development section), thus modifying the 5-voiced rhythmic unison textural format to become a ‘4+1’ texture. This ‘4+1’ texture then gives rise immediately to a four-voiced ‘afterbeat’ (intervals 7, 6 and 5).

![Example 13: *Permutazioni*, bars 32–33](image)

Like the second section, this third section then concludes with the introduction of a new 8-note motif, which we shall call, given its textural character, the *klangfarben* motif: a series of 8 isolated single notes and a concluding pair, outlining intervals which complement those of the *fanfare* motif (4, 3, 2, 1, 10, 9 and 11).
Graham Hair: Matyas Seiber’s *Permutazioni per Cinque*

Again, this *klangfarben* motif is framed by the *fanfare* motif, which, however, appears in yet another new guise: still recognisable from its rhythmic figure (the 3-note figure ‘c’, to use the nomenclature introduced above), its rhythmic unison textural format (but now with only 4 voices, not 5) and its staccato articulation, but this time its harmonic character is modified (intervals from bottom to top: 3, 2 and 1).

**Example 14: Permutazioni, bars 33–34**

**Section Four (bars 36–44)**

This brings us to section four, and we are now able to see a larger-scale pattern of events emerging from these fragmentary musical motif-groups, for the basic shape of the section again consists of a development of a previously-heard idea, followed by a new idea as *cadence phrase* and the whole framed by a version of the *fanfare* motif.

This fourth section (tempo 66) begins at bar 36. First comes a development of the *cantabile* material. There is no truncation process at this appearance. Four statements of the *cantabile* motif appear: three are complete (4-note) versions, the other an expanded (5-note) version. Indeed, from the rhythmic (or at least the durational) point of view, the motif is actually expanded: in place of the original crotchet > quaver > crotchet > quaver pattern, each of the four notes is now a dotted crotchet. The following table summarises the intervallic characteristics (bars 36–41).

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bassoon</td>
<td>5, 6, 7 and 8 (expanded version)</td>
</tr>
<tr>
<td>Clarinet</td>
<td>9, 10 and 11</td>
</tr>
<tr>
<td>Oboe</td>
<td>5, 6, 7 and 8</td>
</tr>
<tr>
<td>Flute</td>
<td>9, 10 and 11 (contour inversion of the clarinet part)</td>
</tr>
</tbody>
</table>

Although in the preceding paragraph I described the cadence phrase as a new idea, it could be construed as a version of the *flourish* motif, for it consists of a rapid 7-note *gruppetto* in the horn (muted and cuivré). Like the *flourish* motif, it consists of a series of different pitch-classes, and could thus be seen as an embryonic twelve-tone aggregate, and indeed – very definitely, in this case – as an embryonic twelve-tone series, for its ordering of intervals is 1, 2, 3, 4, 5, 6 and 7, a preliminary, fragmentary version of what will ultimately become a twelve-tone series incorporating the interval-aggregate, ie an all-interval series. Because its structure is based on a sequence of different pitch-classes as well as different interval-classes, I will call it the twelve-tone
flourish motif, despite the fact that it contains only seven pitch-classes at this point!

Example 16: *Permutazioni*, bar 42

Again, the fourth section, like sections 1 and 3 of what has preceded, is framed by the fanfare motif, but now in a transformation which will have larger consequences for the later course of the work. Again we have three repeated 5-note chords, but just as the third section closed by applying new intervals (3, 2 and 1) to this chord, it appears here in tandem with yet another new set of intervals (8, 9, 10 and 11). Moreover, although the repeated-note rhythm is retained, the length of the chords and the pianissimo dynamic means that the original giocoso character is much dissipated. Clearly, this is a more far-reaching transformation of the fanfare motif. Indeed we will give it a new name: the sostenuto motif. Its significance is that it becomes the basis of an extended development section (of the durchführung type) later on, whereas the original form of the fanfare motif has had essentially a signalling (non-developmental) function up to this point.

Example 17: *Permutazioni*, bars 43–44

**Section Five (bars 45–76)**

The motivic, structural and character patterns which have been established during the first four sections are taken further in section five. Like sections three and four, section five opens with a development phrase, developing material (the twelve-tone flourish motif) which has not until this point been subjected to any real development (indeed has only occurred en passant hitherto); again a new motif is subsequently introduced (at bar 48). But section five is also the terminal section of what we shall call the expository process: after its conclusion (in bar 76), no significantly new material is thereafter introduced in the remaining 187 bars of the work, though various new transformations of the material laid out in the exposition do later appear.

Section five is therefore also culminating in character in another sense: after the development of the twelve-tone flourish motif, the music circles back to bring together some of the material which has occurred earlier and which will acquire greater significance in the later progress of the work. This includes the first complete statement of the twelve-tone flourish with all twelve interval-classes and all twelve pitch-classes in place at the same time (bars 55–56), and an extended development of a version of the cantabile motive which appeared as a mere afterthought phrase at the end of section two (bars 20–21). The reason for highlighting this apparently insignificant afterthought is not really very apparent in section five itself, but its significance becomes evident later, when it forms one of the three motifs which are used to construct a long cadenza-like passage (bars 136–169), which in general character (relaxed and improvisational) is a foil to the intense motivic consistency and concentration and the technical rigour of most of the rest of the work.
So section five begins with a development of the twelve-tone flourish motif. It starts out with a 7-note gruppetto (7 different notes outlining 6 different intervals), rather similar to the version of the flourish motif which was heard near the end of the previous section (in bar 42), though it is not just a transposition or other obvious transformation of the 7-note gruppetto heard there, but a permutation (5–6–3–4–2–1) of the interval pattern of bar 42 (1–2–3–4–5–6). This version of the flourish motif is then developed by extension. The extensions consist of further gruppetti (of 4, 5, 4 and 4 notes in turn). This time the twelve-tone aspect of the motif is not just embryonic, however, for these gruppetti expand the motif to a length of 24 notes in all, and these 24 notes between them spell out two complete twelve-tone aggregates (though they are aggregates unrelated by any of the usual twelve-tone transformations – transposition, inversion, retrogression and combinations thereof – and thus must be counted as ‘independent’ series from the twelve-tone point of view).

The expansion of this twelve-tone flourish motif, from a single 7-note gruppetto in bar 42 into a phrase of 5 gruppetti and 24 notes in the course of bars 45–49, also allows space for the completion of the ‘interval-aggregate’ (of all 11 interval-classes) as well, by outlining the intervals 7, 10 and 11 (in the first 4-note gruppetto), and then the intervals 9 and 8 (in the initial two intervals of the 5-note gruppetto). Taking these last two intervals as common, the remaining 10 intervals also spell out (well almost! - with the exception of the repeated ‘2’ in place of ‘11’) an interval-class aggregate.

Picking up the rhythmic displacement process which was applied to the giocoso motif (in bars 29–31) and the fanfare motif (in bar 32), this development process proceeds in the same way, by canonic imitation at the octave: clarinet answered by oboe an octave higher answered by flute an octave higher again.

Then the final new motif is introduced. We shall call it the horn-call motif, from its first appearance, which is indeed in the horn (in bar 48), though it is passed back and forth between horn and oboe in the course of unfolding into a complete phrase. Its distinctive features are its dramatic character, its rhythm (using syncopation and quaver triplets), and a predominance of wide intervals (8, 9, 11, 5 followed by 11, 9, 8 followed by 10, 6, 3* followed by 4*, 10, 3*), where asterisks indicate compound intervals.

This horn-call motif is accompanied by a motif which combines characteristics of the fanfare motif (see bar 1) and the ‘c’ element of the giocoso figuration (see bar 23) on the basis of the rhythmic figure which is common to both. But this time, both the repeated-note element and the rhythmic-unison textural format are eliminated in favour of a melodic feature: a conjunction of the intervals 2 and 1, forming a trichord figure which will be
picked up again later in the piece.

Example 20: *Permutazioni*, bars 51–55

Like section two, this first part of section five comes to a halt with the twelve-tone flourish motif (forming a cadential phrase) followed by an afterthought phrase, precisely like the end of section two (bars 19–21).

Example 21: *Permutazioni*, bars 55–60

This twelve-tone flourish motif outlines the twelve-tone succession F, G A flat, D flat G flat, C, A, B D sharp, D, B flat, E (intervals 2, 1, 7, 5, 6, 3, 10, 4, 11, 4, 6: viz an aggregate of eleven interval-classes minus the 8 and the 9). The afterthought which follows (bars 57–60) presents the characteristic elements of the afterthought motif, drawn from the afterthought at the end of section two (bars 20–21): a 4-note clarinet motif (intervals 4, 3 and 2) accompanied by a dyad (interval 1) on horn and oboe, with a rhythmic character consisting of an incipit of 3 adjacent semiquaver attacks, the third of which is a long note, and terminated by a single note to end the phrase. Then finally comes another development of the cantabile motive, this time much more extended (bars 61–72), and a terminal statement of the fanfare motif, more or less in its 5-voiced original form (intervals 8, 7, 6 and 5), albeit slightly modified and extended (bars 73–76).

Example 22: *Permutazioni*, bars 73–76

This variation of the fanfare motif rhythm (stuttering groups of 4 attacks, 2 attacks and 1 attack) has extensive implications for the peroration with which the work is to end, where the repeated-note figure will dominate the dialogue between the repertoire of motifs in order to create an intense, emphatic rhetoric, suitable for a final
climax and conclusion.

Thus, at bar 76, ends what we might call the Exposition section of *Permutazioni*. Of course, such a description implies expository tendencies, rather than a section from which development processes are excluded altogether, for as we have noted, development of two or three different types has in fact occurred. But development of a much more far-reaching kind does begin to make its appearance thereafter, so I insist on distinguishing the first 76 bars from the idea of a true development section *per se*, beginning at bar 77.

**Section Six (bars 77–98)**

The development process falls into three parts, each quite different in character from the others. The first part (section 6, bars 77–98) is rather preliminary in nature, and here, for the first time, the *fanfare* motif, which hitherto has played a signalling role, becomes itself the subject of development. In the course of this development, the motif appears in many new variants. Only the *giocoso* ‘c’ motif (which, as we have seen, is closely related to the *fanfare* motif anyway) and a fragment of the *flourish* motif interrupt this development.

**Section Seven (bars 99–139)**

Section seven represents a kind of stock-taking. All the motifs heard so far are heard in new juxtapositions and variants. The passage commences with a mosaic of fragments, abruptly cutting from one to another, but as the passage proceeds, the sense of fragmentation lessens, because the motifs begin to overlap one another.

So we begin with the mosaic: the *cantabile* motif (bars 99–104), the *sostenuto* motif (bars 105–106), the *klangfarben* motif (bars 109–110), and the *sostenuto* motif again (bars 111–112). Then follows the passage where overlapping begins: the *giocoso* material (bars 113–122) overlaps the entry of the *horn-call* motif, whose two phrases (bars 120–125 and 127–133) provide the section’s climax, counterpointed against a barrage of shrieking fragments – elements of the *twelve-tone flourish* motif, in octave- and multiple octave-doublings (bars 123–131) – from the other four instruments. This *horn-call* motif finally subsides onto a single extended tone, over which is heard the merest hint of the *fanfare* motif (bars 134–135), and then, finally, of the *afterthought* motif. The *afterthought* motif, clearly, is introduced at this point in order to prepare for the next section, where it forms the basis of the oboe’s cadenza.

**Section Eight (bars 140–169)**

Section eight is a long triple cadenza (bars 140–169). This is the section which most nearly realises a Carterian dramatic dialogue of instrumental characters which I referred to earlier. Of the three cadenzas, the first is for oboe: a brooding, *recitativo rubato*, built on the rhythmic and thematic material of the *afterthought* motif, but featuring the five intervals 2, 3, 5, 6 and 8, the last used once only, to considerable dramatic effect, at the end of the first oboe passage (bar 144–145), just before the clarinet entry. The second is a brilliant, swirling maelstrom of clarinet passage-work and trills, using only three intervals: 1, 4 and 7. The third returns to the *giocoso* material on bassoon, also using only three different intervals: 9, 10 and 11. Thus with this bassoon cadenza, the interval-class aggregate is completed. We may note that the whole passage outlines but a single such interval-class aggregate, and thus this is the passage of slowest harmonic rhythm in the entire work. Its 30-bar extent may be compared and contrasted with the various statements of the *flourish* motif, which occupy merely a bar or two to complete the interval-class aggregate.
While the bassoon’s *giocoso* stutters and peters out, fragments of the clarinet cadenza and then the oboe one are briefly recalled. In terms of dramatic contrast and harmonic rhythm, this section is the relaxed, improvisatory counter-climax, of the piece, contrasting with various different sorts of climaxes – registral, textural, rhythmic and dynamic – occurring elsewhere.

**Section Nine (bars 170–196)**

Just as the development section began with an extended treatment of the *fanfare* motif (section 6), so it ends here with an extended transformation of that motif’s *alter ego*, the *sostenuto* motif. In the course of this, most of the features which originally linked it to the *fanfare* motif are purged from it.

The ninth section begins (bars 170–172) with a version of the *sostenuto* motif, which, to be sure, manifests something of the fanfare’s original intervallic character (intervals from the bottom up: 8, 7, 6 and 5), but presented now as a long-drawn-out chord (Più lento) and with only a single repetition (which even then, is a rhythmic unison of only 4 or the 5 instruments, under a held flute tone). Later (bars 180–185) it spawns a new outgrowth in the form of a two-note compound interval motif (intervals 1, 2, 3 and 4), by which time, all vestiges of the *fanfare* motif are gone (‘killed off’, so to speak), though at the end of the section, two final twitches of it (reduced to 2- and 3-note chords) flicker briefly.

As in several earlier sections, the cadence-phrase of section 9 is built from a version of the *flourish* motif (bars 193–195); the final ‘twitches’ of the *fanfare* motif thus constitutes a final reference to the fanfare’s original ‘framing’ function, since these twitches (bars 192 and 196) now frame the cadence-phrase.

**Section Ten (bars 197–263)**

The stage is now cleared for the return of the *fanfare* motif, to bring the work to a dramatic conclusion. Using the kind of poetic description (‘killed off’ etc) we have coined in relation to the immediately-preceding section, we might appropriately call it a ‘resurrection’ of the motif, especially since it takes on a different, extended and more vigorous life. Section ten is thus an *up tempo* peroration and coda (marked, appropriately, *stretto*). The *fanfare* motif dominates throughout, although a fragment of recapitulation (of the first theme’s consequent phrase) also appears within it (bars 205–211), along with statements of the *klangfarben* motif, the *sostenuto* motif, the *giocoso* motif (‘c’ version) and the *flourish* motif.

During the course of this peroration, two passages in which the *fanfare* and *klangfarben* motifs merge (bars 215–220 and 245–249) into a twelve-tone series presented in all-interval order for the first and only time in the work, produce a climax of another sort, which we might call a ‘structural’ climax.
After this the remaining 14 bars are given entirely to the final ecstatic peroration on four versions of the *fanfare* motif, using, in order, the intervals 1, 2, 3 and 4 (all compound), then 8, 9, 10 and 11 and finally the version characterised by the intervals 8, 7, 6, 5 (the principal harmonic motif: a transposition of the form in which it was heard in the very first bar of the piece).

**Postscript: ‘Eleven Interval’ Composition**

As a footnote to the post-Webernian language which Seiber has developed in this little *divertimento*, one may note that the flexibility which results from the way in which Seiber causes the concepts of pitch-class and register to interpenetrate to produce his own personal counterpart of the classic Schoenbergian twelve-tone language: viz, a kind of ‘eleven-interval’ language. The basic structural component of this ‘eleven-interval’ language is the aggregate of interval-classes, which may – on occasion, but by no means necessarily or ordinarily – be aligned structurally with the aggregate of pitch-classes, but where the aggregate of interval-classes takes precedence and is definitely what drives the musical structure.
In this ‘Seiberian’ eleven-interval language, the interval-class ‘3’ can be represented, in any intervallic succession, in two ways. For example, the interval ‘3’ from the pitch A can be represented by a C (any C) above the A or by an F sharp (any F sharp) below the A. Thus, at any point, there is a choice of two ways in which to represent the interval-class ‘3’, and this allows for considerable flexibility in making decisions about how pitch-class structures are to relate to other structural parameters involved in the passage in question: to contour or to harmony, for instance. Or, to look at it the other way round: the pitch-class succession A–C can represent either of the interval-classes ‘3’ or ‘9’, depending on the choice of register in each case.

The possibilities multiply when successions of interval-classes are composed into successions of pitch-classes. To take merely a rather simple and straightforward example, consider the development passage in bars 21–31, based on the 6-note phrase of the solo bassoon, outlining the interval-class succession 6–5–4–7–3. Without taking into account phrase transpositions of this phrase, or the use of octave displacement, there are – in the case of a phrase starting on (say) B – 16 possible pitch-class successions which could represent the interval-class succession 6–5–4–7–3.

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