I don’t suppose there has ever been a time when music did not attract some kind of intellectual speculation. However, until some two hundred years ago such speculations bore little affinity to what we nowadays mean by the term ‘musical analysis’. From the ancient world up to the Renaissance, as also in classical India and China, music was studied intellectually, but the music wasn’t being studied for its own sake. Instead it was seen as a reflection of cosmic order or as an instrument of moral education; which meant that it was approached from a theoretical rather than an analytical point of view. Technical aspects of musical structure were not ignored, but they were looked at in the most general light, rather than in the context of individual pieces of music. For instance, theorists would write on the properties of the modal system as such, rather than on the modal characteristics of any particular composition. In fact these theorists were only really interested in individual pieces of music to the extent that the most general principles of musical structure could be derived from them. Once these principles had been discovered, they had no further interest in the individual piece, and that is why these people were not really analysts at all in the sense that we use the term nowadays.

Nevertheless these early theorists were classifying what they found in music – scales, chords, forms, even the instruments of music – and classification forms the indispensable basis of musical analysis. In his article on analysis in the New Grove Dictionary of Music and Musicians, Ian Bent describes musical analysis as a ‘natural science’ approach to music, and the rise of scientific thinking in general had an effect on the way
music was studied. Instead of looking everywhere for universal principles and ultimate explanations, people tried to describe and categorize music in a more neutral, scientific manner than before—trying to do the same for music as people such as Linnæus were doing for the natural sciences. There is a more specific parallel to be made with the natural sciences, too. The discovery of the amazing variety of musical cultures throughout the world encouraged nineteenth-century theorists to apply evolutionary thinking to music. Basically these theorists explained music as they found it by deriving it from supposed origins of some sort. These origins might be historical; showing how chromatic harmony developed stage by stage from diatonic harmony, and diatonic harmony from the modal system, is an example of this. Or the origins might be biological, as when Riemann explained all the various types of phrase structure to be found in music in terms of patterns of inhalation and exhalation in breathing. This concept of what it means to explain something was very characteristic of the time, and you could compare it not only to what was happening in the natural sciences but in other branches of the humanities as well, for instance philology.

Theories of this kind, and analytical applications of them to music, reached a high level of sophistication by the end of the nineteenth century. But in this book we shall hardly be concerned with them at all. The reason is that, apart from the basic idea of explaining music by means of deriving it from something, these evolutionary approaches are more or less obsolete. By this I mean that they are not indispensable for an understanding of current analytical practice, which is what this book is about. This doesn’t of course mean that there is no point in getting to know about nineteenth-century and, indeed, earlier musical analysis; it is interesting particularly as a background to the composition of the period, and the article by Ian Bent that I mentioned is the best starting point for such a study. But for our purposes all we need to know about is the basic terminology which twentieth-century analysts inherited from their predecessors and which remains the starting point for a great deal of analysis even now. The vocabulary that was traditionally used for the description of music and the notations that were used to represent it are the topics of this chapter and, simple though these things are, they raise issues that attract analytical controversy to this day.
There were two main ways in which people approached pieces of music. One was their overall form and the other was their melodic, harmonic or rhythmic content. We'll consider each of these in turn.

Form was viewed in traditional terms. This means that analyzing the form of a new piece basically consisted of assimilating it into one existing formal prototype or another. The simplest of such analytical prototypes were purely sectional – binary form, ternary form – but forms of any complexity were described historically. This means not only that the familiar textbook forms (sonata, rondo, da capo aria) had a specific historical provenance, but also that they incorporated stylistic presuppositions of various sorts. The most important of these is that forms like rondo or sonata are by definition thematic. Certain parts of the music are picked out and identified as themes (and accordingly labelled A, B, B1 and so forth) whereas the rest of the music is regarded as non-thematic – or, to use the old-fashioned and rather unsatisfactory term, ‘transitional’ And each of the various historical forms was defined as a specific permutation of these thematic units, sometimes in a specific association with a tonal area – though the bias of analytical interest at the beginning of this century was heavily weighted towards thematic rather than tonal structure.

Now this doesn't mean that music was seen just as a succession of tunes. Although ‘theme’ and ‘tune’ can mean the same thing, when applied in this kind of analysis ‘theme’ is really a technical term. It refers to some readily recognizable musical element which serves a certain formal function by virtue of occurring at structural points. A tune can be a ‘theme’ in this sense; but so also can a striking chord progression, a rhythm, or indeed any kind of sonority. So if there is something unduly restrictive about this traditional way of looking at musical form – if, that is, it doesn’t express the experience of music very adequately – it is not simply because of the emphasis on themes. It has more to do with the function that the traditional approach to musical form ascribes to themes in music. I said that the term ‘transition’ was an unsatisfactory one: it implies that the function of all the sections in a piece of music that are not thematic is simply to link up the thematic ones – to create ‘transitions’ between them. But this isn't really how people experience music. Often – probably more often than not – it is the transitional passages of a sonata that are the most intense and expressive, not the themes; and this is especially true of Beethoven, who was traditionally
regarded as the great master of sonata form. Why, then, did analysts lay so much emphasis on the thematic aspects of musical form? There are two possible reasons. The first involves the kind of evolutionary thinking I described earlier. Analysts emphasized thematic patterns because it was these that defined the traditional forms, and they emphasized the traditional forms because they believed that people's responses to music were largely conditioned by the past. Either, they may have thought, people derived aesthetic pleasure from music because the musical form developed in accordance with their expectations. Or else people might derive pleasure from just the opposite—from the music being unpredictable, from its doing something other than what the listener expected. These two interpretations of how music gives pleasure are diametrically opposed, but as usual with diametric opposites they have a lot in common. They both agree that expectation plays an important role in music, and how could people have expectations about musical form if not on the basis of the forms they had previously encountered? This is one possible reason for thinking it appropriate to formulate standard patterns corresponding to 'the' classical sonata, 'the' classical rondo and so forth—models from which analysts could derive any particular sonata or rondo by showing the respects in which it conformed to the model and those in which it deviated from it. But there is also a second reason, and a more basic one. This has to do with the purposes for which this kind of analysis was being done. During the nineteenth century it had become normal for composition to be taught in classes at music schools, rather than through private lessons as had been the case till then. Teaching composition in this way meant that teachers relied increasingly on textbooks to guide their students in their attempts at composition. And the standard patterns of form I have described were primarily textbook models; they were meant to be copied, in the same way as student painters used to copy old masters at that time. In a sense, then, they don't primarily belong to the history of musical analysis as such: they belong to the history of composition teaching.

Yet people did try to explain existing music in terms of these textbook models, and there was a good deal of so-called analysis which consisted of no more than fitting compositions into the straitjacket of traditional form and ignoring the bits that didn't fit. There is always a temptation in musical analysis to make everything conform to the model, and this earned a bad name for the traditional approach to musical form. At the same time this kind of approach did sometimes produce work in which the individual qualities of a given piece were examined more sensitively. An example is the long series of analytical
essays Donald Tovey published during the first half of the century and which did much to establish the empirical climate of British musical analysis during that period. They began as programme notes to a regular series of concerts he conducted in Edinburgh, and – in contrast to the work of such continental contemporaries as Schenker – they were intended not for a professional readership but for the middlebrow, concert-going public. They lay somewhere between specialist analysis and journalism. Essentially Tovey wrote a prose commentary on the music (though sometimes he used a simple tabular format). He went through the composition in chronological order, briefly describing the effect of each section, quoting the principal themes as they occurred, and sometimes pointing out motivic similarities between them (or, as he put it, ‘deriving’ later themes from earlier ones); and he assigned each section to its place within the traditional formal plan. In this way he was constantly using traditional terms like theme and transition, exposition and recapitulation (although he preferred the term ‘group’ to ‘theme’ – first group, second group and so forth – on the grounds that a number of melodic ideas might have a single thematic role). However in using these terms he didn’t mean to say that everything could be fitted into a preconceived plan; in fact he frequently ridiculed this tendency, and was himself much more interested in the differences between different composers’ treatment of what was, analytically speaking, the ‘same’ form. Here to illustrate this is a comment he made about Schumann’s Piano Quintet Op. 44 which is typical both of his prose style and of his tolerant, non-doctrinaire attitude:

He is writing an altogether new type of sonata-work; a kind that stands to the classical sonata somewhat as a very beautiful and elaborate mosaic stands to a landscape-picture. In the mosaic the material and structure necessitate and render appropriate an otherwise unusual simplicity and hardness of outline and treatment, while at the same time making it desirable that the subjects should be such that this simple treatment may easily lend them subtlety of meaning – just as, on the other hand, the costly stones of which the mosaic is made have in themselves many an exquisite gradation of shade and tone, though the larger contrasts and colours of the work as a connected whole are far more simple and obvious than those of a painting.¹

In other words, he is implying, a mechanical comparison of the way composers treat musical forms misses the point: what matters is the

¹ *Essays in Musical Analysis: Chamber Music*, p. 150.
aesthetic values, the approach to musical materials, that underlie the forms themselves. And he frequently relies on literary devices such as metaphor to explain what is at issue. Indeed it is a characteristic of Tovey's to point to peculiarities of style without making any attempt to explain them in theoretical terms of any sort. Speaking of the main allegro theme of Tchaikovsky's Fifth Symphony (Fig. 1) he observes that 'great harmonic distinction is given to this theme by its first note. Those who misremember it as B will learn a useful lesson in style when they come to notice that this note is C and not B'. But just what is the lesson?

Fig. 1

What is Tovey getting at? Simply the rocking alternation of IV and I that underlies the tune? The fact that the tune arpeggiates a single C major triad, and that the avoidance of any dominant coloration means that there is only a weak cadential structure? Tovey doesn't say; he observes the phenomenon and leaves it at that; and his analyses fell into some disfavour after the middle of the century, in professional analytical circles at least, because of this lack of explicit theoretical content. What's the point, analysts began to ask, of describing the things that listeners can hear for themselves without attempting to explain them? More recently, however, people have been returning with renewed interest to Tovey and, in general, to straightforward, non-technical description of music. Simple but penetrating observations such as Tovey's make, if nothing more, an excellent starting point for a more technical analysis.

Returning to the earlier part of the century, and more particularly to continental Europe, there was a fairly general dissatisfaction with the fixed, normative models of the traditional forms. Increasingly analysts came to feel that the textbook forms that composition students were taught to imitate - 'the' sonata, 'the' rondo and the rest - had never actually existed in authentic classical music at all. As a matter of fact these compositional models weren't contemporaneous with the classical style; they had been invented around the 1840s, principally by the German analyst and aesthetician A. B. Marx. Marx was one of the main forces behind what became the widespread view that Beethoven's com-

1 Essays in Musical Analysis VI: Miscellaneous Notes, p. 61.
positions represent the purest and most perfect models of musical form. At first sight Marx's view of Beethoven (who had died in 1827) contrasts oddly with that of Beethoven's contemporaries, who were more inclined to see Beethoven as the quintessentially romantic iconoclast. They felt that Beethoven had shattered traditional forms by subordinating everything to intensity and immediacy of emotional expression. But in fact this is not so different from what Marx himself thought. He believed that the form of a piece of music must derive from its expressive content; he described form as 'the externalization of content' and hence concluded that 'there are as many forms as works of art'. However, he also acknowledged that forms have a tendency to become historically sedimented so that traditions of form arise - and it was in explaining this that he drew up his model for 'sonata form', a term which (as referring to a specific form) he had himself coined. What happened was that this model was taken out of context; people started using it as an analytical tool while ignoring Marx's broader conception of the nature of musical form.

The dissatisfaction with this misinterpretation of Marx that people felt in the early years of this century was on three main counts. First, as I said, that the normative forms were no more than pedagogical fictions. Second, that tonal relations (which, again, Marx had himself emphasized but which his successors neglected) were more important than thematic relations; the result of this criticism was a steady shift in the terminology for sonata form, away from melodic character and towards tonal function - the term 'first theme' being modified to 'first subject group', for instance, and then to 'first tonal area'. The third objection, however, was a more basic one: that the important thing about form in music was not how far it happened to fit or not fit with traditional patterns. Progressive analysts began to feel that it was the functional, and not the historical, aspects of musical form that mattered. They became increasingly interested in the harmonic or motivic content of music, because they felt that it was only by virtue of their relation to such things that musical forms had any meaning. They believed that the methodological division between the forms of music, on the one hand, and its content, on the other, was an artificial one and that the traditional formal moulds represented at best purely superficial aspects of the real formal process. In a roundabout way, therefore, they returned to something nearer Marx's original understanding of form.

\[1\] These translations of passages from Marx's *Die Lehre von der Musikalischen Komposition* are taken from Bent's article.
As a matter of fact these progressive analysts – whom we shall meet in subsequent chapters – were probably overreacting. Such things as the contrasts between thematic and transitional areas, the textural characteristics of different formal areas, and so on, have a great deal of importance for the listener. Composers take a great deal of care over them. And there are clear historical traditions within individual forms – so that for instance a composer, when writing a sonata, makes certain presuppositions about the form which derive from earlier composers. All these considerations were largely ignored in the analytical reaction against the traditional forms. And although historical studies of these matters continued, it is only quite recently, with the writings of Charles Rosen, that the traditional aspects of musical form have really become respectable again in analytical circles.

In his books *The Classical Style* and *Sonata Forms* Rosen attempts to explain the apparent diversity of forms found in classical music. He does this in terms of the aesthetic values that underlie them. Rosen is very emphatic that form was important to the classical composers and that their style was largely designed so as to delineate form clearly: ‘sonata style’, he says (and the definition of sonata as a ‘style’ is characteristic), ‘is essentially a coherent set of methods of setting the contours of a range of forms into high relief and resolving them systematically’ (*Sonata Forms*, Norton, 1980, p. 174). But the kind of form they wanted to delineate, as he explains, was not a pattern of themes or keys as such; rather it was a certain kind of structural coherence. The point about sonata form was not that there was anything special about it as a surface pattern, but that it presented a kind of tonal drama. This drama was based on the concept of one key, the tonic, being consonant and all the others being dissonant in relation to the tonic. And the thematic materials could be associated with key structure in two basic ways. They could be associated directly with one key or another so as to clarify these keys and make their formal function more readily perceptible. Or tonal and thematic plans could be staggered against each other so as to produce a more elaborate form – as in the recapitulation of a second thematic group in the tonic. But what is important is not the particular succession of themes and keys so much as the underlying concept of sections being consonant or dissonant, much in the manner of notes being consonant or dissonant in strict counterpoint. A section in a key other than the tonic is dissonant and requires formal resolution: it is this concept that Rosen regards as the common factor behind the variety of classical forms – indeed, he says ‘the principle of recapitulation as resolution may be considered the most fundamental and
radical innovation of sonata style' (p. 272). As long as this principle is adhered to, any number of variations in surface form are possible. For instance, there may be only one thematic group which is used both in tonic and dominant (as Tovey observed, this is frequently the case in Haydn). Again, a theme may be recapitulated in the 'wrong' key, or new material introduced in the development; in either case the result will be an extension of the recapitulation or more probably a coda, in which the balance will be restored. The underlying rule is simply that all thematic material should appear for the final time in the tonic; and there is no limit to the number of surface 'forms' conforming to this underlying formal principle.

Rosen's account of sonata forms (the reason for the plural in his title should now be obvious) in terms of underlying concepts such as structural dissonance and formal balance is convincing and easy to follow, consisting as it does of verbal explanation and musical examples with a minimum of technical apparatus. At the same time it is important to point out that Rosen's approach is rather similar to the iconographical approach in art history, the aim of which is to recreate the artist's intentions by an exhaustive study of symbolical implications of his work — implications that would otherwise be overlooked today. In other words, Rosen is explaining form in terms of the composer's intentions rather than the modern listener's responses. Many listeners do not appear to be aware of the kind of large-scale relationships of tonal contrast that Rosen is concerned with — except, of course, for listeners with perfect pitch, who can follow these relationships almost as if they had the score in front of them. But, as Rosen says,

no composer . . . has ever made his crucial effects depend on such perception: even if he expects his most subtle points to be appreciated only by connoisseurs, he does not write the entire work calculatedly above the head of the average listener. But there is at least one person who is sure to recognize the reappearance of a tonic even without thematic reference: the performer. It is for this reason that subtle effects based on tonal relations are much more likely to occur in a string quartet or a sonata, written as much for the performers as for the listeners, than in an opera or a symphony, more coarsely if more elaborately designed. (The Classical Style, Viking, New York/Faber, London, 1971; revised edn 1976, p. 299.)

What Rosen is saying here is that you can't fully understand classical music, especially classical chamber music, just in terms of how it is heard. You have also to understand it in terms of the musical thinking
that gave rise to it, and of course it is the job of analysis to uncover what this musical thinking was. This means that music as it appears to the listener and music as it appears to the analyst may not necessarily be quite the same thing. The relationship between the two is one of the most problematic issues in the whole business of musical analysis and it will crop up repeatedly in this book.

III

So much for traditional ways of seeing form. What about traditional ways of seeing content? At the beginning of the century, as indeed nowadays, it was harmony that was regarded as the most crucial aspect of musical content—at least in the music of the eighteenth and nineteenth centuries. And as the traditional way of analyzing harmony was to rewrite it in terms of some kind of simplified notation, it is sensible to begin by briefly considering what a notation is and how it works.

Essentially there are two analytical acts: the act of omission and the act of relation. Conventional musical notation is analytical in both these respects. It omits things like the complex overtone structures of musical sounds, representing sounds by their fundamentals alone. Even in the way it represents these fundamentals it is schematic, because it reduces to a few symbols and a finite number of chromatic pitches the enormous variety of articulations and intonations that string players and singers, for instance, adopt. Similarly conventional notation does not show the fine detail of rhythmic performance; indeed it makes heavy weather of showing any rhythmic values which are not in the simplest arithmetical relationships. In all these respects, as in others, the ordinary performance score constitutes an informal and rather unsystematic analysis of musical sound, sacrificing detailed representation in the interests of clarity, simplicity and intelligibility. The various methods of representing harmonic formations in music which the rest of this chapter describes have the same aims of clarity, simplicity and intelligibility; but the pattern of omission and relation is different, since the purpose of the representation is not the same.

The first of these ways of representing harmonic relationships is the figured bass, which was of course a performance device in origin but continued in use after the demise of the baroque style as a means of
analyzing harmony. It is reductive in that it assumes that register is of no significance, as Fig. 2 shows; consequently it says nothing about the

Fig. 2

melodic relationships between one chord and the next. (Hence learning to realize a figured bass is not so much a matter of reading the notation as such, which is easy, as of supplying the correct voice-leading relationships in the upper parts: relationships which are implicit in the baroque bass line but about which the notation itself is silent.) Within these limitations, figured bass notation is very catholic in what it can notate; any combination of notes can in theory be represented by the use of a sufficient number of figures together with accidentals where necessary – although in practice the notation is not really legible in chords of any great complexity. Actually to talk about ‘chords’ in relation to the figured bass is something of a misnomer. This is because, though by convention you assume a triadic realization except when the figures specify something else, the notation simply shows aggregations of intervals. It does not, in other words, categorize chords as such at all. It does not distinguish chords from ‘non-chords’ – formations resulting, say, from passing notes. And it does not recognize that there is any special connection between, say, a root position triad and the same triad in first inversion. Figured bass is, in short, too literal-minded to be a powerful analytical tool: it does not give you any real criteria for deciding what is more important and what is less important, which is the basis of any analytical interpretation.

Roman-letter analysis is the second of the ways of representing harmonic relationships, and it overcomes many of these limitations. Unlike figured bass, it originated as an analytical device and not in performance practice.\(^1\) Despite its apparent simplicity it is quite a

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\(^1\) For the early history of harmonic analysis, including the development of Roman letter notation, see David Beach, 'The Origins of Harmonic Analysis', *Journal of Music Theory*, 18 (1974), p. 274.
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powerful analytical tool. Like the figured bass, it ignores register. But instead of relating the various notes of a chord to the actual bass – as does the figured bass, which in consequence only works in textures where there is a distinct bass line – it relates them to the root of the chord. (Figure 3 illustrates this.) Then, as a second stage, it relates this chordal root to the tonic, showing how many diatonic steps above the tonic the chordal root is: this is what the Roman letter itself indicates. The fact that harmonic formations are here translated into a single symbol, unlike the several numbers designating a harmonic formation in figured bass notation, means that Roman-letter analysis chops music up into a series of disjunct chords – in contrast again to the figured bass, where, as I said, there are no ‘chords’ as such but instead a series of intervallic values in relation to a bass, values which need not all change at once so that one harmonic formation can flow smoothly into another. The way in which it chops music up is both the strength and the weakness of Roman-letter analysis.

Fig. 3

![Diagram of chords]

Translating a series of chords into figured bass notation is an almost completely mechanical process that proceeds note by note and chord by chord. But assigning Roman letters involves a lot more in the way of analytical decisions. In order to assign a Roman letter you have to decide what key the music is in; you have to decide how many chords it should be chopped up into; and you have to decide what those chords are – which means deciding which notes in the music have a harmonic function and which are inessential, such as passing notes. Let us take these decisions in turn.

Suppose you are analyzing Beethoven’s ‘Waldstein’ Sonata (Fig. 4 shows its first 38 bars). What key is this in? Since classical movements do not always begin in their tonic key, but invariably end in it, the easiest way to answer this question is to look at the end of the movement: it is in C major. But is the opening in C major? No: the first phrase spells out IV – V’ – I of G. And the second phrase spells out the
same chord series, only in F. What are we to make of this? Does it mean that there is a modulation between bars 4 and 5? If we say this, then as we continue we will find that the music is a patchwork of different keys and the piece will come out of the analysis looking a complete muddle. Then should we regard everything as really being in C, and so analyze the first eight bars as I – II’ – V – VII – I – I’ – IV? But this is not sensible, because the chord-symbols no longer demonstrate the similarity of harmonic pattern between the first two phrases. The best solution to this problem is to use the Roman letters in a hierarchical way, instead of relating every chord directly to the overall tonic. This means that we call the first phrase as a whole V, and the second phrase IV; and we relate the chords within each phrase to this overall harmonic function. We can write this as V (IV – V’ – I), IV (IV – V’ – I) – meaning that there is first a IV – V’ – I of V and then a IV – V’ – I of IV. And if we analyze the whole of Fig. 4 this way, we will come up with the following chart:

<table>
<thead>
<tr>
<th>Bar</th>
<th>1</th>
<th>5</th>
<th>9</th>
<th>14</th>
<th>18</th>
<th>22</th>
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<tr>
<td></td>
<td>V</td>
<td>IV</td>
<td>V</td>
<td>V</td>
<td>VI</td>
<td>V</td>
</tr>
</tbody>
</table>

What does this tell us? The answer is, quite a lot. For instance, notice how chords on the same root (for instance the Cs at bars 1 and 6) appear on different occasions, but with a different analytical interpretation: the analysis is saying that a C chord will appear quite different depending whether it is functioning as a IV of V, as in bar 1, or a V of IV, as in bar 6. (As a I, of course, it would be different again.) In other words the analysis is saying that the way you experience the sound depends on the harmonic context, and because Roman-letter analysis does take account of context, in a way that figured bass notation does not, it is quite wrong to dismiss it as ‘naive associationism’. Associationism means making a mechanical link between an isolated stimulus and an isolated response (Pavlov’s bell and his dog’s

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1 The symbol ff means a II that is altered in some unspecified manner: here, because it is a D major chord when it ‘should’ have been D minor.

2 Some people use an alternative notation for the same thing: IV – V’ – I instead of V (IV – V’ – I).

Fig. 4 Beethoven, ‘Waldstein’ Sonata, I, bars 1–38

Allegro con brio

cresc.
decresc.

20
salivation), and this is just what is not characteristic of Roman-letter analysis, at least when it is done sensibly.

What else does this analysis tell us? It explains the otherwise puzzling relationship between the G chord in bar 4 and the Bb chord in bar 5; or rather: it says that there is not a direct relationship between the two (they are connected only indirectly, through the overall harmonies of the phrases to which they belong). Again, the analysis shows how Beethoven establishes his C major tonality without ever stating it directly at phrase level; that's an important observation on Beethoven's style. And it also reveals that there is a rather simple, and not immediately obvious, harmonic design behind this entire opening section. However, we need to be a bit careful here. The analysis says that the music starts with a V (IV – V7 – I). And so it does, looked at in terms of the overall design. But does it sound that way? Of course not, because the listener has no way of knowing that the first chord is a IV of V. In fact it is not till about the tenth bar, at the earliest, that any very definite sense of what overall key the music is in emerges at all. But this is something that Roman letters cannot express properly. To assign them you already need to have decided on the key, whereas the listener may have made no such decision. This is an example of one of the dangers of Roman letters, which is that they tempt you to say more about the music that you actually mean to.1

The other decisions I mentioned were how many chords the music should be segmented into and what they are. The opening of the

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1 When keys are not clear – at the beginning of a piece, in a transition or a development – you may want to segment the music into chords without assigning them a specific tonal function. In such cases you can simply call them D7 chords, A7 chords and so on – or better still, use pop music notation (in which D7/F means a D7 triad in first inversion, D7/B means a D7 triad over a B bass, and so on). If you begin by doing this, you can always add a Roman-letter interpretation at a later stage. It is better to say too little than too much about harmonic functions.
Fig. 5  Beethoven, *Pathétique* Sonata, I, bars 1–10

Grave

\[\text{attacca subito il Allegro}\]
‘Waldstein’ presents no difficulties as regards these decisions, so we shall use the slow introduction of the Pathétique Sonata for illustration (Fig. 5). This time deciding on the key is easy (it is C minor), but which chords do we label? The thing not to do is to label every chord as it comes — for example, saying that the first bar consists of two I chords followed by a V₆, followed by another I, followed by a . . . well, what is the next chord? It’s a diminished seventh: how do we analyze that in relation to the tonic? The usual way would be to say that it is functioning as a kind of V₆ of V, that is to say as a variety of D chord. But try playing it as a D chord, replacing the E₇ with a D, and you’ll find the effect of the music is quite spoilt. On the other hand if you replace the diminished chord with a I₆ (play a G in the left hand), you will find the music works much better. Why is this? It’s because the diminished chord is not really a structural chord at all. It is a multiple-appoggiatura formation leading to the V with which the phrase ends; that is why it is perfectly all right to replace it with a I₆ (which is in essence just a double appoggiatura to V). However, if you change it to a V of V you get an extra chord that sounds structural and it is this that clogs the harmonic motion. And if you insist on applying some harmonic label to the diminished chord, then it will be this clogged version of the music you are talking about, not Beethoven’s. This is the analytical equivalent of playing the music in rock piano style, placing an equal emphasis on each chord one after another: it shows the same lack of musical understanding.

Tangles like this inevitably arise if you try to go into too much detail using Roman letters. If you parse everything harmonically, you end up with an imposing series of labels but no clear idea of how the music works; and an analysis that does not simplify the music for you is really a complete waste of time. After all, there is no virtue in reduction as such: only in the kind of reduction that makes something intelligible to you that wasn’t otherwise. But how can Roman letters be used to clarify the introduction to the Pathétique? The answer is that you have to step back from the music and take each phrase as a whole, rather than starting at the beginning and handing out labels one by one till you get

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1 People quite often combine Roman letters and figured bass numbers like this, either to indicate inversions (as here) or to notate chords containing dissonances (II₆, V₆). This is handy but you have to watch for confusions. For instance, in V₁₀ the 6 and 4 are being measured in relation to the actual bass, D; on the other hand people will refer to a dominant seventh G as V₆ even when it is in first inversion, so here the 7 is being measured against the fundamental bass (G).
to the end. Instead, ask yourself where each phrase goes from and to: in other words, look at the cadential structure. The first two phrases (bars 1–2) form a pair, going from I to V and back to I. The third phrase (bars 3–4) looks to be going to V but sidesteps and cadences with a II–V–I pattern onto III, the relative major. The music returns to the tonic minor, first with an interrupted cadence (bar 9) and then with a II–V–I cadence whose final chord is the beginning of the Allegro (bar 11).

We do at least have an analysis now. We have said that certain chords are essential, and we have omitted everything else as being not so essential. For example, we have omitted the emphatic chords that straddle bars 6 and 7, and this is absolutely correct because these chords actually have no harmonic function at all. Play them and ask yourself where the music is going. You will find that they do not imply any definite cadential movement. They are enclosed within a sustained block of diminished seventh harmony lasting from the last beat of bar 5 to the second beat of bar 8; they don't form part of any larger progression. So omitting them in itself represents an analytical insight. But it is a negative one: can't we say anything more positive about these chords? The answer is no, not if we are going to stick to Roman-letter analysis. And the reason for this is that these chords have a linear rather than a harmonic function. Look at the bass in bars 5–7: the chords form part of a consistent stepwise fall (we can ignore the changes in register for now). Look at the top line: the chords form part of a line that rises, with a wave-like sequential motion, all the way from the F of bar 5 to the high F of bar 9. If you want to get a more detailed understanding of the music's harmonic structure, then you have to consider its linear patterns: and you can't do this if you reduce everything to harmonic symbols. What is required is some kind of analytical equivalent of a short score.

Now there was a final approach to the content of musical compositions which was not in itself an analytical method as such, but which greatly influenced the thinking of analysts round 1900 – and especially when they were dealing with the relationship between harmony and line. This was Fuxian (or species) counterpoint, a full explanation of which is outside the scope of this book. But it is worth making a few observations about it which are relevant to the way in which harmonic analysis developed in the twentieth century. It was a system of compositional training, and it took the form of a series of exercises. The simpler exercises consisted of purely consonant formations – two or more lines of music moving at the same speed and with only consonant intervals (such as the octave, perfect fifth and third) between them. In more
advanced exercises the lines moved at different speeds and dissonances were allowed between them; but each dissonance had to be carefully 'prepared' by stating one of its notes as a consonance beforehand, and by resolving the dissonant note by step. From the analytical point of view, the implication of this was that dissonant formations could be seen as linear elaborations of underlying consonances, or, more generally, that complex harmonic formations could be seen as linear elaborations of simpler harmonic formations; Fig. 6 illustrates this. But Fuxian principles were only concerned with the handling of immediate successions from one note to the next. Large-scale harmonic and linear relationships could neither be taught nor understood in terms of strict counterpoint; traditionally, therefore, they were considered to be aspects of 'free composition', and governed solely by the composer's artistry and taste. This is why it was in a book of that otherwise curious title that Heinrich Schenker presented a means of combining harmonic analysis with the principles of strict counterpoint in such a way as to overcome the limitations of each, and so show that even artistry and taste were not wholly inaccessible to rational explanation.

Fig. 6