

as a strong downbeat, and gives a complicated – but probably correct – explanation of this: the E^b that precedes it breaks the previous sequential pattern (it 'should' have come at the beginning of bar 12 itself) and this makes the E^b a particularly emphatic upbeat. This in turn makes the D a particularly strong downbeat. Where I do not agree with Meyer is in seeing this D as strongly implied by the previous pitch patterns. For example he shows it as the goal of gap-fill motions initiated at bars 3 and 9 (graphs 5 and 4 of Fig. 25). But for me the characteristic thing about this D, and the V harmony that supports it, is the way the music blunders onto it. It is particularly the anticipation of both the D and the harmony in bar 10 that creates this effect. When the music settles onto the V chord in bar 12 it does not sound convincing as a dominant at all; the music could just as well resolve as VI (V–I)–II–V–I of G^b . And it is this that makes sense of bars 12–20, the purpose of which is to transform this blurted-out harmony into a real dominant. Essentially bars 12–20 consist of a single V chord supporting a middleground cadenza that rises, like most cadenzas, to the seventh of the V chord and falls to the tonic. And this is why I disagree with Meyer's interpretation of bar 17 as a structural downbeat (see his rhythmic level 3) coinciding with a structural IV chord, as shown in Fig. 27. Of course there is an A^b chord at surface level, just as there is a formal break at the beginning of the *allegro*. But the important thing – which is not so obvious – is that both of these disappear in the middleground. As my Schenkerian graph shows, the A^b chord is simply the result of a passing motion within the structural V chord, which spans the end of the *adagio* and the beginning of the *allegro* in a single motion. That is why the beginning of the *allegro* sounds so oddly insubstantial despite its superficially assertive, downbeat nature; the real downbeat is at bar 21, where the fundamental line of the movement begins. Now Meyer does comment upon this contradiction between surface and background structure, except that he uses different words: he speaks of the 'bifurcation of form and process' (p. 266). By 'form' he means the surface organization into *adagio* introduction and *allegro* movement proper, by 'process' he means the structures created at underlying levels by relationships of implication and closure. So he is really saying the same thing as the Schenkerian chart. But again the Schenkerian approach refines, strengthens and explains Meyer's observations.

What I want to emphasize is not so much the superiority of Schenkerian techniques over Meyer's as the complementarity of the two approaches. A Schenkerian reduction tends to clarify the long-range harmonic continuity of music but suppress foreground contrasts. On

the other hand, Meyer's techniques are useful for observing surface features, and in particular rhythmic contrasts. Both approaches tend to distort the music we experience; so, as I said in the Introduction, the important question is not 'which approach is the more true?' but, 'what are the circumstances in which each approach is more useful?'. As we have seen, the analytical techniques introduced by Meyer are useful for observation but tend to be less useful for generalization and explanation. They clarify the obvious things about music, and this is an excellent starting point for analysis. But in analysis the aim is to advance from the obvious to the non-obvious, and here Schenkerian analysis has the advantage because in most instances – as in 'Les Adieux' – it is the discontinuities that are obvious and the reasons why the music is none the less coherent that are not. Suppose that you were going to perform this sonata: which analysis would be more helpful in refining your interpretation, Meyer's or the Schenkerian one? Surely the Schenkerian one: because the difficulty lies not in projecting the fantastic contrasts of the foreground, but in achieving some kind of background continuity. It is rather like playing Chopin, where you need a very secure grasp of the underlying rhythm in order to make the surface rhythm as free and improvisatory as possible. Schenkerian analysis can provide the same kind of secure grasp when it comes to long-range harmonic structure. More is said about this in Chapter 10.

III Rudolph Reti

The problem with Meyer's brand of musical analysis is that neither he nor anybody else really knows how to formulate the harmonic structures of tonal music in terms of general psychological principles; that is why Meyer and his followers tend to neglect harmonic organization in favour of melodic and rhythmic patterns. The second main analytical approach I am going to talk about in this chapter also tends to neglect harmonic organization, concentrating instead on motivic patterns. This time the reason is quite different, however. To understand what the reason is, and what it has to do with psychology, we need to go back to Schoenberg, who was closely associated with this approach.

Schoenberg's atonal music is densely motivic; that is, it is made up of recurring intervallic cells. Fig. 28 is taken from George Perle's *Serial*

Fig. 28 Motivic patterns in Schoenberg's Op. 11, I, bars 1–3



Perle's *Serial Composition and Atonality*,¹ and it shows how motivic cells explain not just melodic but also harmonic patterns in the first of Schoenberg's Three Piano Pieces Op. 11. Not all Schoenberg's music can be divided up into motivic cells quite so neatly, of course. But even when the style is more free in this respect than it is in Op. 11, it is the motivic aspect that Schoenberg himself stressed when analyzing his own music (which is a characteristically twentieth-century thing to do, by the way). Take for instance the Four Songs Op. 22, which Schoenberg analyzed for a radio talk in 1932.² This is texturally an extremely dense composition involving a gigantic orchestra – hence the rarity of performances – but it begins with a lightly accompanied melody for clarinets (Fig. 29). This initial idea (note that this is in itself a psychological term) is the basis of Schoenberg's analysis. What he does is to show how much of what follows is prefigured in this initial motif. Sometimes it is the contour that recurs (Fig. 30); that is obvious enough. But what is the connection between the initial idea and Fig. 31? Schoenberg's answer is that both are made up of patterns of minor seconds and minor thirds; each can be derived from a basic cell of three notes combining those intervals within the overall compass of a major third. (That is what the brackets beneath Figs. 29 and 31 are showing.) But then what about Fig. 32? The basic shape is still there, says Schoenberg, only it has been transformed – so that the minor second has become a major second and the minor third a major third. (I have

¹ 5th edition (1981), Ex. 7.

² A translation of Schoenberg's talk can be found in Boretz and Cone (eds), *Perspectives on Schoenberg and Stravinsky*, Princeton, 1968, pp. 25–45.

called the original cell as 'x' and the transformed one as 'z'; 'y', reasonably enough, is a halfway stage.) In this way passages that seem at first sight to be unrelated turn out to be variants of a single motivic cell.

Fig. 29



Fig. 30



Now the motivic technique of Schoenberg's atonal music, which figures Schoenberg's serial technique, is the culmination of a historical process going back through Wagner and Liszt to Beethoven. All these composers relied heavily on brief, recurrent motifs; this is one of the most obvious things about their music – particularly Wagner's, the point of those leitmotifs is that they must be immediately recognizable even when half buried in a complex texture. Just because it is so obvious, no special technique of analysis is necessary in order to discover this; indeed commentators had been talking about such things since the days of T.A. Hoffmann. But following Schoenberg's lead a number of analysts developed quite sophisticated techniques whose purpose was to show that motivic patterns played just as important a role when they were not immediately visible (or audible) on the surface of the music. In fact, these analysts tended to assume that hidden patterns of motivic recurrence and transformation played a crucial role in all music – though it was particularly the music of the classical period that they concentrated on. In Britain, though not elsewhere, this became for a time the most influential technique of advanced analytical enquiry, and its principal practitioners were Rudolph Reti (who had been a pupil of Schoenberg's and actually gave the first performance of the Op. 11 piano pieces) and Hans Keller. Keller coined the term 'functional analysis' to describe his method, and published a few examples of it in the form of diagrams with

Fig. 31



a verbal commentary; but he subsequently decided that musical analysis ought to be presented musically rather than graphically, so he began to produce his analyses in the form of scores written for the same forces as the original work. These alternated passages of the work being analyzed with demonstrations of the motivic links between them, and the idea was that the whole thing should be presented as a performance rather

Fig. 32



than simply read.¹ Some of these analytical performances were broadcast in Britain in the late 1950s. However, they have not been repeated and until recently only one of the scores was available in print;² the result is that Keller's work has been less influential than might otherwise have been the case. By contrast Reti's analyses have long been available in book form, so it is his work that I shall discuss.

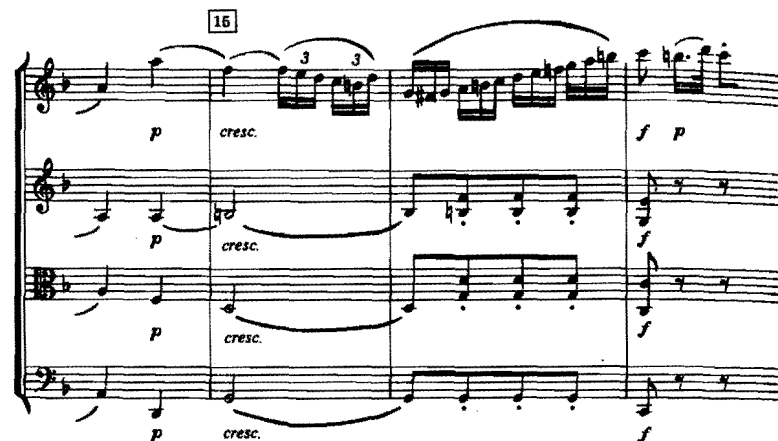
One of the pieces Reti analyzed in his first book, *The Thematic Process in Music*,³ was Beethoven's last quartet, Op. 135; Fig. 33 shows its first sixteen bars. What Reti sees as its basic motifs are not on the surface; you cannot simply ring them as in Schoenberg's Op. 11. Instead Reti takes the opening two bars and compares them with what follows, looking for literal or altered recurrences. It is these alterations that are crucial. One of the most important is when other notes are interpolated between those of the motif. Fig. 34(a) is an example of this. It suggests

¹ See Hans Keller, 'Functional Analysis: its pure application', *The Music Review*, 18:3, pp. 202-6.

² 'FA No. 1: Mozart, K. 421', *The Score*, 22 (February 1958), pp. 56-64. Another has recently appeared in print: 'Functional Analysis of Mozart's G minor Quintet', *Music Analysis*, 4 (1985), pp. 73-94.

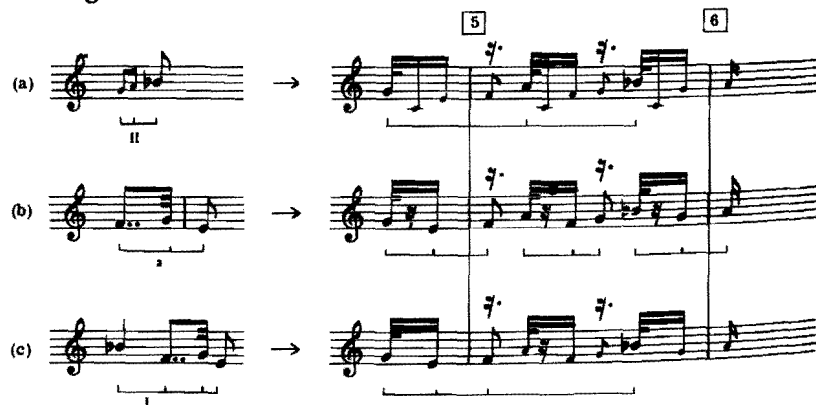
³ New York, 1951. Rufer's analysis of Op. 135 builds on hints thrown out by Schoenberg in 'Composition with Twelve Notes (1)' in *Style and Idea*, Berkeley, 1984, p. 220 ff.

Fig. 33 Beethoven, Op. 135, I, bars 1-16



that the viola's and violins' entries in bars 4-5 spell out a variant of the opening three notes of the work; Reti puts all three instruments onto a single staff (in fact his analysis is based on a two-stave reduction of Beethoven's unusually fragmentary score), transposes the viola part up an octave, and prints the 'interpolated' notes in light type so that the underlying motif stands out. It is recurrences like this, says Reti, that justify our calling the first three notes a motif; in other words, when you call something a motif you are not talking about how it looks (or sounds) in itself but about what it is doing in the piece. However these three notes are only a secondary motif (that is why Reti labels it 'II'); the third to sixth notes in the viola, B^b - F - G - E, are

Fig. 34



primary motif, recurring more frequently and in more widely altered form. In fact the same passage we just derived from motif II can also be derived from the primary motif. Fig. 34(b) shows that if we omit the C, the first three notes are G-E-F; and these are the same as three of the notes of the primary motif, only they appear in *intversion*, that is to say a regrouped sequence. And Fig. 34(c), which picks out the G-E-F of bars 4-5, is intended to show its derivation from the primary motif as a whole; this time the notes appear more or less in *reversion*, that is to say

Fig. 35



Fig. 36



in reversed order. The primary motif appears in other places, too. In bars 6–7, for instance, it can be found in the first violin and viola; the only alterations are octave transposition and interpolation. Fig. 35 shows this, and in addition shows how it is preceded by another occurrence of the pattern – but this time at a different transposition within the F major set. Reti also finds the same transposition of the motif (F–C–D–B^b) in the top notes of the first violin's part in bars 10–13, and another in bar 15 – except that this time the transposition is literal rather than tonal (that is, it has a B^b instead of a B^b). Fig. 36 shows all this and more, and it represents Reti's conception of the entire passage as essentially a single melodic line in which the two underlying motifs appear in a variety of guises.

Now all this certainly provides some measure of the motivic homogeneity of the music. However for Reti it was merely the starting point for analysis. Two things primarily interested him: the way in which motivic formations of this sort had significance at the level of large-scale form, and the psychological significance of motifs in terms of the composer's creation of the music. As regards the first, his analytical method was intended to demonstrate and rectify the shortcomings of the traditional conception of form. What was the point, Reti asked, of describing how movements were built up of thematic sections, or compositions from movements, if you couldn't explain why this particular theme belongs in this work, or this movement in this symphony? As far as traditional concepts of form were concerned, Reti argued, you could substitute any theme, or movement, for any other which happened to be in the right key and tempo; which showed that there must be factors governing musical form which the traditional approach to form altogether ignored. And this is where he saw motifs as playing an essential role. He believed that in any coherent piece of music not only the various themes but the different movements will, on inspection, turn out to be made up of the same set of motifs. He is committed, therefore, to finding the primary motif of Op. 135 in the two middle movements. Fig. 37 shows how he manages this. Effectively he splits the primary motif into two component parts, which he now labels separately as 'I' and 'II'; these consist respectively of a perfect fourth and some combination of seconds and/or thirds. All this is rather tenuous, so Reti hurries on to the final movement, where there is a much better case to be made. This movement is highly unusual in that it has a title (*Der Schwergfaste Entschluss*, the grave decision) together with a musical inscription (Fig. 38). These phrases recur in the course of the movement itself, and Reti

– reasonably enough – that for Beethoven to have picked them in this way and assigned words to them suggests that they had some allegorical or expressive significance to him, as well as a purely musical one. Now in strictly musical terms, Reti points out, these motifs are closely linked to the opening of the first movement; this is obvious in the second 'it must be!' (Fig. 39), and the first two phrases are derivatives of the third (by inversion and transposition respectively). And the final theme of the work (Fig. 40) embodies the primary motif of the work yet again, and in such a manner – as Reti puts it – that 'the phrase that originally was, in all its brevity, an expression of somber woe has now become an utterance of light and almost dance-like cheer. In the transformation of the somber opening motif to the final theme of the Finale, the thematic resolution and the innermost wish of the quartet come to fulfilment' (p. 217). Musically, then, the primary motif of the work not only has a dominating role in the entire work – so assuring its homogeneity – but also begins a process which the final theme terminates; while at the same time the title and inscription prove how this purely musical process was bound up with a kind of extra-musical meaning in Beethoven's own conception of the work. For these reasons Op. 135 had a double significance for Reti. It proved that his analytical method could decipher the symbolical meaning embodied in music as well as its technical structure. And, indeed, it could make sense of music which was unintelligible in traditional terms – in the case of Op. 135, because of the absence of anything resembling what was normally meant by a 'theme' in the first movement. The basic coherence of a piece of music, Reti argued, lay in its motivic patterns; whether or not these were bundled into easily recognizable themes was a matter of compositional style and not of the work's essential structure. This is rather similar to Schenker's distinction between surface form and background structure, and the

Fig. 37

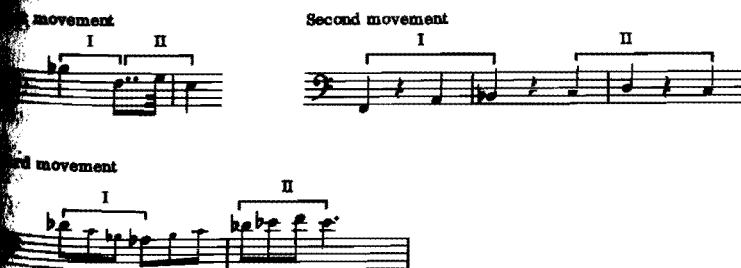


Fig. 38



Fig. 39

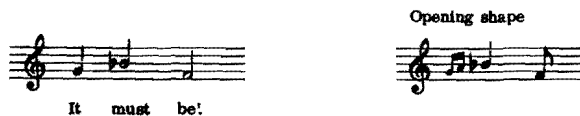
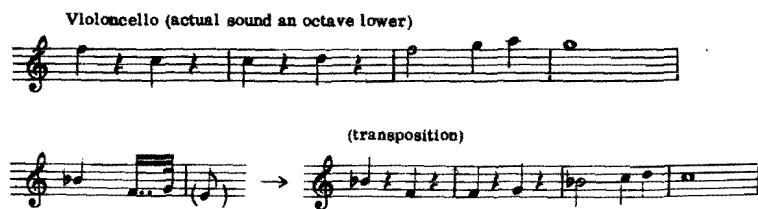


Fig. 40



similarity is the result of a basic conception shared by both analysts: each saw musical composition as the organic elaboration of some kind of underlying idea. It is in this particular sense that both Schenker and Reti regarded music as essentially psychological.

Reti has a habit, as here, of suddenly leaping from a minute examination of the opening of a work to broad conclusions about its large-scale structure. These transitions tend to be the most problematical part of his analyses, so we ought to look at an analysis where the intervening stages are spelt out in some detail. Reti's analysis of the *Pathétique* Sonata is exceptionally detailed and it was published post-

usly in a book called *Thematic Patterns in Sonatas of Beethoven*.¹ The
of a thematic pattern, which hardly appears in the analysis of
35, plays an important role in Reti's method, but before it can be
ated we need to identify the basic motivic constituents of the
a. There are six in all, and all but two of them can be found in the
ing *Grave* section (for the music, turn back to Fig. 5 on p. 23
1. The other two are the 'melodic' motif, which is a rising minor
th as at bar 56; and the 'Rondo' motif, made up of a falling plus a
semitone (for instance C - B^b - C in the first bar of the Rondo).
gh Reti gives the motifs names rather than numbers on this
ion, he explains that this is merely a matter of convenience, and
ut a table listing each motif in the *Grave* together with its in-
on. Fig. 41 shows this, while Fig. 42 shows his detailed analysis of
Grave. Why are bars 1-4 and 5-10 in different formats? Because Reti
is each of the inner parts of bars 1-4 as a separate melodic line
than as harmonic filler, so that there are four structural parts in
1-4 as against three in bars 5-10. And what does this analysis tell
gives an explanation for things like the otherwise odd bass leap
Fig. 41



Faber, 1967.

3

Fig. 42 Reti, analysis of the *Pathétique* Sonata, I, bars 1-10

from C to F[#] in the first bar (it is part of the concluding motif), the choice of the transposition between bars 1 and 2 (the D-F spells out the prime cell), and the larger transposition from the opening C minor to its relative major at bar 5 (the C and E^b again spelling out the prime cell). But the point of this analysis is not so much to explain the *Grave* section in itself, as to enable Reti to explain the rest of the Sonata in relation to it. The basic principle of Reti's analysis is that 'the *Grave* was formed as a model for the entire work. To function as an outline for the structural source of the first movement specifically, and as a structural source for the whole sonata in general, is its innermost architectural idea' (pp.29-30). In other words, Reti sees the *Grave* as functioning in the same way as the initial melody from which Schoenberg derived what followed in his *Four Songs*. In effect Reti's method assumes that all music works this way.

The real findings, then, begin when the remainder of the Sonata is compared to the *Grave*. Again and again Reti discovers not only that the *Grave*'s motifs recur in succeeding themes and movements, but that they recur in the same, or at least a similar, order. Fig. 43 shows his detailed analysis of the first *allegro* theme, on the basis of which he compares it with the *Grave* as follows (p. 35):

Bar 1, *Grave* and *Allegro*: Prime motif in C.

Bar 2, *Grave* and *Allegro*: Prime motif in F.¹

Bars 3 and 4, *Grave* and *Allegro*: Repetition of the first two bars an octave higher.

End of bar 4, *Grave*; bars 5-8, *Allegro*: Descending passage, expressing the concluding motif.

Fig. 44 shows how more or less similar *thematic patterns* occur in the other themes and bridging groups of the *Allegro*, as well as in the themes of the remaining two movements. Furthermore such similarities are not restricted to a single level, one theme being shaped like another; they occur hierarchically too. Fig. 45 sets each of the *themes* of the *Allegro* against the corresponding *phrase* of the *Grave*. And all these structural similarities mean that for Reti the sonata possesses not only *motivic unity* – the homogeneity resulting from motivic recurrence – but *thematic consistency* too: each theme is a variant of the same underlying pattern.

¹ When Reti says 'in C' or 'in F' he is talking about the note that dominates the motif, not about the key (the two may or may not coincide).

Fig. 43 Reti, analysis of the *Pathétique* Sonata, I, bars 11-18

The figure shows a musical score for four voices: Soprano, Alto, Tenor, and Bass, covering bars 11-18 of the first Allegro movement of the Pathétique Sonata. The analysis identifies thematic elements across the staves:

- Soprano:** Labeled with 'auftakt', 'prime cell (maj.)', 'prime motif', and 'concl. motif'.
- Alto:** Labeled with 'auftakt', 'prime cell (maj.)', 'prime motif', 'concl. motif', and 'prime cell (maj. inv.)'.
- Tenor:** Labeled with 'prime motif (maj. inv.)', 'concl. motif (var.)', 'pr. motif (inv.)', and 'concl. motif'.
- Bass:** Labeled with 'note repetition' and 'pr. motif'.

Below the main score, there are additional staves showing further analysis of the prime cell and motif, including 'fin.', 'pr. cell (inv.)', 'pr. cell (maj. inv.)', and 'pr. motif (inv.)'.

Fig. 44 Reti, thematic patterns in the *Pathétique* Sonata

Grave: prime (C) plus fin. prime (F) plus fin. concluding motif

First *Allegro* theme: prime cell fin. pr. motif concl. motif
in C in F

Second *Allegro* theme: prime cells (inv.) fin. concluding motif as contour
in E \flat prime motif in F (inversion)

Third *Allegro* theme: prime cell fin. prime motif fin. concluding motifs
in C in F

bridging passages: prime cell fin. two concluding motifs

concluding motifs prime cell fin. motif etc.

First *Adagio* theme: prime motif in C plus fin. Series of concluding motifs
8va bassa prime motif in F

Allegro theme: pr. (F) pr. (F) pr. (F) fin. pr. fin. melodic motif
4th 5th 5th 4th 4th pr.

prime cell in C fin. pr. fin. mel.

melodic motif pr. fin.

melodic concluding motifs

Adagio theme: 4th mel. melodic
prime concl. plus fin.

concluding concluding

prime (C) plus fin. prime (F) concluding motif

As Reti puts it, 'if the cells and motifs can be regarded as bricks of a work's structure, then the "patterns" are its larger units. Or, more specifically, the patterns are the motivic ideas of the themes' (p. 46). The themes *seem* different – it is a necessary condition of the classical style that they should – but at the deeper level they are the same: and that is why they belong together.¹

Motivic unity and thematic consistency are hierarchically related: thematic consistency assumes motivic unity and adds something else to it. (Reti disliked the term 'motivic analysis' and instead referred to his technique as 'thematic analysis' in order to stress its significance for large-scale form.) However, there is also a third stage in this hierarchy, which Reti called *architectural planning*. He defined it as 'the method of shaping the motifs and themes from the beginning in such a way that, by transforming them in an appropriate manner as the work progresses, and finally leading them to a resolution, a kind of story or "architectural plot" is evolved which makes all the shapes of a composition a part and expression of one higher unity' (p. 141). Reti uncovers such a structural process in the *Pathétique* when he compares the tonal plans of the three movements. Tonal shifts are predominantly by thirds in the first two movements, he points out; indeed he adds that 'the pivotal keys of the *Allegro* are C, E flat, E natural, C, while the main keys of the *Adagio* are A flat, F natural, F flat, A flat. Or in other words the key pattern of the *Adagio* is the exact contrary motion of the key pattern of the *Allegro*' (p. 69). But in the Rondo almost all the structural key-relationships are by fourths or fifths. How, then, can it even belong within the same composition, let alone function as a satisfactory resolution of it? Reti's answer is that the thirds so characteristic of the first movement represent 'shapes of tension' which, from the very beginning, have a tendency to resolve into fourths and fifths – the 'shapes of resolution', as he calls them (p. 80). But in the first movement this tendency is repeatedly blocked: hence the tension of the movement as a whole, a tension that receives its structural resolution only in the last movement. More specifically, he points out the association of the prime motif, the minor

¹ Keller lays even more stress on the essentially monothematic nature of music or at least of great music, as he considers this the principal criterion for distinguishing the great from the merely good. This kind of monothematicism, where the thematic pattern is buried deep under the surface, is quite different from nineteenth-century cyclic thematicism. Composers like Liszt and Franck simply transformed themes, not their underlying patterns, and the transformations are very simple – they have to be, since the identity of the theme is intended to be immediately obvious to the listener.

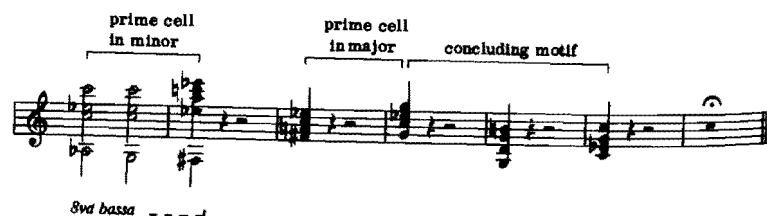
Fig. 45 Reti, comparison of *Allegro* themes with *Grave* phrases

The figure displays musical notation on two staves, comparing themes from an *Allegro* movement with phrases from a *Grave* movement. The notation is in treble clef with a key signature of two flats (B-flat and E-flat).

- Allegro first theme:** The first staff shows a melodic line with eighth and sixteenth notes, including a phrase labeled "crossing bars:".
- Grave second part:** The second staff shows a slower, more rhythmic phrase with dotted notes, labeled "(contrary motion of Grave shapes)".
- Allegro second theme:** The third staff shows a melodic line with eighth and sixteenth notes, including a phrase labeled "crossing bars:".
- Grave third part:** The fourth staff shows a slower, more rhythmic phrase with dotted notes, labeled "(contrary motion of Grave shapes)".
- Allegro third theme:** The fifth staff shows a melodic line with eighth and sixteenth notes, including a phrase labeled "crossing bars:".
- Grave, end:** The sixth staff shows a slower, more rhythmic phrase with dotted notes, labeled "(contrary motion of Grave shapes)".
- Allegro, end of exposition:** The seventh staff shows a melodic line with eighth and sixteenth notes, including a phrase labeled "crossing bars:".

third, with diminished seventh harmonies (the *Grave* particularly illustrates this), and with the unusual modulation in the *Allegro* from C minor to E^b minor – a modulation that constitutes a harmonic dead-end and which leads, at bars 289–94, to what Reti calls the ‘dramatic outcry . . . when the prime cell C to E flat, with the F sharp as bass, finally flows into nothing – a rest’ (p. 74). Only in the final seven bars of the *Allegro* is this shape given a tonal resolution (Fig. 46) – but, Reti explains, a fully structural resolution cannot be attained simply by means of a single final cadence. So the structural tension remains unresolved, and the opening of the *Rondo*, which arpeggiates a C minor triad, repeats the shape of resolution with which the *Allegro* ended. In fact the whole *Rondo*, in Reti’s view, constitutes a formal resolution of the previous movements, and the way in which fourths and fifths constitute a resolution of the earlier thirds is underlined by the second and third rondo themes – themes which are wholly based on fourths and fifths, and which betray no motivic affinity with any of the previous themes of the entire sonata. Anywhere else in the composition they would have been out of place, but here they embody the thematic resolution of the work as a whole. And to dispel any lingering doubts, Reti points to the two chords in the third and fourth bars from the end of the sonata (Fig. 47): each states the prime cell in its original transposition (C to E^b), but whereas the first couples it with an F[#], and so with the unresolved tensions of the first movement, the second couples it with a G and so with resolution. ‘The whole story of the structural drama of the *Pathétique*’, Reti concludes, ‘is compressed in these two *pianissimo* chords’ (p. 84).

Fig. 46



Reti’s method is very ambitious in its aims, but it has come in for a great deal of criticism. One major criticism is that he picks out the evidence that fits his interpretations and ignores what does not. Consider his demonstration of the inversive relations between the keys of

47



and second movements of the *Pathétique* sonata (p. 106 above). To the C and E^b of the first movement are structural keys, but why pick E minor from the development when it is preceded by G minor and followed by the same passage transposed to D major? Why pick out the F of the second movement when it lasts only three bars, initiating a sequence of fifths that returns to A^b? The answer is all too obvious: to fit the problem is not simply one of Reti’s analytical scrupulousness, but of the nature of the motifs and transformations on which he based his analysis. Suppose we were to regard the second (major or minor) as a basic motif. And suppose that we said that statements of this motif could be combined together to give thirds, fourths and so on. We can now demonstrate that the structural drama of the *Pathétique* sonata can be derived from this motif. But obviously this demonstration is totally meaningless. Now this is of course a gross exaggeration of what Reti did. But he did sometimes regard single intervals as the ‘finishing’ motif of the *Pathétique* was a second, the prime cell a second. He defended himself against the criticism that this led to indistinct and empty ‘explanations’ by saying that ‘the individual form of a musical unit is not built by the use of so many and such-and-such intervals, but by the specific and always different way in which these intervals are introduced, developed and finally combined into higher units’ (p. 74). This sounds all right in principle, but do we see these ‘specific and always different’ characteristics in his actual analyses? Look again at Reti’s analysis of the inner lines of the first four bars of the *Pathétique* sonata (Fig. 42). In every relationship of a third as the ‘prime cell’, whether it is a skip or a stepwise, whether it is major or minor, whether it is rising or falling. In the ‘finishing motif’ occurs as a rising or falling interval, and as a major or minor second, so that any scalar pattern whatever can be derived from it. And sometimes, like our all-explaining motif of a second, Reti’s motifs do not vary just in the size of their scale steps (major or minor second)

but in the number of them too. Consider the following instances of the 'concluding motif', all of which are drawn from Reti's charts (Fig. 48): just what is the common factor? Is it anything more than the combination of one small and one large interval? And when you consider that Reti sometimes regards features like note-repetition or arpeggiation as themselves constituting motifs, it becomes clear that the technique is capable of indiscriminate explanation. It becomes impossible to imagine anything that couldn't logically be shown to be thematic in more or less any context.

Fig. 48 Variants of Reti's 'concluding motif' in the *Pathétique*



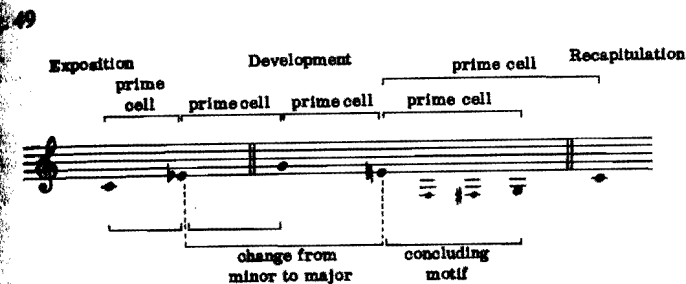
Now all this shows that the way Reti analyzes music is not very objective, but that does not necessarily mean it is bad analysis. After all, the same kind of objections can be made to Schenkerian analysis. You can always derive any music from any fundamental structure simply by picking out notes. The point, however, is not what you *can* derive but what you *choose* to derive. Good Schenkerian analysis is good not because it is more objective than bad Schenkerian analysis but because it is more musical: that is, because it takes proper account of harmonic and rhythmic implications, because it respects or even clarifies dynamics, phrasing and articulation in general. By contrast Reti frequently ignores all of these.¹ He justifies this as follows:

'The conscious phrasing and grouping of a work's shapes, as they finally appear in the score, need not necessarily conform in every detail with the mold in which these shapes first grew in the composer's mind from his motivic ideas. . . . The frequent discrepancy between the

¹ In his book *Beyond Orpheus* (MIT, 1979) David Epstein presents a number of Beethoven analyses which are essentially Reti-like, but in which the identifications of motifs are based on more-or-less Schenkerian criteria.

anner in which shapes seem to be divided if one follows the phrasing marks given by the composer, or if one traces the motivic elements, is the reason that the phrasing marks are often omitted in the musical examples quoted in this study' (*Thematic Process*, p. 204).

In other words, he is saying, when you analyze music in terms of motifs you are primarily talking about the music as it is heard, but about the logical process that gave rise to it. You are reconstructing the logical psychological structure of that process – which is likely to correspond less to its outward chronology, though it need not necessarily do



at discovering things about a piece of music and discovering about the process of its composition are quite different things. What Reti regarded as the most decisive confirmations of his statements occur when motivic links are either irrelevant from the point of view of musical sense, or when they actually run counter to it. An example of when motivic links are more or less irrelevant is when the shape appears on a tiny scale, say as an ornament, and on the other scale, for instance in a pattern of keys. Fig. 49 shows how the shape of the *Pathétique* are reflected in the tonal plan of the first movement as a whole. Now nobody is likely to hear such a link: it is not musically significant. But, argues Reti, it is just this that gives it its psychological reality: Beethoven must have had the shape in mind so that it was naturally reflected at quite different levels of the musical structure, for otherwise why should the link be there at all? And an example of when motivic links actually run counter to the musical sense is provided by the beginning of the third movement of Beethoven's Quartet Op. 130 (Fig. 50). Why those odd rests in the

See Reti's discussion of the genesis of the *Pathétique* sonata in *Thematic Patterns*, p. 97.

Fig. 50 Beethoven, Op. 130, III, bars 1-4

Andante con moto ma non troppo

VI. I *poco scherzoso* *p* *dolce*

VI. II *p* *p* *p*

Viola

Cello

Adagio

second violin part during the last bar, when they could so easily and naturally have been filled by passing notes? The reason, says Reti, is that this is a quotation from the quartet's opening theme which is shown underneath. The omission of the passing notes renders it a literal, note-for-note repetition (apart only from the changed accidentals). And the musical oddness of the result is the proof – 'a proof of almost

matematical conclusiveness', Reti called it – that this hidden thematic presence is not a chance occurrence but must be the result of a conscious editorial decision on Beethoven's part. Reti in fact believed that the techniques of thematic transformation he described had been used quite consciously by the classical composers, and that they had worked them out in elaborate detail – more or less in the same way that he analyzed them. Few people accept this conclusion, and it is at the very least, that there is no documentary evidence for the existence of so subtle and complex a compositional technique – especially when you compare it to the amount of fuss that Romantic composers made about their much more crude and obvious technique of thematic transformation. But the question whether classical composers were conscious of what they were doing actually is not so important. It might be perfectly possible to think that everything Reti describes was done unconsciously. Either way Reti's analytical technique might be equally significant. In the one case it would be telling us about the history of compositional technique, and in the other about the psychology of the compositional process. And in either case the correctness or incorrectness of a given analytical interpretation would be a matter of fact as that of any other historical or psychological interpretation. Questions of how 'musical' the interpretation was wouldn't enter into it.

At the same time Reti also believed that his method did have something to say about the way in which listeners perceive music, and it was – in what I see as the central area of musical analysis – that the essentially unmusical, or even anti-musical, nature of thematic analysis was a real problem. As I mentioned, Reti denigrated traditional musical form for its failure to answer what he considered the basic analytical question, 'why in music one group can be followed only by other groups and not by random groups which happen to fit in with the rhythm and the like' (*Thematic Process*, p. 349). In other words a theme will be experienced as being satisfactory in one context and unsatisfactory in another. And how does the context influence the way a theme is experienced? Because, says Reti, of the listener's subconscious recollection of the motifs and pattern of earlier themes, to which he transfers the new theme as he hears it. His recollection is obviously unconscious, because until Reti people didn't realize what it was that made a theme appropriate. Consequently for a motivic relationship to be musically significant it is not necessary 'that it must be heard and understood as a motivic utterance by the listener. The unnoticeable presence that it may exert on the listener as a passing subconscious

recollection – in fact, *its theoretical existence in the piece* – suffices' (*Thematic Process*, p. 47). But if he is not to refer to his own experience as a listener, how is the analyst to decide what motivic relationships are important and what are not? Is he simply to label everything he can see, regardless of how it is experienced? Motivic analysis easily degenerates into a purely mechanical exercise in which the score is analyzed without ever really being read properly, and this tendency is exacerbated by the special importance Reti attached to what he called 'identical pitch'. By this he meant a motif recurring in its original notes, except that the accidentals may be quite different (the recurrence of the opening theme in the *Andante* of Op. 130 was an example of this). And frequently the harmonic context will be quite different, or the motif will appear in the same notes but in a different key.¹ In other words it will *sound* quite different, but it will *look* the same. The whole tendency of motivic analysis is to suggest that music is some kind of complicated cipher, and that the way to break the code is to stare at the score for long enough. It does not encourage sensitive listening.

I do not mean to say that Reti did not have good musical insights about the way that pieces are experienced. And to be fair to Reti we have to remember that he was just about the first analyst in the English-speaking world seriously to tackle the problem of large-scale coherence in music: in 1950 hardly anybody in Britain or the USA knew of Schenker's work. But nowadays the shortcomings of Reti's method are very apparent. The point of an analytical method is that it should guide you towards a clear and compelling account of the music as you experience it. And the Schenkerian method provides such guidance by suggesting initial questions, such as how the music is experienced as directed motion, and by means of a graphic technique that poses these questions in an increasingly refined and searching form. A Schenkerian graph not only expresses an analytical interpretation: it also constitutes a way of arriving at the interpretation, and an argument for its validity. It constantly refers you to the score, so as to check a particular motion against your experience of the passage or to see how it is confirmed by rhythm, phrasing and other means of articulation. But Reti's method rules out all these things; and instead of referring you to the score, it encourages you to pick out the themes and ignore everything else. (It is extraordinary just how much of the *Pathétique* sonata Reti leaves completely unexplored at the end of 78 pages of analysis.) His method also tends to blunt your sensitivity to the individual qualities of each piece. It

¹ For examples see Reti's analysis of Schumann's *Kinderszenen* in *Thematic Process*.

the same procedure to everything – a detailed examination of the score as to find the motifs, followed by a rapid comparison with the themes. To be sure, Schenkerian analyses also begin in a similar manner – that, after all, is what having an analytical means. But the way a Schenkerian analysis develops depends on the individual piece, and the result is an insight into that piece. By contrast, each of Reti's analyses ends up with more or less the same insight, and this insight (if it really is an insight) concerns the nature of the compositional process in general rather than the particular quality of the piece being analyzed.