Beethoven's Instrumental Fugal Style: an Investigation of Tonal and Thematic Characteristics in the Late-Period Fugues.

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Summary of Thesis

The present thesis examines the instrumental fugues written by Beethoven during the last twelve years of his life (1815-27). It does not deal specifically with the fugati nor with the incidental fugues though these may on occasion be mentioned. The fugues to be discussed are therefore as follows: Op. 102 no.2 (III), Op. 106 (IV), Op. 110 (III), Op. 120 (var. 32), Op. 133 and Op. 131 (I). The criteria by which the scope of the thesis has been restricted to these particular works are outlined during the Introduction which also includes a discussion of the style of analysis adopted and of the relevance of certain analytical methods. The aims of the thesis in dealing with these works are as follows: first and foremost it is intended that a series of detailed analyses of the late-period fugues be offered, since the fugue as a genre in Beethoven's music has suffered undue neglect. Secondly the thesis seeks to determine the means by which the fugue is integrated into the musical structure as a totality and to assess its role within that structure. Finally the thesis aims to establish whether or not the several fugues exhibit similar tendencies in respect of their tonal characteristics and thematic treatment.

In order to fulfill the primary objective of the thesis, the fugues are considered individually, a chapter being devoted to each of them. These analyses form the bulk of the thesis and incorporated within them are observations relevant to the second objective of the thesis. For a number of reasons, enlarged upon during the Introduction, it has seemed fit to divide the analyses into two groups, those in Part II of the thesis being more substantial than are those in Part I. The conclusion deals with the third objective of the thesis by drawing out for further consideration and comparison the salient points from each analysis. In this manner, it is submitted, the present thesis will bridge a substantial gap in the Beethoven literature and in so doing afford fresh insights into certain of Beethoven's most exalted creations.

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TO MY MOTHER

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INTRODUCTION

The Purpose and Scope of the Present Thesis

The fugue as a genre has received little attention in the literature on Beethoven currently available. The majority of the analyses which have been made exist in volumes which deal not with the fugue itself, but with some other musical sphere, often a 'Life and Works' style of approach[1] or an all-embracing consideration of a particular medium such as the piano sonata or the string quartet. Thus, for example, Tovey's volume on the piano sonatas includes, fortuitously as it were, an analysis of the fugues from Op.106 and Op.110[2], while the Grosse Fuge and the fugue from Op.131 are discussed in the various commentaries upon the quartets as a whole[3]. Inevitably when this manner of approach is taken the fugue may claim no role of especial importance: it is examined as and when it occurs but otherwise ignored. Thus in each of these instances the fugue is analysed not because it is a fugue, but because it happens to fall within the scope of the appropriate volume, and since that scope is often defined by criteria which embrace a substantial part of Beethoven's oevre, the analyses offered tend to do little more than scratch at the surface.

There are nonetheless some notable exceptions to this general failure to deal with the fugue as a genre in Beethoven's output: an important example is the series of analyses provided by Cockshoot which examines the fugue and fugato in Beethoven's piano music in some detail[4]. However, as his title suggests, two of the very greatest fugues (Op.133 and Op.131) lie outside the scope of his study[5]. A further exception which deserves mention is Kirkendale's volume which deals with Beethoven's fugal works in toto, but so immense is his sphere of interest, the chamber works of the entire Rococo and Classical periods, that there is little room for any detailed analysis[6]. Moderately detailed however,

is his examination of the Grosse Fuge, his analysis of which was published in a separate article prior to the publication of his book[7].

In addition to these volumes there is a number of articles dealing either with individual selected fugues[8] or, by contrast, with the fugues in a general sense which need not necessarily entail specific consideration of the fugues themselves[9]. Kerman's volume on the Beethoven quartets, for example, devotes a separate and enlightening section to the role of fugue in Beethoven's music which serves as a preface to his analysis of the two fugues relevant to his theme[10]. Finally, Beethoven's interest in counterpoint may be examined from a different perspective altogether, that is through an investigation of his contrapuntal studies and the extent of his familiarity with the various treatises to which his tutors referred him[11]. This approach throws interesting light upon Beethoven's efforts to master the intractable art of counterpoint, but it is not directly relevant to the line of investigation pursued in the present thesis[12].

One thing thus becomes clear: in spite of the extensive nature of the Beethoven literature generally, the fugue as a genre has suffered considerable neglect. Winter's consideration of the structure of the C# minor quartet includes an observation regarding the

> "paucity of penetrating analyses of even his best-known works," 13

a comment which might well have been made with specific reference to the fugues. It is at once amusing and tragic to read, as late as 1967, the following remark pertaining, incredibly, to the Grosse Fuge:

> "This little known and hardly adequately appreciated work is nevertheless worthy of serious attention." 14

Clearly a number of important analyses have emerged since then, but this quotation yet remains symptomatic of the general neglect of

Beethoven's fugue still very much in evidence. It may be that some writers, focusing their attention upon Beethoven as the summation of the Classical style and as the instigator also of Romanticism, have disdained a musical style so clearly belonging to the pre-Classical era. Be that as it may, the omission of a comprehensive survey of Beethoven's fugues from the literature is a shortcoming to be pondered in amazement, the more so in view of the fact that Beethoven's fugues are almost without exception to be ranked amongst his greatest creations. The present thesis therefore offers a detailed consideration of the late-period fugues which are here viewed from a non-academic perspective with the emphasis clearly on Beethoven's handling of tonality and thematic content rather than upon his adherence to, or departure from, traditional fugal procedure. In this way it is hoped not only that a significant gap in the literature be bridged, but also that a fresh range of insights be offered into these musical structures of transcendental originality and depth. Before these analyses may be presented it is necessary first to outline in more detail the scope of the thesis and to explain the criteria by which the works selected for analysis have been chosen.

The thesis deals with the instrumental fugues written during Beethoven's 'third' or 'late' period. The division of Beethoven's life and works into a number of fixed periods is the subject of a penetrating article by Solomon[15]. His argument that the middle and third periods are separated by a period of transition is a sensible attempt to rationalise the crudities inherent in any such division of Beethoven's works. In the broader context his views deserve credence, but for the purposes of this thesis (which deals only wth the fugues) the late period may be said to begin with the 'Cello Sonatas Op.102, since the fugue from the second of these sonatas and the fugues which follow are third period in style even though some of them precede what Solomon describes as

"the consolidation of the late style at a high level of productivity." 16

The following table, based on that offered by Kirkendale[17], therefore lists all of Beethoven's instrumental fugues and fugati beginning with the 'Cello Sonatas Op.102 and continuing throughout the last years of Beethoven's life. The opus numbers and title of each work are given as well as the date of composition and, where appropriate, the location of the fugue or fugato within the work as a whole. Only actual compositions are included: the various projected works, arrangements and fragments listed by Kirkendale are omitted, though one unlisted project is discussed below[18] since in the present view it is of particular relevance to a consideration of the late-period fugues.

Work		Location	Date
Op.102 no.2	'Cello Sonata in D major	III:finale	1815
Op.101	Piano Sonata in A major	III:development in sonata form	1816
Op.137	Quintet Fugue in D major		1817
Op.105 no.1	Variations for Piano and Flute in G major 19	After variation 3	1817-18
Op.107 no.3	Variations for Piano and Flute in G major 19	After variation 5	1817-18
Op.106	Piano Sonata in B♭ major	I:development in sonata form	1817-18
Op.106	Piano Sonata in B♭ major	IV:finale	1817-18
Op.110	Piano Sonata in A♭ major	III:Arioso-fugue-arioso-fugue	1821
Op.111	Piano Sonata in C minor	I:development in sonata form	1821-2
Op.124	Overture - Die Weihe des Hauses in C major	b.88ff.	1822

Work		Location	Date
Op.120	Diabelli Variations in C major	Variation 24	1822-3
Op.120	Diabelli Variations in C major	Variation 32	1819-23[20]
Op.125	Ninth Symphony in D minor	II:beginning of scherzo	1822-4
Op.125	Ninth Symphony in D minor	IV:finale, b.401 ff.	1822-4
Op.125	Ninth Symphony in D minor	IV:finale, b.654 ff.	1822-4
Op.127[21]	String Quartet in E♭ major	III:beginning of scherzo	1822-5
Op.132	String Quartet in A minor	III:b.171 ff.	1825
Op.133	String Quartet in B♭ major	Original finale to Op.130	1825
Op.131	String Quartet in C# minor	I	1825-6

Even the briefest of comparisons between the fugal passages here listed and those to be found in Beethoven's earlier works could not fail to establish the greater incidence of extended fugal writing in the late-period works. It is for this reason that the present thesis deals only with the late-period fugues, for only at this time does the fugue as a genre assume a significance which merits so detailed an inquiry. The earlier works do include numerous fugati, often introduced either as a means of development[22] or as the first or second subject in a sonata form structure[23], but only one instance of what might properly be termed a fugue[24]. In the later works the fugato continues to occur with comparable regularity although it may become a more substantial affair resembling more an incidental fugue than a fugato[25]. Indeed the occurrence of a small-scale fugato like that which opens the slow movement of Op.21 within a late-period composition of the highest stature is a rarity, the main examples being the fugati from Op.111 and Op.127, both of which are however classified by Kirkendale as

"dubious." 26

The less extended fugati are on the whole confined to works of lesser import[27].

The general picture then is one of increasing importance both of the fugue and of the fugato in the late-period works. The present thesis is devoted to a consideration of what may be termed the 'complete' fugue, that type of fugal passage which in the late works must be viewed as a relative newcomer, a significant broadening of Beethoven's contrapuntal horizons. The criteria by which a distinction is to be made between the fugue and the fugato, or more specifically between the 'complete' fugue and the 'incidental' fugue and between the 'incidental' fugue and the fugato must needs be clarified in order to explain the selection for consideration of those particular works upon which the present thesis is based and the omission of the other works listed in the table above.

The discussion thus far has already stated by implication the existence of a continuum which spans the whole gamut of fugal expression from the briefest of fugati to the greatest of fugues. Any terminology which attempts to classify such works according to their fugal content must, as a consequence of this continuum, be tolerant of compromise or else betray those flexible dimensions which are a reality of the music. Even the composer's indications are not to be taken as a literal guide for these demarcations: Beethoven, for example, describes Op.102 no.2(III) as 'fugato' and Op.133 as '<u>Grosse Fuge</u>' notwithstanding the fact that the former of these is consistently fugal while the latter is frequently homophonic. The following terminology is an attempt to deal with this problem in a realistic and flexible manner, a manner which has been found to be of use in the preparation of this thesis as a means of determining which of the works listed are most suited for inclusion. Four types of fugal passage may be distinguished, the fugato and the three subdivisions of the term 'fugue', namely the incidental fugue, the complete fugue and the separate fugue[28]. These terms may be defined as follows: the fugato denotes a fugue exposition or a series of fugal

entries occurring within an otherwise homophonic or non-fugal movement. If this is extended beyond the introduction of the several voices with the subject to include further entries or episodes it may be described as an incidental fugue. The complete fugue relates to a movement which is entirely fugal, the structural design not necessarily being determined by rules governing any other form. Should this occur as an independent composition, rather than as one of several movements in a larger work, it is referred to as a separate fugue. This terminology is an expansion of the distinction made by Bullivant when referring to the continuum between the complete and incidental fugues[29]. In fact the first three terms should be viewed as points on this continuum rather than as separate isolated categories while the fourth is clearly identical to the third, except that it does not constitute an integral part of a larger musical structure.

It is vital to appreciate firstly that these are not rigid Procrustean definitions, but rather the identification of movable points on the continuum, and secondly that few, if any, of the works can be deemed to coincide at exactly the same point on this continuum. The present thesis deals only with the complete fugue, that is with those movements which are entirely fugal and which occur as part of a larger muscial structure. This is a necessary restriction given that the thesis is concerned with the tonal structure of the fugues: in those cases where fugal texture is introduced within the confines of an essentially non-fugal movement its structure is clearly subordinated to the dictates of the larger musical structure, while the structure of the complete fugue is by contrast independent of such external considerations. Since the scope of the thesis is for this reason limited to the complete fugue the distinction which now needs to be drawn is that which divides the incidental from the complete fugue. Allowing for brief non-fugal introductions such as the prefatory Largo in Op.106 (IV), itself a

demonstration of the flexibility required in the application of these definitions, the following works are automatically to be included within the scope of the thesis: Op.102 no.2 (III), Op.106 (IV), Op.133 and Op.131 (I). The Grosse Fuge, though published independently of the B♭ major quartet, Op.130, was originally intended as the finale to that quartet and may therefore be ranked as a complete, rather than as a separate, fugue. The fact that it so often has recourse to homophonic writing is a salutory reminder of the failure of any attempt to classify musical works according to rigidly pre-defined moulds. Clearly however, its omission from the thesis would be unthinkable.

Besides these four movements there are in addition two others which demand consideration and possible inclusion: these are the fugues from the A♭ major sonata, Op.110 and the Diabelli Variations, Op.120. All the other instances of fugal writing listed in the table above fall unambiguously outside that part of the continuum which might reasonably be said to embrace the complete fugues. The two fugues just mentioned fall, as it were, in the overlap between the complete and the incidental fugue. The first of these, the fugue from Op.110, is certainly of curious construction and likely to prove inconvenient however one defines one's terms of reference. It is included within the scope of this thesis because, as suggested in the consideration of its structure below[30], it seems most appropriate to regard its two fugal passages as one complete fugue which is divided by the return of the Arioso. The fugue from the Diabelli Variations is also included, but for different reasons: since the structure of any set of variations is that of a single integrated unit which does not subdivide into a number of separate movements the classification of the 32nd variation from Op.120 as a complete fugue would seem contrary to the definition given above. Nevertheless its function within the structure of the work as a whole is consistent with that of the other works here discussed, with the

exception of Op.131 (I), in so far as it takes on the role of the finale. Its inclusion is further justified by consideration of its thematic content and certain structural and thematic procedures characteristic of the other fugues. These matters are elaborated upon in the appropriate analysis below and therefore require no further clarification at this point[31]. Suffice it here to state that an analysis of the fugue from Op.120 will appreciably enhance our overall perception of Beethoven's late-period fugal style.

The present thesis thus focuses upon the six most important fugues by Beethoven, the finale of the 'Cello Sonata in D major Op.102 no.2, the finale of the Piano Sonata in B♭ major Op.106 and A♭ major Op.110, the fugue from the Diabelli Variations in C major Op.120, the Grosse Fuge Op.133 which was Beethoven's original finale to the String Quartet in B♭ major Op.130, and the opening movement of the C# minor String Quartet Op.131. The decision to concentrate exclusively upon these movements is, as the above discussion makes clear, neither whimsical not arbitrary, but rather the natural consequence of the logical application of relevant criteria. These six analyses which form the essence of the thesis are divided into two groups, the first group (Part I) comprising the fugues from Op.102 no.2, Op. 110 and Op.120, the second (Part II) those from Op.106, Op.133 and Op.131. The analyses in Part II of the thesis are more substantial than are those in Part I, most obviously because the fugues concerned are themselves more substantial, whether in length (Op.106 and Op.133) or in content (Op.131), but also because these fugues exhibit a more pronounced tendency towards structural and thematic integration than do the fugues in Part I. This tendency will become clear during the analyses, but here an important compositional principle may be noted which is largely responsible for the profound unity of the late-period fugues: this principle, or

"device"[32]

as Kerman calls it, concerns the melodic contour of the fugue subject and its capacity to influence the tonal structure of the fugue or, in the case of Op.131 where the fugue is placed first, its influence upon the entire quartet as a totality. The very fact that a device such as this is used, whether to promote the internal unity of the fugue within which it occurs or to enhance the integration of that fugue into the total musical structure, is a consideration which requires a fundamental re-appraisal of the perspective from which the fugues are to be viewed. For this reason there now follows a brief description of the style of analysis adopted during the present thesis, a style which would be quite irrelevant were the fugues of Bach under examination, but which illumines the fugues of Beethoven in a manner far beyond the range of conventional fugal analysis.

1. See, for example, Martin Cooper : Beethoven The Last Decade 1817-1827 (Oxford, 1985) and Denis Arnold and Nigel Fortune (editors) : The Beethoven Companion (London, 1979).

2. Donald Francis Tovey : A Companion to Beethoven's Pianoforte Sonatas (London, 1931), pp.243-56 and pp.279-87 respectively.

3. See, for example, Daniel Gregory Mason : The Quartets of Beethoven (New York, 1947) and Joseph Kerman : The Beethoven Quartets (London, 1978).

4. John V. Cockshoot : The Fugue in Beethoven's Piano Music (London, 1959).

5. His style of analysis, incidentally, differs markedly from that adopted in the present thesis : see below, p.21.

6. Warren Kirkendale : Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979).

7. Warren Kirkendale : 'The Great Fugue Op.133 : Beethoven's Art of Fugue' in Acta Musicologica, vol. xxxv (1963), pp.14-24.

8. See ibid., for example. Also Sydney Grew : 'The Grosse Fuge : an Analysis' in Music and Letters, vol.12 (1931), pp.253-61.

9. See, for example, Otto Zickenheiner : 'Zur kontrapunktischen Satztechnik in späten Werken Beethovens' in Beethoven - Jahrbuch, vol.IX (Bonn, 1977), pp.553-69.

10. Joseph Kerman, op. cit., pp.269-302.

11. These include Gustav Nottebohm : Beethovens Studien - Erster Band - Beethovens Unterricht bei J. Haydn, Albrechtsberger und Salieri (Leipzig and Winterthur, 1873). Alfred Mann : The Study of Fugue (London, 1958), p.213 et seq. Alfred Mann : 'Beethoven's Contrapuntal Studies with Haydn' in The Musical Quarterly, vol.56 (1970), pp.711-26. On Beethoven's relationship with his tutors see James Webster : 'The Falling-out Between Haydn and Beethoven : The Evidence of the Sources' and Martin Staehelin : 'A Veiled Judgement of Beethoven by Albrechtsberger?' both in Beethoven Essays (Cambridge, Massachusetts, 1984), p.3 et seq. and p.46 et seq. respectively.

12. The style of this thesis is a matter for discussion below; see below, p.20 et seq.

13. Robert Winter : 'Plans for the Structure of the String Quartet in C Sharp Minor, Op.131' in Beethoven Studies 2 (London, 1977), p.110.

14. Hugo Leichtentritt : musical form (Cambridge, Massachusetts, 1967), p.321.

15. Maynard Solomon : 'The creative periods of Beethoven' in The Music Review, vol.34 (1973), pp.30-38.

16. ibid., p.38.

17. Warren Kirkendale, op. cit. (Fugue and Fugato in Rococo and Classical Chamber Music), pp.225-7.

18. See App.I, p.251 et seq.

19. A certain amount of leeway is admissible with the instrumentation; thus in the Gesamt-Ausgabe these works are designated

> "für Pianoforte allein oder mit Flöte oder Violine."

20. This is dated 1823 in Warren Kirkendale, op.cit., p.227. However Kinderman shows that the first draft for Op.120 (dating from 1819) includes the fugue (var. 32) but not the fugato (var. 24). See William Kinderman : Beethoven's Diabelli Variations (Oxford, 1987), p.34, Table 3.

21. Kirkendale omits Op.127 from his table, elsewhere referring to its classification as a fugato as

> "dubious."

See Warren Kirkendale, op. cit. (Fugue and Fugato in Rococo and Classical Chamber Music), p.224.

22. For example, Op.29 (IV), Op.55 (I), Op.59 no.1 (I). The fugato is also used with developmental effect in a rondo structure : Op.27 no.1 (IV) and Op.37 (III).

23. For example, Op.18 no.4 (II), Op.21 (II), Op.23 (II) and Op.59 no.3 (IV).

24. The Fifteen Variations and Fugue in E♭ major, Op.35 for piano.

25. For example, Op.101 (III), Op.106 (I) and Op.125 (IV).

26. Warren Kirkendale, op. cit. (Fugue and Fugato in Rococo and Classical Chamber Music), p.224.

27. For example, Op.121a, Op.105 no.1, Op.107 no.3 and Op.124.

28. The term 'fugue' has itself been a source of controversy and misunderstanding the nature of which is summarised by Mann in a chapter entitled 'Texture Versus Form' : Alfred Mann, op. cit. (The Study of Fugue), p.5 et seq. The most sensible exit from this dilemma would seem to be the acceptance of fugue as a texture with unspecified formal implications. Throughout this thesis the term 'fugue' is used in a formal sense to denote a musical structure which differs from other such structures only by virtue of its flexibility.

29. Roger Bullivant : Fugue (London, 1971), p.25 et seq.

30. See below, p.52 et seq.

31. See below, p.77 et seq.

32. Joseph Kerman, op. cit., p.275.

The Style of the Present Analyses

The analyses contained within this thesis are essentially of a formal rather than genetic nature, a distinction first postulated by Rosen[1]. The primary source upon which the analyses are based is therefore the music itself although numerous references are made to the sketchbooks when a consideration of the material therein is deemed to enhance one's appreciation and understanding of some aspect of the finished work. No attempt is made however, systematically to reconstruct the various stages in the evolution of a particular work. The different editions consulted in the preparation of this thesis are listed at the beginning of the Bibliography and comparison between them is offered in Appendix II. Reference is made throughout the text to Appendix II as appropriate.

The discussion of a finished musical work, or of a series of works, may be undertaken from a variety of legitimate standpoints ranging from a general description of the music's character and 'meaning' to a detailed account of its tonal and thematic events with little attempt to explain their relevance to one's perception of the music as a whole. Happily most essays fall somewhere between these two extremes, but few, it seems, achieve that elusive balance which is founded upon detailed analytical content combined with an enlightened clarification of its significance. In the case of the fugue, which is generally regarded as the most academic of musical disciplines, the temptation is strong merely to analyse the composer's treatment of his thematic materials and the manner of their recurrence and combination within the texture. Such an approach, typified, for example, by Rieman's analysis of the '48' [2], is not without purpose but it is of limited usefulness, particularly where the late-period fugues of Beethoven are concerned since these fugues are so fundamentally different from those of any

other composer. As Ratner observes:

> "[Beethoven has here] created some unique works of art, fugal in their arrangement but unlike any other works of their kind." 3

Their originality is beyond doubt. It is a fact attested by the composer himself in a well-known observation which stresses the importance of regenerating the fugue through its infusion with a new poetic element :

> "Eine Fuge zu machen ist keine Kunst, ich habe deren zu Dutzenden in meiner Studienzeit gemacht. Aber die Phantasie will auch ihr Recht behaupten, und heut' zu Tage muss in die alt hergebrachte Form ein anderes, ein wirklich poetisches Element kommen." 4

This remark is of particular significance to the analyst, for it illustrates Beethoven's determination to revitalise the

> "Kunst, musikalische Gerippe zu schaffen." 5

by clothing them with flesh and blood. So fundamental a re-appraisal of the genre demands a corresponding readjustment on the part of the analyst, a willingness to view the fugues thus created from a redefined perspective, for Beethoven's consultation of various academic treatises in no way requires that the stature of his fugues be measured according to the precepts dictated therein. Thus Kerman stresses the modernity of Beethoven's fugues :

> "What did Beethoven want with fugue? ... Doubtless the answer will continue to elude us; but we can be pretty certain first of all that it has nothing to do with antiquarian investigations." 6

Similary, in his discussion of the fugue finale from Op.106, Barford states :

> "Beethoven, throughout this fugue, is dealing at first hand with the energies of life. His counter-point cannot remotely be approached from the critical standpoint of the conservatoire ...."7

The diminished significance of conventional fugal analysis, which is a logical consequence of this enlightened attitude, is a feature referred to by several other authors including Cockshoot, though his analyses do tend nevertheless to be rather academic : thus, during his

discussion of the A♭ major fugue from Op.110, he mentions Beethoven's

> "knowledge of fugue, based rather on deep, personal needs than on text-books."8

In this respect he follows Blom :

> "for he [Beethoven] is not in the least inclined to write a paper fugue to satisfy the pedants; he writes music that is vital in every bar." 9

The analyses contained within this thesis are a response to the conviction that the fugues of Beethoven are more fully to be understood through an examination of their tonal and thematic structure than through a consideration of their adherence to, or departure from, the precepts laid down in those treatises referred to above. Undeniably the analyses are detailed, but they in no way conform to the expectations of conventional fugal analysis merely for the sake of so doing[10]. Rather they concentrate primarily upon tonality and thematic treatment as a means of elucidating the structure of the fugue itself and its relationship to the larger musical structure within which it occurs. This manner of approach thus prefers the consideration of each fugue as a unified musical structure, rather than as an extended passage of academic counterpoint. It also requires the examination of certain tonal and thematic elements of which Beethoven was quite possibly oblivious, for these elements may be deemed to promote the unity of the fugue at the deepest possible level. The question therefore arises whether such details are of legitimate signifance to an analysis of the music, whether in fact they are present only coincidentally, or indeed as a result of the mind of the composer fashioning his creation at a subconscious as well as at a conscious level. This question may briefly be addressed before the analyses are presented.

The structural unity of a particular work may appreciably be enhanced by the repetition at a suitable juncture of material heard previously within the course of that work : the Piano Sonatas Op.27 no.1 and Op.101,

the 'Cello Sonata Op.102 no.1 and the Ninth Symphony Op.125 are among the most obvious examples of this feature in Beethoven's music. No one would for a moment suggest that even one of these examples is anything less than deliberate and fully conscious on the part of the composer. Scepticism however is readily induced in one's critics once the relationship postulated between the two sections or themes within a work or movement becomes more subtle; the similarity for example, between the melodic line of the Arioso dolente from Op.110 and its scherzo theme, or between the fugue subject and the opening of the first movement in the same sonata, are less demonstrably the outcome of conscious deliberation : see Ex. Int. 1 and Int. 2. Spink however considers them to be of fundamental importance :

> "Possibly Beethoven was unaware of these relationships in composing the sonata, nevetheless they are the outward sign of an inward unity unconsciously realised." 11

Less obvious perhaps than these relationships is the derivation of the finale theme of the sonata in A major Op.101 from the material of its first movement. The evidence presented in Ex. Int. 3 would fail to convince most people unacquainted with the actual music that Beethoven was aware of this relationship or indeed that it even exists. Yet in spite of this, the way in which this phrase is recalled from the first movement, repeated thoughtfully and audibly transformed into the theme of the finale would seem to suggest, not only that Beethoven was aware of the transformation, but also that he actually sought to inform the listener of it : see Ex. Int. 4 and note how the relevant quavers are consistently isolated by the phrasing.

The examples furnished thus far fall into two categories, the first a deliberate and manifestly conscious procedure of thematic interaction between different sections of the overall musical structure, the second a type of thematic relationship which it is impossible definitively to

evaluate in terms of its realisation in the composer's consciousness. Comparison of these examples readily demonstrates the futility of attempting to determine that point at which the composer's conscious and deliberate exploitation of a particular thematic device merges into a subconscious procedure, and from this it follows that one's assessment of a given relationship according to the composer's (hypothetical) perception of it must be fallacious[12]. The following observation by Barford is pertinent here :

> "an aesthetic idea does not need to be precisely formulated in an artist's mind in order to dominate it. Before an idea becomes fully conscious - before, that is, it exists as an idea - it may be a power in the mind in the form of a spiritual [or sub-conscious] impulse." 13

The significance of the subconscious is acknowledged also by Walker in an article which begins thus :

> "One of the most sterile arguments ever advanced against the theory and practice of musical analysis is that nothing can be of aesthetic importance in a composition unless it was at first consciously intended by the composer." 14

The real question, it would seem, should be directed not towards differentiating the conscious activity of the composer's creative processes from the subconscious; rather the point at issue centres upon the analyst and his ability accurately and objectively to distinguish those relationships which are of significance to the musical thought, and to the structure within which that thought is embodied, from those which are not. This is clearly the view taken by Temperley in his discussion of such thematic relationships, for the two questions which he poses each embrace the conscious and subconscious as complementary to one another[15]. The focal point of the argument thus turns upon what Kerman describes as

> "the familiar crux of analysis and criticism - what aesthetic sense to make out of observed or analyzed fact." 16

It is the responsibility of the analyst to determine whether a relationship, once identified, is of any particular significance or whether its elaboration would merely stretch and contort his material beyond reason. Two specific analyses relevant to the present thesis may briefly be mentioned to illustrate what in the present view constitutes an excessive application of otherwise acceptable methods.

The dependence of the Hammerklavier sonata upon the interval of a third in both a melodic and a structural sense has been noted by a number of writers and in particular by Rosen[17]. His analysis of this sonata is on the whole a model to be emulated by any scholar who wishes to delve deeply into the structural unity of the work, but he is at times blinded by his devotion to the omnipresent third[18]. The second analysis concerns Cooke's theory regarding Beethoven's late-period quartets[19]. His attempts to unite the last five quartets as an arch form is potentially the most controversial example of this style of analysis[20] and the methods by which he pursues his objective do not always convince. It is significant that Beethoven himself claimed to be able to work simultaneously on several different compositions without in any way confusing their content :

> "... weil ich zuweilen mehreres zugleich in Arbeit nehme, aber sicher bin, keines mit dem anderen zu verwirren." 21

The thematic relationships discerned during the course of Cooke's investigation ought therefore to stem from Beethoven's subconscious, yet the sketchbooks do testify, as Nottebohm has pointed out[22], to a fundamental relationship between Op.133 and Op.132 which can hardly have been entirely subconscious in origin. This fact confirms the view above regarding the impossibility of distinguishing conscious from subconscious creation, and extends its relevance from the sphere of the analyst's perception of the composer's thought processes to embrace the composer's perception of his own thought processes; thus, even if

Beethoven were alive and one were to question him on specific thematic relationships or cryptic compositional procedures within his works, the answers given might not prove as trustworthy as one would hope.

What conclusions then can be drawn from the discussion thus far? Firstly, that since it is impossible unreservedly to assess the extent to which the subconscious mind exerts its influence upon the creative process as a whole, those relationships which might reasonably be deemed to derive from the subconscious sphere are nonetheless to be considered of potential value in contributing to the unification of the musical structure within which they occur. Thus Barford comments upon Beethoven's powers of subconscious creation :

> "it seems that Beethoven must have had fantastic powers of mental abstraction, that his creative life went on ceaselessly at subconscious levels, even as his everyday consciousness enmeshed itself in machinations with the outer world." 23

Secondly, that while it is acceptable and indeed logical to regard subconscious creation as a phenomenon whose influence upon the structural unity of a work is beyond question, yet this fact does not give the analyst carte blanche by which to pursue personally favoured pre-formulated ideas. Each of the analytical observations made during the course of this thesis has therefore been subjected to considerable scrutiny before being granted its place in the discussion. Generally this scrutiny takes the form of reflection and self-criticism leading, if necessary, to the rejection of one's initial ideas; in other words it requires a degree of objectivity in matters which are by definition subjective. Where however, an idea is retained and its significance hinges upon the minute details of the composition, the following words of Beethoven should be borne in mind :

> "I am not in the habit of re-writing my compositions. I never did it because I am profoundly convinced that every change of detail changes the character of the whole." 24

It is in this spirit that the analyses which constitute the bulk of the present thesis are offered.

1. The distinction is noted by Winter who does not give his source: see Robert Winter: 'Plans for the Structure of the String Quartet in C Sharp Minor, Op.131' in Beethoven Studies 2 (London, 1977), p.110, n.12.

2. Dr. H. Riemann: Analysis of J.S. Bach's Wohltemperirtes Clavier (London, no date), trans. by J.S. Shedlock B.A.

3. Leonard G. Ratner: Classic Music Expression, Form, and Style (New York, 1980), p.270.

4. Quoted in Warren Kirkendale: Fuge und Fugato in der Kammermusik des Rokoko und der Klassik (Tutzing, 1966), p.176.

5. Beethoven's joke definition of fugue occurs in a letter to Bernhard Schotts Söhne, Mainz dated January 22, 1825. See Emily Anderson: The Letters of Beethoven (London, 1985), vol. III, no.1345, p.1169.

6. Joseph Kerman: The Beethoven Quartets (London, 1978), p.272 (italics mine).

7. Philip Barford : 'The Piano Music - II' in The Beethoven Companion (London, 1979), p.165.

8. John V. Cockshoot: The Fugue in Beethoven's Piano Music (London, 1959), p.96.

9. Eric Blom: Beethoven's Pianoforte Sonatas Discussed (New York, 1968), p.234.

10. As Horsley observes:
> "The analysis of the fugues of Beethoven is still an adventure, and, despite the many dicussions available in critical and analytical writings, there is no consensus of opinion as to their correct analysis or evaluation."

See Imogene Horsley: Fugue History and Practice (Toronto, 1966), p.292.

11. Ian Spink: An Historical Approach to Musical Form (London, 1967), p.127.

12. It is similarly futile to debate whether such relationships are perceptible in performance; different listeners hear different things and the so-called 'naive' listener is a myth since the criteria by which his naivety is to be defined cannot feasibly be established.

13. Philip T. Barford: 'The Idea of Fugue' in The Music Review, vol. 15 (1954), p.173.

14. Alan Walker: 'Unconscious Motivation in the composing Process' in The Music Review, vol. 20 (1959), p.277.

15. Nicholas Temperley: 'Testing the Significance of thematic Relationships' in The Music Review, vol. 22 (1961), p.178.

16. Jospeh Kerman, op. cit., p.226.

17. Charles Rosen: The Classical Style Haydn, Mozart, Beethoven (London, 1980), p.409 et seq.

18. See, for example, ibid., p.431 (musical quotation). This analysis is discussed in more detail below; see below, p.101 et seq.

19. Deryck Cooke: 'The Unity of Beethoven's late Quartets' in The Music Review, vol. 24 (1963), pp.30 -49.

20. An important example of subconscious thematic interaction between different works directly relevant to the present thesis is noted in Appendix I.

21. This is taken from a remark by Beethoven to Louis Schösser in 1822. It is quoted in Felix Braun: Beethoven im Gespräch (Wien, 1971), pp.48-9. Solomon discredits Schösser (but not upon this specific point) in Maynard Solomon: 'On Beethoven's Creative Process: A Two-Part Invention' in Music and Letters, vol. 61 (1980), pp.272-83.

22. Gustav Nottebohm: Zweite Beethoveniana (Leipzig, 1887), pp.550-51.

23. Philip Barford, op. cit., p.170.

24. This quotation is taken from a letter to George Thomson, Edinburgh dated February 19, 1813. The original, in French, is written by a third party and signed by Beethoven:

> "Je ne suis pas accoutumé de retoucher mes compositions; Je ne l'ai jamais fait, pénétré de la vérité que tout changement partiel altère le caractère de la composition."

See Emily Anderson, op. cit., vol. I, no. 405, p.405. The English translation given here is not my own, but I have been unable to relocate its source.

PART I

Chapter 1

The 'Cello Sonata in D major, Op.102 no.2

Character and Rhythm

The finale to the 'Cello Sonata in D major, Op.102 no.2 is Beethoven's first late-period work to include a complete fugue, although its companion sonata (Op.102 no.1 in C major) was originally intended to finish with a fugue the subject of which is given by Nottebohm [1]. Although retained in the finale of Op.102 no.1 as the first subject in a sonata form structure, this theme was later to be reworked as the subject in the fugato section from the overture Die Weihe des Hauses, Op.124. Its most conspicuous motif is also featured prominently in a little-known fugue for piano which is discussed by Cockshoot and dated c.1795 [2]. Ex.1.1 compares these three subjects, the subject quoted by Nottebohm (Ex.1.1(i)), which is slightly different from the sonata form first subject which replaced it, the fugato subject from Op.124 (Ex.1.1(ii)), and the subject from the earlier fugue (Ex.1.1(iii)). All three subjects, it may be noted, are in the same key[3]. The subject of Op.124 is rather less impressive than that of the 'Cello Sonata, the main figure being repeated in a tediously over-extended sequence, but the accentuation of the weak beat of the bar, its most striking feature, is retained briefly in the sonata as the development section and coda are begun (Op.102 no.1 (II), b.75-85 and b.184-94 respectively). Their transferal of emphasis from a strong to a weak beat is evident also in the subject of the fugue from the D major sonata, Op.102 no.2, to which our attention is now directed.

This fugue, Beethoven's first essay in the form since the 'Eroica Variations', Op.35 (1802) and standing on the threshold of the late-period world, demonstrates forcibly Beethoven's apparent lack of concern for his audience and his re-appraisal, or relinquishing even, of

conventional beauty in music[4]. His critics would maintain that it demonstrates also his ineptitude in the sphere of counterpoint and his blatant inability to compose a fugue. The former point, regarding musical aesthetics, is acknowledged by the author of the first review in 1818:

> "everything which is ... gratifying to the ear is disdained." 5

A later writer echoes this opinion, but extols Beethoven's craftsmanship and to that extent counters his detractors:

> "... if the reviewer is to confess his frank opinion, he cannot ... describe this fugue as beautiful, despite the fact that it is skilfully wrought and highly original." 6

Like certain other of Beethoven's greatest creations[7] the fugue has continued to be misunderstood: its uncompromising nature has, for example, led Schauffler to express his view that its

> "brutality, inflexibility and lack of poetic relief ... [make it] the worst [of the fugues]." 8

So subjective a criticism as this, even when based upon thirty years' acquaintance with the music, is a rare and inappropriate admission for any musician. The fugue is admittedly an early late-period work which could hardly have been written after any of the other fugues here discussed: its diatonic subject, which lacks the subtle ambiguities of the A♭ major fugue subject from Op.110, and its failure to exploit tonal relationships to the same degree as do the other fugues, are factors which place it before them on a chronological scale. These considerations however, connote stylistic differences rather than inferior quality when compared with the fugues which follow. In this sonata Beethoven appears to be feeling his way towards the fugue, as is evident in the searching mysterious codas appended to both of the preceding movements. It is hardly surprising that his first late-period attempt to answer such questions with a fugue should meet with disapproval, in spite of a certain retrospective quality noted by Kirkendale:

> "... of all the fugal movements in Beethoven's chamber music, this one, with its strong linear counterpoint, is closest to J.S. Bach." 9

It is this emphasis upon linear writing (and the dissonant harmonies which result and which are further intensified by a generous distribution of sforzandi) which is responsible for Beethoven's apparent desertion of beauty. This is evident, for example, during the episode prior to the entry of the inverted subject (i.e. at b.84 ff.): a cadence in C major (with flattened sixth) is outlined by the soprano and alto and the same progression adopted by the tenor and bass. The tenor however resolves the diminished harmony one beat late, the bass one beat early, producing a series of dissonances which indicate Beethoven's primary concern with the linear aspect of the music.

The kind of harmonic disagreement just noted is virtually built into the subject, for its staccato crotchet-accented minim rhythm[10] generally implies a premature resolution when heard in the context of the accompanying parts. Indeed the passage just cited exemplifies this very characteristic of the subject. This uneasy rhythm is similar in sound to the truncated section of the retrograde subject from Op.106: see Ex.1.2. In fact the rhythm of the present subject sounds more fluid when played backwards - comparison of the subject's actual rhythm and its rhythm in cancrizans is offered in Ex.1.3 - though there is no evidence that this feature and its resemblance to the treatment of the subject in Op.106 is anything more than coincidental. There are however some strong similarities between these two fugues, one of which is specifically rhythmic; the most obvious of these are the introduction of new material after the fugue has come to a temporary halt (Op.102, b.143 ff. and Op.106, b.250 ff.) and - the rhythmic similarity - the concluding parallel movement which directly contradicts the triple meter (Op.102 no.2, b.235 ff. and Op.106, b.389 ff.). This latter feature,

the opposition of duple and triple meter, is more fully worked out in the Hammerklavier fugue than is the case here, but it is significant that the only two complete fugues to be scored in triple time both entail conspicuous attempts to supplant that meter with duple time. Throughout Beethoven's oevre, particularly of course in scherzo movements, one may note fugati in triple time[11], but the tendency of both of these substantial fugue finales, the only movements of their kind in triple time, towards duple meter renders the following stipulation by Mattheson unusually interesting:

> "a fugue should be written in duple meter since it requires a certain element of seriousness which is not to be found in the light, skipping motion of triple meter." 12

Clearly the metrical conflict which characterises the fugues from Op.102 and Op.106, and the ultimate triumph in both cases of the duple meter, are qualities supplied by Beethoven to enhance the asperities of these uncompromising fugues, rather than considerations entertained out of deference to Mattheson. In the Hammerklavier fugue particularly it is the opposition of these two metres, a feature not noted by other authors, which generates tension and drives the music to its conclusion. This feature will therefore be discussed in detail when appropriate.

The dicussion thus far has identified two important characteristics of this fugue: firstly its departure from conventional beauty and the incomprehension that evoked, and secondly its exploitation of rhythmic conflict which is derived during the course of the fugue from its subject. The first of these features recurs conspicuously in the outer sections of the Grosse Fuge, the second, as suggested, in the Hammerklavier.

Analysis of the Fugue[13]

4-41: after an introductory allusion to the fugue subject the

fugue proper begins. The exposition introduces the four voices (each new entry overlapping with the last), followed by a codetta and redundant entry in the 'cello[14]. These entries outline the key of D major in which the exposition concludes and admit, for harmonic reasons, a modification of the subject unusual at such an early stage of the fugue (e.g. S., b.21). An improvement to the answer noted some years later by Beethoven in one of the sketchbooks was never actually realised; the effect of this alternative answer which is discussed by Nottebohm[15] would have been further to strengthen the key of D major by answering its V with the I more consistently. Ex.1.4 compares the subject with Beethoven's improved answer.

The transferal of emphasis to the weak beat of the bar, a feature consistently employed also by the leaping figure with which the first movement begins, gives rise to that element of harmonic disagreement referred to above which is regularly heard during the exposition and further exploited throughout the fugue: even the two-part texture of answer and countersubject suggests that the resolution of E to F# and G# to A (b.12-13) runs contrary to the harmonic rhythm by occurring a beat early. As the texture thickens this impression inevitably becomes more pronounced and by the fourth entry (b.24-5) it is particularly noticeable. Effectively the subject is out of step with the harmonic framework set up by the countersubject and other accompanying parts; a smoother counterpoint might be achieved by reversing the crotchet-minim rhythm of the subject, but as so often in Beethoven's fugues it is precisely features such as this which confer upon the music its strength of character and gritty determination. Their removal or simplification would merely debase the music, rendering it colourless and uneventful.

After the fourth voice has concluded its presentation of the subject and two countersubjects have been established, the second of which is less

regularly employed than the first, there is a brief codetta leading to the redundant entry. This codetta includes what might be heard as an allusion to the inverted subject (b.29-30 and b.33) though this material is in fact taken directly from the second countersubject (vlc., b.20). The fact that scalic quavers are a prominent feature both of the subject and second countersubject, and to a lesser extent of the main counter-subject, gives rise to a very tightly-knit fugue whose material seldom sounds new even when it is of unclear origin: this thematic economy of the fugue is exemplified shortly after the exposition as a single melodic line is formed by the fusion of two separate themes[16].

41-46: the exposition ends in the I, D major and a brief episode follows. This episode is constructed of material from the subject over a scalic bass line which ascends four octaves but is twice transposed to facilitate performance. Here is offered the first indication of the fugue's tendency towards duple meter, which was mentioned prior to the analysis, for the melodic contour of the present episode implies a remove from triple time through the contraction of a part of the subject answered by a variant upon itself inverted. This is illustrated in Ex.1.5. As in Op.106 such digressions into duple meter occur in preparation for, or indeed give rise to, the final bars of the fugue. This present episode mvoes through B minor to A major and leads into a delightful stretto of a three-note fragment (the second statement of which is altered to accomodate the preceding material): see Ex.1.6. Since this fragment is of three beats' duration and begins on every beat of the bar, it overthrows the duple meter but fails entirely to re-establish triple time; it therefore acts as a rhythmic transition between the duple meter of the episode and the triple meter of the subject which now enters directly in the soprano part.

46-62: the subject is stated twice in the home tonic, the answer position leading but beginning immediately in A major. It is not inappropriate that D major be reasserted in this manner since Beethoven thereafter directs his attention to other keys and the I is not restated with any force until the 'recapitulation' (b.154 ff.); the present entries thus confirm the I before more remote keys are visited. Nonetheless this conservative choice of key for the first middle entries of the fugue is not typical of the later fugues, and supports the view expressed above that this fugue is stylistically less advanced than are the others: in the later fugues more adventurous forays are made, the main exception being the first fugue section of the Grosse Fuge where a limited tonal range is enforced to bring out more clearly the process of rhythmic variation by which the subject is treated. In the case of the incidental fugue, which is often developmental in purpose, the I may be deserted even earlier: in Op.101, for example, (composed in 1816 only one year after Op.102) the A minor subject is answered in C major (Op.101 (III), b.123-33).

The first entry (b.46 ff.) is accompanied by the main countersubject (pf., L.H.) doubled at the upper third by the 'cello[17]. The countersubject demonstrates the thematic economy of the fugue referred to above[18]: it is stated in its entirety (transposed down a fourth at first) but its final bars resemble part of the second countersubject in inversion. Ex.1.7 compares the original countersubject (Ex.1.7(i)) with the present variation (Ex.1.7(ii)) and the relevant part of the non-inverted second countersubject taken from the A major entry in the exposition (Ex.1.7(iii)). In this way the two countersubjects are fused into a single melodic line: the main countersubject is modified to incorporate part of the second countersubject (inverso) yet without losing its identity for it is stated in full. The 'cello line moreover is extended to include the second countersubject recto (Ex.1.7(iv)).

This passage thus exemplifies the remarkable economy of material in this fugue and emphasizes the importance of simple scalic figures, common to each of the three subjects. It also introduces an important thematic characteristic by demonstrating a deeper unity of content between ostensibly diverse themes. This is a recurrent feature of Beethoven's fugues and will be noted throughout the analyses[19].

A brief codetta passing through E minor leads to the next entry in D major which is heralded and at first accompanied by a series of diminished harmonies characteristic of Beethoven's late style. Strict fugal texture is momentarily suspended, but restored as the entry continues in diatonic fashion leading to the next episode.

63-72: this episode initiates a lengthy section of the fugue which is centred upon the key of E minor. It moves quickly from the D major of the foregoing entry into E minor (via G major) where it remains for some time and the next pair of entries then outline E minor by referrence to its V and I. The episode which follows (b.84 ff.) begins abruptly in C major and modulates rapidly. There is thus a substantial portion of the fugue in the supertonic minor directly following the exposition and first middle entries which focus upon the I; this relationship is to be found in microcosm at the beginning of the first movement: see Ex.1.8. It is also a tonal relationship which recurs with a certain regularity in the late period fugues[20].

The thematic content of the episode is dependent primarily upon two figures neither of which is new: the bass figure (b.62-3) is derived from the subject in its modified form (i.e. with the fifth bar transposed up a third, b.20-21) as shown in Ex.1.9. This figure which was present also in the last episode (vlc., b.40 ff.) is here simplified and inverted in the 'cello. The second figure is the five-note descending

scale which accents the second beat of the bar; given the thematic content of this fugue it is inevitable that this scale sound organic: it may be traced by inversion either to the countersubject (vlc., b.14-15) or to the subject (vlc., b.5-6) but it is most obviously related to the preceding quavers (b.60-62) again by inversion. The episode thus accents the weak beats of the bar and modulates to B minor for the next entry. A three-part texture has prevailed to offer contrast with the beginning of the D major entry; now the dynamic is lowered also.

72-83: the subject is stated in full in B minor answered in stretto by an entry in E minor. The stretto requires that the second entry begin in B minor becoming major by which to return to the local I, E minor. As in the preceding pair of entries the answer position leads. The first entry is accompanied in the 'cello by a skilled piece of thematic manipulation: the bass figure from the preceding episode was originally derived from the subject as demonstrated in Ex.1.9; here however, it is the material from which the countersubject is re-created: in Ex.1.10 this figure's presence in the 'cello line is indicated by brackets and its similarity to the beginning of the countersubject noted on the lower stave. A common thematic link is thus established between the subject and its countersubject, and this link is confirmed by the soprano entry which fuses subject and countersubject together as illustrated in Ex.1.11 and in so doing assumes the role of modified countersubject to the false entry in the 'cello (b.80-83). The most important point to emerge from this interpretation of the thematic treatment is the observation that the subject and countersubject are fundamentally related to each other: the three-note fragment which is derived from the subject becomes the source from which the countersubject is refashioned.

84-112: the fugue so far has centred upon the I, D major and ii, E minor. The present episode modulates rapidly through a variety of keys leading to an entry of the inverted subject in the IV, G major. The supertonic relationship remains prominent however, since the episode oscillates between the IV and its ii, A minor, while the inverted entry in G major is answered by the recto subject in A major, before E minor is temporarily re-established. The third tonal centre of the fugue may therefore be said to be that of the IV with an inclination towards its ii (/II). Since the episode modulates so regularly through a number of different keys the IV centre is less emphatically established than was the ii centre in the preceding section. However it is worth noting that the introduction of the IV key (certainly not unusual in a fugue, as Bullivant observes[21]) constitutes a further anticipation of tonal procedures consistently employed in the remaining fugues, particularly in the fugue from the A♭ major sonata, Op.110. This IV tendency is evident also in the first movement of both of these works: the false IV recapitulation in Op.102 no.2 (I, b.84 ff.) is replaced in Op.110 (I) by a genuine recapitulation in the I which, however, soon digresses to the IV (b.62 ff.). Such tonal parallels are an important means of integrating the fugue into its larger musical structure.

The episode begins abruptly in C major (with the not infrequently heard flattened sixth). The essentially linear quality of the writing at this point was remarked upon above[22] where it was noted that the minim of the subject tends to imply premature resolution; this is obviously true of the alto part in b.87, but less so of the bass line of b.85: here E minor harmony is expected on the third beat of the bar but, the D# having resolved early, the music is diverted instead into D minor[23]. This disrupts the harmonic rhythm in the manner of a hemiola and anticipates the duple meter conclusion to the fugue[24]. The harmony of

this passage is summarised in Ex.1.12 where the linear writing is smoothed over and the brackets indicate the effective progression of the music in duple meter. Several important observations should be made regarding this analysis of the harmony: firstly, it is by no means accidental that the key of G major endure twice as long as do the other keys, for this helps to establish it as the main tonality at this point in the fugue; secondly, each cadence in G major is preceded by one in A minor, its ii key, just as the cadence in D minor is preceded by one in E minor. The overall progression thus summarises the primary tonal centres of the fugue so far, namely the I (D major, here D minor[25]), the IV (G major) and the ii in both a specific and a local sense (E minor and A minor, respectively). The remainder of the episode continues in these keys but includes one new and significant key, the VI, B major (b.93-4); this is the key in which new material will be introduced after the fermata and, being located a third below the I, it constitutes the final key relationship to be introduced in this fugue which foreshadows tonal events in the fugues to follow, especially Op.106. The episode concludes with a two-bar phrase in A minor sequentially repeated in G major before the entry of the inverted subject.

The thematic content of the episode is formed initially of the crotchet-minim figure from the subject and that portion of the countersubject set against it in the preceding bars (b.82-3). The syncopated bass line from b.90 arises from the repetition of this fragement of the subject and leads, as indicated in Ex.1.13, into a figure resembling the augmented subject whose entry coincides with the dynamic climax of the episode; it is however, chromatically distorted, beginning on the leading note, and to some extent overshadowed by the new figure presented in stretto above it, which directly anticipates the treatment of the subject by inversion: see Ex. 1.14. The inverted subject is

stated pianissimo in double thirds accompanied by an incomplete and modified version of the inverted countersubject and answered recto in the II key. This latest entry is little more than a token reference to the subject and lapses almost immediately, melting into a substantial episode which brings to a conclusion the greater part of the fugue.

110-142: the episode proper (which begins on the last beat of b.112) is joined to the foregoing entry by a brief link in E minor whose texture and thematic content relate it more closely to that entry than to the remainder of the episode. The syncopated left hand in the piano part echoes the previous episode's treatment of the crotchet-minim fragment from the subject (B., b.90-93) but inverts it and in addition proceeds to speed it up across the beat in the manner heard at the onset of that episode (B., b.84-6); this treatment in both cases is depicted in Ex.1.15. The right hand meanwhile traces a series of whispering diminished harmonies whose subdued dynamic is reminiscent of the coda to the first movement of the G major violin sonata, Op.96 (b.243 ff.). The return at this point to the key of E minor is a factor of some structural importance for it relates back to the E minor entry prior to the last episode; the structure of the fugue thus far, in its simplest form, consists of two basic key centres, D major (b.4-62) followed by E minor (b.65-112), the latter encompassing a temporary remove to the local relative major, the home IV key. By tying the thematic content of the present E minor link passage to the material of the preceding entry, Beethoven strengthens this perception of the structure for the episode itself (b.112 ff.) is a point of departure which leads to new tonal regions and, for the first time since the exposition, to new thematic material of significance.

The last episode had led to the inverted subject in G major and for that reason had remained on the flat side of D major, restricting itself primarily to E minor, D minor and G major. The present episode on the other hand is to lead up to the introduction of new material in B major and therefore remains on the sharp side of D major, passing through F# minor, A major and C# minor to B major, which key, like the parallel use of D major in Op.106, is prepared by its tonic minor. During this episode, more so than anywhere else in the fugue, the emphasis is placed on linear rather than harmonic writing: the texture is formed almost entirely of the opening phrase of the subject in stretto recto and inverso and the continuous nature of the counterpoint is only seldom tolerant of solid clear-cut cadences. The first such cadence firmly establishes the key of A major, as the stretto of false entries is replaced by a simultaneous statement of the subject in three parts (b.121-4). These entries are soon duplicated in double counterpoint[26], but the addition of the fourth voice and the Interrupted cadence directly beforehand (b.127) now cause them to be re-interpreted in an F# melodic minor context[27]. This technique, by which the melodic line of a particular entry may be recast in a different harmonic light, is the foundation upon which the climax to this half of the fugue is formed: the key of F# minor becomes IV harmony in C# minor and the inverted subject is stated three times in the bass beginning on A, but in each case serving as the basis for a different harmonic progression (b.130-36). These three entries are depicted in Ex.1.16 with their passing notes bracketed and the harmonic scheme indicated above: the third entry is altered to outline the local neapolitan key, D major, but an augmented sixth harmony on G then resolves onto V harmony in B minor[28]. This section of the fugue is the first major climax, the point to which the episode has been leading from the pianissimo diminished harmonies through a gradual crescendo to the current fortissimo and here for the first time in the fugue the subject's intervallic structure is distorted

through the adoption of the harmonic minor scale[29].

This juncture of the fugue offers the most obvious point for comparison between this and the fugue finale from Op.106: in both instances the head of the subject is treated in stretto recto and inverso, leading to a dramatic interruption of the fugue, to be followed by a more tranquil passage centred upon new material which is then combined with the subject before disappearing. In both fugues the main modulations within the structure occur prior to the interruption and thereafter the home I, once re-established, prevails until the end. The tonal structure of the Hammerklavier is to a large extent based on descending thirds[30] and the descent from the key now reached, (D major) to the home I (B♭ major) is clearly the final stage in the overall design. In the 'Cello Sonata however, the introduction of the remote tonality, B major (a third below the I), is rather more surprising than is the appearance of D major in Op.106, since B minor, the home I's relative minor, would provide a more immediate link with D major. Its conversion to the major sounds like a digression by which the I is avoided, for it is expected that the V harmony in B minor, upon which the fortissimo climax subsides, will function as III preparation for the key of D major. This is the case in, for example, the Piano Sonata, Op.28 (I, b.227- 69) and in the Ninth Symphony, Op.125 which had not yet been composed (IV, b.187-213), both of which are, like the present 'Cello Sonata, in the key of D major. In this instance however, the F# major harmony does not function as III preparation for the home I, but resolves instead like a V into B major. The return of the I is delayed to coincide with the return of the main subject, as in Op.106. Meanwhile the key of B major represents a brightening of the key of B minor; the use of minor and major as an expression of contrast between dark and light is intimated by Beethoven in the sketches for this fugue which include the marginal note

"h moll schwarze Tonart." 31

It is remarkable that in the Hammerklavier, whose fugue is in so many ways a re-working of the ideas underlying the present fugue, B minor should be very much the 'dark' key. As Brendel states:

> "The tension between B flat major (Light) and B minor (Darkness) determines the course of the Hammerklavier Sonata." 32

143-174: a new four-note figure is introduced in B major the contour and style of which are commonly to be found in the Baroque[33]. Less importance is ascribed to this fugue than to the new melody in Op.106: in the later work the D major theme is stated and developed in an extended passage from which the main subject is completely absent. Here however, the subject is present almost from the outset in the accompanying snippets which are clearly related to it by inversion. The return to D major is made, significantly, via E minor, reinforcing the importance of the ii key and shunning the more obvious route through B minor. Once the home I is re-established the subject returns and is thrice stated: the first entry is interrupted by the answer which contrasts with the original by beginning on E and thereby emphasizing the V from the outset[34]. A codetta re-establishes D major and the third and only complete entry begins fortissimo. Greater attention is drawn to this entry by reducing its first note to a quaver, a simple but effective technique which is to be repeated in the fugue from Op.106 (b.51 ff.). The new figure which has undergone various distortions accompanies this final entry but then fails to reappear. One of the greatest differences between this fugue and the finale of Op.106 lies in the fact that this new figure is not subsequently replaced by the original countersubject: the remainder of this fugue is based almost entirely on scalic figures taken from the subject and second counter-subject and there is no corresponding climatic return of the original countersubject (cf. Op.106 (IV), b.318 ff.).

175 - 185: the episode beginning in E minor is based upon the figure from the end of the subject which is repeated in a rising sequence. This sequence is actually begun during the subject itself so that the episode arises merely as a continuation of what precedes. The repetition during the sequence of one statement of the fragment acts as a preparation for its compression by which the triple time is again suspended in a manner recalling the first episode (b.41-6). This transition between the two meters is marked by brackets in Ex.1.17, the upper stave of which outlines the rising sequence. This passage is in fact the most extended departure from triple meter in the entire fugue.

A summary of the episode's harmonic structure is offered in Ex.1.18[35] for the harmony counteracts the meter even more forcefully than does the rhythmic transformation of the subject, as is blatantly obvious when it is simplified in this way[36]. Analysis of the harmony also illuminates the new treatment of this fragment of the subject, the first note of which is often dealt with as an appogiatura. An occasional retardation (S., b.179-80 and b.183-4, for example) or anticipatory resolution (T., b.181, the C# in b.180 resolving a beat early) may also be heard, but the overall structure remains clear. The series of chords marked with a bracket in Ex.1.18 (I-ii-iii-IV-V^7, b.181-4) is particularly unusual and therefore particularly convincing in its affirmation of duple meter. It leads to an unexpected cadence in D minor whereupon a colourful augmented sixth harmony restores the tonic major. The return to triple meter is both violent and abrupt, the V^7 harmony crashing down on the weak beat of the bar while the 'cello embarks upon a new entry of the subject.

185 - 244: little need be said about the remainder of the fugue. There are no further statements of the complete subject but

numerous partial entries, both recto and inverso, intensified by low pedal trills in the bass register of the keyboard. After several such entries over a pedal A the music passes briefly through the dark key B minor and the IV, G major, before settling onto a diminished harmony in the I (b.202-6)[37]. Throughout this passage the dynamic is gradually lowered and the subject becomes less and less conspicuous, finally dissolving completely into the right-hand scales which outline the diminished harmony and upon which the harmonic progress of the movement is temporarily halted. When this harmony at last resolves the dancing phrase from the subject appears pianissimo, accompanied by the appropriate part of the second countersubject inverted. This is repeated in double counterpoint[38] cadencing into the IV and the timeless scales return now alternating I and V harmony in G major[39].

The purpose of this lengthy passage soon becomes clear: in the first place it serves to distance the final climax of the movement from the dramatic interruption of the duple meter (b.185) which might otherwise overshadow the fugue's conclusion. In addition it prepares that conclusion by allowing time for an extended I pedal and for a digression to the IV key, both of which are typical features at this late stage of a fugue[40]. Most ingeniously of all however, it preserves the thematic unity of the movement by concentrating single-mindedly upon scalic figures, yet at the same time lowers the prominence of the subject itself (from which these figures are derived) by divorcing them from its crotchet-minim rhythm. Thus, although this passage is entirely thematic in its content, the effect is that of a period of respite from the subject, a calm before the final storm, which is the direct thematic equivalent to a slowing of the tempo prior to a final burst of energy. The gradual dissolving of the subject into the texture, whereby it remains present but inconspicuously so, is the prelude to its dynamic re-creation, empowering it to emerge with a freshness and vitality which

drive the fugue onwards to its conclusion. This it does directly following a four-octave scale which rises with increasing strength from the depths of the piano (b.222 ff.).

The stretto of the subject recto and inverso which now takes place is an intensified repeat of the material which concluded the first half of the fugue, intensified by the doubling of the subject in thirds and sixths and by the singular economy of the material presented. The final section of the fugue which emphatically overthrows the triple meter is a clear anticipation of Op.106 and entails an extended application of a technique employed twice previously during the fugue, the compression of the subject's crotchet-minim figure to crotchet-crotchet[41].

Beethoven's first late-period fugue is an exciting introduction to the fugues to follow; the direct parallels between it and the fugue from Op.106 offer a curious, almost prophetic, indication of future horizons. The fact that there are only two fugues in triple meter and that in both instances the disruption of that meter is a primary driving force of the music is a consideration of especial interest, the more so since it has escaped the attention of other commentators. At the same time the present fugue provides, as it were, an inventory of the main tonal centres to be explored in subsequent fugues without focusing in particular detail upon any one of them: the most important tonalities visited during the course of this fugue may be listed as I (exposition and first middle entries), ii (second pair of middle entries), IV, (presentation of the subject inverso), VI (introduction of new material) and I (return of the main subject). In the analyses which follow it will become clear that these are precisely the keys chosen by Beethoven to replace the V as the primary tonal centre second only to the I.

1. Gustav Nottebohm : Zweite Beethoveniana (Leipzig, 1887), p.316. Kirkendale points out that Beethoven's intention to conclude a 'Cello Sonata with a fugue dates from the time of Op.68 (1807-08) : Warren Kirkendale : Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979), p.244.

2. John V. Cockshoot : The Fugue in Beethoven's Piano Music (London, 1959), pp.28-37.

3. There can be no doubt that certain keys had particular relevance for Beethoven. The question of key characteristics is discussed briefly in so far as it concerns Beethoven by Rita Steblin : A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries (Michigan, 1983), p.145 et seq.

4. Musical aesthetics are the subject of a famous volume by Hanslick in which he points

> "to the one and immutable factor in music, to purely musical beauty, such as our great masters have embodied in their works, and such as true musical genius will produce to the end of time."

Eduard Hanslick : Vom Musikalisch-Schönen (Leipzig, 1885), trans. by Gustav Cohen : The Beautiful in Music (New York, 1974), p.13.

5. A lengthy extract from the Allgemeine musikalische Zeitung (Leipzig, 1818) is quoted in translation by Warren Kirkendale, op. cit., pp.246-7. Wallace summarises this review thus :

> "Skepticism ... tinged with a profound respect."

See Robin Wallace : Beethoven's Critics Aesthetic dilemmas and resolutions during the composer's lifetime (Cambridge, 1986), p.38.

6. Allgemeine musikalische Zeitung (Berlin, 1824). See Warren Kirkendale, op. cit., p.246 (italics mine).

7. Consider for example, Benjamin Britten's veridct on Beethoven's most sublime sonata :

> "I heard recently the piano sonata, Op.111. The sound of the variations was so grotesque I just couldn't see what they were all about."

Quoted in Murray Schafer : British Composers in Interview (London, 1963), p.119.

8. See Martin Cooper : Beethoven The Last Decade 1817-1827 (Oxford, 1985) p. 144, n.1.

9. Warren Kirkendale, op. cit., p.247.

10. See App.II.

11. For example, Op.18 no.4 (II), Op.59 no.2 (III), Op.67 (III), Op.97 (II), Op.125 (II) and Op.127 (III). Other triple time fugati include Op.21 (II), Op.55 (I), Op.91 (b.516 ff.) and the separate fugue Op.137 plus the fughetta from Op.120 (var.24).

12. Johann Mattheson : Der vollkommene Kapellmeister (Hamburg, 1739) here quoted from Alfred Mann : The Study of Fugue (London, 1958), p.55. Beethoven's acquaintance with Mattheson's volume is noted by Warren Kirkendale, op. cit., pp.207-8.

13. Throughout the thesis bar numbers are preceded by the letter 'b.' unless they stand outside the text, in which case they are given merely as numbers. Wherever the numbering of bars is inconsistent from one edition to another that given in HV is preferred. 'HV' refers to the edition offered by G. Henle Verlag, as indicated in the bibliography.

14. The voices are referred to as S.A.T. and B., T. usually denoting the vlc.

15. Gustav Nottebohm : Beethoveniana (Leipzig, 1872), pp.33-4. Nottebohm states (on p.33) :

> "Beethoven had später an eine andere Beantwortung, an eine regelmässigere Einrichtung des Gefährten gedacht,"

and places Beethoven's suggestion

> "etwa vier Jahre nach dem Erscheinen der Artaria'schen Ausgabe jener Sonate."

The sonata was published by Artaria in January 1819 : see Georg Kinsky : Das Werk Beethovens Thematisch-Bibliographisches Verzeichnis Seiner Sämtlichen Vollendeten Kompositionen (Munich, 1955), p.283.

16. See below, pp.37-8, and refer to Ex.1.7.

17. The vlc. begins this section as T.(b.46) but subsequently becomes A.(b.50). This is because the original A. falls absent (b.47) and returns as B. (b.50).

18. See above, p.36.

19. It is also discussed in the Concluding Remarks : see below, pp.247-9.

20. In later works the tendency towards the supertonic may be related to the comparable tendency of the B-A-C-H motif discussed in App.I.

21. Roger Bullivant : Fugue (London, 1971), p.167.

22. See above, p.33.

23. See App.II. The ♮ supplied by HV seems more consistent with the vlc. than does the # generally given.

24. Cf. with the episode in Op.106 (IV), b.41-8.

25. That is if one accepts the F♮ in b.86.

26. The parts exchange as follows : S. remains S., T. becomes A. and B. becomes T. The vlc presents the T. line in both cases.

27. See App.II. The E(♮) is presumably a misprint for C#.

28. Textual discrepancies in b.133 and b.138 are noted in App.II.

29. This was avoided in the B minor entry by placing the leap of a third between the second and third (instead of between the first and second) notes of the subject (b.72-3).

30. This is discussed in more detail in the appropriate chapter : see below, p.100 et seq.

31. See Gustav Nottebohm, op. cit. (Zweite Beethoveniana), p.326.

32. Alfred Brendel : 'The New Style' in Ludwig van Beethoven The Complete Piano Sonatas (Philips record sleeve 6768 004, 1976).

33. Cooper compares it to the subject of W.T.C. I, 16 : see Martin Cooper, op. cit., pp.143-4. Also similar is the subject of W.T.C. II, 20.

34. This is comparable to the fugue from Op.120 : the original answer asserts the I (b.6-7 and b.20-21) but when the exposition is restated (b.117-33) a modification is allowed to produce a shift in emphasis towards the tonality ranked second in importance to the I, in that case the IV (b.129).

35. The alternative conclusion depends upon a textual discrepancy noted in App.II.

36. Since the sole purpose of this simplification is to afford a rapid insight into the harmonic rhythm, no effort is made to obviate the consecutive fifths which are in practice avoided by redistributing the texture within the duration of a single harmony. See 'Preface to the Music Examples' in vol.II of the thesis.

37. The flattened sixth which this entails was prominent also in the preceding IV section (A., b.200 : cf. this with the S. C♮ in b.79).

38. Certain editions give the bass note in b.209 as G : see App.II. Comparison with b.213 suggests that A is the correct reading.

39. Again the suggestion in HV seems preferable : see App.II, b.215.

40. The IV is also featured in the first movement at the beginning of the coda (b.129-32 give the second subject in I, repeated in IV).

41. Cf. with b.84-6 and b.108-12. Refer also to Ex. 1.15 above.

Chapter 2

The Piano Sonata in A♭ major, Op.110

Structure and Style

The fugue from the Piano Sonata in A♭ major, Op.110 is from a structural viewpoint Beethoven's most unorthodox essay in the form, dovetailed as it is with the profoundly moving Arioso dolente which constitutes the essence of a slow movement. This highly original division of the fugue gives rise to a possible ambiguity noted by Bullivant who describes the fugue as:

> "on the borderline between being two incidental fugues and one complete one." 1

It is included within the scope of this thesis because, as noted above in the introduction[2], regardless of the precise classification given it by the analyst, it serves the aural purpose of fugue finale to the sonata. In fact it would seem reasonable to regard the fugue more as a single complete fugue than as two incidental fugues, the first fugue section corresponding to the exposition, the second to the middle entries and what might in this case be termed the 'recapitulation'. This is the interpretation persuasively urged by Cockshoot in his summary of Schenker's analysis [3]; it is also a basic assumption made by Tovey who does not even discuss the possibility that there might be two fugues here[4]. The only plausible objection to this interpretation of the structure is obvious: the fugue exposition (b.26-c.113)[5] exceeds in length the remainder of the fugue (b.137-213), an imbalance which is exacerbated by the non-fugal texture for much of the final section. The tonal considerations noted by Cockshoot however, in connection with the first part of the fugue[6] and the emotional content of the movement as a whole, which demands the gradual replacement of a strictly fugal texture with more pianistic figurations, are factors which far outweigh these dimensional imbalances; the Adagio sostenuto from the Hammer-klavier sonata and the first movement from the C minor sonata, Op.111

are of course to be analysed as sonata form structures notwithstanding the fact that their development sections are remarkably short [7]. In fact development has become an all-pervasive feature of the sonata form [8] and Beethoven tailors the structure to meet his requirements. In similar fashion the expected proportions of the fugue are here altered according to the demands of the context: the exposition is expanded to enable it to stand alone, separated from the remainder of the fugue by the return of the Arioso, and the fugue once resumed is of adequate length as it stands to fulfil its emotional task of bringing the sonata to a climactic conclusion; the second fugue section is in fact of fairly regular duration relative to the length of the exposition (b.27-40), for the unusual feature of this fugue (besides the intrusion of the Arioso) is not the actual length of the exposition, but rather its threefold presentation. This tendency on Beethoven's part to transcend fundamental musical principles is noted in a different context by Kunze:

> "... könnte man von der Tendenz im Spätwerk Beethovens sprechen, musikalische Grundordnungen zu transzendieren." [9]

In the present consideration of the sonata the two fugue passages are therefore deemed to constitute a single complete fugue whose structure is refashioned to accommodate the return of the Arioso.

The subject of the fugue is of an elegant simplicity and stately grandeur which contrasts with every one of Beethoven's other fugue subjects: absent are the rhythmic quirks of the 'Cello Sonata's fugue subject, the drive of the Hammerklavier and Diabelli fugues and absent also the portentous chromaticisms of the Grosse Fuge and the C# minor String Quartet fugue. Hopkins describes the present subject as one

> "of such purity and serenity that it might have been carved in marble " 10

while Ratner claims that it

> "would have delighted Fux and other 18th-century pedagogues." 11

Less pleasing to the pedagogues would have been Beethoven's exploitation of the subject's 'ambience' between the I and IV keys which is noted by Dreyfus[12]. Yet in spite of its uniquely retrospective subject the finale of this sonata is the most obviously Romantic of all Beethoven's fugues, and this is due not merely to the emotionally charged Arioso dolente in the extreme key of A♭minor[13] and its weeping reappearance a semitone lower[14], but also to the programmatic connotations implicit within Beethoven's directions for the fugue itself ('Nach und nach wieder auflebend') and to the tempo changes and attention to timbre ('sempre una corda - poi a poi tutte le corde') neither of which is to be expected in the course of a Classical or pre-Classical fugue. It is therefore not without some justification that Hopkins regards this movement as the dam of Classicism being overthrown by the waters of Romanticism[15], the -

> "perfect symbol of the Revolution that Beethoven accomplished"16,

though the music exists per se and any attempts to impose a specific programme should resolutely be avoided. The fugue is at least a most striking example of the revitalization of the traditional form by its infusion with that new poetic element of which Beethoven himself spoke:

> ".... heut 'zu Tage muss in die alt hergebrachte Form ein anderes, ein wirklich poetisches Element kommen." 17

Tonality

A particularly important point for consideration at the beginning of this fugue is the tonality, the fundamental nature of which is emphasized by George:

> "... in fugues of any sort, even more than in most structures, the unifying function of tonality is especially important because of the probability of considerable thematic complexity ... this truism is particularly applicable to Beethoven." 18

Although he mentions as characteristic of Beethoven's fugues

> "a combination of rhythmic diversity and thematic reiteration which is apt to lead to analytical confusion unless order is restored through the recognition of tonality" 19,

yet there is, as Dreyfus points out[20], an important tonal ambiguity at the outset of this fugue, the effect of which is precisely to obscure one's recognition of the tonality. This is the capacity of the subject initially to imply the key of D♭ major and subsequently to suggest a modulation to its V A♭ major. These tonal implications of the subject's melodic structure are realised in, for example, the third entry (S.,b.36 ff., D♭ major - A♭ major) and, it may be argued, retained transposed in the second and fourth entries (A.,b.30 ff. and B.,b.45 ff., respectively, A♭ major - E♭ major)[21]. The codetta during the first exposition moreover (b.34-6) by sequentially repeating the end of the preceding entry further asserts the key of D♭ major in which the next entry begins. Dreyfus, seeking evidence or preparation of this tonal ambiguity earlier in the sonata mentions the importance of the IV key in the recapitulation of the first movement and concludes:

> "The expressive core of this sonata, then, is that unique ambivalence between the I (V?) and IV (I?)." 22

This is undoubtedly a significant observation and its validity is further confirmed by reference to the trio whose ternary structure (D♭ major - G♭ major - D♭ major) likewise furnishes evidence of the local IV key usurping the role of the I. Thus, in his discussion of the harmony of this trio, Misch refers to the

> "dominantization of the tonic,"[23]

a clumsy but appropriate term which he borrows from Klatte[24].

In each of these instances the absolute supremacy of the I is called in doubt by the placing of some degree of emphasis upon the IV key. In spite of this, Dreyfus' observation regarding the tonal ambience of the fugue subject should be qualified by consideration also of certain other relevant details: firstly, the ambivalence between I and IV is

utterly destroyed if the subject is inverted, as happens at the beginning of the second fugal section of this finale (b.136 ff., Die Umkehrung der Fuge'). Secondly, and rather more significantly, the note A♭ is firmly and unambiguously established as the tonic by the Arioso which leads directly into the fugue. The absence of harmony in the final bars of the Arioso might be taken both as a preparation for the introduction of the fugue subject, by which the texture is reduced to a single strand, and also as a means of gradually brightening the harmony from i to I, a transition which would be more abrupt were the two harmonies simply juxtaposed. As the fugue begins the impression gained is that the final section of the sonata is underway; this view requires that the subject, if possible, be heard in the home tonic, A♭ major[25]. Since the present subject is suitable for harmonization in this key the home I exerts a greater pull at this stage than does the IV key. This is contrary to Dreyfus' claim that the beginning of the fugue

> "sounds like D flat" 26

for once C♮ is heard the transition from minor to major is confirmed. Indeed, this note's failure to resolve onto a D♭ weighs heavily against the argument that the subject is in the IV key, even if a modulation to the 'dominant' at this point is conceded. Thus when taken in context the subject is heard in the correct key, A♭ major, as shown in Ex.2.1 [27]. The ambiguity or ambivalence, such as it is, arises more than anything else as a result of the ear's familiarity with Classical tonality and its natural reluctance to interpret a rising fourth (or descending fifth) as degrees I - IV of a key in preference to the more obvious Perfect cadence, V-I; at the beginning of the fugue this tendency to interpret the subject wrongly is minimal given the context in which it is first heard. In the ensuing entries however the I/IV ambiguity is more fully exploited and intensified so that the IV does begin to assume command. Dreyfus' observation then, and only then,

becomes entirely correct:

> "The subdominant exercises the greater pull: all the modulations in the first part of the fugue are subdominant tending." 28

Analysis of the Fugue[29]

26-49: the first section of the fugue involves, as suggested above, a three-fold statement of the exposition. The first statement introduces the three voices with the subject and also a countersubject which is merely a variant upon the subject at the lower third (see Ex.2.2). This countersubject is treated with some freedom and at times replaced by alternative figures related in style. The derivation of the subject (and therefore of the countersubject also) from the opening theme of the first movement is widely-known[30], as is the derivation of the Arioso theme from that of the scherzo movement[31], though this latter 'resemblance' is decried by Tovey:

> "if we stake our faith on that, we may as well go further and find cryptographic evidence that Beethoven's later works were written by Spohr." 32

Nonetheless one or both of these relationships is mentioned also by Cockshoot[33] (who also relates the subject to a number of other works by Beethoven[34]), Dreyfus[35] and Reti[36]. In addition Schenker suggests the derivation of the Arioso dolente from its introductory repeated chords, since both are based on the descending three-note figure E♭ - C♭ -A♭[37]. Clearly there is here a deeper level of thematic unity and a more sophisticated approach to the integration of the fugue into the larger structure than in Op.102 no.2.

The finale of Op.110 has begun in mournful style, the Arioso singing in the extreme key of A♭ minor. The first exposition of the subject re-establishes the I major of the sonata but then begins to undermine that tonality by exploiting the I/IV ambiguity latent within the

melodic contour of its subject, but not fully realised at the outset. The first two entries begin and end in the I, A♭ major and V, E♭ major respectively; they are then repeated, but given an entirely new harmonization such that the I becomes the V^{38}. Each of these two repetitions is preceded by a codetta; the first codetta (b. 34-6) establishes D♭ major to prepare the new harmonic perspective from which the subject is to be viewed, while the second (b. 40-45) is more substantial but serves the same purpose by different means: it moves in a leisurely passage of tonal stability through F minor but then changes key rapidly, settling only as the subject begins in A♭ major (b. 45). This variation in the harmonic pace is designed to confer greater stability upon the key of A♭ major and is complemented by the delayed introduction of the sharpened fourth by which to modulate into the local V^{39}.

The tonal argument so far may therefore be summarised as follows: the subject of the fugue, if considered in isolation, is tonally ambiguous and that ambiguity is demonstrated by presenting both the subject and its answer in two entirely different harmonic lights in the first section of the fugue: the first two entries of the fugue establish the tonality while the second two begin to undermine it. In this way the fourth entry (which actually begins the second statement of the exposition) is welded onto the first three entries and the wondrous continuity of this fugue upheld.

45-66: the second group of entries further exploits the subject's tendency towards the IV key: the two outer entries (B., b.45 and S., b.62), both in the answer position beginning on E♭, harmonize the subject as if in A♭ major modulating to its V E♭ major, while the intervening entry (A., b.53) beginning on A♭, though more chromatic, begins in D♭ major and modulates to its V A♭ major. Each of these three entries thus treats the first note of the subject as a dominant.

Of the two codettas which separate these entries, the first (b. 49-53) descends through fifths to establish D♭ major for the next entry but includes a passing modulation to E♭ minor, the local supertonic minor and a tonal feature which is destined later to recur. The second codetta (b. 57-62) may be mentioned here in greater detail; it is formed by varied repetition in invertible counterpoint and is based largely in F minor: the repetition begins in the second half of b. 59, the soprano taking the bass part (from b. 57) while the bass takes the alto. Since the entry which precedes this codetta ends in A♭ major and since it is intended that the next entry begin in this key, the intervening codetta has no specific harmonic function and therefore remains almost throughout in the local relative minor. Nevertheless it does allude once more to the I/IV issue: at the end of the first statement of the codetta's material (b. 59) the descending melodic minor scale in the bass tentatively suggests the possibility of a modulation to the local IV. When this material is repeated in invertible counterpoint additional chromaticisms are included by way of variety (G♭ in S. and A♮ in B., b.61) and these confirm beyond doubt the modulation to the IV key. Thus this codetta, which is not strictly required to modulate into the tonality of the next entry and might therefore have been quickly dismissed, is taken by Beethoven and moulded in such a way that it perpetuates the delicate balance between the I and IV keys. The mastery by which this is achieved is evident firstly in Beethoven's choice of key - further reference to D♭ major at this point would have been tautologous so Beethoven selects instead the relative minor and its IV - and secondly in the restraint with which the IV is at first approached (b. 59). Moreover, the use of the relative minor (become major) as V of the ii is parallelled on the larger scale by the F minor scherzo, whose tierce de Picardie conclusion resolves at the beginning of the finale into B♭ minor. The underlying subtlety of this ostensibly simple codetta is thoroughly typical of Beethoven's fugal style in the late-period works, for it illustrates his

ability to select a particular harmonic, thematic or rhythmic device (in this case the I-IV relationship) and allow it to permeate the composition at every level. Comparable passages will therefore be cited as evidence of this characteristic throughout the thesis.

A brief extension concludes the codetta re-establishing A♭ major for the next entry by treating B♭ minor as ii harmony in a conventional cadential progression. The introduction of B♭ minor during this codetta is in fact prepared during the preceding entry (b. 53-7) whose harmonic structure may be summarised thus: D♭ major-A♭ major-B♭ minor-A♭ major (via E♭ major). This temporary remove once A♭ major has been established from the tonic major to its supertonic minor is a repeat of the harmonic content of the preceding codetta (D♭-e♭-D♭, b.51-3) as well as a link with the key of B♭ minor in the following codetta. It is also a recurrent feature of the fugue and will be mentioned again in connection with the third exposition[40]. At this stage it serves to fuse together the several sections of the fugue, binding entries and codettas into a unified whole[41]. The salient details of this passage (b. 51-63) may therefore be summarised as follows: the harmonic structure of the first codetta is repeated during the entry to which it leads and this repetition a fifth higher introduces the key which will act as a local IV in the next codetta. This interpretation is illustrated diagrammatically in Ex.2.5, the lower brackets indicating the temporary move to the supertonic minor, the upper brackets the resultant preparation of B♭ minor and its subsequent exploitation[42].

66-87: a lengthy episode separates the second and third expositions. It begins with a sequential passage based on the end of the subject which at first appears destined to relax through descending fifths; instead Beethoven sharpens the root of the V^7 harmony and forces the music up through sharper keys increasing the tension. On reaching

G major (b. 70) the sequence is broken as the soprano leaps emphatically to A♭ and the tension then dissipates. This section has been described by Schenker as

"very eloquent"[43]

and by Cockshoot as

"certainly a touch of Beethoven's genius."[44]

It is an excellent example of Beethoven's complementary exploitation of a number of musical parameters by which to create a particular effect: these may be listed as dynamic gradation (cresc. to the climactic A♭ followed by a reduction to piano), harmonic rhythm (the seventh, F♮ in b.70 is introduced early breaking the sequence), rhythm (the quaver rest in b.70 further highlights the A♭, as noted by Cockshoot[45]), register (the A♭ is the melodic apex of the structure, occurring a minor third higher than expected) and texture (the texture reduces to two parts after the climax). In addition there is a marked reduction in the degree of chromaticism once the climax of the structure is reached. Each of these features combines with unity of purpose to create and resolve the tension and thereby to lend direction and meaning to what might otherwise remain a dull and uneventful sequence.

The subject now enters dramatically in the bass, considerably expanded. This majestic striding entry sounds like the beginning of the middle section of the fugue and modulates to B♭ minor. The new conclusion to the subject is then taken as the basis for a brief passage of invertible counterpoint which is enhanced by dynamic contrast and, more unusually, by rhythmic exchange such that two voices which change places in the texture also exchange their rhythms, one with the other. This principle is most readily to be discerned in the repetition of this section a tone lower in A♭ major (b. 83-7): the second half marked piano repeats the first half marked forte with the texture inverted[46] but the two voices exchange rhythm also. The new soprano part thus combines the melodic

contour of the former bass with the rhythmic style of the former alto, as illustrated in Ex.2.6; the new bass line is derived by similar means. Two new melodic fragments are thus created by this process of amalgamation and a routine repetition, albeit enlivened by inverting the counterpoint, becomes the impetus for the creation of something new. The preceding section in B♭ minor (b.79-83) involves a less stringent application of the same idea.

87-105: the introduction of a G♭ on the final quaver of the episode establishes D♭ major as I at the beginning of the third and final exposition of the subject. This is the only entry in the entire first section of the fugue not to begin either on the I or V of A♭ major and significantly it is the only entry (excluding the original entry and its answer) not to treat the first note of the subject as a V. Consequently it is unique in its failure to modulate to the local V and therefore remains in the IV, D♭ major throughout, only momentarily suggesting a shift to E♭ minor. Almost as if the IV emphasis has assumed too great a level of importance, Beethoven answers the subject immediately with an entry which oscillates uncertainly between he IV and I keys. This harmonic indecision may result directly from the false entry in stretto (B., b.93): the subject begins in D♭ major (S., b.91) and modulates immediately to the V, A♭ major but when the bass enters in stretto, also on A♭, a temporary return to D♭ major is necessary if the opening note of this entry is not to be regarded as the I. To this extent the harmony is dictated by the counterpoint, a simple modulation being repeated in stretto, a stretto of the harmony in fact, the net result of which is the alternation of two keys; this is illustrated in Ex.2.7, the brackets indicating the harmonic stretto, the bottom system the overall effect. Of course Beethoven might simply have omitted the first modulation to A♭ major (b. 92-3), but in so doing he would have destroyed this delicate balance: as it stands the present entry serves both to undermine the IV

key so firmly asserted by the foregoing entry and also to epitomise the fundamental tonal argument of the fugue. The placing of these two entries, by which the IV key is conspicuously established and then called in doubt, at the strategically significant point two thirds of the way into this first section of the fugue, is a quite deliberate means of presenting this tonal ambiguity in its most effective light.

The remainder of this section of the fugue is concerned with re-establishing A♭ major as the I; the IV has temporarily achieved prominence so now A♭ major is re-instated but not, as it transpires, unequivocally. The subsequent codetta which now precedes the final entry of the subject thus modulates sequentially to E♭ major, settling onto a pedal E♭ which sounds as V in the home I. After a transitory modulation to B♭ minor the subject enters strongly in the bass in A♭ major, but beginning on E♭ and thus following the general pattern. The passing modulation to B♭ minor during the entry, which is cancelled by the alto entry in stretto (b. 103), picks up the modulation at the end of the codetta (b. 99-102) and refers back to the second exposition where such momentary shifts to the supertonic minor were noted (b. 51-7)[47]. The key of the supertonic minor is not infrequently used by Beethoven in the late-period fugues as a prominent secondary tonality: it was noted above in connection with the D major 'Cello Sonata[48] and will further be mentioned in the analyses which follow. In the present fugue its prominence may be explained partly by the observation that it is the IV key in relation to the tonic's relative minor, precisely the manner in which it was heard during the episode above (b. 57-62).

105-116: the final entry of this threefold exposition of the subject concludes in the real V, E♭ major, and the introduction of a D♭ in the inner part presages the return to the home I (b. 105). A♭ major is indeed re-established, but a beautiful chromatic insertion

first diverts the music through the IV key, its final fleeting appearance in this half of the fugue (b. 105-6). The music builds up to a climax using stretto between the outer parts and a free treatment of the subject by diminution which anticipates later events once the fugue is resumed. Given that the subject is scored in compound time it is inevitable that the diminution be not strict[49]; the new rhythm however enhances the subject's ascending contour particularly in the bass entry (b.107 ff.) where the final notes are diverted further aloft. The fugal texture is abandoned as the music settles onto V harmony in the home I: the V^7 is then outlined in a descending and ascending arpeggio as a means of dissolving the tension before melting like an augmented sixth harmony into G minor for the return of the Arioso, " Ermattet, klagend" whose mellifluous cantabile line is now interrupted as if by sobs. By the time the fugue returns G minor has become G major, a remarkable series of chords prior to the inverted fugue giving the impression of increasing strength after the soul-baring and emotionally exhausting Arioso.

136-152: the choice of G minor/major as the tonality for so expansive a section of the movement, and the key in which the fugue is resumed, is most unusual and requires what Rosen describes as

> "an abnormal harmonic movement"[50]

in order to return home. Tovey explains this choice of key as follows:

> "The purport here is to produce surprise and a break away into something remote from the key of the Fugue but near in pitch to the Arioso." 51

The primary tonalities of the fugue so far have been the I and IV keys, in addition to which there have been less extensive references to the relative minor and its IV. These keys, like that of the original Arioso, are without exception firmly on the flat side so a temporary shift to a different tonal plane introduces a welcome element of contrast. Lowering the tonal centre by a semitone might also be deemed to contribute in some small measure to resolving the I/IV ambiguity since

the note G, the leading note in A♭ major, is foreign to the key of D♭ major. However, its impact in this respect is minimal since the sharpened fourth is one of the most frequently heard of chromatic notes; a G♮ in D♭ major need in no way necessarily imply a modulation to the V key, just as the bass D♮ in b.109 does not for a moment imply a remove from A♭ major to its V. Thus when the final section of the fugue begins (at b.174) the IV tendency of the subject is still very much in evidence. The descent to G minor which subsequently becomes major also acts as a counterbalance to the supertonic modulations noted during the fugue, particularly towards the end of the third exposition (b.99-104). Such a lowering of the tonal centre is described as follows by Tovey:

> "the move a semitone downwards from the tonic (to VII# or vii#) is a move into mysterious brightness." 52

Certainly there is mystery as the fugue dissolves into the Arioso, and there is brightness too as repeated G major chords prepare the return of the fugue.

The G major section of the fugue re-introduces the three voices in the manner of an exposition and concludes with a redundant entry in the soprano. Cockshoot remarks upon Beethoven's skill in disguising the necessary alterations to the subject's melodic shape in the answer[53]. His comments are convincing in spite of Nottebohm's suggestion that an unspecified improvement noted by Beethoven might refer to this very passage:

> "Unmittelbar nach obiger Andeutung [regarding Op.102 no.2] findet sich noch Folgendes bemerkt:
>
> in der Sonata in As ist auch etwas welches in der geschriebenen vom Erzherzog anders ist.
>
> ... Vermuthlich ist die Stelle im letzten Satz gemeint, wo das in G-dur und in entgegengesetzter Bewegung eintretende Fugenthema zum ersten Mal beantwortet wird." 54

It is the proximity of this remark to Beethoven's recommendation regarding the answer from Op.102 no.2 which suggests that it refer to a

comparable passage in Op.110, hence Nottebohm's assumption. Nonetheless it is difficult to envisage what Beethoven's intention might have been.

The tendency of the music towards the IV key is for the moment set aside as the entries outline I and V in G major; however, the redundant entry modulates to the local IV key, C minor, closing on its V chord, the bass note of which initiates the next section of the fugue. Henceforth the presentation of the subject recto becomes the norm. The expository nature of this 'middle' section of the fugue is the main argument for regarding the fugal content of this finale as two incidental fugues rather than as one complete one; Cockshoot however explains it as the means by which

> "Beethoven tried to portray the gradual return of vigour after the grief of the Arioso" 55

and, as noted above [56], this seems the better interpretation of the two. Beethoven's indication 'nach und nach wieder auflebend' is clearly similar in intent to his 'Neue Kraft fühlend' from the A minor String Quartet, Op.132. The various means by which this process of regeneration is here expressed give rise to a movement of tremendous enrichment which renders quite incomprehensible McNaught's reservations regarding its success:

> "In the final movement of Op.110 he [Beethoven] seems to be searching some upper region by fugal ways, and it needs a sense of duty not to be aware that his steps go lamely." 57

On the contrary, this is a music which evolves so naturally that it appears to have composed itself.

152 - 174: the remainder of the middle section of the fugue once more involves the presentation of the subject in each of the three voices, in a passage which tends increasingly towards homophony: the main entries are soprano (augmented, recto, b.152 ff.) bass (augmented,

recto, b.160 ff.) and alto (non-augmented, inverso, b.170 ff.). These entries are accompanied, not by the countersubject which has been seldom retained in its original format, but by the subject itself, now heard in a diminution which reduces the note values by two thirds. Blom describes this as

> "a rare and astonishing technical device" 58

but it is a logical consequence of the compound meter in which the fugue is set. To ensure its immediate recognition the upper parts are silenced as it is first introduced (b.152). The new accentuation of the subject, arising from this manner of diminution (see Ex.2.8) is reminiscent of the treatment of the subject by augmentation in Op.106 (IV, b.94 ff.)[59]. This feature is remarked upon by Tovey:

> "Beethoven ... adapted augmentation and diminution to sonata-like varieties of thematic expression, by employing them in triple [and compound] time, so that ... they produce an entirely new rhythmic expression." 60

Consistent with this transformation of the subject's rhythm is the syncopation of the augmented subject across the barline. At one point this results in the first beat of the bar not being sounded on seven successive occasions (b.162-8). Also interesting is the complete omission of the countersubject at this point; its replacement by the subject itself is perhaps implied by its failure to assume an independent melodic line, but this is in any case characteristic of the late-period fugues which tend increasingly towards monothematicism yet without loss of internal contrast.

The first two entries of the augmented subject treat the opening note as a V in familiar fashion; the first entry is in C minor moving temporarily to the V minor while the second, though beginning in C minor, moves during the first note to the IV. This latter entry is more chromatic than the first and includes an anticipatory return to the home I (which coincides with the marking 'poi a poi tutte le corde'[61])

but ends in the key of E♭ major. Beethoven now marks the music 'Meno Allegro. Etwas langsamer'but continues the feeling of growth and increasing vitality by introducing the subject in double diminution and by beginning the continuous semiquaver movement which is perpetuated without interruption until the end of the sonata. This tempo change and the subsequent accelerando ('nach und nach wieder geschwinder') constitute as Hopkins notes

"the exact equivalent of a change of gear." 62

The subject in double diminution is condensed by the omission of its third and fourth notes and a fugal texture becomes increasingly difficult to trace, though Cockshoot does explain the counterpoint latent within the semiquavers at the point of recapitulation[63]. A link codetta (b. 168-70) establishes the new texture and movement leading to the third entry of the subject which restates the supertonic minor relationship (B♭ minor - A♭ major). Its chromatic distortions and scraps of accompaniment alternating between the outer voices signal the end of strict counterpoint and an impending homophonic conclusion.

174 - 213: the final section of this fugue may appropriately be termed the 'recapitulation' for the subject is stated by each of the three voices in the same order as in the original exposition and at the same pitches. The repetition of that material is thus made with what Tovey describes as

"a more than accidental exactness." 64

One significant alteration lies in the fact that a greater proportion of the keyboard's register is explored in the recapitulation, the first entry being transposed down an octave and doubled at the lower octave while the third entry is doubled at the upper octave. This is a direct preparation for the sonata's forthcoming climactic combination of the extreme registers of the keyboard[65].

To this final section of the fugue is entrusted the task of resolving, or of failing to resolve, the I/IV imbalance which has been the fundamental driving force of the fugue from the beginning. The key of A♭ major is established as the subject enters (b. 174) but there is an immediate shift to the IV[66] so that the first note of the subject is once again treated as a V. In the second entry (A., b. 178 ff.) the harmonization exhibits this IV tendency of the subject more markedly, but in the third entry (S., b. 184 ff.) the subject finally begins both on and in the home tonic. This, it should be noted, is the only entry in the entire fugue so far, excluding the original entry and answer, to treat the subject in this way: the only exception is the alto entry in D♭ major at the beginning of the third exposition (b. 87 ff.), but since that entry is set in the IV key its failure to comply with the treatment of the subject consistently employed elsewhere has the effect of enhancing, rather than of diminishing, the IV emphasis of the fugue. Now however, for the first time in the fugue the subject is stated on A♭ and in the home I. Moreover, in the final summing up which is based upon a free development of the subject by way of a coda, there is only one further entry of the subject (S., b. 200 ff.) and that entry likewise begins on A♭ very firmly in the home I. Shortly thereafter the sonata ends with a flurry of I arpeggios[67] and a dense but widely-spaced chord of A♭ major.

It would thus appear that the fugue has come full circle: the original unaccompanied entry, which sounded in A♭ major but which was subsequently re-interpreted in a IV light, is here re-instated and confirmed in the I tonality. This interpretation however pays too little alteration to the hard realities of the I/IV conflict which in fact persists throughout the coda. Thus the third entry (S., b. 184 ff.) is preceded by a momentary modulation to D♭ major which is repeated more emphatically during the entry itself. Nor does this entry return as expected to the

I, but digresses instead into F minor and only re-establishes the I by restating the end of the subject, doubled at the upper third (b. 188-90). A further transitory modulation to D♭ major (in b. 199) precedes the final statement of the subject; it is of comparable brevity to the modulation prior to the soprano entry at b. 184 and does little to prepare the most devastating stroke of all: the subject beginning in A♭ major modulates into the IV key at the same point as before (cf. with b. 186-7) but is then expanded to assert this key with unprecedented force. A sequential extension continues the IV emphasis whereupon a violent diminished seventh harmony wrenches the music back towards A♭ major. The sonata does end in the home tonic, but there is no solid Perfect cadence, the expected V harmony being replaced by the less stable diminished seventh. The last seven bars thus sound dangerously close to an interruption of the IV key, and the concluding arpeggios more like a refusal to continue the argument than a glorious re-affirmation of I tonality. Thus Dreyfus states:

> "despite the apparent assertiveness and vigour of the close of the sonata, it does not in fact succeed in resolving this ambivalence at all." 68

She continues however:

> "The true resolution does not come until the end of the first movement of Op.111 ... in that marvellous coda which ... resolves the ambivalent I/IV into its alternative and harmonious form: the Plagal cadence." 69

This latter point requires some degree of clarification.

It is clear that any harmonic conflict in one work may recur in another. If however that conflict should appear unresolved in the first work yet find resolution in the second this fact need not, indeed should not, lead one to the conclusion that the two works are continuous. Dreyfus nonetheless states that the last three sonatas <u>are</u>

> "continuous (indeed forming three parts of <u>a single conception</u>)." 70

This view is not substantiated by the I/IV issue, since the key of C major, even if reached via a Plagal cadence from F minor, is clearly no resolution to a conflict which rages about A♭ major and its IV, D♭ major; rather it is the resolution of a stormy C minor into the I major, a bridge between the turbulence of the Allegro con brio ed appassionato and the timeless hushed world of the Arietta. In the present view each of Beethoven's late-period compositions is to be understood as a separate independent musical structure. Similar compositional procedures may recur from one work to another - indeed they are explored in this thesis with respect to the fugues - but this does not require that the works concerned be any more closely related than for example the F minor Piano Sonata Op.57 and the F minor String Quartet Op.95, both of which immediately restate their opening material in the neapolitan key. The A♭ major fugue from Beethoven's penultimate sonata thus presents a tonal conflict which at the last fails satisfactorily to be resolved. It is this opposition of two tonalities, inherited from the sonata style, which gives rise to the new dramatic and emotional qualities fundamental to Beethoven's imaginative concept of fugue.

1. Roger Bullivant : Fugue (London, 1971), p.122.

2. See above, p. 15.

3. John V. Cockshoot : The Fugue in Beethoven's Piano Music (London, 1959), pp.95-7. This is taken from Heinrich Schenker : Die letzten fünf Sonaten von Beethoven, Op.110 (Vienna, 1914), p.49 et seq., p.58 et seq., and p.67.

4. Donald Francis Tovey : A Companion to Beethoven's Pianoforte Sonatas (London, 1931), pp.227-87.

5. Bar numbers are counted in HV from the beginning of the Adagio ma non troppo. The word 'finale' is thus used in this chapter to embrace the Adagio introduction and both appearances of the Arioso and fugue.

6. John V. Cockshoot, op. cit., p.96 based on Schenker. See above, n.3.

7. They last 19 bars in a movement of 187 bars and 22 bars in a movement of 158 bars, respectively.

8. See, e.g., the recapitulation of the second subject, Op.111(I), b.116-31.

9. Stefan Kunze : 'Fragen zu Beethovens Spätwerk' in Beethoven-Jahrbuch, vol.IX (Bonn, 1977), pp.306-7.

10. Anthony Hopkins : Talking about Sonatas (London, 1971), p.114.

11. Leonard G. Ratner : Classic Music Expression, Form, and Style (New York, 1980), p.267.

12. Kay Dreyfus : 'Beethoven's Last Five Piano Sonatas A Study in Analytical Method' in Beethoven-Jahrbuch, vol.IX (Bonn, 1977), p.42 et seq. This matter is discussed further below : see below, pp.54-7.

13. Beethoven's dislike of flats causes him to write the Key Signature of E♭ minor and to inflect the F♮'s as necessary.

14. Schenker interprets Beethoven's use of the word 'Arioso' as a feature

> "indicating quite clearly the hidden existence of words."

See Heinrich Schenker : Harmony, trans. by Elisabeth Mann Borgese (Chicago, 1973), p.15.

15. Anthony Hopkins, op. cit., p.117 et seq.

16. ibid., pp.118-9.

17. Wilhelm von Lenz : Beethoven Eine Kunst-Studie (Hamburg, 1855-60) quoted by Warren Kirkendale : Fuge und Fugato in der Kammermusik des Rokoko und der Klassik (Tutzing, 1966), p.176.

18. Graham George : Tonality and Musical Structure (London, 1970), p.101.

19. ibid. (italics mine).

20. Kay Dreyfus, op. cit., pp.42-3.

21. It seems preferable however, to regard the second entry as beginning and ending in E♭ major : see below, pp.57-8.

22. Kay Dreyfus, op. cit., p.43.

23. Ludwig Misch : Beethoven Studies, trans. by G.I.C. De Courcy (Oklahoma, 1953), p.73.

24. Wilhelm Klatte : Grundlagen des mehrstimmigen Satzes (Berlin, 1922). See ibid., p.73 and p.187.

25. Tonality is the main reason that the G# minor Allegro during the introduction to the Hammerklavier finale fails to convince the listener that the finale proper has begun.

26. Kay Dreyfus, op. cit., p.42.

27. Later Beethoven does treat this C as VII in D♭ major (at b.93), but its function there is clarified by the harmony of the accompanying parts. In the present case this is not so and it is heard as III in A♭ major.

28. Kay Dreyfus, op. cit., p.43.

29. Cockshoot's analysis of the fugue is preceded by a comprehensive survey of the textual differences between the two autograph scores and a further copy which was revised by the composer : see John V. Cockshoot, op. cit., pp.97-109. Where appropriate these discrepancies are incorporated in App.II.

30. This was noted above in Ex. Int.2. A comparable derivation (of the finale theme from material of the opening movement) is evident in a much earlier work, the Piano Sonata in C minor Op.13 (1798-9). See Ex.2.3. This is mentioned in part by Reti : Rudolph Reti : Thematic Patterns in Sonatas of Beethoven (London, 1967), p.71, Ex.90.

31. This was also noted above : see Ex. Int.1.

32. Donald Francis Tovey, op. cit., p.281.

33. John V. Cockshoot, op. cit., pp.97-8.

34. ibid., pp.109-10.

35. Kay Dreyfus, op. cit., p.43.

36. Rudolph Reti : The Thematic Process in Music (London, 1961), pp.89-90.

37. Heinrich Schenker, op. cit. (Harmony), p.343, App.I, Ex.A2.

38. Cf. the first entry (b.26-30 in A♭ major throughout) with the third (b.36-40, D♭ major - A♭ major), and the second entry (b.30-34, in E♭ major throughout) with the fourth (b.45-9, A♭ major - E♭ major).

39. Cf. with the early introduction of G♮ in the third entry, b.37.

40. See below, p.63.

41. The progression during the entry (b.53-7) affords a curious parallel with the fugue from Op.120 where the present progression is preserved almost identically and in the same key : cf. Op.110 (III), b.54-7 with Op.120 (var.32), b.129 ff. and refer to the analysis of the Diabelli fugue : see below, p.92 and Ex.3.22. In Ex.2.4 this similarity is particularly noticeable, for the melodic contour of each part is also duplicated, in addition to the underlying harmonic progression.

42. The Roman numerals in Ex.2.5 refer not to the harmonies but to the keys through which the music modulates.

43. See John V. Cockshoot, op.cit., p.112.

44. ibid.

45. ibid.

46. The pedal E♭ may for the moment be ignored.

47. See above, p. 60.

48. See above, pp.40, 41 and 42.

49. Kirkendale notes that fugues in $\frac{6}{8}$ time were rare before Haydn : see Warren Kirkendale : Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979), p.196.

50. Charles Rosen : The Classical Style Haydn, Mozart, Beethoven (London, 1980), p.67.

51. Donald Francis Tovey, op. cit., pp.283-4.

52. Donald Francis Tovey : The Forms of Music (London, 1967), p.61.

53. John V. Cockshoot, op. cit., p.115.

54. Gustav Nottebohm : Beethoveniana (Leipzig, 1872), p.34.

55. John V. Cockshoot, op. cit., p.114.

56. See above, p.52.

57. William McNaught : 'Beethoven' in Grove's Dictionary of Music and Musicians, ed. by Eric Blom, vol.1 (London, 1977), p.565.

58. Eric Blom : Beethoven's Pianoforte Sonatas Discussed (New York, 1968), p.235.

59. See below, pp.120-21, and Ex.4.21.

60. Donald Francis Tovey, op. cit. (The Forms of Music), p.23.

61. The duration of the crescendo in this passage varies from one edition to another : see App.II.

62. Anthony Hopkins, op. cit., p.118.

63. John V. Cockshoot, op. cit., p.107.

64. Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.286.

65. The various alternative readings in this section are listed in App.II.

66. Cf. this with the bass entry, b.160-68.

67. These are compared by Marx to the demisemiquavers in mvmt.I (b.12 ff.) : Adolf Bernhard Marx : Ludwig van Beethoven : Leben und Schaffen (Berlin, 1863-4), vol.II, pp.302-3.

68. Kay Dreyfus, op. cit., p.44.

69. ibid.

70. ibid. (italics mine).

Chapter 3

Thirty-three Variations on a Waltz by A. Diabelli, Op.120

Structure

If, as Kirkendale asserts, the Grosse Fuge should be regarded as Beethoven's Art of Fugue[1] then the Diabelli Variations undoubtedly find their counterpart in Bach's Goldberg Variations. Indeed these two works are linked by Tovey when he describes them as:

> "the two greatest sets of variations ever written"[2],

a view which in fact echoes Diabelli's original announcement of their publication[3]. Besides their awesome length both works share in common a tendency towards contrapuntal textures: in the Goldberg Variations every third variation is a canon, variation 10 is a Fughetta and the final variation is a Quodlibet which quotes two popular German songs. In the Diabelli Variations imitation abounds (var. 4 and 6, for example) and canonic writing may be noted (particularly in var. 19 and 20: see also var. 23); the texture is inverted in a non-contrapuntal context (var. 16 and 17 collectively) and frequently the second half of a variation re-presents the material of the first half modified by inversion (var. 6, 10, 14, 16, 17, 19, 21, 23 where the hands are inverted upon repetition, 24 and more freely in var. 26, 27 and 33). Occasionally free inversion characterises the written repetition of the first half of a variation (var. 12 and 30) and finally Beethoven includes a fughetta (var. 24, an obvious parallel with the Goldberg Variations) and, as the culmination of these features, the fugue itself (var. 32). Maniates writes of the quodlibet:

> "Juxtaposing several pre-existing melodies, as in the cantus firmus quodlibet, represented in Renaissance thought the ultimate in contrapuntal mastery."[4]

In Beethoven's Diabelli Variations the quodlibet is replaced by the fugue, but its spirit, that of parody and humour, is retained most conspicuously in variation 13 and the quotation from Mozart's 'Don

Giovanni' (var. 22); nor is it entirely absent from the fugue itself whose material brazenly ridicules the repeated notes in Diabelli's simple little waltz. Kinderman devotes a separate chapter of his book to the element of parody in Op.120, arguing that when Beethoven expanded the work he strengthened its relationship with the waltz by inserting strongly parodistic variations at strategic points[5].

Stronger parallels than these have however been drawn between the Goldberg and Diabelli Variations. The Diabelli Variations, so Geiringer argues[6], divide into eight units each of four variations, the whole preceded by the Thema and followed by the final variation. He states that the last variation in each *group of four* acts as a conclusion,

> "frequently slowing up in tempo and stressing contrapuntal features."7

Such regularity of contrapuntal emphasis immediately suggests a parallel with the Goldberg Variations, but on closer inspection it is clear that Geiringer's view is not substantiated: the contrapuntal variations are numbers (3), 4, 6, (14), 19, 20, 24, 30 and 32, not numbers 4, 8, 12 etc. In fact his analysis is entirely discredited by Kinderman[8] who notes that the original draft for Op.120 (1819) was expanded from within (in 1822-3) to produce the finished work:

> "these added variations contribute substantially to the form of the whole work, imposing not a symmetrical but an asymmetrical plan ... The presence of a totally symmetrical plan analogous to the Goldberg Variations is unthinkable." 9

The similarity between these works thus lies in their stature rather than in their structure.

As far as the fugue itself is concerned comparison with Beethoven's 'Eroica' Variations, Op. 35 is likely to prove more enlightening. The fugue from Op. 35 like that from Op. 120 occurs as the penultimate event in the musical structure. The earlier example gives way to a return of

the theme with further decoration, accounted for by Misch as follows:

> "since the bass theme [which provides the fugue subject] plays only a secondary role in comparison with the real theme of the variations, the fugue cannot conclude the work." 10

This may be so, but it does not explain the presence of the coda which would have been appended regardless of the thematic content of the fugue: in Op. 120 the fugue is thematically one of the variations most closely related to the waltz theme, yet the theme still returns thereafter, transfigured. In fact it is a notable feature of Beethoven's other fugue finales consistent with both the Diabelli and Eroica Variations that the fugue invariably gives way to a non-fugal conclusion; the only work which comes close to breaking this 'rule' is the 'Cello Sonata, Op. 102 no.2. However, in spite of its failure literally to conclude the work, the fugue in each of these sets of variations does take on the task of a finale. In each case the fugue is prefaced by an extended slow section (var. 15 and var. 29-31 in Op. 35 and Op. 120 respectively) which provides a pedestal for the fugue, distancing it from the preceding variations and thereby enhancing its capacity to imply the beginning of a final section[11]. It is for this reason that, when he expanded his original draft for Op. 120, Beethoven composed the Adagio (var. 29) and Largo (var. 31) to supplement the Andante (var. 30) which had formerly been the only variation separating the fugue from the energetic Vivace (var. 27). His initial intention had been to lead directly from the Andante into the fugue, as noted by Kinderman[12]. The alterations here made demonstrate Beethoven's realisation of the need to set the fugue apart more convincingly.

Thus in both Op.35 and Op.120 the fugue acting as finale is the penultimate event in the structure, preceded by a lengthy slow section and followed by a return of the theme. The fugue from Op. 120 however, unlike that from Op. 35,is actually numbered as one of the variations,

an important point for it is modelled very clearly upon the structure of the theme, though not upon its length. The fugue as a whole falls into two clearly defined sections, each of which follows the structure of Diabelli's waltz; these sections are therefore referred to as the 'fugue' (b. 1-117) and the 'variation upon the fugue' (b. 117-60). Their relationship to the theme may be clarified as follows; the waltz falls into two halves, each repeated, the first moving from I to V, the second beginning and ending in the I; this structural outline is clearly retained in the fugue where the repeats are written out in full and modified quite substantially: the fugue exposition corresponds to the first half of the theme beginning in the I and concluding in the V (b. 28) whilst containing (as expected in a four-voiced exposition) a virtual written repeat of its material, the second pair of entries repeating the first pair. The remainder of the fugue (b. 28-117) corresponds to the second half of the theme, the repetition beginning at b. 71: thus the material of the first episode (b. 28-34) is duplicated at the beginning of the repeat (b. 71-85) but explored in greater detail. For this reason the first two entries (B., b. 34 and T., b. 44) are omitted from the repeat, this being the only significant departure in the fugue from the simple structure of Diabelli's waltz. Two entries of the subject in stretto (S., b. 55 and B., b. 57) cause the texture to thicken in preparation for a climactic entry of the inverted subject in the bass doubled at the octave (b. 63); the basic details of this passage are exactly duplicated in the repeat, two entries in stretto (A., b. 85 and T., b. 89) leading to the climactic bass entry again doubled at the octave and presented in inversion (b. 95). The repeat ends, as did the original, in the I, E♭ major with flattened sixth (b. 114-7) contrasting with E♭ minor (b. 70-71). In view of this Cockshoot is perfectly correct to observe that Beethoven, had he so wished, could have embarked immediately upon the Tempo di Menuetto moderato once he had reached the end of the fugue (b. 117)[13] for by this point the variation is complete.

The remainder of the total fugue (b. 117-60) is therefore an extra, a variation upon a variation rather than a variation within a variation as Cockshoot suggests[14]. This variation upon the fugue is similarly modelled in a structural sense upon Diabelli's waltz, as outlined below[15].

The fugue as a whole thus divides into two sections of irregular length each based upon the structure of the waltz. It is apparently coincidental that the combined length of these sections is precisely five times the length of the original waltz, though Cooper does remark upon the general regularity of the variations and their adherence to the structure of the theme; curiously however, he omits both the fughetta with 33 bars and the fugue with 160 bars from his summary[16]. It is also worth noting that variation 4, one of the irregular 31-bar variations, subsequently appeared with an extra measure. This feature is discussed by Nottebohm who attributes the insertion to Diabelli:

> "...so kann man gar nicht zweifeln, dass er auch fähig war, in einer Composition Beethoven's eine vermeintliche Verbesserung vorzunehmen, zumal wenn der Composition, wie es hier der fall ist, ein Thema von ihm zu Grunde liegt." 17

In modern editions this 'improvement' (Verbesserung) has been corrected.

Tonality and Thematic Content

The tonality of the fugue is E♭ major. Given that of the thirty-three variations twenty-eight are in the home tonic and four in the tonic minor, the fugue is allotted the work's most distant tonality, being the only variation without C as its tonic. Nonetheless it stands in the familiar tertiary relationship to the I and is thoroughly prepared by the placing of three of the four C minor variations immediately before it. Blom explains its comparatively remote tonality by arguing that, had the fugue been heard in the I, the final variation would have seemed like

> "an irremediable anticlimax." [18]

More interestingly Kinderman postulates a reciprocal tonal exchange between the Largo and the fugue:

> "Just as stress on E flat major in the Largo anticipated the key of the Fugue, so does the emphasis on C minor in the Fugue render the E flat modulation less conclusive, preparing the return of the tonic major in the Minuet finale." 19

This would account in some measure for the tonal integration of the fugue into the structure as a whole; its thematic integration may be assessed by a consideration of its subject and countersubject[20]. The subject is clearly based upon the right hand of Diabelli's theme: Ex. 3.1 compares the opening of the waltz with an early sketch for the fugue subject (marked 'fuge')[21] and a sketch quoted by Nottebohm which is marked 'Vielleicht so anfangen'[22]. The final version of the subject is more complex thematically than these early drafts, but no less clear in its derivation. The countersubject is a more subtle and ingenious creation: it offers a rhythmic and a diatonic-chromatic contrast with the subject yet is no more than a simple variation upon that subject, descending in similar fashion by step through a third: see Ex. 3.2. This is particularly evident in one of the sketches cited by Nottebohm where a 'sf' and 'f' are added to the F and E♭ respectively[23]. The relationship between the subject and the countersubject of this fugue is thus similar to that found in the A♭ major sonata, the countersubject providing a decorated version of the subject at the lower third. Their combination implies a descending sequence which mirrors the ascending sequence evident within the harmonic structure of Diabelli's waltz. This structure is summarized in Ex. 3.3 with a bracket indicating the relevant tonalities. If the keys in the first half of the waltz are reversed and transposed their status as the source of the fugue's material becomes clearer: see Ex. 3.4. In themselves these observations are perfectly adequate to account for the thematic content of the fugue; a less obvious point

may however also be made. Beethoven's contempt for Diabelli's waltz is widely reported; why then did he expound upon it at such length? Besides the remarkable scope for invention afforded by the simplicity of the theme's melodic and harmonic structure[24] it is also possible that Beethoven recognized in the rosalias, which were in fact the target of his criticism[25], a particular musical figure of some consequence to him, for the bass line of Diabelli's waltz adumbrates at one point in the first half the B-A-C-H motif and in the second half renders these allusions explicit[26]: see Ex. 3.5. By sheer chance Diabelli's elementary repetitions of a simple figure have given rise to that very motif which occupied Beethoven's thoughts so frequently at this time. The countersubject of the present fugue may be related to this figure either by retrograde motion (Ex. 3.6(i)) or by inversion (Ex. 3.6(ii)) but it is the latter of these two methods, beginning like the countersubject on G, which reproduces the motif at its correct pitch as it is heard in Diabelli's waltz. It is almost certain that Beethoven was not consciously aware of this, yet this derivation of the countersubject from the bass of the theme does seem more convincing than the tenuous relationship between it and the first few notes of the waltz which Cockshoot suggests[27]. It is therefore interesting that Beethoven at one point considered raising the countersubject above the subject and further stressing its prominence by marking the subject piano. This sketch is cited by Nottebohm as the first in a series of sketches which, he claims, show the work nearing completion:

> "Wieder andere Blätter zeigen die Arbeit der Beendigung nahe." 28

Their resemblances to the finished fugue are however fairly remote, involving $\frac{3}{4}$ time and $\frac{12}{8}$ time and scalic quavers which exhibit

> "the typical mediocrity of many of Beethoven's first ideas." 29

Nottebohm informs us that the sketches are scattered on loose leaves

which makes it difficult to establish their chronology with accuracy[30] but nonetheless committs himself, erroneously as noted by Kinderman[31]. In the finished work the balance in emphasis between subject and countersubject in this sketch is redressed, the subject being marked forte and placed above the countersubject. Nevertheless the draft cited by Nottebohm is used, and prominently, at the climax to the variation where it is marked sempre fortissimo (b. 145 ff.).

One final point may be made regarding the countersubject prior to the analysis of the fugue: like the chromatic subject of the Grosse Fuge, this countersubject is formed of essential and non-essential notes in alternation: the E♮ and D are decorations of the F and E♭ like grace-notes which have been incorporated into the melody and received full status. In the Grosse Fuge the effect of such notes is to create extreme dissonance, but in the case of Op. 120 their pungency is tempered by concurrent suspensions in the subject as is evident from the very first entry.

Analysis of the Fugue

1-28: the exposition introduces the four voices in pairs separated by a brief sequential codetta and ends after a further codetta in the V key. The answer exchanges I and V thus emphasizing the key of E♭ major at the outset, but subsequently tending towards the IV key, A♭ major. This is an important factor of this fugue for the IV emphasis becomes more noticeable in the variation upon the exposition (b. 117 ff.), the second answer of which actually begins with the fourth A♭-E♭ (T., b. 129), and so powerfully does this key then take over that the fugue virtually ends in the IV, an unexpected diminished seventh chord wrenching it back to the I E♭ major. This is clearly reminiscent of the tonal procedures in Op. 110.

The presence of A♭ major in the first exposition clearly has to be limited since one of the main tasks for the exposition is the establishing of the fugue's tonality. Restricting its influence in this way also has the advantage of enabling Beethoven to increase its significance later (in the variation upon the exposition and thereafter) and thereby to create the impression of a gradual shift from the I to the IV throughout the fugue. Tonal events directly following the two expositions are intended to complement this procedure, the original fugue exposition leading to entries in C minor (B., b. 34 ff.), relative minor of the I E♭ major, while the exposition of the variation upon the fugue leads into entries in F minor (S., b. 135 ff.), relative minor of the IV A♭ major. This strengthens the parallel with Op. 110, for in both works the main tonalities are I, IV and their relative minors.

As expected, the exposition follows the structure of the waltz in so far as it entails a repetition of its material, but variety is achieved by subtle alterations to the finer details of the harmony, one example of which may be given here: in both answer versions of the subject, the music modulates through B♭ minor and A♭ major; in the first case (b. 9-10) the fourth beat of each bar is a point of departure leading to the next key whereas in the repetition (b. 23-4) it is the point of resolution for each key on account of the delayed resolution of the bass note (which gives rise to the typical late-period progression Ic - I). The relevant extracts are given in Ex. 3.7 for ease of comparison, with the differing points of key change indicated by brackets.

28-34: the exposition is followed by a brief episode based on a stretto of the subject's opening notes in the answer position, the falling perfect fifth becoming on one occasion a tritone (S., b. 30-31). This episode which shows a remarkable economy of

material and transparency of texture anticipates the more extended treatment of the reduced subject (b. 71 ff.). There is only the slightest of references to the countersubject as the music modulates via G minor and F major to C minor, key of the middle entries.

34-55: the two entries of the subject now heard (B., b. 34 ff. and T., b. 44 ff.) together with the link episode between them and the extension of the second entry constitute that portion of the fugue which will be omitted when this section of the waltz' structure is repeated. The subject is stated twice in C minor, the answer position with descending fifth leading. The first entry is noticeably chromatic and the countersubject itself is inflected also. These chromaticisms in the subject strengthen the relationship between the thematic content of the fugue and the harmony of Diabelli's waltz: a comparison of these bars of the fugue (b. 37-8) and the relevant part of the waltz (b. 8-12 or more strikingly b. 24-8) reveals a progression common to both passages (V^7c - Ib in G major and F major); the difference lies only in the order of the keys, those of the waltz being reversed as a basis for those of the fugue. Earlier it was suggested that these bass notes from the waltz were the source of Beethoven's countersubject[32]; now however, these notes appear as the source of the chromatically inflected subject while the countersubject appears to derive from the upper part of Diabelli's waltz. Even the sforzando is used consistently in both cases. The relevant voices are quoted in Ex. 3.8 in order to demonstrate this relationship, the keys through which the waltz modulates being reversed for ease of comparison.

The purpose of this thematic manipulation is twofold, firstly to establish the relationship between the Thema and the fugue, the latter of which is, as noted by Beethoven, a variant upon the former rather

than a separate event based upon a similar theme, and secondly to demonstrate the unity of content within the fugue which is consistently economic with its material. The mutual dependence of the fugue's two 'contrasted' themes upon the same fundamental cell will be confirmed again shortly. Finally it is not implausible that the sketch cited by Nottebohm[33] with the countersubject above the subject derives directly from the part-writing of Diabelli's waltz; Ex. 3.9 compares part of the sketch cited by Nottebohm (on the two outer staves) with the rosalias from the waltz transposed (in the centre). It thus becomes clear that Diabelli's waltz virtually contains inherent within it Beethoven's subject and countersubject simultaneously presented.

The second entry in this section of the fugue (T., b. 44 ff.) thickens the texture by doubling the subject at the upper sixth, for which reason the countersubject is lowered a third. The most interesting feature in this section lies in the subsidiary soprano part which accompanies the sequential extension of this entry (S., b. 49-55); this part underlines the thematic kinship between the subject and countersubject by referring remotely to both of these themes but explicitly to neither, as illustrated in Ex. 3.10. Subject and countersubject are thus different facets of one and the same stone. In addition the rhythm of this soprano part alludes to the new form of the subject which begins the variation of the fugue (see Ex. 3.11) while its treatment by thematic reduction (illustrated in Ex. 3.12)[34] anticipates the beginning of the repeat of the fugue's second half (b. 71 ff.). In both cases this technique of thematic reduction is used to build up to the entry of the subject in stretto so that the beginning of the repeat (b. 71-85) constitutes a condensed version of the original (b. 28-55): much of the material is omitted in the repeat (b. 35-49 for example) but the repeat nonetheless contains a fusion of the melodic content of the original

(b. 28–34) with its primary means of rhythmic development (b. 49–55) whose function as a preparation for the main events of the overall structure remains constant.

55–71: a stretto of two entries in C minor modulates into F minor for the inverted subject. Both entries are complete and correctly stated, the countersubject freely doubled at the lower third accompanying the first. The inverted subject which forms the climax to the second half of the fugue is by contrast substantially altered towards the end. It is accompanied by the inverted countersubject, also modified, and leads to D♭ major, making however a brief and temporary digression to E♭ minor whereby the structure of the fugue might the more closely be linked to that of the waltz.

71–85: the second half of the fugue is repeated. This first section deals with the material of the first episode but subjects it to the manner of treatment prescribed by the soprano line discussed above (b. 49–55). The main stages in this process of thematic reduction are summarized in Ex. 3.13 from which it is evident that there are three reduced versions of the subject and that the version heard in the first episode (S., b.28–30) is not one of them; this and the flatter tonality permit repetition without tautology. The thematic reduction is enhanced by the harmonic structure which at first modulates at a leisurely pace in the stepwise manner inherited from Diabelli's waltz (D♭ major, E♭ minor, F minor) but then proceeds more swiftly as the second reduction of the subject begins (b. 79). At this point the status of this passage as a repetition of the second half of the structure becomes especially clear: see Ex. 3.14. With the third reduction interest is sustained by means of syncopation and off-the-beat sforzandi which beautifully offset the sudden lowering of the dynamic

for the entry of the subject. Interestingly the Eroica Fugue (from Op. 35) features an extended application of a related thematic technique, the reduction of the subject by repeated diminution which likewise leads to an unexpected alteration of the dynamic (b. 52-77 of the fugue). The subject of that fugue and its reductions are given in Ex. 3.15.

The episode now before us (b. 71-85) also demonstrates further the thematic kinship between subject and countersubject which was mentioned above[35]: the initial reduction follows the answer version of the subject closely (see Ex. 3.16) but the conversion to minims and the insertion of an extra chromatic note (marked 'x' in Ex. 3.16) produce a figure more obviously related to the countersubject: see Ex. 3.17. This relationship is clarified almost immediately by the bass entry which seems to present an amalgamated version of the subject and countersubject (b. 77 ff.: see Ex. 3.18). Since the ear accepts this as a variant of the preceding soprano entry, the countersubject here appears as a metamorphosis of the subject. This is indicative of a fundamental trend towards deeper unity and economy of content in the instrumental fugues of Beethoven's last years: already this principle has been demonstrated in Op. 102 no.2[36] and it will be evident also in Op. 133 where the subject gradually becomes its own countersubject and in Op. 131 where there is no countersubject at all but the subject in diminution is used to accompany the return of the subject.

Finally the thematic economy of this fugue, a feature complementary to the textural economy of most of the variations, may further be stressed: in this passage there are presented two thematic fragments besides the subject and countersubject, but neither is a mere filling-out of the texture: the first (T., b. 74-5 and b. 78-9) is much used during the forthcoming climactic entry in inversion (b. 97-105) while the second

(A., b. 80-83 and T., b. 84-5) relates backwards to the soprano line at b. 49 and forwards also to the variation upon the subject (b. 117 ff.).

85-95: the emphasis from here until the end of the fugue is upon the I, all four remaining entries of the subject beginning in E♭ major. The first two entries in stretto correspond to the two earlier entries in C minor (b. 55-63) but the second voice enters after four instead of two bars and there is here greater freedom of treatment. The countersubject appears in the first entry above the subject, as in the sketch cited by Nottebohm[37], while in the second entry it is sonorously doubled at more than two octaves distance.

95-117: the climactic entry in inversion is considerably extended by sequence and leads to the highest entry of the subject in the fugue, recto and accompanied by the countersubject. Tension is increased by the dramatic sforzandi added to the inverted subject. Most interesting is the figure chosen to accompany the subject at this point, anticipated in the repeat of the first episode (T., b. 74-5 for example). This figure is first scored in conversation between two voices overlapping with each other (b. 97-102) but once this delightful point has been made Beethoven accomodates the dialogue within a single voice; the initial exchange is thus purely explanatory. The recto subject then enters in the soprano part and undergoes further treatment by thematic reduction (S., b. 105-13). This passage taken as a whole is perhaps the most impressive demonstration of thematic unity between the subject and countersubject: the three-note figure in minims is clearly related to the countersubject by inversion, while the soprano crotchets leading up to the diminished seventh harmony are directly taken from the entry of the subject which precedes them, yet in spite of being derived from two different themes both parts are identical; this is illustrated in Ex. 3.19 where the upper brackets indicate the

three-note figure from the inverted countersubject overlapping with itself, the lower brackets the reduced fragment of the subject. The final reduction of the subject moreover is extended by reference to the countersubject, the two themes being fused into one: see Ex. 3.20. The fugue thus comes to a conclusion on a diminished seventh harmony in E♭ major; the flattened sixth in this key has incidentally already been heard during the exposition (S., b. 18).

Analysis of the Variation upon the Fugue

The fugue variation is now complete but Beethoven embarks upon a variation upon that variation. If the fugue with its laughable four-square subject and equally wooden countersubject is intended to parody the crude simplicity of Diabelli's waltz then the variation upon the fugue, which is lighter in texture and infinitely more flexible in rhythm, mirrors the variations as a whole, by which Beethoven raised the trivial waltz to immortality. In structure the variation upon the fugue is not dissimilar to the fugue itself, the second repeat and the material of the first episode being omitted; this omission and the reduction in length of the subject account for the fact that the variation is somewhat shorter than the fugue, or just over one third of its length[38]. The variation like the fugue itself thus bears comparison with Diabelli's waltz: the exposition, like that of the fugue, corresponds to the first half of the theme repeated. The second half contains, as before, two entries in stretto (S., b. 135 ff. and A., b. 138 ff.) leading to a climactic bass entry doubled at the octave (but now stated recto). This free duplication of the waltz' structure is followed by way of a coda (the structural equivalent of b. 105- 17) by a series of entries which lead the music away from the I to the IV key. When this process is interrupted by an abrupt return to the I the fugue and its variation are over and a non-contrapuntal link leads into the final variation in C major, described by Geiringer

as the

"epilogue in heaven."[39]

117-134: the subject and countersubject rhythmically transformed are stated to form the variation upon the exposition. The inevitable similarities between the two expositions are counterbalanced by a number of important differences: as Cockshoot observes[40], the energy of the original subject is here conferred upon the countersubject which now lends its former inactivity to the subject; roles are thus reversed. Comparison of the present subject and countersubject with their original selves is offered in Ex. 3.21. The mordent-like decoration of the subject's final note is replaced in the variation by a single note[41]; this is not a new feature but derives directly from two entries during the fugue (A., b. 20-27 and B., b. 34-41). The reduction of the chromatic notes in the countersubject to quavers (see Ex. 3.21(ii)) underlines their subsidiary ornamental nature postulated above[42]. A more important difference between the two expositions lies in their contrasting character; the present exposition is swifter-moving and much lighter - Beethoven twice stresses that the dynamic is to be held in check sempre piano (b. 120 and b. 132)[43] and a four-part texture is consistently avoided. Even after the exposition is complete a three-part texture remains the norm; in fact, taking the octave doubling as a single voice, only one sixth of the variation is scored in four parts compared with one third of the fugue. A typical Beethovenian joke at the listener's expense enhances the already fluid rhythms of the variation, for in view of the pause over the final chord of the fugue it will not be immediately obvious that the texture thereafter is syncopated by half a bar.

The most significant difference between the two expositions however concerns their structure and the manner in which the variation upon the fugue places greater emphasis upon the IV key than does the original.

Thus the answer in the variation, though beginning like the original answer with V and I of E♭ major, is actually harmonized at the outset as V^7 in A♭ major, which key is thus introduced both earlier and more emphatically than before (cf. b. 121 with b. 6-7). The second answer moreover modifies the initial leap by which further to emphasize the IV, though Beethoven could have avoided this modification with ease had he so wished: Ex. 3.22 suggests one obvious alternative which preserves the descending fifth of the subject as well as retaining Beethoven's bass line. The harmony of the varied exposition is more simple than that of the fugue exposition, the passing modulations to the supertonic key relative to the key of each entry being virtually omitted since the chromatic notes of the countersubject are here reduced to a quaver. One supertonic modulation does however stand out, perhaps to restrain the IV key which might otherwise take over completely: as soon as A♭ major is established by the second answer, a G♭ suggests the key of D♭ major (its IV), but this is immediately abandoned as the V^7 chord on A♭ folds in upon itself leading instead into the supertonic key B♭ minor, as illustrated in Ex. 3.23. The exposition ends nonetheless in A♭ major, unlike the original which moved conventionally and in accordance with Diabelli's theme to the V.

134-142: a brief link episode (actually b. 133-5) resolves Ic in A♭ major and then modulates into F minor, in which key there are two entries of the subject each accompanied by the countersubject freely varied. The beginning of this passage is the only instance of four-part writing in the variation prior to the closing bars but even here there are only three moving parts; at one point in the Hammerklavier sonata a pedal such as this is incorporated into a three-voiced fugue to create a four-part texture (Op. 106 (IV), b. 318 ff.), a liberty which is entirely appropriate in view of the other considerations outlined in that chapter[44]. In the Diabelli fugue no such liberty is taken and the

texture remains light in practice, the introduction of the fourth voice notwithstanding.

142-160: on reaching E♭ major the original subject returns, accompanied however by the varied countersubject. For harmonic reasons the beginning of the subject is compressed placing emphasis on the anacrusis and increasing the impact of its entry; this accentuation is comparable both to the reduced subject during the fugue (b. 84-5) and to the sketches quoted in Ex. 3.1. The subject is here curtailed to facilitate its combination with the varied countersubject. In the fugue as a whole there are three such climactic entries of the subject in the bass doubled at the octave and, as shown during this analysis, each of them occurs at the same point in the structure if the fugue and its variation are related to Diabelli's waltz in the manner suggested. The first entry (b. 63 ff.) was extended briefly before the second half of the structure was repeated, while a more substantial extension was given to the second entry (b. 95 ff.) bringing the fugue to a climactic conclusion in the I. In the third case (b. 142 ff.) the bass entry is again the climax of what precedes, but it is designed also to initiate events: the final section of the fugue which it begins is similar to a third exposition of the subject except that the second entry fails to provide an answer. However the texture is reduced to two parts at the outset and the subject and countersubject are given in all four voices. The varied countersubject which accompanies the first entry begins to accompany the remaining entries also[45] but in each instance is replaced by the original countersubject whose appearance is conspicuously managed above the subject at the very pitch given in the sketch cited by Nottebohm[46]. With its reinstatement the supertonic modulations which it presages return as well and the harmony becomes a little more chromatic, the variation upon the fugue having been unusually diatonic so far. By re-ordering the entries (subject, subject, answer, answer)

and by finally adopting an unambiguous IV answer Beethoven is able in this coda further to heighten the IV emphasis present in the exposition of the fugue and enhanced during the variation upon that exposition. The IV, becoming increasingly prominent throughout the fugue, now takes over completely and is only deposed by the unexpected diminished harmony which forces an end to the counterpoint. The virtuosic arpeggios which twice sweep down to the depths of the keyboard banish all prospects of a further variation upon the fugue and effectively wipe the slate clean so that a fresh view of the waltz may be portrayed. As in the sonata Op. 110, so here, the fugue exhibits not a balanced but an imbalanced tonal structure, the progress of which has to be halted by drastic means. Such is the delicacy of the minuet and so great the contrast between it and the driving power of the fugue that Beethoven inserts a ponderous almost searching return to the I in order to prepare the atmosphere of the work's conclusion. In relating the Tempo di Menuetto moderato to Diabelli's theme Blom states:

> "whereas earlier composers ... transformed their themes more or less ingeniously, he [Beethoven] transfigured his in his best variation works." 47

The climactic fugue 'finale' thus gives way to a timeless reincarnation of Diabelli's earthy little waltz.

1. See Warren Kirkendale : Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979), p.268. Kirkendale's viewpoint is noted below: see below, p.206, n.1.

2. Donald Francis Tovey : Essays in Musical Analysis Chamber Music (London, 1944), p.28.

3. See ibid., p.124.

4. Maria Rika Maniates : 'Quodlibet' in The New Grove Dictionary of Music and Musicians, ed. by Stanley Sadie (London, 1980), vol.15, p.517 (italics mine).

5. William Kinderman : Beethoven's Diabelli Variations (Oxford, 1987), pp.68-75.

6. Karl Geiringer : 'The Structure of Beethoven's Diabelli Variations' in The Musical Quarterly, vol.50 (1964), pp.496-503.

7. ibid., p.498 (italics mine).

8. Kinderman notes that none of the analyses of Op.120 available is wholly satisfactory. Geiringer's analysis however, is one described with more force, as

> "outrageously unsatisfactory."

William Kinderman, op. cit., p.xvii.

9. ibid., p.xviii. Porter's interpretation of the structure is asymmetrical since he groups together variations 1-10, 11-17, 18-23, 24-8 and 29-33 : David H. Porter : 'The Structure of Beethoven's Diabelli Variations, op.120' in The Music Review, vol.31 (1970), p.298.

10. Ludwig Misch : 'Fugue and Fugato in Beethoven's Variation Form' in The Musical Quarterly, vol.42 (1956), p.17.

11. It is significant that Op.102 no.2 is the only 'Cello Sonata to include an extended slow movement and that this movement directly precedes the fugue.

12. William Kinderman, op.cit., p.41 and p.178.

13. John V. Cockshoot : The Fugue in Beethoven's Piano Music (London, 1959), p.138.

14. ibid., p.139.

15. Refer to the 'Analysis of the Variation upon the Fugue' : see below, pp.90-91.

16. Martin Cooper : Beethoven The Last Decade 1817-1827 (Oxford, 1985), p.206.

17. Gustav Nottebohm : Beethoveniana (Leipzig, 1872), p.48.

18. Eric Blom : Classics Major and Minor (London, 1958), p.76.

19. William Kinderman, op. cit., p.123.

20. In this analysis the term 'countersubject' is preferred to that of 'second subject'. The exposition alone indicates that, while the subject is preserved in its entirety, the countersubject is generally reduced to five notes. Thus Bullivant's view is here confirmed : see Roger Bullivant : Fugue (London, 1971), p.33.

21. This is noted in the transcription of the Wittgenstein Sketchbook by William Kinderman, op. cit., p.190.

22. Gustav Nottebohm : Zweite Beethoveniana (Leipzig, 1887), p.569.

23. See ibid., p.571, first example.

24. Tovey writes of the tonal structure of Diabelli's waltz :

> "This plan is astonishingly elastic."

Donald Francis Tovey : The Forms of Music (London, 1967), p.244.

25. See Anton Felix Schindler : Beethoven As I knew Him, ed. by Donald W. MacArdle, trans. by Constance S. Jolly (London, 1966), p.252.

26. For a fuller discussion of this motif and its significance to the fugues refer to App.I.

27. John V. Cockshoot, op. cit., p.127.

28. Gustav Nottebohm, op. cit. (Zweite Beethoveniana), p.571.

29. John V. Cockshoot, op. cit., p.125.

30. Gustav Nottebohm, op. cit. (Zweite Beethoveniana), p.568.

31. William Kinderman, op. cit., p.4.

32. Refer to Ex.3.5.

33. Gustav Nottebohm, op. cit. (Zweite Beethoveniana), p.571.

34. This technique is similar to that described by Brendel as 'foreshortening' : see Alfred Brendel : Musical Thoughts and Afterthoughts (London, 1982), pp.42-3 and pp.154-61. My term, 'thematic reduction', is however more literal in its meaning and more stringent in its application. The musical technique to which it refers is much-used in the late-period fugues.

35. Refer to Ex.3.10.

36. See above, p.39 and refer to Ex.1.10 and Ex.1.11.

37. Gustav Nottebohm, op. cit. (Zweite Beethoveniana), p.571.

38. The codetta during the exposition (b.12-14) is also omitted from the variation.

39. Karl Geiringer, op. cit., p.497.

40. John V. Cockshoot, op. cit., p.126.

41. See all entries of this exposition except the first, hence the brackets in Ex.3.21(i).

42. See above, p.81.

43. So this passage appears in GA and HV. Ratz however marks the variation upon the fugue pianissimo : see App.II.

44. See below, p.140.

45. Regarding the countersubject in b.154 see App.II.

46. Gustav Nottebohm, op.cit. (Zweite Beethoveniana), p.571.

47. Eric Blom, op. cit., p.51.

PART II

Chapter 4

The Piano Sonata in B♭ major, Op. 106

Introduction

Of all the fugues by Beethoven the finale of the Hammerklavier Sonata is perhaps the one which has received the greatest attention from musical analysts and about which the most perceptive remarks have been offered. The most interesting of these observations have tended to focus upon the interval of a third as both a melodic and harmonic feature and upon the opposition of the two keys B♭ major and B minor, factors which Rosen sees as complementary, the second of them deriving from the first[1]. These features are undoubtedly of fundamental importance to any consideration of the Hammerklavier's harmonic structure but they must be viewed in perspective; Rosen's analysis[2], currently the most important discussion of this sonata, is indeed an enlightening account, but at times too narrow in its adherence to a scheme of descending thirds. I would like briefly to restore the balance between the emphasis given to those modulations which do involve such a descent and those which do not, and thereafter to turn my attention to a feature which has been all but totally overshadowed by these thematic-harmonic considerations, yet which is of the greatest importance, particularly in the finale, that is rhythm. This approach will involve a general discussion of the sonata's harmonic structure, which may be kept brief lest other material be unnecessarily duplicated, to be followed by a more detailed analysis of the actual fugue. Such a prefacing of the fugue analysis by a summary of the sonata's structure is happily appropriate, for the thematic and harmonic interrelationships between the several movements of this work (and similarly between the movements of later works) are such that the fugue becomes an integral part of the total conception which may not properly be discussed without reference to the other movements. Its integration is enhanced through the creation of a direct link between

thematic contour and harmonic structure, as noted by Kerman in connection with the C# minor quartet:

> "More impressively than any other fugue, furthermore, this one exploits a device which Bach barely knew but which Beethoven knew very well: the projection of the subject into the form." 3

It is also mentioned by Klein, specifically in connection with Op.106, but only briefly as an afterthought:

> "Dass die Konstruktionsidee auch die Wahl der Tonarten beeinflusst, soll nicht übersehen werden." 4

This principle recurs in both Op. 133 and Op. 131 such that Rosen's generalisation about Op. 106 becomes relevant:

> "[The Hammerklavier] allows us to see, as almost no other piece does, the principles by which he [Beethoven] worked, particularly at the end of his life." 5

These principles may now briefly become the subject of discussion prior to a more detailed examination of the actual fugue.

The Overall Structure of the Sonata

The Hammerklavier is the only one of the late-period sonatas to fall unambiguously into a four-movement structure and it does so in colossal style[6]. The freedom, it may be noted in passing, with which Beethoven appeared to regard its structure in his extraordinary letter to Ries[7] has a simple explanation: two months previously (on January 30, 1819) Beethoven had written to Ries regarding the String Quintet, Op. 104 (an arrangement of the Piano Trio Op. 1 no. 3) and the Hammerklavier Sonata:

> "Do see to it that both works, and especially the quintet, shall be engraved immediately. Things can proceed a little more slowly in the case of the sonata. At the same time I should like it to appear within two or three months at latest." 8

The Hammerklavier Sonata thus contains four movements, each of which is, as Tovey points out, based upon a cell motif formed of a rising and descending third[9]. Though ridiculed by Blom[10], Tovey's observation has generally been accepted by more recent commentators and is fully

justified: Beethoven's decision to affix an introductory bar to the Adagio sostenuto after the music had already been sent to the press is merely one example which demonstrates not only that he was conscious of this relationship, but also that he wished to endorse it. Also significant in this respect are the sketches quoted by Nottebohm to demonstrate the evolution of the fugue subject[11]. All four of these involve, as Cockshoot observes[12], the melodic contour F-A-B♭-G, a rising third answered by a falling third. Rosen's analysis which must inevitably be taken as a point of departure for the present discussion places considerably more emphasis upon the descending third, present in the Adagio from the outset, than upon its ascending counterpart. This falling third may also be found in numerous other melodies from this sonata such as the G major second subject of the first movement and has a clear harmonic parallel in the structure of the opening movement which descends from B♭ major (first subject) through G major (second subject) and E♭ major (fugato development) to B major (development of the cantabile theme) whereupon a controversial shift returns to B♭ major (recapitulation)[13]: see Ex. 4.1. Thus it is that the descent by thirds places the two keys of tonic and flattened supertonic (or its enharmonic equivalent) in direct opposition, thereby confirming Rosen's viewpoint mentioned above[14]. Op. 106 (I) then continues by placing greater emphasis in the recapitulation upon the darker keys, the first descent to G♭ major (instead of the brighter G major) which serves as V for the unexpected outburst in B minor, the minor key here replacing the major key of the exposition, (at b. 210): see Ex. 4.1. This use of a G♭ tonality as the dominant of what may be termed the key of opposition is a deliberate preparation for the Adagio sostenuto whose F# minor tonality serves both as ♭VI of the I and as V of the ♭II[15]. This climactic juncture of the first movement (b. 263-70) is thus parallelled on the larger scale as the movement's internal harmonic structure finds its external realisation. In fact this feature is clearly not dissimilar

in principle to those parallels between the melody of a given fugue subject and its projection into the harmonic structure of the fugue. In the coda this emphasis upon the darker keys is maintained by a sequence moving upwards from the tonic through a series of minor supertonic keys which includes C minor, D minor and even the very sombre E♭ minor (b. 350 ff.). This sequence is taken up and expanded right at the end of the fugue finale when the music breaks out of triple time into the $\frac{2}{2}$ meter of the first movement (b. 389 ff.).

Thus the first movement which begins fairly optimistically - 'vivat vivat Rudolphus' - becomes gradually more and more overcast ending in uncertainty and irresolution[16]. Even the major keys employed earlier in the movement are undercut by minor subdominant harmony, the flattened sixth being the melodic and harmonic counterpart to the larger scale modulations within the overall structure: the most obvious example of this may be heard in the cantabile theme (b. 100 ff.) and in the

> "magnificent arabesque" 17

which precedes it (b. 75 ff.). No convincing resolution is offered by the fleet-footed and whimsical scherzo: rather the opposite, for its concluding bars place the two main keys of the work in stark opposition with the minimum of subtlety and the scherzo movement ends on chord Ic in a passage aptly described by Barford as

> "a gesture of deceptive innocence." 18

The sketches reveal that Beethoven decided upon the use of B minor in the scherzo at an early stage of its composition:

> "Auch stand es bald fest, dass am Schluss die Tonart H-moll, jedoch nur kurz und vorübergehend berührt werden sollte." 19

The slow movement whose secondary tonality is again the VI (D major in F# minor) and whose development section is again based, at least melodically upon the ubiquitous descending third, is the most profoundly moving expression of sorrow ever conceived, its tonic major conclusion notwith-

standing. Thus Tovey, citing this movement writes:

> "modulation from a minor tonic to its subdominant key means the tragic irony of a momentary major tonic chord, implying a hope which is frustrated ... which leads us to a still darker minor key." 20

It is thus left to the finale to resolve the tensions of the sonata and this it attempts in a titanic fugue whose harmonic structure is to some extent based, like that of the first movement, on descending thirds. Tovey has made the important observation that the key scheme of this finale is the converse of that of the opening movement, the darker keys G♭ and D♭ appearing towards the beginning while the lighter keys G and D are reserved for later[21]. One of its most original features is the structural and emotional use of the most academic of all fugal devices: the exposition of the subject in cancrizans, the 'anti-subject', is placed with absolute logic in the key of B minor producing a long-term conflict with the original exposition in B♭ major, or rather, underlining most emphatically the already existing conflict, that about which the whole sonata revolves[22]. This is indeed a most original means of portraying this conflict, but what of the descending thirds from which that conflict arises? To what extent does the finale owe its structure to the descending thirds so prominent in Rosen's analysis? To answer this question I propose first to state, and then to comment upon, Rosen's interpretation of the fugues's harmonic structure.

The Structure of the Fugue

In its simplest form Rosen's analysis breaks the fugue down into a number of sections whose tonalities are illustrated in Ex. 4.2[23]. This seems very convincing at first sight and there can be no doubt whatever that the descent by thirds was deliberate on Beethoven's part; his adherence to this tonal scheme however is more flexible than Rosen implies: the very first descent in Rosen's analysis, from B♭ major to G♭ major, is somewhat dubious since it raises greatly the importance of a tonality

which is heard only briefly (b. 82-7) in the middle of a lengthy modulating episode (b. 71-93), whilst subjugating completely the intervening entries in D♭ major and A♭ major (b. 51-7 and b. 65-71). Indeed were it not for the fact that a lighter texture is introduced in G♭ major, this key would merit our attention no more than any other of the numerous tonalities through which the music passes during the episodes of this fugue. The change of key signature at this point should be understood as a visual rather than aural event: it might simply have been regarded by Beethoven as the most convenient point at which to insert the key signature of E♭ minor in preparation for the forthcoming treatment of the subject by augmentation. Rosen's surprising attribution of emphasis he attempts to justify in advance by suggesting that the descent by thirds does not in fact relate to the significant modulations within the structure; rather he states:

> "At each entirely new form or treatment of the theme, there is a modulation which is, as one might expect, always the descent of a third. (The return of the theme in a previously heard form provides subsidiary modulations." 24

This relegation of certain conspicuous tonalities sounds rather like an attempt to force the music into a predetermined analytical mould and its success is questionable: even taking into account this proviso Rosen's theory does not entirely convince since his selection of E♭ major as a pillar of the harmonic structure (b. 229 ff.) can hardly be justified, the subject having already been heard in inversion by that stage (S., b. 208 ff. not to mention the incomplete, but not false, entry in B., b. 111 ff.). In any event it seems somewhat contrived to describe as a subsidiary modulation a complete entry of the subject answered after a codetta in its V key, especially as the whole process lasting some twenty bars is based in the remote, and therefore hardly subsidiary, tonality of D♭ major. Indeed the use of this key so early in the fugue

and for such an important event as the first entry subsequent to the exposition leads Cockshoot to consider it as one of the licenses to which Beethoven alludes at the outset[25]. The importance he ascribes to G♭ major notwithstanding, Rosen promptly ignores the key of A♭ major when the so-called 'Independent' episode is reintroduced[26], presumably because its material is no longer entirely new. The key of A♭ major is however established more emphatically, after a lengthy V pedal in the bass, than was that of G♭ major[27].

Following the exposition of the subject in cancrizans in B minor (actually C♭ minor[28]), rightfully the next stage in Rosen's analysis, there is an episode in D major which harmonically is perhaps the least active passage of its length in the entire fugue; by adhering rigidly however to a scheme of descending thirds this most stable of tonalities must fall by the wayside. It is a natural choice of key for this episode, being the relative major of the preceding B minor exposition (the answer of which is in D major) and here serving as a passage of V preparation for the G major entry to follow. The descent to D minor, become major, breaks the chain of thirds beyond doubt (but is

"neither makeshift nor short-cut" 29)

and sets the stage for a final descent to the I after which the tonal centre remains stable.

Bearing in mind these observations the structure of the fugue may now be summarised as follows:

16 - 40	Exposition	B♭ major (-F major - B♭ major)
41 - 51	Episode	modulating
51 - 57	Entry	D♭ major
57 - 65	Codetta	
65 - 71	Answer	A♭ major
71 - 93	Episode	modulating (to include G♭ major)

94 - 105	Entry (augmented)	E♭ minor
106 - 110	Codetta	
110 - 116	Answer (augmented)	B♭ minor
116 - 152	Episode	modulating (to include A♭ major)
153 - 174	Re-exposition of subject (cancrizans)	B minor (-D major - B minor)[30]
174 - 195	Episode	D major
196 - 201	Answer	D major
201 - 207	Episode /extended codetta	modulating
208 - 213	Entry (inverted)	G major
214 - 216	codetta	
216 - 220	Answer (inverted)	D major
221 - 228	Episode	modulating
229 - 233	Entry (inverted)	E♭ major
233 - 249	Episode	modulating, ending in D minor
250 - 278	Exposition and development of new subject	D major
279 - 306	Combination of the two subjects, the first prevailing and being given recto and inverso simultaneously	B♭ major, modulating - F major (b. 294) - B♭ major (b. 300)
306 - 333	Episode	modulating
334 - 339	Answer	F major
340 - 344	codetta	
345 - 349	Entry (recto and inverso)	B♭ major
349 - 358	codetta	
359 - 366	Entry plus brief continuation	B♭ major
367 - 400	Coda	B♭ major

In this consideration of the fugue's harmonic structure certain entries have been grouped together as indicated by the brackets. Where this has been the case the term 'codetta' has generally been preferred to that of 'episode' to denote a link passage between entries similar to that found in many fugue expositions[31]. In this way the enormous labyrinthine interweaving of entries and episodes is broken down into smaller intelligible units, that the overall structure of the fugue may more readily be grasped. Although more fullsome than Rosen's analysis, it is clear that the present summary yet remains selective in its detail: no mention is made for example of any countersubject and the use of the word 'modulating' to describe many of the episodes is deliberately vague. Nonetheless each of the <u>important</u> tonal events during the course of the fugue <u>is</u> noted and given what I believe to be its due emphasis. These details are transcribed onto manuscript in Ex. 4.3[32]. Where two tonalities are bracketed together the one which appears also in round brackets is to be regarded less as a tonal event in its own right than as a reinforcement of its companion by reference to its V: thus A♭ major is deemed to emphasize the key of D♭ major and B♭ minor that of E♭ minor while the passage from b. 196 - 220 is described as G major even though it begins and ends in D major. The three centralbrackets in Ex. 4.3 thus correspond to the first three brackets in the written summary given above. In each of these instances my interpretation is justified by reference to the actual music, for the entries in A♭ major (S., b. 65 ff.), B♭ minor (S., b. 110 ff.) and D major (B., b. 196 ff.) each begin with the tritone in the manner of a tonal answer in the V. In this way they emphasize their respective tonalities in precisely the same way that the F major entry underlines the I in the original exposition and again in the final section of the fugue (S., b. 26 ff., A., b. 294 ff., and A., b. 334 ff.). These entries are indicated by the outer brackets in Ex. 4.3. In the same way the final entry of the subject (S., b. 359 ff.) presages the IV beginnings of the coda by acting as its V: it is actually

the answer form of the subject but in the I key (E♭ - A - B♭ instead of F - A - B♭). Finally the keys of G♭ major and A♭ major are both included in Ex. 4.3 because of the important textural changes which they accompany, but in view of their brevity they too are placed in round brackets.

The principal tonalities of the fugue may therefore be clarified as in Ex. 4.4. A comparison with Rosen's summary (see Ex. 4.5) immediately reveals that the difference is not merely one of detail in a quantitive sense, for those keys to which he attaches the greatest significance are different from those chosen in the present analysis[33]. The point of Rosen's analysis, that the fugue is structured in descending thirds, clearly remains valid: indeed the most important modulation, the return to the I, is just such a descent. However, Beethoven's exploitation of this harmonic device is less stringent than Rosen would have us believe: the continuous descent by thirds throughout the Largo, followed however by a descending fourth, illustrates not only Beethoven's deliberate and conscious exploitation of this harmonic principle, but also the flexibility with which he saw fit to approach it. Rosen refers to sketches which show this fourth initially intended as a further series of thirds but does not acknowledge his source[34]. These sketches are not quoted by Nottebohm who claims that the introduction was realised in a single draft with the exception of the contrapuntal interludes:

> "Die Einleitung zur Fuge wurde, jedoch mit Uebergehung der Zwischenspiele, in einem Zuge entworfen." 35

The sketch he then quotes follows the harmonic scheme of the final version exactly and therefore concludes with a descending fourth.

Thus in the present analysis the significance of descending thirds is acknowledged but not exaggerated; attention is here directed towards a rhythmic factor, more specifically the opposition of duple and triple meter, which informs almost every major juncture of the fugue culminating

in the final bars of the coda. The recurring prominence of this structural feature during the following discussion of the fugue is all the more justified in view of its virtual omission from the literature currently available on this sonata. Such has been the delight with which analysts have seized upon the descending thirds and the semitonal conflict which ensues, that the rhythmic subtleties of the fugue, which are considerably deeper than at first appear, have suffered all but total neglect. In the present discussion they are deemed to be no less than vital to the aggressive character of the fugue.

Rhythm

Besides the Largo introduction to the fugue which need not be mentioned in detail here[36], there are in addition several bars marked Allegro risoluto prior to the entry of the fugue subject. These bars serve the purpose of establishing the tempo and tonality of the fugue, sought after in its highly original introduction, and even anticipate in various ways the subject itself: the right hand trills, the leaps in the left hand, and the semiquaver figuration which overlaps the beginning of the fugue all point clearly to the imminent fugue subject. Such preparation is in fact a fairly regular feature of Beethoven's late period fugues: it may be noted to varying degrees in Op. 102 no. 2 (III, b. 1-4), Op. 106 (I, b. 133-6) and, most emphatically, in Op. 133 (b. 1-30), while the contrapuntal finale of Op. 101 is anticipated in a similar manner (III, b. 24-32).

In the Hammerklavier sonata the various means of anticipating the subject are well-known. Less attention has been given however to the hemiola rhythm, illustrated in its most elementary form in Ex. 4.7, although it is a direct preparation for the metrical conflict which pervades this fugue. Tovey mentions the hemiola in passing, but in no way suggests that it is of any particular importance[37]. In fact the element of

metrical conflict fundamental to this fugue has generally been ignored. The hemiola continues right into the fugue subject and thereby appears to place its explosive trill on the first beat of the bar as shown in Ex. 4.8 which is identical to the original except for the barlines. The subject is so written that its first note tends inevitably to sound like an anacrusis; the initial absence of a sforzando on the trill[38] would seem to indicate Beethoven's awareness of this and his desire to preserve something of a balance rather than sacrificing the triple meter completely. At this stage in the sonata such contrast is not an entirely new feature for the second movement changes gear unexpectedly with a Presto section in $\frac{2}{4}$ between the trio and the return of the scherzo. The importance to Beethoven of a contrasting meter (as well as a contrasting tempo) at this point is attested by the various sketches which are, Nottebohm informs us, without exception in $\frac{2}{4}$ time:

> "Auf den Gedanken, dem kanonischen Trio in B moll ein rascheres Sätzchen in gleicher Tonart folgen zu lassen, ist Beethoven später gekommen [than the use of B minor at the end of the movement]. Verschiedene Ansätze finden sich dazu, die sich aber alle im $\frac{2}{4}$ - Takt und in Achtelnoten bewegen." 39

Later, at the end of the scherzo, this opposition of meter is allied to the B♭ major - B minor conflict as the music explodes in Presto octaves hammered out in $\frac{2}{2}$ time. Other rhythmic and metric features within this sonata which may be noted briefly include the cross-rhythms in the first movement (b. 209-12) which are unusual but not without precedent[40] and the $\frac{4}{4}$ contrapuntal Allegro in G# minor during the Largo introduction, which contrasts with the triple meter of the fugue proper. The slow movement's second subject in D major gently suggests $\frac{3}{4}$ time in contrast to its duple meter accompaniment in $\frac{6}{8}$ (b. 49-53 and the corresponding place in the recapitulation); it is this particular feature of the Adagio which is developed in the coda to generate the movement's climax (b. 158-65).

In the finale such contrast becomes a recurrent feature though not always in so blatant a manner as happens in the scherzo. It may perhaps be linked to Beethoven's initial uncertainty in the compositional process regarding the correct choice of meter for the working out of the fugue: the four sketches quoted by Nottebohm to illustrate the evolution of the fugue subject alternate duple and triple meter and between them experiment with quaver, triplet quaver and semiquaver movement[41]; although Beethoven finally opted for triple time, both the subject and countersubject are reluctant to conform unreservedly, for both emphasize the second beat of the bar, the subject with its dramatic trill and the countersubject with its sforzando markings. Clearly such a shift of emphasis away from the first beat of the bar constitutes a potential disruption to, not a flat contradiction of, the triple meter. Nonetheless the meter is called in doubt by the continuous semiquavers of the subject and its unusual continuation, for these semiquavers imply, by virtue of their melodic structure, a division into two-beat units running contrary to the specified time-signature, as indicated by brackets in Ex. 4.9[42]. After the insertion of an 'extra' beat (marked 'x' in Ex. 4.9) triple time is restored. Even the head of the subject, by far its most distinctive feature (and its most oft developed) sounds to be at odds with the triple meter: any other composer would either have written it in duple time and continued the subject differently or else increased the minim to a dotted minim and turned the F into an anacrusis. Ex. 4.10 is one possible suggestion which preserves the melodic contour of Beethoven's subject whilst ironing out its rhythmic irregularities: in so doing however it renders the subject impotent, for it simplifies out of existence that tension which arises from the subject's precarious balance between two fundamentally opposite meters. Only in the final bars of the coda does the subject, torn continually between duple and triple meter, rise above this conflict and break out into the duple time for which it has striven throughout. The finished subject thus seems

to acknowledge the metrical indecision evident in the above-mentioned sketches but at the same time it turns this indecision to advantage providing its author with the richest resource imaginable for the conflict which pervades this fugue. Beethoven's exploitation of this resource will be noted throughout this analysis.

A Word on the 'Licenze'

It is well-known that Beethoven prefaced the fugue with the words 'Fuga a tre voci con alcune licenze', a compromise which he took from his teacher Albrechtsberger whose habit it was to insert the word 'Licenz' or 'Lic.' over

> "permissible exceptions to the rules of strict counterpoint in his pupils' fugues." 43

Various attempts have been made to identify these liberties or licences in the present fugue: they are generally explained as the departures from a strict three-part texture. Thus Tovey categorically states:

> "The licenze are the remarkably rare deviations from strict 3-part writing." 44

This view is echoed by Blom[45] and seems to be accepted generally. Bullivant however notes that even before Bach the number of parts in a fugue was not always strict and gives a number of examples each of which involves however a reduction in texture rather than the increases to be found in Op.106.[46] A broader interpretation of the word 'licenze' is taken by Cockshoot: he accepts its reference to the increases in texture[47] but in addition suggests, somewhat tentatively, that it might refer also to the use of a remote tonality for the first entry of the subject after the exposition and the absence of the countersubject at this point[48] or to the freedom with which Beethoven treats the melodic shape of the subject.[49] Perhaps it is not unthinkable that Beethoven's apology, whilst referring to each and every one of these specific points, was intended also as a general observation upon the radical character of the

fugue as a whole; that the licenze are as much a reference to a teacher whose rules, comparatively free though they were[50], Beethoven's artistry and imagination had superseded but whose thoroughness and dedication he still admired[51], as to those specific departures from accepted practice mentioned above.

Analysis of the Fugue

16 - 40: the exposition presents the subject in all three voices[52] - I, tonal answer in the V, I - and introduces two counter-subjects, the first of which is of considerably greater import and destined later to be used in a structural manner[53]. Rosen has commented upon the appearance of the "dissonant" B♮ in the fugue subject[54]. With the exposition of the subject in cancrizans this melodic feature of the subject will assume a structural-harmonic role which perfectly complements the exploration of this tonal relationship in the preceding movements. The main countersubject, it should be noted, likewise introduces and cancels this B♮ : see Ex. 4.11. The codettas which separate the entries of the subject in this exposition are based like the episodes to come upon repetition and sequential writing to which may be added invertible counterpoint: so standard do these techniques become as a means of episodic development that no wholly new material is introduced within the episodes. There is in fact very little material in this fugue which does not stem directly from the exposition, a remarkable fact when one contemplates its length, complexity and variety.

41 - 51: the exposition comes to a close in the I and the first episode begins using repetition and invertible counterpoint as its primary means of extension. The main countersubject, reduced to a three-note figure in the same way that the subject will so often be handled, is combined with part of the second countersubject over a running semi-

quaver bass. The episode thus develops some of the material so far heard but its main purpose is to provide some harmonic movement between two areas of relative tonal stability: for this reason it is noticeably more chromatic than the entries which it connects. Most of these chromaticisms arise either as semiquaver decorations of the bass harmony notes or through the use of a diminished harmony in a major key. These complexities are removed in the harmonic simplification of this passage offered in Ex. 4.12[55]. An interesting point to arise from this analysis of the harmony is the manner of treatment of the three-note fragment taken from the main countersubject its first note is generally regarded as a dissonant note whose resolution enhances the sforzando emphasis on the second beat of the bar. Ex. 4.13 based on b.42 illustrates this point, while in b.41 the same principle is applied to the second countersubject B♮ resolving upwards onto C. In Ex. 4.12 these dissonant notes are omitted and their notes of resolution are advanced one beat (but placed in brackets) so that the harmonic structure of the passage might be illustrated in the clearest possible way. This technique will be exploited more forcefully in the Grosse Fuge where the dissonant note itself is emphasized, thus accounting for the uncompromising sound of that work.

The most interesting point to emerge from Ex. 4.12 however, is the fact that the harmonic structure of this episode is carefully designed in such a way as to lead up to the next entry of the subject: the square brackets in Ex. 4.12 show that a Perfect or Interrupted cadence occurs in each of the keys indicated on the second and third beats of the bar, but just as it appears that the passage will be repeated - in the actual music the right hand is transposed up an octave (cf. b.42 with b.45) - the harmonic scheme is altered and compressed bringing the cadences closer together so that they cut across the triple meter, as indicated

by the brackets in Ex. 4.12. This is one of the more subtle instances of duple-triple conflict in the movement and it serves partly to maintain the excitement and forward drive of the episode but primarily to lead it more purposefully into the next entry of the subject in the manner indicated in Ex. 4.12. The effect of this harmonic technique is considerably enhanced in thematic terms by the absence of the subject from the episode until this point. Clearly the fact that this entry subsequently proves false in no way detracts from the build-up created by the foregoing increase in harmonic pace: it merely means that the climax of what precedes becomes a starting point for what follows as Beethoven leads the music onwards maintaining both its interest and continuity.

The 'entry' just mentioned is the first in a series of false entries in which the subject, reduced to a mere three notes, is heard a beat early each time. As will so often happen again in this fugue all sense of genuine false entry is soon replaced by a sense of development: only a few of the numerous 'false' entries in this fugue may accurately be defined as such.

51 - 71: on reaching C minor the subject is stated in full in D♭ major, again a beat early. This alteration of the subject's accentuation casts in a different light its metrical struggle: it still remains a subject scored in triple time yet appearing for most of its duration to prefer duple meter, but the dilemma is now viewed from a different angle. As in the first section of the Grosse Fuge, so here Beethoven's treatment of his subject is by rhythmic variation: its next presentation (in A♭ major, S., b.65 ff.) will afford a further modification of its rhythmic emphasis. In the Grosse Fuge however, this process of rhythmic variation is set in relief by a less adventurous approach to

the tonality. The present entry in the Hammerklavier by contrast, is in the remote key of D♭ major, neapolitan in relation to the local tonality of C minor. It is this sudden change of key and the reduction of the subject's first note to a quaver, necessary for practical performance reasons but also highly desirable in a musical sense, which gives this entry fresh impetus and sets it apart from the preceding false entries. The countersubject, absent at first, joins in later (A., b.55, last beat) thus underlining the greater thematic significance of its final phrase; it is this part of the countersubject which is climactically to be developed in the closing stages of the fugue (b.318 ff.).

A substantial codetta, whose harmonic simplicity is belied by the chromatic semiquaver decorations of its harmony notes, modulates simply from D♭ major to A♭ major for the answer. This codetta opens by repeating the end of the preceding entry in invertible counterpoint and continues to develop the countersubject by means of thematic reduction, which is illustrated in Ex. 4.14[56] and foreshadows the climactic reintroduction of the countersubject where the same technique is reapplied to this material but in a more protracted manner (b.318 ff.).

The answer to which this passage leads is a tonal answer in A♭ major, accompanied by the countersubject in the bass, but subsequently transferred to the alto (b.69). The preceding entry was stated one beat early, but this entry is delayed by one beat so that the subject has now been heard in all three possible positions in the bar, thus highlighting its apparent unsuitability to the triple meter. It is as if the subject has embarked upon a search for its most comfortable location in the bar, but it rapidly becomes clear that the subject is losing its way rather than finding its true accentuation: this is illustrated in Ex. 4.15 where the brackets indicate that part of the subject which

most willingly conforms to the triple meter. By the third attempt no part of the subject sounds to be correctly placed within the bar so after a lengthy pause for thought a more radical solution to this rhythmic problem is attempted, a modification of the subject's rhythmic character by augmentation. This pause takes the form of an extensive episode which in view of its thematic content it is well to consider in two sections.

71 - 93: the first section of the episode (b.71-84) follows the example of the last by repeating the end of the subject and countersubject in invertible counterpoint and developing this material sequentially. The most conspicuous element is the tail end of the countersubject in double thirds or sixths and a beat late. Although it is shortened almost immediately the technique of thematic reduction is here carried no further: rather the shortened version is given a freshly invigorating rhythmic touch by the transference of its sforzando to an entirely new point in its melodic structure: see Ex. 4.16. In this way it focuses attention upon the quaver movement of the countersubject which has in previous episodes been omitted. The fragmentary opening of the countersubject lacks the thematic strength of its continuation being essentially rhythmic, and is for this reason never subjected to episodic development.

Harmonically this is a passage of great simplicity but Beethoven's genius may be discerned in its complementary exploitation of harmonic and melodic rhythm: see Ex. 4.17 in which the beginning of the episode is marked 'x'. The thematic reduction of the countersubject (upper brackets in Ex. 4.17) is balanced by an increase in the harmonic pace (lower brackets in Ex. 4.17) but this increase is withheld for one repetition of the reduced unit (upper brackets of the section marked B♭ minor in Ex. 4.17). There are thus three stages to the gradual

increase in momentum which characterises this part of the episode, the repetition of the complete fragment in the same tonality, the repetition of the reduced fragment in the same tonality and the use of a new tonality with each statement of the reduced fragment. In this way the section in B♭ minor acts as an explanatory pivot between the two extremes of minimum and maximum movement and ensures a carefully graded increase in the momentum. The bars to which this process leads involve a free combination of the subject and countersubject and serve as an introduction to the second part of the episode. For the first time in the fugue so far the relentless semiquavers of its subject cease.

Much has been written about the passage now reached (b.85 ff.): it is a focal point in Rosen's analysis and as such has already been mentioned in some detail[57]. Tovey entitles it the 'Independent Episode'[58] and I propose to retain his description because the passage to which it refers has a fresh new sound which sets it apart from all that has preceded and indeed from much of what follows: it is the only episode in the entire fugue which does not entail a direct and immediately obvious quotation of material from the exposition. However, it is common knowledge that Tovey's assertion that its material is

> "entirely new" 59

is quite erroneous for the main figure is freely derived from the opening leap of the fugue subject[60]. Bullivant lists such filling in of a subject's interval as one of the possible fugal resources available to a composer and describes it as follows:

> "not a common device, and one that naturally tends to obscure the theme." 61

In addition the present example transfers the tenth from degrees V and VII of the scale to degrees III and V thus altering the quality of the interval from major to minor. Nonetheless there can be no doubt about

Beethoven's intentions when the preceding bars are taken into account: a false entry of the subject with the opening leap similarly bridged is followed by a false entry which lacks this ornamentation: see Ex. 4.18. A more direct explanation of what is to follow could hardly be required! The identity of the subject is thus preserved but its character is transformed: the sense of striving implicit within the subject's leaping tenth is completely lost when an arpeggio bridges the gap and the dramatic trill so vital to the character of the original subject is omitted. Initially a low dynamic is used, a rarity in this fugue, and the texture is generally reduced to two rather than three parts[62]. This then is a period of respite from the intense demands of the preceding counterpoint, a passage whose simplicity is achieved by a relative absence of chromaticism matched by lightness of texture. Once the material has been explored the music disintegrates as the fragments lose or obscure their identity: Ex. 4.19 shows some of the various stages in this phase of disintegration; octave transpositions are indicated by brackets while the final extract shows the second fragment modified by inversion.

93 - 116: Suddenly all is swept aside as the subject enters dramatically in augmentation in the key of E♭ minor. The most surprising feature of this entry is the complete absence of semiquavers from the texture which gives the impression that the music is being played at half speed: in Bach's music the semiquavers would undoubtedly continue. The cessation of the semiquaver movement is complemented by textural means which underline the significance of this entry of the subject: in the foregoing episode a gradual reduction of the texture from three to two parts has been noted. This is now abruptly reversed and the music written in such a way as to suggest a four-part texture[63]: the compass of the soprano part is considerably expanded to take in the bass region of the keyboard while the 'lower' parts present the subject in the

centre of the texture, sonorously doubled at the lower sixth. This unorthodox treatment of the texture must, as Tovey suggests[64], be one of the licenze for which Beethoven makes provision at the outset. The previous doubling of the subject at the octave (b.60 ff. and b.80 ff.) is a quite different matter and should not be viewed in this way; no apology is proferred in the fugue from Op. 110 where such doubling is regularly heard. The present entry of the subject is accompanied by the augmented countersubject whose presentation is neither complete nor entirely strict: it is compared with the original in Ex. 4.20 which illustrates not only its occasional rhythmic quirks, but also its increased range from one and a half to more than four octaves. Curiously the notes of the countersubject are augmented not in the usual way, but through the insertion of rests reminiscent of the rare device known as Unterbrechung[65]: only the augmented subject dictates that the countersubject here be heard augmented but in the codetta which follows (b.106-10) the rests become more conspicuous and the subject dissolves into an ascending and descending scale.

Most important of all however is the treatment of the subject itself: the process of rhythmic variation mentioned above[66] is here taken a stage further, for the treatment of the subject by augmentation involves an alteration of its character through a reinterpretation of its rhythmic shape. This transformation is most evident in the semiquavers of the subject become quavers. Comparison has already been made in Ex. 4.9 between the accentuation of the subject when played in triple time and its natural accentuation based on the duple meter implied by its melodic shape; in its augmented form a new pattern of emphasis may be traced which suggests the subject's translation into compound duple time, but played at half speed: this is illustrated in Ex. 4.21 by quoting the subject in its non-augmented form, but indicating with accents the notes

now emphasized. (The crosses above the system show by way of reminder the accents implied by the subject's tendency to suggest duple meter.) As Tovey observes:

> "Ordinary augmentations and other fugal devices lack this kind of transforming effect, which is essentially dramatic." 67

A further rhythmic modification to the subject lies in the use of sforzandi on every beat of the bar, the effect of which is to highten the dramatic nature of this passage. These sforzandi are however withheld until the new accentuation of the subject has had chance to make itself felt; thus when the augmented entry is answered this objective has been achieved and the sforzandi are included automatically (b.114).

Thus far the subject has been given three full statements since the exposition (B., b.51 ff., S., b.65 ff. and A., b.94 ff.). Each of these statements is quite different rhythmically from the other two and none of them restates the accentuation of the original subject. When later the subject is given in cancrizans its rhythm becomes almost unrecognizable and the term 'rhythmic deviation' might better replace that of 'rhythmic development' to indicate the progressive departure of the subject from its original format: in other words, at each of its successive statements thus far the subject has taken a fresh step away from its original character until finally it becomes barely recognizable, a tendency which was mentioned briefly above in connection with the A♭ major entry[68].

A brief codetta leads the music to B♭ minor for the answer also in augmentation. This codetta, whose combination of the keyboard's extremes is thoroughly typical of late-period Beethoven, makes further emphatic use of the countersubject. Its treatment here has the same effect of rhythmic transformation as was noted previously with regard

to the subject: this is indicated in Ex. 4.22 by placing accents on the appropriate notes and comparing the present version with the original. Except in register it is all but identical to the version just heard (S., b.102-5) but its promotion as the main thematic element of the codetta draws greater attention to its new accentuation.

The answer in the local V is a brief affair: Beethoven maintains a high level of interest by combining the subject recto and inverso, thereby anticipating the final section of the fugue where such combinations are a recurrent feature, but abruptly curtails this process to forestall an overextended passage of sforzando quavers. This rude interruption of the subject's impressive combination with itself takes the form of the lengthiest episode in the entire fugue. Again it will be considered in two sections, the first a series of trills modulating to A♭ major followed by an imitative use of the countersubject (b.116-29), the second an extended repeat of the 'Independent Episode' the latter part of which involves an enharmonic circle on the flat side (b.130-52).

116 - 152: the first part of this episode is based upon the head of the subject generally reduced from three to two notes. To some extent it continues the ideas of the preceding section by combining the augmented subject recto and inverso; the highly ordered nature of that passage gives way however to what is arguably the most modern-sounding passage in the fugue, a veritable chaos of leaps and trills whose rhythmic dislocation is unparallelled elsewhere in Beethoven's music. The underlying harmony is nonetheless of great simplicity (see Ex. 4.23), a conservative progression whose potential elegance is utterly destroyed by the wide-ranging leaps, the intense trills and the abnormal rhythms. The entries of the subject at this point are summarized in Ex 4.24 to demonstrate Beethoven's original exploitation of the keyboard's

register. (The third note of the subject, present only occasionally in the music, is here omitted.) One result of these textural aberrations is his failure correctly to resolve the V^7 harmonies: the alto B♭ rises to C♮ (b.119-20), the E♭ to F♮ (b.122-3). In scornful defiance of such niceties Beethoven is pleased in the second of these instances to insert the highly illegal passing note E♮ and thereby to confirm the deliberate nature of these 'mistakes'.

The rhythm of these bars is equally unconventional: the simplification in Ex. 4.25 (i) indicates upon which beats of the bar a note is struck (excluding of course the trills which are heard continuously). This is then compared with the same rhythm rewritten with the bar lines advanced one beat (Ex. 4.25 (ii)), in which form it is still unusual yet sounds more comfortable in triple time than does the original. This would seem to suggest that the whole passage is syncopated by one beat and this impression is confirmed by a consideration of the harmonic structure as simplified in Ex. 4.26. Rhythmic stability returns with an imitative development of the countersubject now in lyrical form contrasting with its customary percussive nature. This, its last appearance of any significance for a considerable period of time, almost half the fugue in fact[69], paves the way for the less extreme material of the 'Independent Episode', now to be repeated in A♭ major to form the second and lengthier of the two sections into which this episode falls.

Earlier in the course of this analysis it was suggested that the use of A♭ major at this point in the fugue would prove more significant than was that of G♭ major when the 'Independent Episode' was first introduced[70]. This suggestion is borne out by the comparatively lengthy treatment now given to those thematic elements which constitute the

material of the 'Independent Episode' (23 bars compared with the 9 bars previously) and by the fact that A♭ major reappears during the modulations of this episode in a way that G♭ major did not. A brief consideration of the episode's tonal structure will serve to illustrate the prominence given to this tonality on its return, and the keys through which the present episode moves and their respective durations are therefore summarized in Ex. 4.27. In view of the virtual absence of chromatic notes the tonal structure of the passage may be noted in this way with greater accuracy than normal though such simplifications must always entail some element of compromise. The turning point in the episode is marked in Ex. 4.27 by a double bar: until this point the episode develops its material in much the same way as did the original except that there is no comparative disintegration of the texture. With the change however from a minor to a major tonality (b.139-40), the inversion of the texture (cf. b.140-43 with b.136-9), the doubling of the three-note stepwise figure (the reduced fragment from Ex. 4.19) in octaves (b.140 ff.) and its new accentuation, together with an increased rate of modulation (see Ex. 4. 27), the music clearly finds a new sense of direction at this juncture. Taken as a whole the present episode (b.130-52) thus constitutes a free repeat of the 'Independent Episode' (b.130-39) followed by a modulating development of two of its main thematic elements (b.140-52). These are the descending scale figure derived from the original countermotif (see Ex. 4.19(ii)) and the three-note stepwise figure enhanced by a semiquaver upbeat which is arrived at during the present episode. The complementary nature of the main motif and its countermotif (not explicitly stated in this repeat of the 'Independent Episode') is evident from the observation that the bass motif developed in the cycle of fifths (b.140 ff.) might reasonably be derived from either: Ex. 4.28 (i) shows its derivation from the former by a compression of the semiquavers and their subsequent inversion,

while Ex. 4.28(ii) indicates its derivation from the latter. Towards the end of this episode the texture disintegrates in a fashion comparable to the close of the original 'Independent Episode': once B minor is reached the texture dissolves gradually from three parts, one of which is doubled at the octave, to two parts and then one, whereupon the subject enters immediately in cancrizans.

153 - 174: the treatment of the subject in cancrizans is an extremely rare fugal device and one which, Bullivant informs us[71], was never used by Bach in an actual fugue. The sketches for the Hammerklavier sonata include a musical quotation from Marpurg's treatise 'Abhandlung von der Fuge' which illustrates the 'rüchgängige Gegenbewegung' of a fugue subject and thereby confirms this work as the source from which Beethoven took the present cancrizans treatment of his subject. This excerpt is quoted by Nottebohm who identifies it but does not otherwise comment upon it:

> "Die andere Aufzeichnung (S.8) ist Marpurg's ≫ Abhandlung von der Fuge ≪ (2. Theil, Tab.XVI Fig.1 bis 6) entnommen." 72

It is axiomatic that the reversal of the subject in this manner will obscure its presence, particularly when so large a part of it consists of running semiquavers[73], but it is quite wrong therefore to raise the status of the new countermelody which accompanies it to that of a second subject, as does Tovey[74], and still worse to dismiss the present treatment of the subject as a

> "pedantic triviality".75

Such a misappropriation of thematic significance stems from a failure to appreciate the role of this passage in terms of its relationship to the original exposition: this is a re-exposition of the fugue subject in cancrizans, not merely a further series of middle entries which happen to treat the subject in this way. Its low dynamic and tender

countermelody provide optimum contrast with the end of the scherzo, but the same struggle is fundamental to both passages. This is here expressed by the use of B♮ as the tonic instead of the original B♭, by the choice of a minor tonality in preference to the major and most ingeniously of all by the reversal of the subject's note order. The 'anti-subject' is thus stated with absolute logic in the key of opposition. This essentially dramatic usage of the most learned and academic of fugal devices available, is a remarkable example of Beethoven's new attitude to fugue being realised in practical terms. As Cockshoot states:

> "Beethoven carefully makes his Countersubject very simple, in order to set the new form of the Subject into relief. The beautiful smooth line of the Countersubject and its cantabile indication give it character and compensating importance." 76

Thus the new treatment of the subject at this point far outweighs the importance of the new countersubject, beautiful though it be.

The most unusual result of reversing the subject lies in the conspicuous truncated rhythm which arises and by which the subject is most likely at first to be recognized. The reversal also brings to the fore that section of the subject which implies duple time and this is subtly played off against the new countersubject in clear triple time: see Ex. 4.29. Roles are then exchanged the subject returning to triple meter while the countersubject adopts a hemiola rhythm. This element of metrical opposition is deliberately less forceful at this juncture that the listener's attention might be directed to the reversed subject which is stated in full by all three voices in the same order as in the original exposition. Comparison with the E♭ minor entry (A., b.94 ff.) reveals only one intervallic alteration, which may be attributed to the structure of the melodic minor scale upon which the entries are based: this is illustrated in Ex. 4.30 where the augmented entry is transposed into B minor for ease of comparison[77]. The answer in D major corresponds

to the original B♭ major entry except for one chromaticism (D# instead of D♮, b.162) and the raising of its final note to facilitate the return to B minor (b.167). These entries are separated by several false entries of the normal subject which serve to remind and assist the listener in his identification of the reversed subject. The second of these (A., b.159-60) is a rare example of the subject not being based on degrees V, VII and I of the scale: its purpose is tonal and E minor harmony makes an obvious pivot between B minor and D major.

174 - 195: the re-exposition of the subject in cancrizans leads at the end of its third entry to an episode based upon what has now become its most prominent rhythmic and melodic feature. The episode follows the example of earlier episodes by repeating the end of the preceding entry in a few bars of double counterpoint before settling firmly into D major. The scalic nature of the material employed renders all manner of treatment possible: one particularly complex instance is cited by Cockshoot:

> "At 184 the motif is inverted (soprano), inverted and cancrizans (alto) and recto and cancrizans (bass)."78

For its length this episode is unusually diatonic and this clearly assists in such complex arrangements. Those chromaticisms which may be heard are wholly typical of Beethoven's late-period style: they include a penchant for diminished harmony (b.194-6), enharmonic modulation (b.177-8, the 'A#' being written and resolved as B♭[79]) and semitonal slides as a method of changing key (b.192-3). The most interesting feature however is one of rhythmic consequence: a simple thematic reduction produces a six-note fragment whose repetition suggests compound duple time, though this is flatly contradicted by sforzandi which insist upon the retention of the triple meter: see Ex. 4.31[80]. Significantly the bars from which this figure is derived constitute the only part of the original subject not to imply duple time: refer to Ex. 4.9. Thus

the entire subject has by now questioned its allegiance to the time signature: at the end of the movement these questions are to be translated into emphatic denial and self-assertion.

196 - 220: a marked increase in chromaticism, presaged by the emphasis on diminished harmony mentioned above, characterises the next series of entries. It is my intention, as noted in my introductory remarks to this chapter[81], to regard this passage as being based in G major even though it begins and ends in the dominant of that key. Of the three entries heard in this passage only the second in G major is complete; it is also the most stable of the three tonally since the first has a highly chromatic accompaniment while the last is itself unusually chromatic. The tritone with which the first of the three entries begins (B., b.196) indicates that it is to be understood as the answer version of the subject in the local V rather than as an actual D major entry in its own right. It is an intermediate entry whose purpose, Cockshoot notes, is

> "to remind the listener of the original shape of the Subject before it undergoes further transformation." 82

For this reason it is designed to relate both backwards to the episode's extensive V preparation for G major and also forwards to the impending entry in this key. The balance by which this purpose is achieved depends upon the subject's combination of the melodic tonality of the last key with the functional tonality of the next, and it is the preservation of this balance which dictates that the potential supremacy of D major be undercut by the replacement of the countersubject with a more chromatic accompaniment. As a general rule the entries of a fugue are less chromatic, or at least less prone to modulation, than are the episodes; however this tendency is here reversed as the accompaniment makes fleeting references to F# minor, B minor and E minor before

returning to D major. Cockshoot points out that this accompaniment is

"really only one part made into two." 83

Nevertheless it is precisely the fact that it sounds as two parts which enables it to consolidate the keys just described. Such passages in which the subject pursues its course, its melodic tonality apparently independent of the accompanying parts, are seldom to be heard in Beethoven's fugues.

As soon as D major is re-established the subject breaks off and a sequential repetition of its semiquavers forms the basis for an extended codetta, the harmonic structure of which is of particular note: the sequence rises by step before settling into G major, key of the next entry, and each key is stated in a simple Perfect cadence consisting of two beats of V harmony and one of I. Flat keys are however avoided, so the third key in the process is a rather curious combination of F major and F# minor. The interesting feature of this sequence lies in the way in which Beethoven selects the most important key (G major) and allots it one extra beat which has the effect of syncopating the remaining cadences. This is illustrated in the simplest possible way in Ex. 4.32. In fact Beethoven's handling of the codetta's thematic and harmonic content is entirely complementary: the thematic cell G#-A-G♮-F# (S., b.200-201) would naturally occur in a cycle of fifths such that the second note represents the I of one key becoming V of the next. In the present case however the music does not descend through fifths but rises sequentially so that this note fulfils only the second of these functions[84]. Once the sequence reaches G major the music undergoes certain textural alterations and the fragment is transferred to its customary place in the scale, the second note now sounding initially as a I: this is evident in the bass line from bar 204 onwards, the F# being omitted from the first statement of the fragment

in the bass ((F#)-G-F♮-E). When the third note of this cell is heard it does indeed sound as though a cycle of fifths will result, but immediately the F♮ resolves onto the new III (E♮ in C major, b.204) this 'III' proves to be a V, driving the sequence upwards and on through A minor, B minor and C major. Ex. 4.33 illustrates this change in the fragment's harmonic status by relating it to the harmonies which accompany it. Its new role is highlighted by the adoption of a more forceful rhythm (see Ex. 4.33) and by the transference of the fragment from the upper parts to the bass line. In addition Beethoven now writes this fragment into the continuous semiquavers of the middle part, tentatively at first but then explicitly, so that it is heard in free imitation with itself: see Ex. 4.34.

Ostensibly then, this codetta is a simple rising sequence; Beethoven has however selected the one most important tonality through which the sequence progresses and set it above the others by various means: the extension of G major by one beat and the subsequent syncopation of the harmony, the revision of the texture which occurs at this point, the new harmonic function of the fragment just discussed and the imitative introduction of a free variant upon it, each of these factors plays its part in asserting G major as the most important tonality in this lengthy sequence. In addition a new figure is introduced at this point, the two semiquavers - dotted crotchet figure marked dolce (S., b.204 ff.) which is not dissimilar to the modified inverted countersubject heard below (S., b.217 and b.218). The turning-point in the codetta is thus made to coincide exactly with the introduction of G major. This selection of a particular, appropriate tonality for such emphasis during the course of a lengthy modulating episode is not uncharacteristic of Beethoven's fugues[85] and illustrates the significance of the lesser details of the structure.

Little need be said about the remainder of this section: the subject enters inverted in G major with certain chromatic modifications towards the end and accompanied by fragmentary allusions to the countersubject. A brief codetta with a colourful juxtaposition of diminished harmonies leads to the answer in the V. The freedom with which this answer is treated illustrates that in Beethoven there is not that same degree of strict thematic observance to be found in Bach: a beat late the answer inverts V-VII-I to IV-I-VII rather than the expected IV-II-I and there are various chromatic deviations (B# and D# in b.220). The entry proves incomplete and only the briefest of references is made to the strong thematic part of the countersubject (S., b.220).

221 - 228: the episode which follows modulates from D major to E♭ major, key of the next entry. In the preceding section the inverted subject has been stated at its normal place in the bar (S., b.208 ff.) and a beat late (A., b.216 ff.); the present episode therefore focuses upon the most conspicuous part of the inverted subject a beat early (b.223-8) preceded by a two-bar link. This episode is of a simple sequential nature enlivened by the familiar technique of double counterpoint. Its kernel is the two-bar sequence (E minor with Picardie-third to D major, b.224-5) which is immediately repeated with the texture inverted and a simple syncopation introduced to facilitate execution. These bars are balanced on either side by one bar of similar design; the first such bar (b.223) permits an ornamental decoration to the bass to explain the ensuing manner of treatment of the subject, while the second (b.228) continues the sequence into C minor to provide a link with E♭ major for the next entry of the subject, also inverted.

229 - 233: this entry is described by Cockshoot as "rather belated" 86

but compensation is found in the energy of its accompanying parts which include a pre-echo of the subject's semiquavers in non-inverted form (see, for example, A. and B., b.230). Such an increase in movement is implicit within the preceding two entries, quaver allusions to the countersubject in the first being replaced by an increasing number of semiquavers in the second, and is one of several stages by which the forthcoming climax is prepared. These stages may be summarized as the present increase in movement (b.229-34), a wide-ranging exploration of the keyboard by reference to the subject combined recto and inverso (b.235-42), an explosion of trills (b.243-6) and the complete disintegration of a contrapuntal texture (b.246-9). The second of these stages is brought into play as the ensuing episode begins; the inverted subject breaks off at precisely that point at which the G major entry became less regular - it also retains the chromatic inflection heard during that entry, the E♮ (b.233) corresponding to the G# (b.212) - and the episode begins a bar later with allusions to the subject recto and inverso.

233 - 249: the first half of the episode is based upon the inverted subject combined with a rising scale figure ranging over the interval of a tenth and thereby suggesting the filling-in of the subject's opening leap. This implicit combination of the subject recto and inverso is then rendered explicit by way of confirmation (b.239 and b.241). The rising scale figure, though deriving ultimately from the subject itself, may trace its immediate origins to the inner part of the preceding episode where such scalic semiquavers first achieve prominence (A., b.223 ff.). None of the entries contained in the present episode may genuinely be said to be false: it is clear from the outset that the head of the subject is being used for episodic development and the listener is never led to expect any serious continuation of the subject.

This passage makes use of octave transposition, for climactic effect: it is based upon sequential repetition as illustrated in Ex. 4.35 but in the first repetition both parts are initially transposed up one octave (b.237); the upper part is then restored to the correct pitch (b.238) while the lower part moves down three octaves (to a pitch two octaves below its expected position). These exciting transpositions constitute a highly dramatic exploitation of a conventional contrapuntal technique: under normal circumstances octave transposition would not give rise to music of such force or impact[87] but in this case its application entails a rapid and climactic exploration of virtually the entire keyboard. This can lead only to further disintegration and silence.

The treatment of the subject which now completes this process of disintegration would appear to indicate that its potential for exploitation has been exhausted. This is confirmed by Beethoven's decision to introduce new material by which to facilitate the continuation of the fugue and by the observation that there is hereafter no entirely new treatment of the subject other than its combination with the as yet unheard second subject[88]. This then is the greatest turning point in the fugue and it is significant that, as at all other major junctures in this finale, an audacious metrical conflict takes place. Rosen's excessive allegiance to descending thirds is evident in his analysis of these bars:

> "Short development and stretto ending with a brilliant cascade built from the opening tenth leap and descending harmonically by thirds." 89

Contrary to the musical example which he then furnishes to clarify this observation, the passage in fact rises by fifths: this should be immediately obvious from the series of Perfect cadences illustrated in Ex. 4.36(i). The revolutionary sound world here created may be attributed to the perpetual leaping about the keyboard and the attendant explosive trills, but most certainly not to the harmony which is simplicity itself.

This harmonic naivety is counterbalanced by a rhythmic subtlety which further assists in the disintegration of the music: the metrical conflict just referred to may most readily be explained by writing the harmonic rhythm in the manner shown in Ex. 4.36(i), each note in the rhythmic analysis indicating the beginning of a new harmony, be it I or V. If this is then simplified (Ex. 4.36(ii)) it will be seen that most of the passage under discussion falls into a syncopated $\frac{2}{4}$ time, duple meter once again infiltrating the triple meter in which the music is cast. As noted earlier[90], the head of the subject (upon which this passage is based) tends naturally to imply duple rather than triple time: here this implication is further realised but by different means for the present compression of the subject in free diminution robs it of its characteristic rhythm on whose account duple meter was initially adumbrated. Counterpoint is now abandoned and the music comes to a dramatic half close in D minor followed by a silence pregnant with expectation. Such dramatic interruptions in a fugue are quite alien to the music of Bach and constitute one of the original elements introduced by Beethoven in his revitalization of this hitherto essentially academic genre.

250 - 278: the section which now begins in D major provides a complete contrast with all that has preceded. The melody now introduced has been variously classified: Cockshoot debates its potential status as a second subject but concludes that it is

"really a fourth Countersubject" 91,

Tovey describes it as a

"Short Third Subject" 92

while Rosen refers to this section generally as a

"Second episode". 93

His derivation of this material from the main subject is vastly different from that proferred by Nagel[94], but either is arguable since both subjects

are constructed about the same interval. In this analysis I propose to describe the new theme as the 'second subject' since it is given a separate, though unusual, exposition of its own. I do not however refer to the fugue as a 'double' fugue since this would seem unduly to raise the status of this new subject which is, as Cockshoot rightly observes[95], dropped completely from the texture shortly after its combination with the main subject.

The chorale-like second subject, be it or be it not a variant upon the first subject, is like that subject constructed out of thirds. It is stated in stretto in all three voices but only the first entry is complete. After a brief link passage this process is repeated but the stretto is closer, the voices presenting the subject one bar apart instead of two (b.259 ff.). These entries are in fact the last occasion upon which the subject is heard in full though the texture from here until the return of the first subject is ripe with false entries. The immediate use of stretto obviates a possible hiatus in the movement and is in this respect comparable to the fugal variation in the finale of the E major Piano Sonata Op. 109 (III, var.V), which gives the impression of a sudden leap into the middle of a fugal movement already in full flow. In the present exposition (from Op. 106) lack of rhythmic activity is offset by an increase in chromaticism: even the simple purely diatonic D major subject is chromatically inflected immediately the second entry begins (A., b.252-3) and this inflection is maintained in certain of the subsequent entries (B., b.261-2 and, transposed, B., b.272-3). It is possible that the C#'s in b.262 should actually be C♮'s; this is discussed in a comprehensive footnote by Cockshoot[96] who prefers C♮ to maintain the key of G major just established, but in view of the parallels cited above and of the winding chromaticism of this section of the fugue generally, the C# is entirely appropriate. Metrical conflict is hardly

in evidence at this point but the suspension of one of the subject's notes provides the gentlest possible allusion to duple meter, which is considered worthy of mention not on its own account, so slight is it, but on account of the prevalence of such ambiguities elsewhere in the movement: see Ex. 4.37. The character of this exposition of the second subject is thus markedly different from that of the remainder of the fugue - it is to be played sempre dolce cantabile una corda - and its purpose is to provide a source of impetus for the remainder of the fugue by opening up the possibility of combining the subject with new material. This tranquil D major section ends with a final descent of a third to the home I, B♭ major.

279 - 306: the only slowing of the tempo in the entire fugue (excluding the Poco Adagio which actually takes place in the coda) relaxes into the combination of the two subjects pianissimo. The key is B♭ major and from this point onwards there are no departures of any real weight from the I. In thematic terms the movement is by this stage virtually over: there remain to be heard only the combination of the two subjects, the simultaneous presentation of the main subject recto and inverso which has already been prominently suggested on two occasions (b.110-16 and b.235-42) and the climactic return of the main counter-subject. In spite of the relative absence of new thematic treatment the remainder of the fugue does constitute, as Tovey points out,

> "nearly a third of the whole design." 97

and it takes on the responsibility of bringing to a culmination not only the events of the fugue so far but also Beethoven's greatest sonata as an entity. It is the unusual and highly original tonal structure of the finale which requires that such an extended reassertion of the I occur in order to stabilize the music for the descent by thirds is one of the reasons for the music's failure to ingratiate itself with the listener: thus Rosen states:

> "[in this sonata Beethoven] substitutes tonic-mediant relations for tonic-dominant. This is, in fact, the principal reason for the difficult sound of the Hammerklavier, as the ear is traditionally used to the dominant-tonic resolution implied by the language, and Beethoven withholds such resolutions fairly consistently throughout the work." 98

The two subjects are combined in B♭ major but the early introduction of the important note B♮ diverts the tonality through C minor to F major. The initial retention of a low dynamic and the serenity of the second subject allow it elegantly to dominate the main subject. When the dynamic is increased to forte this elegance is laid aside and the second subject's domination, albeit temporary, is confirmed by the fragmentation of the main subject and the doubling of the second subject in octaves deep in the bass. At this point Beethoven avails himself of the opportunity afforded by the main subject's disintegration to restate the all-pervading duple-triple conflict. This is one of the few instances of this conflict which has been mentioned by the various commentators upon this sonata[99], though no one has fully stated its significance as a recurring feature and as the factor which perhaps more than any other generates that Herculean struggle which is the very essence of this fugue. The six semiquavers upon which this passage is based constitute the only part of the original subject not to imply duple meter, yet they are twice rewritten during the fugue, first in compound duple time and then in simple duple time: see Ex. 4.38. The present combination of the two meters is fairly protracted and leads to a descending semiquaver scale which heralds a more fullsome presentation of the main subject, the second subject now disappearing permanently from the texture.

It does not seem entirely inappropriate to regard the entire section from the combination of the two subjects until the next episode as a repeat of the original exposition by which to reassert the I. Such an

interpretation would produce a very neat ternary framework for the movement drawing out the two opposing tonalities of the work, an exposition in B♭ major (b.16-40), the exposition of the subject in cancrizans in B minor (b.153-74), and a re-exposition of the original subject in B♭ major (b.279-306). The tonal structure of the movement which is for the most part based on descending thirds would thus have superimposed upon it a more simple tonal structure which is manifested not by tonal means, but by virtue of the movement's thematic treatment of the subject. A dual tonal structure would emerge consisting of the basic or primary structure which accounts for the music's progress through a series of keys and thereby realises in structural terms an important and recurring melodic feature, the interval of a third, and above this a secondary tonal structure which owes its existence to thematic events and expresses on the grand scale that conflict between the two keys of I and ♭II. Although there are clear reasons for not regarding the present passage as a repeat of the original exposition, this superimposed ternary structure is readily perceptible, since it is illuminated by the thematic content of the fugue. Indeed thematicism and tonality cannot be divorced in any meaningful examination of a musical structure: it is for this reason that George's analysis of this fugue is so utterly misleading for it entails no consideration whatsoever of the fugue's thematic content[100].

As the second subject falls absent there is an exciting stretto of the *subject combined recto and inverso; when the augmented subject was* treated in this way the recto version preceded the inverso (b.110 ff.) but their order is now reversed and the recto presentation overlaps with the next entry of the inverted subject to produce two pairs of overlapping entries, the first pair at the answer position in the V, the second in the I; none of these entries occurs at the same point in the bar as does the original subject. The two recto entries are complete

though both change parts at the end: see Ex. 4.39. What is remarkable about this passage is the freedom with which, in the second pair of entries, Beethoven alters certain of the subject's most conspicuous intervals changing the perfect fourths into a second (B., b.303) or a third (S., b.302 and b.303). The combination of the subject recto and inverso naturally gives rise to a passage of mirror treatment which initiates the next episode.

306 - 333: this episode falls clearly into two sections, the first (b.308-17) recalling by virtue of its texture and thematic content an earlier episode (b.223-8) and focussing its attention upon the subject, the second and more substantial portion (b.318-33) reintroducing the long-absent countersubject and developing it in a particularly interesting passage of thematic reduction.

The first part of the episode is highly structured: it subdivides into three units each of three bars' length (b.308-10, b.311-3, b.314-6); each of these units is sequential within itself while relating to the other units by invertible counterpoint and the third such unit is a repetition of the first, a rising sequence here being balanced in the central unit by a falling one. At first sight it would appear that the texture is inverted in such a manner that each of the three parts may be heard in each of the three voices: thus the semiquavers are given by soprano, bass and then alto, the subject by alto, soprano and then bass while the third part fills out the texture as appropriate. This interpretation is implicit within Cockshoot's analysis:

> "Exigencies of keyboard-writing in these last bars [b.314-6] prevent the soprano having the same free part [as B., b.308-10 and A., b.311-3]." 101

However, it is interesting to note that the third unit repeats the pitches of the first more stringently than this interpretation would

suggest and thereby provides a degree of thematic variation not noted by Cockshoot. These alterations, illustrated in Ex. 4.40, have less to do with the

"exigencies of keyboard-writing"

than with the avoidance of tame repetition. In the central unit this purpose is achieved by means of colourful harmony: the flattened sixth is heard against the natural sixth in each bar and a non-related harmony, the (♭)iii, is inserted between keys as noted in Ex. 4.41. Mundane sequential note-spinning has no place in a Beethoven fugue!

The third unit is followed by a link bar connecting with the second half of the episode which begins by using both harmonic and thematic means to presage a rapid conclusion to the fugue: these are respectively the introduction of a fourth voice to allow a V pedal to sound in the bass and the return of the countersubject. The second of these means is particularly potent in signalling the end of the fugue given the truly remarkable length of its absence from the texture and the fact it is returned in the additional fourth voice. It transpires nonetheless that the fugue is not in fact destined to finish just yet: instead the episode works up to a magnificent climax by developing the countersubject in a passage of thematic reduction. Ex. 4.42 details each of the stages in this process by quoting the various compressions which take place[102]. It seems inevitable that this extensive treatment of the countersubject be enhanced by further allusions to the duple meter which informs so many *important junctures within this fugue*. The nature of its intrusion at this point becomes clear from Ex. 4.43 which summarizes the passage from a rhythmic perspective, showing the return of the countersubject and its subsequent compressions, numbered beneath in such a way as to correspond to Ex. 4.42 while additional imitative uses of the counter-subject in the subsidiary parts are indicated on the upper system. The double bar followed by '$(\frac{2}{4})$' indicates that point at which the reduction

of the countersubject produces a fragment more suited to duple than triple time. This is the most emphatic contradiction of the meter so far heard for two-time takes over completely and is not fully overthrown until the alto entry in b.334; this point is similarly marked with a double bar and '$(\frac{3}{4})$' in Ex. 4.43. The climax to which this rhythmic treatment of the countersubject leads is reinforced in harmonic terms by the most intensive exploitation of diminished harmony in the sonata: see Ex. 4.44 and compare this passage with the climax of the first movement's fugato development (b.189-97). This highly dramatic introduction of duple meter arising from the process of thematic reduction and complemented by a rich texture and such extreme harmonic means is particularly fitting as the final preparation for the next and most conclusive departure from the meter, that which brings to an end the entire sonata and in so doing acts as the crown and culmination of all that has preceded.

333 - 366: the subject enters and is heard recto and inverso in a bar of diminished harmony which leaps like thunder to the extremes of the keyboard. Both of these entries are rapidly curtailed but the alto takes over and in a passage of contrasting lighter texture states the subject in full in the answer position accompanied by various snippets of the countersubject. Rhythmically these two false entries belong to the preceding episode since the trilled minims may be heard as starting on the first beat of the bar in $\frac{2}{4}$ time. Only with the genuine entry in the alto is the triple meter restored and tension released. Ex. 4.45 selects a single melodic strand from the texture by which to illustrate the dissolution of tension by the restoration of triple meter. This alto entry is identical to the original answer (S., b.26 ff.) except for the rhythmic modification to its first beat[103]; though necessary alteration given the limitations of the human hand this is

indeed musically desirable for it gives impetus to this entry and thereby distinguishes it from the climactic false entries of the preceding bar[104]. At the last the semiquavers of the subject are transposed up an octave and taken over by the soprano: this serves the practical purpose of initiating a passage of double counterpoint which forms the basis for the ensuing codetta in a manner absolutely typical of the episodes of this fugue.

Relatively little need be said about the remainder of this fugue. The entry to which the codetta leads takes up the climactic combination of the subject recto and inverso at the end of the last episode but inverts the texture, the hands leaping inwards on this occasion. The key is B♭ major, reached in the sequential codetta via G major, and diminished harmony is at first retained, the inverted subject beginning on the flattened sixth of the scale instead of on the usual uninflected fourth. Neither entry is complete perhaps because, as Cockshoot postulates[105], a continuation of the mirror writing which this combination of the subject recto and inverso naturally entails would involve an undesirable repetition of earlier material. A stretto of kinds follows: it would perhaps better be described as a series of overlapping incomplete entries of the recto subject, all one beat late, accompanied by references to the subject's opening leap in diminution. This treatment of the subject dissolves into running semiquavers prior to the final entry of the subject which is pitched higher than any of the other entries in the fugue.

The content of this final entry and its continuation is of especial interest: by giving the subject in the answer position in the I, Beethoven foreshadows the IV beginnings of the coda. The countersubject moreover, absent at first is subsequently included and doubled in thirds for

emphasis. As the subject breaks off prematurely the countersubject takes over and undergoes further thematic reduction in a manner which is essentially identical to its treatment in the preceding climactic episode: in Ex. 4.46 the present compressions are numbered according to their role in Ex. 4.42. This then is a repeat of the substance of that episode but considerably condensed. The manner of its culmination is deliberately altered to forestall any possible feeling of superfluity: it builds up to fortissimo in similar fashion but cadences abruptly off the beat and is followed by silence.

367 - 400: a quiet combination of the subject recto and inverso begins the improvisatory coda in the IV, a momentary flattening of the tonality which commonly occurs towards the end of such a movement. The affixing of a coda of toccata-like character to the end of the fugue is not particularly unusual. Bullivant traces its origins to the early Baroque toccata and cites examples from Buxtehude and Bach[106]. The present coda makes full use of Beethoven's keyboard: the inverted subject leaps down to a IV pedal trill in the depths over which diminished arpeggios explore the middle and upper reaches of the register. Whispering references to the subject and to the less prominent thematic elements of both countersubjects are then heard over a I and V pedal in a manner reminiscent of the coda to the first movement (b.385-405). A slowing of the tempo, the countersubject in imitation and again fragmented though less rigorously than before, leads to a tentative reflection upon the head of the subject which is made to overlap with itself: see Ex. 4.47[107]. Resolution of the third entry is withheld as scalic semiquavers race down the keyboard into the final summing up; this is the repeated statement of the opening of the subject in unison to which reference has often been made during the course of this analysis. Kirkendale writes:

> "Unison quotation of the subject in the final measures is ... a late baroque device." 108

He then cites a number of examples two of which are by Albrechtsberger and were probably familiar to Beethoven. What is new about Beethoven's exploitation of the subject in unison is the manner in which it cuts across the meter and in so doing resolves the conflict which pervades this momentous fugue. Ex. 4.48 compares this passage notated in $\frac{3}{4}$ time with its $\frac{2}{2}$ accentuation; from this it is clear that the final chord appears to be delayed by one beat though in reality it sounds a beat early. Beethoven must have noted with satisfaction this dramatic and highly appropriate conclusion for rhythmic deception of one kind or another is much used in his late-period works.

1. Charles Rosen: The Classical Style Haydn , Mozart, Beethoven (London, 1971), p.431.

2. ibid., pp.404-34.

3. Joseph Kerman: The Beethoven Quartets (London, 1978), p.275.

4. Rudolf Klein: 'Beethovens Gebundener Stil in Opus 106' in Beethoven - Jahrbuch, vol.IX (Bonn, 1977), p.198.

5. Charles Rosen, op. cit., p.434.

6. The last Piano Sonata by Beethoven prior to Op. 106 to contain four movements is that in E♭ major, Op. 31 no. 3, dating from 1802.

7. See Emily Anderson (ed.): The Letters of Beethoven (London, 1985), vol.II, no. 939, pp.804-5. The suggested date for this letter is "c. March 20, 1819", the London postmark being April 6, 1819: see ibid., p.797 and n.2.

8. ibid., p.791 (italics mine).

9. Donald Francis Tovey: A Companion to Beethoven's Pianoforte Sonatas (London, 1931), pp.233-4.

10. Eric Blom: Beethoven's Pianoforte Sonatas Discussed (New York, 1968), p.203.

11. Gustav Nottebohm: Zweite Beethoveniana (Leipzig, 1887), p.136.

12. John V. Cockshoot: The Fugue in Beethoven's Piano Music (London, 1959), p.71.

13. It is uncertain whether the bass note at this point (mvmt.I, b.224-6) should be A# or A♮. Hauser argues in favour of A#:
> "Die Formidee des ersten Satzes mit ihren vielfältigen motivisch-thematischen Zusammenhängen, die Besonderheit der Reprise und ihrer Einführung weisen in allen Einzelheiten auf ais."

Richard Hauser: 'Das Ais in der Hammerklaviersonata' in Beethoven-Jahrbuch, vol.VI (Bonn, 1969), p.258. Fischer also prefers A#: Edwin Fischer: Ludwig van Beethovens Klaviersonaten, trans. by Stanley Godman (London, 1959), p.105.

14. See above, p.99. This structure is duplicated in microcosm in Op. 102 no.1 (II, b.181-217): C - A♭ - F - an extended passage in D♭ major, the ♭II - C.

15. The second of these functions is of especial note in the tonic major conclusion to the Adagio sostenuto.

16. Note the absence of a final Perfect cadence, Ic moving directly to I, b.401 ff.

17. Charles Rosen, op. cit., p.417.

18. Philip Barford: 'The Piano Music - II' in The Beethoven Companion (London, 1979), p.159.

19. Gustav Nottebohm, op. cit., p.131.

20. Donald Francis Tovey: Beethoven (London, 1944), p.26. See also Donald Francis Tovey: Essays in Musical Analysis, vol. I (London, 1942), p.6.

21. Donald Francis Tovey: Essays in Musical Analysis, vol. III (London, 1942), p.7.

22. The possibility of regarding the fugue as possessing a ternary structure (B♭ major - B minor - B♭ major) superimposed upon its more complex structure is discussed below: see below, pp.137-8.

23. Charles Rosen, op. cit., pp.430-33.

24. ibid., p.430 (italics mine).

25. John V. Cockshoot, op. cit., p.76.

26. The classification of this passage is discussed at the appropriate point during the analysis; see below, pp.118-9.

27. Cf. b.124-30 with b.81-5.

28. See below, n.30.

29. Charles Rosen, op. cit., p.431.

30. The cancrizans exposition is heard in C♭ minor on account of the cycle of fifths in the preceding episode. The enharmonic notation, a matter of convenience, probably continues (G major being heard as A♭♭ major) until the inverted entry in E♭ major which is heard as E♭ major. The interruption which follows is thus heard in real D minor. I am grateful to Dr. Bullivant for these insights into the harmonic structure.

31. Cockshoot describes the codetta at b.57-65 as
"a codetta of episodic proportions."
John V. Cockshoot, op. cit., p.77. Subsequently his differentiation between codettas and episodes is not dissimilar to mine.

32. This closely resembles Barford's analysis: see Philip Barford, op. cit., p.164, Ex. 28. Significantly it was reached completely independently of his essay.

33. The restoration of D♭ major as a significant tonality produces a similarity between the harmonic structure of the fugue and the melodic contour of its subject: see Ex. 4.6.

34. Charles Rosen, op. cit., p.429, n.1.

35. Gustav Nottebohm, op. cit., p.135.

36. Kinderman states of this Largo:
"the third interlude is an evocation of the contrapuntal idiom of Bach which is broken off after a few bars. Its role is to point towards the creation of a new contrapuntal style, in the ensuing Fugue, that supersedes the fugal idiom of Bach."
William Kinderman: Beethoven's Diabelli Variations (Oxford, 1987), p.115.

37. Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.243.

38. Cf. b.16 with b.26 and b.35.

39. Gustav Nottebohm, op. cit., p.131 (italics mine).

40. See for example the G major Piano Sonata Op. 79 (III, b.35 ff.).

41. Gustav Nottebohm, op. cit., p.136.

42. Klein's analysis of the fugue subject is quite different, and yet more obsessive than Rosen's in its detection of descending thirds: see Rudolf Klein, op. cit., p.190.

43. Warren Kirkendale: Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979), p.268.

44. Donald Francis Tovey. op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.243.

45. Eric Blom, op. cit., p.221.

46. Roger Bullivant: Fugue (London, 1971), pp.90-91.

47. John V. Cockshoot, op. cit., p.91.

48. ibid., p.76.

49. ibid., p.90.

50. Kirkendale notes Albrechtsberger's freedom in comparison with Vallotti: Warren Kirkendale, op. cit., p.268, n.217.

51. Cockshoot criticizes Albrechtsberger's teaching of fugue: John V.Cockshoot, op. cit., p.26. Beethoven however, in 1817 when asked by Cipriani Potter to recommend a tutor, declared:
"I have lost my Albrechtsberger and have no confidence in anybody else."
See Elliot Forbes (ed.): Thayer's Life of Beethoven (Princeton, New Jersey, 1964), p.683. Albrechtsberger had died in 1809.

52. These are referred to as 'soprano', 'alto' and 'bass'.

53. See below, p.140.

54. Charles Rosen, op. cit., p.430.

55. There are a number of uncertain readings in this passage, listed in App. II.

56. The octave transposition in Ex. 4.14(i) avoids tenths with the alto. The sforzando on the dotted crotchet becoming quaver is not always marked but perhaps intended: see App. II. At one point it is placed also on the anacrusis (S., b.61).

57. See above, p.103 et seq.

58. Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.246.

59. ibid.

60. Cockshoot moreover attempts to explain the countermotif by reference to the preceding bass line: John V. Cockshoot, op. cit., p.79. This seems unjustified, particularly since this motif is not repeated with accuracy when the 'Independent Episode' returns in a more extended form.

61. Roger Bullivant, op. cit., p.123.

62. The subject is variously phrased in this passage, a significant discrepancy between editions being the possible sforzando on the third beat: see App. II.

63. Regarding the first quaver of b.97, see App. II.

64. Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), pp.249-50.

65. This term was coined by Beethoven's tutor, Albrechtsberger: Johann Georg Albrechtsberger: Gründliche Anweisung zur Composition (Leipzig, 1790), pp.194-5. This is quoted by Kirkendale, who observes:

> "The artifice is extremely rare in fugal repertoire. Apart from a free application in Contrapunctus XI of the Art of Fugue, I find it only in Albrechtsberger's Quartet-fugue Op. 1/1."

Warren Kirkendale, op. cit., p.263.

66. See above, pp.115 and 116-7.

67. Donald Francis Tovey: op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.247.

68. Refer to Ex. 4.15.

69. The countersubject accompanies the inverted subject at b.209 ff. and b.217 ff. but it is relatively inconspicuous. Except in b.220 its strong thematic character is absent until b.318.

70. See above, p. 105.

71. Roger Bullivant, op. cit., p.121.

72. Gustav Nottebohm, op. cit., pp.351-2. Refer also to Warren Kirkendale, op. cit., p.208, 8 c).

73. Barford nonetheless considers it

> "quite obvious in performance."

Philip Barford, op. cit., p.169.

74. Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.251.

75. See ibid.

76. John V. Cockshoot, op. cit., p.82.

77. The head of the subject is altered rhythmically, musical sense as always taking precedence over rigid adherence to academic principles.

78. John V. Cockshoot, op. cit., p.83.

79. Barford comments:
> "In this sonata A sharp must always seem to be hovering suspiciously on the brink of enharmonic transformation."

Philip Barford, op. cit., p.161.

80. The mirror writing at this point anticipates more extended treatment of this kind later on (b.304 ff.).

81. See above, p.107.

82. John V. Cockshoot, op. cit., p.83.

83. ibid., pp.83-4.

84. The first note is sometimes retained as a non-essential chromaticism: e.g. A., b.201, A#.

85. Examples have already been cited from Op. 102 no. 2 and Op. 110. See above, p.41 and pp.59-60 respectively.

86. John V. Cockshoot, op. cit., p.85.

87. In Op. 101 (III) this technique turns one part into two (B., b.182 ff.). Elsewhere in Op. 106 (IV) it is required for practical textural reasons (b.297-8 and b.303-4).

88. The classification of this material is discussed below; see below, pp.134-5.

89. Charles Rosen, op. cit., p.431.

90. Refer to Ex. 4.9.

91. John V. Cockshoot, op. cit., p.86.

92. Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.253.

93. Charles Rosen, op. cit., p.432.

94. Wilibald Nagel: Beethoven und seine Klaviersonaten (Langensalza, 1924), vol. II, p.305 ff. Cited in John V. Cockshoot, op. cit., p.87.

95. John V. Cockshoot, op. cit., p.86.

96. ibid., p.88 n. See also App. II of the present thesis.

97. Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.253.

98. Charles Rosen, op. cit., p.431. In his discussion of Op. 106 (I), Greene argues that lack of fulfillment or resolution stems directly from the B♭/B♮ clash: its
> "persistence is the particular way that fulfillment is avoided while coherence is nevertheless achieved."

David B. Greene: Temporal Processes in Beethoven's Music (New York, 1982), p.123, n.4.

99. For example, Donald Francis Tovey, op. cit. (A Companion to Beethoven's Pianoforte Sonatas), p.254 and John V. Cockshoot, op. cit., p.89.

100. Graham George: Tonality and Musical Structure (London, 1970), pp.104-5.

101. John V. Cockshoot, op. cit., p.91.

102. Ex. 4.42 (v) is more a melodic variant upon, than a compression of, Ex. 4.42 (iv), but it is included because it prepares the reduction in Ex. 4.42 (vi). It may be derived from the last four notes of Ex. 4.42 (i) and is readily accepted by the ear as the logical next step in the process.

103. However, refer to App. II regarding b.335. The E♭ is an unnecessary and presumably erroneous distortion.

104. Cf. with b.51.

105. John V. Cockshoot, op. cit., p.92.

106. Roger Bullivant, op. cit., pp.139-40.

107. The same idea is to be heard in the coda to the contrapuntal first movement of Op. 111 (b.146-9).

108. Warren Kirkendale, op. cit., p.70.

Chapter 5

The String Quartet in B♭ Major, Op. 133

Fugue Versus Rondo

The Grosse Fuge is Beethoven's most enormous fugue, whose character and tonality have inevitably led to comparisons with the finale of the Hammerklavier sonata, though that movement does not dwarf its companion movements as does the Grosse Fuge nor does it strain the medium to the same extent, in spite of its more persistent efforts to remain contrapuntal[1]. In view of its length and complexity and the resulting difficulties his players encountered in its execution Beethoven was induced to replace it a year after its composition with an alternative finale, thereby creating for posterity an ultimately insoluble problem, though one which must be addressed briefly. Although not unanimous in its verdict, posterity has tended to favour the original finale rather than its lightweight counterpart, conceding nevertheless that it is too substantial a conclusion to the work as a whole, but finding solace in the realisation that the alternative is perhaps not substantial enough. The dilemma is summarized neatly by Kerman:

> "The Fugue runs the danger of trivializing the experience of the other movements, but the new Finale runs the danger of seeming trivial itself." 2

Inevitably this chapter must concentrate on the fugue, but before dismissing the Rondo altogether a few preliminary observations may be made regarding the two finales.

Beethoven's decision to compose the rondo was certainly influenced by non-musical factors - pressure from friends, financial considerations and so forth - and it is therefore difficult to tell to what extent, if any, his acquiescence in this matter might stem also from a degree of personal dissatisfaction with, or reservations about, the original

finale. Extreme opinions are therefore likely to be of little value though they have been advanced on both sides of the argument. Ratz for example asserts:

> "Beethoven relied upon the understanding of later generations who of course would restore the work to its original form as soon as they had grasped its meaning." 3

This is countered by Schering in a fatuous remark:

> "[fugue was for Beethoven] merely a temporary substitute for a finale which was not yet ready." 4

A less extreme view hinges upon the observation that the Grosse Fuge is not suitable as a finale, simply because it is not a finale but rather an entire four-movement structure - first movement (b. 30-158), slow movement (b. 159-232), scherzo (b. 233-272) and finale (b. 272-510) with a lengthy coda to follow (b. 511-741)[5]. Radcliffe states:

> "[The Grosse Fuge is] a separate composition of symphonic dimensions containing within itself the contrasts usually associated with the familiar three- or four-movement scheme." 6

Another argument of merit depends upon thematic relationships between the Grosse Fuge and the other movements: Truscott for example, discerns such a relationship between one of the cadence themes of the first movement and the countersubject to the G♭ Meno mosso of the Grosse Fuge:

> "[the cadence theme] becomes one half of the main double theme in the G flat section of the real finale ... This is a strong argument ... for the proper status of the fugue in the scheme of this quartet." 7

A stronger argument lies in the observation that the subject is written in such a way as to imply two voices[8], the uppermost of which is related to the first movement as shown in Ex. 5.1. The chromatic Adagio, ma non troppo with which the quartet opens seems certainly to portend a conclusion more substantial than that offered by the rondo, but Kirkendale, who is this movements most notable advocate, argues that

the rondo has

> "closer links to the other movements of this divertimento quartet than the intellectual fugue could ever have had." 9

He even suggests, somewhat facetiously, that the Grosse Fuge should be reinstated

> "as the finale to the quartets Op. 131 or Op. 132, with which it is far more closely related thematically." 10

This is a deliberate blow aimed at those commentators who in their bid to reinstate the Grosse Fuge have enlisted help from elsewhere in the form of Beethoven's other late-period quartets. Grew is one such:

> "Actually the fugue is not only necessary in the scheme of the quartet, but it is an essential part of the group of quartets [Op. 132, Op. 130, Op. 131]... and its full interpretation is possible only with the help of the three quartets in their entirety." 11

These ideas are clearly related to the theory propounded by Cooke[12].

Whichever finale is preferred one point should be stressed: many of the tonal features which might commend the Grosse Fuge to the other movements of the quartet are in fact duplicated in the rondo[13]. The opening on G for example, which links the Grosse Fuge to the preceding Cavatina and even to the Alla danza tedesca before that, is retained in the rondo, as is the subsequent descent by fifths to the I: the difference here lies not in the harmony but in the manner in which it is applied: the Overtura (like the Largo from Op. 106) wanders purposefully until it finds the right key for the finale whereupon the movement proper begins. In the alternative finale this tonal wandering is repeated but it no longer serves as an introduction, for this light-weight finale does not require a long and serious introductory passage. A second point relating to the two finales may also be made: it is very interesting that the middle movements of the quartet should have as their I those notes which form the V^7 harmony of A♭ major (B♭, D♭, G,

and E♭ respectively, there being no movement in F major) and that this key should be of such importance in the Grosse Fuge. Emphasis upon this key however recurs in the rondo though on a suitably smaller scale. Thus in some respects the two finales seem equally appropriate although the recreation in the rondo of those harmonic procedures which characterise the fugue might be considered indicative of Beethoven's satisfaction with the original finale. At the last it seems that wisdom must abide in the voice of moderation, for the question of which finale is the correct one remains a question to which there is no entirely satisfactory solution. Indeed it may be the wrong question altogether for Lam is surely correct when he states:

> "Op. 130 must be considered as a work planned to end with a vast fugue, but the existence of the second finale is proof that Beethoven regarded a different conclusion as aesthetically valid." 14

Rhythm

On hearing the opening of the first fugue it is difficult to believe that the vigorous countersubject was not in Beethoven's mind from the first[15]; the way in which that bold initial statement of the subject at the beginning of the Overtura becomes gradually more tentative through the lowering at each stage of its dynamic level and then through the almost faltering introduction of rests - surely the only occasion upon which the uncommon technique of Unterbrechung is used before the fugue even begins - only to be swept aside by the fugue whose relentless drive and rhythmic vitality forge the way ahead with not the least hint of abating, all this seems positively to demand a counter-subject of such fearsome energy. Yet it is clear from the sketches, not only that Beethoven experimented with many different types of countersubject but also that those qualities of the final version which are mentioned above, were not present until a fairly late stage. In his article entitled 'Sechs Skizzenheften aus den Jahren 1825 u. 1826'

Nottebohm states:

> "In den vorliegenden Skizzenheften ist die Arbeit zunächst auf die Gewinnung von Gegenthemen gerichtet. Beethoven stellt deren viele auf, und eines lautet anders, als das andere." 16

Of the six sketches then quoted by Nottebohm four were abandoned and only the last one resembles the final version. The other sketch became the slow countersubject for the second fugue. None of these attempts feature the dotted rhythm which accounts so much for the vitality of the first fugue, nor do any of them show the subject modified by the technique of Unterbrechung though the fourth sketch contains a hint of the subject in a syncopated form prior to a presentation in regular crotchets. This is very interesting for Stravinsky is surely correct when he singles out rhythm above all else as the feature most worthy of praise:

> "The Great Fugue ... now seems to me the most perfect miracle in music ...[it] is, in rhythm alone, more subtle than any music of my own century." 17

Doubtless he was referring to the numerous rhythmic devices employed during the course of the fugues, particularly the first, but in view of his observation it is significant that the melodic shape of the countersubject at first appears in the sketches with no hint of its incisive rhythm. Curiously it is pitched in Nottebohm's extract an octave higher than the final version and thus resembles the syncopated form heard in the coda (b. 716): see Ex. 5.2[18].

The dotted rhythm with which Beethoven enlivened this comparatively static draft may itself be regarded as a typical feature of the late-period style, particularly in a quick tempo, since it appears with much greater frequency in the last works than in those of the preceding years. Beethoven first makes conspicuous use of it towards the end of the middle period in the eponymous Allegro assai vivace ma serioso from the String Quartet in F minor Op. 95, written in 1810 but not premièred

until May 1814. Subsequently it is to be found in numerous works including the 'Cello Sonata in D major Op. 102 no.2, the Piano Sonata in A major Op. 101, and the String Quartets in E♭ major Op. 127 and, less extensively, A minor Op. 132 as well as in augmented form in the finale of the C# minor String Quartet Op. 131. In other instances a dotted rhythm was considered but rejected as is clear from various sketches some of which may be instanced briefly at this point.

Sketches from a book relating to Op. 106 which are dated 1817 by Nottebohm reveal Beethoven considering a fugue subject characterised by this dotted rhythm[19] and the last of the many attempts quoted by Nottebohm in connection with the scherzo theme from this sonata reveals the same tendency[20]. Next to the fugal sketch just mentioned Beethoven noted

"Fis dur. Fugirt in diesem wo möglich B moll."

Later he attempted another fugal sketch, this time in B♭ minor (B moll) and this too features the dotted rhythm, though Nottebohm thinks that this was intended to be in a slow tempo as an introduction to the finale:

"... das wir uns in einem langsamen Tempo und nur zum Eingang des letzten Satzes bestimmt denken." 21

See Ex. 5.3. Two years prior to these sketches in a sketchbook from 1815 which contains work on the fugal finale of Op. 102 no.2 Beethoven had drafted a number of fugal sketches which were not used. Of those quoted by Nottebohm the last is similarly dependent upon dotted rhythms though it too seems to have been intended for use in a slow tempo[22]: see Ex. 5.4.

It is clear from these observations that this rhythm becomes a more regular feature of Beethoven's musical style during the late period, but what is not clear is why this is so. Like so many other features which may be regarded as typical of the late-period style, isolated examples

of this dotted rhythm may be found in the earlier works. Some of these have been cited by Fischer who draws attention to the frequency with which this rhythm appears in the late works:

> "Es fällt auf, dass sich die punktierten Motive in Beethovens letzten Werken vermehren; sie breiten sich über längere Strecken, ja über ganze Sätze." 23

This rhythm may in some ways be related to Beethoven's adoption of fugue, since almost all of the examples cited above are of a fugal or contrapuntal nature. An interesting comparison may be made between the sketches for the Scherzando vivace of the E♭ major quartet Op. 127 and those for the first countersubject of Op. 133, for both these themes appear initially with the pitches in a straightforward quaver rhythm and only later are enlivened by their conversion to a dotted rhythm. The sketches for Op. 127 are also quoted by Nottebohm and from his comments it would appear that the dotted rhythm was one of the very last modifications which Beethoven made to his theme, for in the examples which he gives simple quavers are used and all three of these examples involve the answer in inversion, an idea which occurred to Beethoven only at a relatively late stage:

> "Der Vordersatz des achttaktigen Themas bewegt sich zwar ungefähr eine Octave aufwärts, der Nachsatz abwärts ... jedoch wird der Nachsatz nicht ... durch Umkehrung des Vordersatzes gewonnen. Dieser Schritt geschieht erst später." 24

In the last of the three examples which Nottebohm then gives the subject and its answer appear at the pitch finally chosen after some deliberation by Beethoven, but there is still no hint of the dotted rhythm: see Ex. 5.5[25]. It is unlikely that Beethoven intended the dotted rhythm from the outset but wrote quavers simply to save time in spite of Nottebohm's observation that the sketches are

> "flüchtig geschrieben." 26

His sketches often lack a key signature and clef for this reason but the three sketches under discussion are clearly marked. Rather it seems that

in this instance and also in the case of the first countersubject of Op. 133 it was the melodic contour with which Beethoven was initially concerned, while the rhythm was to a certain extent superimposed after the event. Of course, the rhythmic modifications could not involve too extensive a divergence from the original idea; indeed the conversion to a dotted rhythm is one of the limited possibilities available and it has the positive effect of bringing the melody sharply into focus. It is not therefore surprising that Beethoven, having selected the pitches and contour of his melody, should enhance it in this way. Nor is it surprising that pitch should precede rhythm in the composer's mind for both of these passages are fugal or at least contrapuntal in nature: certainly in Op. 133 the initial search was for a series of pitches which would combine well with the subject, and the finer details of rhythm were something which could be incorporated at a later stage as the composer hammered his ideas into shape.

When a dotted rhythm such as this appears in a work which is not fugal the sketches sometimes reveal the same kind of compositional procedure - melody preceding rhythm - but to a much lesser extent: as an example of this the sketch cited by Nottebohm in connection with Op. 95 may be compared with its final version: see Ex. 5.6[27]. In this sketch the dotted rhythm is already present but the final version makes more extensive use of it whilst retaining the melodic contour of the sketch. These observations provide a very interesting insight into Beethoven's compositional processes and at the same time make it clear that the rhythm which pervades the first section of the Grosse Fuge is thoroughly typical of the late-period style and may possibly be related to Beethoven's adoption of fugue. Extensive use is made of this same rhythm in sections of Bach's Art of Fugue - Contrapunctus II and IV, for example - a work which Beethoven knew and which Kirkendale and Kerman have even debated upon as the impetus for Beethoven's Grosse Fuge[28].

Stravinsky's description of the Grosse Fuge however refers not so much to this dotted rhythm, however important and typical it may be, as to the way in which the subject of the first fugue undergoes various rhythmic transformations, both within itself (syncopation and compression) and through its combination with a rhythmically changing environment. These various stages in its rhythmic development are summarized in Ex. 5.7. The subject as it stands for the first fugue has already been modified by the exceptionally rare device termed Unterbrechung and Beethoven combines this with another rare device, syncopation[29]. The fact that the listener cannot know that the subject is syncopated when it is heard at the end of the Overtura immediately before the first fugue begins is a favourite joke of Beethoven's encountered elsewhere in his last works. Its combination with the dotted rhythm of the countersubject at the beginning of the first fugue is the first in a series of rhythmic developments which drive the music relentlessly onwards: see Ex. 5.7(i). After the fugue exposition a series of entries beginning in the IV introduce a new rhythmic accompaniment: triplets are added to the texture - see Ex. 5.7(i) and (ii) combined - and the combination of these three rhythms is explored in detail. On reaching the I, B♭ major, a further important rhythmic event takes place: the syncopation of the subject is intensified so that instead of falling on the weak beats of the bar it now falls off the beat altogether. The dotted rhythm of the countersubject remains as before, but a new rhythm is added, allying itself to the countersubject, as may be seen from the 'cello part (b. 110-13): see Ex. 5.7(iii). Later, when this latter-mentioned rhythm is omitted, there is a remarkable sense of dislocation as the syncopated rhythm occurs in three and then two parts conflicting with the dotted rhythm of the countersubject (b. 129). This leads immediately into the next significant rhythmic alteration, the re-writing of the countersubject in triplets combined with the subject, still in the syncopated form just heard, but here compressed by the removal of its rests: see Ex. 5.7(iv).

This is in fact a repeat of the original exposition, the entries of the subject and countersubject occuring in those same voices as before though the additional parts now concentrate exclusively upon the material of the countersubject[30]. As here, each important return to the I during the first fugue is marked by the introduction of a new rhythmic device. It is this principle of rhythmic variation more than anything else, more even than the energetic quality of the material used, which gives this first section of the Grosse Fuge its dynamic sense of direction, as the material is constantly subjected to some new manner of rhythmic treatment.

Terminology

Two problems regarding terminology are immediately raised by the Grosse Fuge: is the dotted melody which pervades the first fugue to be termed the 'subject' or the 'countersubject' and what is the proper description of the G♭ major Meno mosso e moderato, a 'fugue' or a 'fugato'? These questions may be dealt with briefly and in order.

By the end of the Overtura the listener has heard the main theme of the Grosse Fuge in all of its most important guises rather like reading the 'Contents' page of a book. It is for this reason that I propose to describe the material with which the first violin energetically begins the first fugue as the 'countersubject' though the majority of commentators either describe this as the 'subject' or else adopt the terminology of 'double fugue', the implication in the latter instance being that there are two subjects of equal importance. Mason, for example, states that the main theme

> "passes into the background as a countersubject" 31,

while Kirkendale simply describes the first section as a

> "regular double fugue." 32

These alternatives are combined by Kerman who regards the first section as a double fugue but observes that

> "a gapped version of the basic theme accompanies it [the dotted theme] as a strongly conflicting counter-subject." 33

The problem is avoided altogether by Radcliffe who refers simply to 'theme A' and 'theme B', though an element of committment may be detected in his attribution of the former term to the material which I regard as the subject[34]. This is the line unambiguously taken by Bullivant who describes the dotted theme as

> "one of the most conspicuous countersubjects ever written." 35

He also makes an illuminating observation in respect of the term 'double fugue':

> "In fact such a definition is not helpful, for there is always one theme which stands out, on grounds of strength of melodic characteristics, as being the main theme to which the others are subordinate, and it is much better for this to be known as the subject." 36

If the first fugue were to be considered in isolation the subject would, according to this argument, be the dotted melody, but in its proper context this fugue follows the Overtura and there can therefore be no doubt which of the two melodies is of greater import. The fact that each of the three fugue expositions introduces the countersubject concurrently with the subject is attributed by Kirkendale to the medium for which the Grosse Fuge is scored:

> " it is an adherence to the old tradition, still championed by Albrechtsberger, of the quartet-fugue (as opposed to the keyboard fugue with solo opening ...)." 37

Thus in the context of Op. 133 as a whole, it is clear that the subject is the less conspicuous of the two themes in the first fugue. The gradual process by which the subject gains prominence over its several countersubjects is an ingenious feature of the Grosse Fuge which underlines its existence as an entity rather than as several disparate elements: in the Meno mosso section a new countersubject is introduced

which does not dominate the subject to the same extent as does the first countersubject; in the third fugue however, the only one of the three in which the subject begins before its countersubject, the subject achieves the undisputed prominence which might be expected of it, for here two new countersubjects are introduced, both of them fragmentary in nature and therefore failing to dominate the subject, and, more significantly, both of them derived from, and therefore dependent upon, the subject itself. This is indicative of the remarkable degree of thematic unity which exists within the Grosse Fuge and it constitutes the essence of that transcendental struggle to which Ratz has compared this work[38]: the subject, suppressed at first, ultimately achieves the supremacy ordained it in the Overtura thus conferring upon the Grosse Fuge a sense of direction and purpose which hallmarks it as one of Beethoven's greatest late-period compositions.

The second problem concerns the Meno mosso section of Op. 133 which, like the 'Independent' episode of Op. 106, uses the key of ♭VI to produce a temporary respite from the intense demands of the complex fugal writing. The result is a structure which includes many of the trappings of a fugue - exposition, regular countersubject, middle entries, stretto, pedal points - but which, it is generally felt, should more accurately be described as a fugato, chiefly because of its frequent recourse to homophony. Thus Kerman observes:

> "Qua fugue, the G♭ movement is certainly a curious production; safer to consider it a fugato. It spends more than half of its time on a serene, meandering exposition, the greater part of which neglects to be even contrapuntal, let alone fugal." 39

Nevertheless some writers have described it as a fugue[40] and this seems preferable since it underlines most clearly the tripartite structure of Op. 133, the fact that there are three main fugal sections in the work,

three widely differing examinations of the same basic subject. This concurs with the aural impression gained by the listener and also relates well to my later observations about the

"neue Overtura mit 3 ..." 41

The structure of the Grosse Fuge may thus be summarized as follows:

1 - 30: Overtura: states the subject in its various guises while moving to the I (B♭ major).

30 - 158: Fugue I: treatment of subject and countersubject by rhythmic variation returning at important structural points to I but ending unexpectedly in ♭VI.

159 - 232: Fugue II: lyrical treatment of subject in ♭VI returning at the last to I.

233 - 272: Allegro molto e con brio: homophonic scherzo-like passage in I leading to ♭VII.

272 - 510: Fugue III: the heart of the structure, in ♭VII renders the subject as its own countersubject. Fugue II returns climactically in ♭VII.

511 - 564: Allegro molto e con brio: after an abrupt return to I the scherzo passage is restated.

565 - 741: Coda: an enormous coda in I with repeated references to IV.

Melodic Characteristics of the Subject and their Significance

One purpose of the following analysis is to explore the melodic, harmonic and rhythmic relationships which exist between this fugue and the subject from which it grows. In connection with the C# minor quartet Kerman

states:

> "More impressively than any other fugue ... this one exploits a device which Bach hardly knew but which Beethoven knew very well: the projection of the subject into the form." 42

This observation is relevant also to the Grosse Fuge where the principle postulated by Kerman works on two different levels: on the large scale the melody of the subject may be deemed responsible for certain important modulations which are relevant to a consideration of the total structure, while on the smaller scale it influences the finer details of the composition, as for example in the choice of keys during an episode, or in the enrichment of simple harmonies by appropriate dissonant notes. Our appreciation of the principle is fundamental to our appreciation of the Grosse Fuge and for this reason it is expedient briefly to consider the fugue subject specifically in this light, as a fundamental source which may subsequently be drawn upon in ways more subtle than mere citation.

It is the purpose of the Overtura to establish the melody of the subject prior to the fugue which exploits the implications of that melody. Thus, it is Beethoven's intention to emphasize the melodic features of his subject which dictates that the majority of the Overtura be unharmonised, particularly the bold fortissimo statement with which it begins, for rhythm is one of the less important factors here. Thus, at the outset of this enormous movement the listener is presented unequivocally with a subject whose melodic inflections will determine many of the harmonic and structural events during the course of the movement. In view of this the starting point for this investigation must be the subject itself and there are several features of it to which attention may be drawn at this stage.

The first and most unusual feature of this fugue subject is the way in which it embraces the key of the supertonic minor, as shown in Ex. 5.8[43]:

the outlining of the diminished seventh is a cliché from the Baroque and one which Beethoven had already used in other fugal or contrapuntal contexts, among them Op. 37 (III, b. 229 ff.) and Op. 111 (I, b. 20-22), both incidentally in C minor, the key implied here when the subject is heard in the I. What is unusual is the fact that Beethoven has written this C minor formula in the wrong key (B♭ major), so that it constitutes a shift to the II/ii. Kirkendale writes:

> "For the first time in its long history it [the C minor formula involving diminished seventh] is employed in a major key (B♭), transferred to the supertonic." 44

It is this tendency of the subject to move upwards which may be held responsible for the large scale tonal plan of the entire movement - B♭ major interrupted by G♭ major, rising through A♭ major to the I, B♭ major.

In addition to these supertonic implications the subject also suggests the key of the flattened supertonic, although somewhat less emphatically: the second note of the subject is the enharmonic neapolitan and in subsequent presentations it is on occasion written as such. Beethoven probably regarded this interval simply as a semitone and wrote the second note in the way most appropriate to the context of each particular case: in the Meno mosso section of the Overtura, for example he writes F - G♭ at first since the music is moving to B♭ minor (b. 17-19), but he then writes F - F# when it modulates to G minor (b. 21-2). The second note of the subject thus has a dual function: it may be taken to assert the importance of the neapolitan in the I while at the same time serving as the leading note in the II/ii. Generally the neapolitan sound occurs during the course of the movement as one of the smaller details of harmonic colour, while the supertonic modulations attend to the weightier matters of the overall structure as outlined above. In the coda a further ambiguity is introduced as the second note of the

subject becomes the ♭VI in the IV (b. 694, vl.II taking over from vl.I), a harmonic feature which relates back to the Overtura (b. 18), as does much of the coda, thereby contributing to the unity of the entire structure.

Besides these supertonic tendencies, flattened or otherwise, there are further important ways in which the initial presentation of the subject encapsulates the salient harmonic features of the whole: its alternation of semitones with larger intervals, which Beethoven had in mind from the outset[45], permits the interpretation of certain notes as auxiliary grace-notes which have been lengthened; the possibility of regarding them in this way is suggested by Beethoven immediately after the subject has been stated by repeating it with the auxiliary notes reduced to quavers in $\frac{6}{8}$ time so that the accents naturally fall upon the main notes: see Ex. 5.9. Moreover in the Allegro section of the Overtura the penultimate A♮ is reduced from a crotchet to a quaver so that it actually sounds like a grace-note (b. 29). If the subject is examined in this way it will be seen that in spite of its chromatic nature the essential notes lend themselves to a harmonisation which is surprisingly simple: see Ex. 5.10; indeed, Beethoven later invites this manner of harmonisation when he adds a brief countermelody - see Ex. 5.11 - but prefers instead to harmonise this passage as B♭ major with a V pedal. It is this same harmonic principle which underpins the Overtura, for it simply descends through fifths from G to B♭ , the I and key of Fugue I. In this respect it resembles, in purpose at least, the Largo introduction to the finale of the Hammerklavier.

This interpretation of alternate notes of the subject as unessential is initially of melodic interest but destined to have harmonic repercussions; a similar case, it may be noted, is Bach's W.T.C.I, 24 in B minor which Beethoven had arranged in 1817, significantly for string

quartet[46]. The subject of Bach's fugue like that of Op. 133 is highly chromatic and consists mainly of pairs of semitonally related notes the first of which may in each instance be regarded as a non-harmony note. In the third entry (b.9-11) most of the dissonances are explicable simply as suspended thirds or appogiaturas. Later in the fugue Bach continues to regard the first of each pair of notes as a non-harmony note, but tempers the dissonance thus created by introducing into the texture other notes with which it is consonant. This is the case in the alto entry (b.21 ff.) whose harmonic progression is identical to that in b.9-11, but because of the introduction of other notes which are consonant with the subject's dissonant notes, intermediate harmonies may be heard. By contrast, Beethoven's harmonisation of his subject's appogiaturas shows a quite different approach to what is essentially the same harmonic principle, for he tends to exploit, sometimes very forcefully, rather than to soften or ameliorate, the dissonance. This is particularly evident in Fugue III, as illustrated in Ex. 5.12. Every melodic fragment in these bars is related to the subject and the simple harmonic progression (indicated in brackets in Ex. 5.12) is enlivened by such unessential notes which clash with the harmony and in one instance produce a false relation. Dissonances such as these are further emphasized in the Grosse Fuge by Beethoven's relentless insistence upon a high dynamic level punctuated with numerous sforzando markings. In spite of the startling modernity of the sound Kirkendale states:

> "Here Beethoven adheres to a traditional fugal practice ... forte performance of fugues was still the norm in Albrechtsberger's time." 47

However Beethoven's departure from this convention is evident from a sketchbook from 1815 in which he wrote:

> "Bei allen Fugen piano u. forte." 48

In the Grosse Fuge Beethoven exaggerates the convention noted by Kirkendale and turns it to poetic ends. Dynamic contrast occurs within the movement

as a whole, but between entire sections rather than between mere sub-sections[49], such that the dynamics take on a structural function. Thus in Op. 133 traditional practice is transcended, not imitated.

Finally, the last feature of the subject which should be mentioned at this stage is one which also lends itself to a harsh and dissonant treatment, although in origin it is a rhythmic rather than harmonic feature. Because of the pause at the opening of the Overtura it is impossible for the listener to realise that the first note of the subject in its initial presentation begins on the second beat of the bar. In Fugue III Beethoven is able to exploit this rhythmic characteristic in such a way that it takes on an harmonic significance: the dotted crotchet may be treated as an anticipatory note which clashes violently with the surrounding harmony as is the case, for example, with the fortissimo viola entry in b.350. Aurally this is related to the appogiaturas mentioned earlier because the C wants to resolve upwards to accord with the D♭ major harmony, and this it does three bars later, but it is really a rhythmic rather than a melodic feature in origin.

By way of conclusion a brief summary may now be given of the subject's melodic characteristics which are relevant to the future harmony and structure of the Grosse Fuge: these are the subject's tendency towards the supertonic key, its neapolitan implications, its melodic structure as an alternation of auxiliary and essential notes, and its syncopated first note which, though a rhythmic factor, is later of harmonic impact. By virtue of these characteristics linear or horizontal factors take on a vertical or harmonic significance. Many of the dissonances which render the Grosse Fuge so difficult for the listener may be explained by reference to the subject in its raw form as it is first heard in the Overtura - one might term it the Ursubjekt. One purpose of the following analysis is the clarification at appropriate points of this relationship

between the melody of the subject and the harmony and structure of the fugue.

Analysis of the 'Grosse Fuge'

Fugue I

30 - 57: in view of the musical events of the Overtura it is not surprising that Beethoven chose to introduce the countersubject concurrently with the first entry of the fugue exposition: it would simply have been tautologous to repeat the end of the Overtura without it and, since the subject is treated throughout in Unterbrechung it could not possibly have had such a dramatic effect were it unaccompanied. The structure of the exposition may be summarised as four entries (I answered by V, repeated), codetta and a redundant entry in the I ending in the V which is then immediately abandoned by a brief modulating episode (b.54 ff.). This expected I - V polarity is lightly coloured by the supertonic implications arising from the subject which are enhanced by appropriate chromatic notes in the countersubject. The answer is a direct transposition modified at the last to reestablish the I, but an important alteration (vlc., b.37) emphasizes the subject's structure as an alternation of auxiliary and essential notes. At the end of the Overtura attention is drawn to the unessential nature of the A♮ by its reduction to a quaver (b.29) and this same principle is now applied to the B♮ (b.28) which sounds as F# in the answer. These explanatory modifications are illustrated in Ex. 5.13 where the confirmed grace-notes are marked 'x'. No corresponding change is necessary in the counter-subject which still sings out a minor sixth above the subject's auxiliary note, but whereas the B♮ and G of the original entry would be heard as V harmony (in C minor) resolving in the next bar (b.33-4), now the F# is heard to resolve immediately[50]. Thus, the harmonic progression of these bars is telescoped into a single beat and the auxiliary nature of certain notes becomes clearer. Moreover, once this modification has

been introduced it becomes the norm for the remainder of the fugue; it is retained in the third entry (vl.II, b.41) which thus differs from the original, and in all subsequent entries except for one where the relevant note falls (vl.II, b.68 ff.), the entries of the syncopated subject (b.111 ff.) and the series of compressed entries (b.139 ff.). Most of these exceptions are however otherwise modified with the *same* purpose in mind: the compressed entries for example demonstrate the auxiliary nature of the subject's opening note (vla., b.139). This treatment of the subject may be regarded as explanatory: it confirms the subject's structure as an alternation of essential and non-essential notes in anticipation of Fugue III where their potential to create dissonance finds its most violent realisation.

The passage which links the redundant entry to the next series of entries may be termed a 'link episode', but it is deliberately welded onto the exposition, being based like the codetta (b.47-9) upon a chromatic extension of the subject. It is inevitable that when the next series of entries begins (with the new triplet rhythm added) the listener will be aware of one section ending and of another beginning. By basing the episode on material from the preceding codetta, Beethoven blends the exposition and episode together and thereby focuses attention not upon the episode, but upon the first stage in the process of rhythmic variation by which this fugue is governed. The diversion of attention away from the episode, that the variations upon the subject might stand out more plastically, is an entirely appropriate and recurrent feature of Fugue I contrasting with, for example, the G♭ major episode from Op. 106, for the degree of emphasis given to each episode is determined by the musical requirements of each particular context.

57 - 72: the next series of entries begins in the IV key, E♭ major, and introduces the triplet quaver movement which begins the

process of rhythmic variation. This is the only occasion during Fugue I upon which the I is not used as the key for a phase of rhythmic development; it is significant that this exceptional key should be the IV, for this is the key momentarily suggested by the original combination of subject and countersubject before the B♮ swings the music into C minor (b.31-2) and also the key to which frequent references are made in the final coda.

The present entry is answered at the V, modulating to F major but as the V harmony in this key resolves the I note is sharpened and the music is forced upwards to the local supertonic minor, a characteristic thrust in this eventful and unresting fugue and one which testifies to the way in which the melody of the subject is woven into the very fabric of the music (vlc., b.66). G minor becomes major and acts as V in C minor, a most important key and that in which the next episode begins.

72 - 78: this episode, like the preceding one, is noticeably more chromatic than the entries which it thus throws into relief, highlighting the technique of rhythmic variation which proceeds with each new presentation of the subject; the entries tend almost invariably towards the supertonic minor apart from which they remain diatonically stable, whereas the episodes flit rapidly through a variety of keys; the fact that these keys are almost always on the flat side (E♭ major/minor, G minor and C minor in the first episode, b.54-7) is a constant preparation for the sudden move to Beethoven's favourite key, the ♭VI, here G♭ major, which concludes Fugue I. The present episode (b.72 ff.) ends in typical fashion with a series of descending fifths but the minor keys are used (D minor, G minor, C minor and F minor, b.74-7), rather than their more simple, but sharper, major counterparts. This is consistent with the policy of emphasizing the flatter keys in anticipation of the remote

tonality of Fugue II, and also gives rise to interesting thematic considerations noted below[51]. This cycle is preceded by an interrupted cycle (C minor, F major/minor[52] interrupted by G minor, b.72-4) which duplicates the underlying principle of the earlier link episode (b.66-7), sharpening the I (F) upon resolution to deflect the tonality upwards, and again illustrating the influence of the subject upon the finer details of the harmony.

Thematically this episode is based upon the end of the countersubject as it has just been modified (vl.I, b.71-2). This fragment which is passed in developmental style around the upper instruments while triplets in the 'cello maintain the sense of forward drive has been traced by Kerman to the end of the countersubject in the answer from the exposition (vl.II, b.38-9)[53], an interesting observation for this relationship undoubtedly enhances the thematic unity of the first fugue. However, the presentation of the subject and countersubject which begins prior to this episode (b.67-8 ff. in vl.I and vl.II) is extensively modified and the episode thus continues a process of thematic development which has already begun. It therefore seems more relevant, firstly to relate this fragment to the end of the modified countersubject which it doubles at the compound lower sixth and which from an aural viewpoint is undoubtedly its raison d'être, and only thereafter to explain its appearance by reference to the exposition; such an approach emphasizes the most important feature, the fact that this episode grows organically out of the preceding entry. In the latter half of the episode this fragment is extended and a comparison with a later part of the movement becomes relevant; after the cadence in D minor (b.109), the only point at which Fugue I comes momentarily to rest, a fragment is heard in stretto which is very closely related to that which pervades the present episode, though it entails a subtle melodic alteration which is not featured in the countersubject

during the exposition: see Ex.5.14. The melodic extension which both of these fragments share, but which is not featured at the beginning of the present episode, stems from Beethoven's use of minor keys during his cycle of fifths and the need to raise the III before it can function as VII in the next key of the series: see Ex. 5.15. In this way a link is produced between the beginning of this episode (and thereby the exposition) and a later point in the movement, a thematic link which is dictated by harmonic necessity[54].

78 - 82: the entry of the subject (vl.I, b.79 ff.) takes up the preceding supertonic modulations by juxtaposing F major and G minor, a typical semitonal slide (V^7 in B♭ becoming VII^7 in G minor, b.79-80) shifting the tonal plane[55]. As far as the technique of rhythmic variation is concerned this entry is not of great importance, since no new rhythmic combination is heard. However there is a rhythmic purpose in this passage which reveals Beethoven's mastery of the subtleties of composition: for a moment the listener is led to expect that the countersubject accompanying the entry will be heard in canon at the half bar. Although his expectations are here disappointed since this proves to be a mere doubling of the countersubject at the lower third, Beethoven has nevertheless drawn the attention to this possibility and thus prepared the lengthy episode which follows, the greater part of which deals with the countersubject in this very way. The dominance of the countersubject over the subject for almost the next thirty bars is asserted by unexpectedly beginning the second entry of the countersubject half a bar early (vlc., b.82) and by omitting the subject even though the countersubject is here heard in its entirety and extended.

82 - 109: although the subject is not present with this entry of the countersubject, yet its harmonic implications are retained in the harmonisation of the countersubject - F major to G minor to

F major[56] which becomes V in B♭ major. The process of sharpening the I to force a modulation upwards is now used to drive the episode from B♭ major through C major to D minor (b.86-8), the new V being added beneath each sharpened note for greater stability. The dependence of the harmony here upon the combined subject and countersubject may best be illustrated by comparing the first such modulation with the beginning of the exposition[57]: in both cases the key is B♭ major to which A♭ is added with IV implications which are however cancelled immmediately by sharpening the I.

As the episode continues the rhythm of the countersubject gradually takes over the texture and is then fragmented; such dissolution inevitably prepares the way for a new event and in this case it is an extensive stretto of the countersubject in an abbreviated form in the key of F minor. Before the stretto proper begins with an entry every half bar (b.98) there are two introductory entries in canon which relate back to the aborted canon at the last entry of the subject (b.78-9). Having thus reminded the listener of his intentions to treat the countersubject in this way, Beethoven proceeds with the stretto itself. This is the most diatonic section in the whole of Fugue I, pure F minor without even a reference to the supertonic. The tendency of the music to move in the episodes to the flat side has already been mentioned as a way of preparing the key of Fugue II, and now, slightly more than halfway through Fugue I, the tonal centre settles, albeit temporarily, in the flattest key so far heard, F minor, which lies halfway between the I and ♭VI, the key of Fugue II. Further preparation will entail a less extensive use of still flatter keys in the episodes yet to come (D♭ major and B♭ minor, for example in b.120 and b.124 respectively).

The final entry of the present stretto reinstates the beginning of the countersubject, signalling the end of the stretto and the beginning of

something new (vl.I, b.101 ff.); this is the treatment of the counter-subject by thematic reduction, as illustrated in Ex. 5.16. During the course of this process the music becomes more chromatic, again striving upwards through supertonic keys (F major to G minor and then towards A minor in b.103-4) but cadencing finally in D minor.

109 - 110: after the emphatic cadence in D minor a brief two-bar link leads to the next entry of the subject and countersubject. This link is based upon the fragment discussed above[58], and its evolution during the course of the fugue is summarised in Ex. 5.17. It will be seen from these quotations, which have been selected because they show each stage of the fragment's development at the same pitch, that the melody in its original form comes to rest on an E♭, but is subsequently extended by the addition of an E♮, the purpose of which, it was suggested earlier, is to facilitate a cycle of fifths based upon minor flat keys[59]. Except for the sake of producing such an emphasis, the E♭ serves no harmonic purpose: indeed it may be regarded as a decoration of the E♮, an upwardly resolving grace-note in the manner prescribed by the subject, as is substantiated by an intermediate stage in its development (Ex. 5.17(ii)) which reduces the E♭ in length and thereby audibly relates it to the grace-note technique. The non-essential nature of this note of the fragment is further confirmed as B♭ major is re-established for the entry of the syncopated subject (b.110-11): the relevant notes (A♭ and C♭) produce a diminished harmony which facilitates the introduction of the countersubject on D (vlc., b.110) and enriches the cadential Ic-V^7c-Ib progression: see Ex. 5.18. Thus, this fragment which is directly based upon the countersubject takes on, as a result of its evolution, the most prominent harmonic characteristic of the subject. Its transferal at this point to a new degree in the scale - the E♭ sounds as ♭II in D minor instead of III in C minor - strengthens the link with the subject whose second note is the (enharmonic) neapolitan. In this way it illumines the harmonic-thematic suitability of subject and

countersubject to each other. Finally the fragment here serves the immediate thematic purpose of preparing the return of the countersubject (in vlc., b.110)[60]; this might account for the subtle alteration to its thematic contour noted in Ex. 5.14.

110 - 118: the entry of subject and countersubject which now begins in the I constitutes the next stage in the process of rhythmic variation: the subject is displaced by half a beat and a new anapaestic rhythm is added, the melody of which has been taken by Lam as the impetus for the countersubject of Fugue II[61]: see Ex.5.19. On its first appearance (vl.II, b.111 ff.) it also adumbrates the melodic contour of the present countersubject. The introduction of this material is an important event in the rhythmic structure of the fugue whose thematic unity at this stage is enhanced by grafting the new rhythm onto the countersubject (vlc., b.112) which is then transferred to another voice (vl.II, b.112) until the subject (vl.I) breaks off: see Ex.5.20. In the answer version (b.114 ff.) the countersubject is similarly divided (this time between vl.I and vla.). As expected the answer is in the V (with a temporary remove to G minor), but the viola's continuation of the countersubject is altered to imply a return to F minor instead of F major[62]. The significance of this harmonic difference between the two parallel passages lies in the current preference of flatter keys in anticipation of Fugue II, for it is in the episode which now follows that Beethoven introduces the flattest keys heard in Fugue I and his suggestion of F minor rather than F major in the preceding answer clearly accords with his purpose.

118 - 138: consistent with earlier examples, the present episode is grafted onto the preceding material by developing the tail end of the countersubject; in this way Beethoven directs the listener's attention away from this seam which is relatively unimportant and focuses

it upon the next vital seam at which a further rhythmic variation of subject and countersubject begins (b.138); for this reason this latter seam is clearly demarcated by an emphatic Perfect cadence.

The tonal structure of this episode, generally moving through fifths with an occasional shift to the supertonic or relative minor, is summarised in Ex. 5.21: supertonic modulations are bracketed, while moves to the relative minor are indicated by slurs. The numbers above the system indicate the repeated progression of the music flatwards. The tonal purpose of this episode is to prepare the listener for the forthcoming move to G♭ major, but it is not Beethoven's intention at this stage to settle even momentarily into a key so remote, and the supertonic modulations and shifts to the relative minor are therefore to be understood as a means of preventing any further flattening of the tonality. Each time the music heads towards the flattest regions it is diverted in one of these two ways, the result being that the entire episode remains flat, but not excessively so. Moreover, since the next important event (like most of the rhythmic variants of the subject) is to occur in the relatively sharp key of B♭ major the diversions are strategically placed in such a way that the process of flattening the tonality by descending through fifths is halted at an earlier stage towards the end of the episode than at the beginning; this is clear from Ex.5.21. In this way the episode serves a dual harmonic purpose: by introducing flatter keys than have so far been heard, it prepares the G♭ major tonality of Fugue II, but at the same time it prepares the more imminent return to B♭ major, by restricting the use of the flattest keys towards the end of the episode. This interpretation, which reveals a gradual tightening of the tonality, illumines the logic which underlies the episode's repeated use of the same progression, for this might otherwise appear to lack direction and purpose. The process of tightening the tonality is perfectly complemented by Beethoven's

handling of the harmonic rhythm: it will be seen from Ex.5.22, which depicts the approximate duration of the tonalities through which the episode progresses, that the descent through fifths is at first quite rapid, but slows in pace as the flattest keys are omitted. Thus, as the tonality is tightened so the harmonic pace slows, giving emphasis to the tonic return and the entry of the compressed subject.

Finally it is important to note that the syncopation which was introduced during the preceding entries becomes a more prominent feature towards the end of the episode, asserting more forcefully the equal status of the four instruments. At the climax to Fugue III (b.477-92) the melodic independence of the four voices becomes absolute, and it is doubtless to such remarkable passages as these that the first bewildered critic referred:

> "the fugal finale ... was incomprehensible, like Chinese ... when each of them [the four instruments] has a different figuration and they cross each other with accented passing notes and an immense number of dissonances ... then indeed, the Babylonian confusion is complete." 63

The syncopation of the subject which informs the present episode and the preceding entries as well as much of the material in the remainder of Fugue I, has its origins in the very beginning of the Overtura whose opening statement of the subject begins on the weak beat of the bar. This feature of the subject is now exploited both for its rhythmic and for its latent harmonic effect: at the beginning of the episode (vlc., b.118-9) there is an harmonic anticipation, the 'cello each time anticipating the cadence with dissonant results; this is followed by a melodic anticipation as the syncopation, originally a feature of the subject, is grafted onto the material of the countersubject currently being developed (vlc., b.119-21). The effect is quite different from the conventional classical cadence involving a suspended V harmony over a I bass, for it involves impetuous anticipation enhanced by vigorous syncopated rhythms,

rather than a gentle delayed resolution. In Fugue III this characteristic of the subject is used with considerable force.

138 - 147: the next series of entries announces that the end of the fugue is at hand for they amount to a repeat of the fugue exposition in the I. The texture is reduced to two parts, as at the beginning of the original exposition, and the subject and countersubject enter at the same pitches and in the same voices and order as in the original, except that the fifth, redundant entry is omitted. The fugue does not however fall into sonata form[64]; a more accurate description would be 'rondo variation form' though the lightweight character generally connoted by the word 'rondo' renders its suitability questionable. Although in essence a repeat of the original exposition, significant rhythmic alterations are made: both the subject and countersubject are compressed, the former remaining syncopated, the latter now moving in regular triplets so that for the first time in the fugue the relentless dotted rhythm is absent, a temporary respite which makes its climactic return at the end particularly effective. The omission of the rests which have punctuated the subject throughout this fugue has the effect of revitalising the material, injecting it with fresh energy and impetus by which to sweep the fugue on inexorably to its conclusion. It also constitutes the last and climactic stage in the process of rhythmic variation which is the main driving force of Fugue I.

147 - 158: the repeat of the fugue exposition is followed by a coda which leads directly into the Meno mosso & moderato of Fugue II. This coda continues the triplet quaver movement and the syncopated rhythm of the subject from the preceding section, and begins with a slow descending sequence, a two-bar unit repeated, followed by a rapid ascending sequence, a rhythmic contrast which is entirely appropriate for it leads to a

climactic return of the dotted rhythm as the countersubject bursts in again, its leaps to the opposing reaches of the pitch spectrum, calling to mind the climactic entry of the subject in the Hammerklavier sonata (Op.106 (iv), b.333).

The tonality of this climactic juncture is B♭ major, passing very briefly through other keys beginning with C minor. This final supertonic modulation in Fugue I reasserts the fusion noted above of the rhythmic drive and melodic contour of the countersubject with the harmonic characteristics of the subject[65], for the 'cello line, based upon the countersubject in free inversion, takes on the harmonic function of the subject in its absence, sharpening the I to serve as a VII and driving the music upwards (vlc., b.153-4). Just as it seems that B♭ major will be re-established, the root of its V^7 slides onto a G♭ and chord VI in B♭ minor becomes the new I without even a hint of a Perfect cadence in that key. Fugue I does not really end; rather it is stopped in its tracks by an abrupt change of key which establishes the remote tonality of Fugue II. Although the episodes concentrate, as shown above, upon flat keys in anticipation of this move, it nevertheless remains unexpected for there is no actual modulation, and its logic becomes clear only in hindsight.

Fugue II

159 - 167: Fugue II is in complete contrast to Fugue I. Its exposition is preceded by an eight-bar introduction which serves several purposes: most obviously it initiates a new and more serene atmosphere, replacing the storminess of Fugue I with a lyrical calm and emphasizing this change by confirming the new tonality of G♭ major. Kirkendale points out that Beethoven's initial intention was to begin Fugue II in D♭ major[66], thus preparing the ♭VI key by reference to its V as actually happens in Op. 106 (IV)[67]. A change of heart however resulted in the immediate and

arresting introduction of G♭ major[68].

In addition to establishing this key these preliminary bars serve to introduce the new countersubject to which allusion has already been made in the Overtura. The first two bars deal however with the subject, the melodic contour of which is evident though its precise intervals are altered. Its new rhythm, like its $\frac{2}{4}$ accentuation in the exposition below, gently restates the auxiliary nature of certain notes as indicated in Ex.5.23[69]. A related technique is evident in the new countersubject where the grace-notes take the form of sighing appogiaturas[70], whose effect is quite different from the harmonic clashes created in Fugues I and III. Certain of these appogiaturas may more accurately be described as suspended passing notes, but their relationship to the auxiliary notes of the subject remains aurally clear: the relevant notes are marked 'x' in Ex.5.24. These falling appogiaturas are balanced in the viola part by rising non-harmony notes, which is indeed appropriate since the subject itself contains both types of auxiliary note: the current prominence of the appogiaturas however, accounts for the comparatively restful nature of Fugue II. Unlike the subject, the present countersubject is perfectly diatonic; a substantial central portion of it is however suited to harmonisation in the supertonic minor, as indicated by the bracket in Ex. 5.25. This capacity to entertain that particular modulation further underlines the suitability of this countersubject to the subject. Its presentation prior to the exposition allows it to dominate the subject, but in a much less emphatic manner than does the countersubject of Fugue I. Fugue II thus serves as an intermediate stage in the gradual emergence of the subject throughout the Grosse Fuge, as would be confirmed by a brief comparison of the three expositions.

167 - 191: the exposition of Fugue II preserves the subject's

intervals exactly and thus entails a shift to the supertonic minor in each of the four entries. In respect of Op. 133 Kerman states:

> "Beethoven is working less with fixed pitches than with the general shape of the theme - a semitone up somewhere around the tonic, followed by a large leap of one sort or another." 71

In the present view his observation is simply erroneous: the fact is that every entry in the exposition of all three fugues preserves the intervals prescribed by the Overtura exactly, the sole exception being the answer version of Fugue III (vla., b.280 ff. and vl.I, b.296 ff.). In addition the non-fugal B♭ major scherzo-like passage (b.233 ff. repeated at b.533 ff.) is based upon the same interval series and the Overtura, contrary to Kerman's implications, does adhere consistently to this pattern as the subject is given in each of its four guises (b.2-10, b.11-13, vlc., b.21-5 and vl.I, b.26-30). Admittedly there are entries which alter the interval series, but the fact that this series is retained by all of the most important entries throughout the entire movement makes it quite clear that Beethoven had a very precise concept of his subject's intervallic structure.

The first pair of entries in the exposition of Fugue II are separated from the next by a codetta of unusual length which amounts to a modified repeat in the V of the opening introductory bars (b.159-67), the most important modification being the inversion of the initial references to the subject. The second pair of entries is identical to the first except for two slight alterations to the countersubject (vl.II, b.188 and b.191); from an harmonic viewpoint neither of these alterations is necessary, but they serve to intensify the lyrical beauty of the countersubject by introducing further non-harmony notes in the manner prescribed elsewhere, the first being an appogiatura, the second a suspension.

191 - 209: the final entry of the exposition is followed by a brief link episode leading to the middle section of the fugue which

begins with a two-voiced stretto of the subject, the first entry accompanied by the countersubject. This material is then developed in a cycle of fifths leading back to the I, G♭ major, for the final section of the fugue. The countersubject which leads the stretto (vl.II, b.193 ff.) may be traced in full, retaining incidentally its modification from the end of the exposition, though it is here passed between the second violin and viola. The purpose behind this choice of instrumentation is that it explains the manner in which the material is now to be developed, for it is that portion of the countersubject assigned to the viola, which is used as the basis for subsequent development as illustrated in Ex.5.26. The upward transposition by a third of the second group of four notes in this fragment is determined by the slight modification made to the countersubject in the preceding bar (vl.II, b.195 first beat), and its effect is to give the fragment in the violin an imitative sound as an impetus to thematic development. This becomes clear from the comparison of the present version of the countersubject with that heard at the end of the exposition, as offered in Ex.5.26: although the countersubject is heard in full and its melody quite strictly preserved, yet the eight-note fragment is present three times within that melody as a basis for the development which follows. As a result there is a very real sense of organic growth: the thematic material is not stated and then developed, rather development begins while the material is still being stated. This is true also of the subject, for by reversing the order of its last two notes Beethoven is able to extend it in a freely sequential manner which portends development. Thus, instead of rising temporarily to the supertonic key, the tonal plane is raised first from D♭ major to E♭ minor and thence to F major so that the supertonic modulation becomes an integral part of the harmonic structure, rather than a temporary colouration of the tonic.

During the course of this process the fragment from the countersubject

comes to the fore and the passage builds to a climax, albeit sempre pianissimo, by spreading the texture more liberally across the pitch spectrum and by introducing the fragment in inversion and combining it with itself recto and inverso. The subject, which began in stretto as the main feature of this passage, has by now fallen out of the texture altogether making its imminent return more effective, but also underlining the relative importance of the countersubject in this fugue: by the end of the exposition the countersubject has been stated twice more than the subject: during this central section of the structure the countersubject gradually usurps the limelight and in the coda, which is the only section of the fugue to move outside the reaches of a pianissimo dynamic, it dominates completely, being stated forte in octaves. Only in Fugue III does the subject gain absolute thematic supremacy as the countersubjects of fugues I and II are replaced by a fragmentary variant upon the subject.

209 - 232: the final section of Fugue II opens with one of many passages which reveal Beethoven's convictions regarding the importance of the poetic element in fugue[72]: essentially it is a repeat of the first entry in the exposition, but the texture is here raised to the heights, the lowest note being the pedal G♭ above middle C as the 'cello moves into its uppermost register, weaving the countersubject in and out of the subject[73]. This is in sharp contrast to the preceding texture which embraces between four and five octaves, and Beethoven underlines the poetry of this stroke by repeating his demand for the tenderest dynamic level. A series of cadences, based upon the last two notes of the subject with anticipatory resolutions, leads into a freely varied statement of the subject by which G♭ major is re-established. The dynamic is raised, counterpoint abandoned and the countersubject given forte in parallel octaves at four different pitches (b. 223 ff.) and extended by the very fragment developed in the middle section of the fugue. This settles onto V harmony in the home I which resolves as the scherzo-like Allegro begins.

Allegro molto e con brio

233-272: this section which prefaces the third and most complex fugue, serves to establish the tempo and compound rhythm of that fugue. It also reminds the listener of the subject's precise intervals and of its potential to be regarded as an alternation of auxiliary and essential notes, since the compound rhythm naturally emphasizes the subject in this way. Although this section is non-fugal in nature the subject is answered at the fifth and it is then given a brief new countermelody (vl.I, b.237-9) which has already been mentioned because its combination with the subject suggests the subject's harmonisation by a descending cycle of fifths[74]. This combination is a masterstroke, for the trill figure which is thus introduced becomes in the subsequent fugue a part of the subject itself and in this way Beethoven prepares the use of the subject as its own countersubject, an important landmark in the Grosse Fuge as a whole given the dominance of the countersubjects in the preceding fugues. The rest of the introduction concerns itself with a light skipping eight-bar melody (extended by repetition to twelve bars) which does not lend itself to fugal treatment though fragments of the subject are placed against it. This melody is beautifully linked to the preceding combination of subject and new counter-melody by a trilled D falling to C (vl.I, b. 241-2): at first these two notes sound to belong to the preceding material whose melody they echo, but it then becomes clear that they are a part of the new melody also which would otherwise be an irregular eleven bars in length. Their role as an integral part of this new melody is clear from the fact that they balance, both rhythmically and melodically, with the rising A to B♭ at the end of that melody and in so doing produce a palindromic series of rhythmic units, as noted in Ex. 5.27; in this way they serve a dual role, echoing what precedes while giving impetus to what follows. The melody itself is entirely appropriate from an harmonic viewpoint since it concentrates upon the tonic, the dominant and both of their supertonic minors, a further indication of the extent to which this fugue, even in its least

fugal moments, is shot through with the characteristics of its subject. The repeat by which the melody is extended from eight to twelve bars reinforces the importance of the original supertonic by returning briefly to C minor (b. 249-53): see Ex. 5.28. The whole passage since the introduction of the new countermelody is then repeated with a slightly enriched texture and octave transposition, leading again to a cadence in B♭ major. At this point the lightness and simplicity of the music are rudely interrupted by an unexpected rhythmic twist whose purpose it is to enable the subject to begin in A♭ major on the second beat of the bar. In its simplest form the passage might have been written as shown in Ex. 5.29, in which case Beethoven could still have begun the fugue subject on the second beat of the bar, either immediately after the A♭ or before it to clash with the G in a manner absolutely typical of this fugue: see Ex. 5.29. Effectively this is just how he does treat the first violin part, but he enhances the cross-rhythm by inserting an extra beat (the dotted crotchet rest in vl.I, b.271) which enables the fragment upon which these bars are based to be given in stretto between the violins: see Ex. 5.30. A final subtlety is the way in which the 'cello falls silent, making its entry on A♭ with the subject of Fugue III that much more emphatic. Since this entry completes the process of reversal, re-stating the contents of the Overtura in reverse order, the Grosse Fuge has by this stage come full circle thematically; tonally however, it is far from home and has thus far run less than two fifths of its course.

Fugue III

272-305: the exposition of this momentous third fugue upon which Beethoven now embarks will bear brief comparison with the corresponding section of Fugue I: in both instances the entries of the subject are dovetailed in accordance with Albrechtsberger's recommendations and practice[75], but in the present exposition the codetta and redundant entry are omitted, doubtless because the subject in its present form is

considerably longer than that of Fugue I, but also because their inclusion would undesirably restrain the pace of events in much the same way that an ill-placed aria might delay action in an opera. The dramatic bursting in of the subject demands that the fugue proceed inexorably; this is achieved, not by a redundant entry, but rather by the introduction of the complete subject in stretto with the second answer (vl.II, b. 298 ff.)[76]. Once the exposition is complete the progress of the fugue is maintained by a tendency to reduce the length of the subject to a cell containing but a few notes. As in the exposition of fugue I, so here each entry embraces a temporary shift to the supertonic minor, but the present answer is given on the dominant note rather than in the dominant key. The I - V polarity of the exposition is conveyed by the long opening note of the subject and by the modification made to the answer which directly parallels its treatment in Fugue I (cf. vla., b. 287-9 with vlc., b. 38-9). A most significant alteration to the subject of Fugue III is the restoration of the trill which though present in the Ursubjekt has in the two preceding fugues been omitted. This anticipates later developments during the fugue, as the trill becomes a prominent part of the texture, and at the same time provides an ingenious link between Fugue III and its homophonic preface, as noted above[77].

The structure of the present exposition may thus briefly be summarised as follows: entry in A♭ major, answered on E♭, both entries being repeated with an extra entry in stretto against the second answer. The entry in stretto is complete and not quite as grossly distorted as might at first appear: see Ex. 5.31. A most unusual modification is the compression of the subject's third and fourth notes into a single bar, which seems further to illustrate the auxiliary nature of the original F♮, an important characteristic of the subject and, in Fugue III, of the countersubject also, since these are formed of fragmentary references

to the subject. The first countersubject is regularly employed, the second less so, its intervals being varied freely but its general contour remaining consistent. If applied specifically to this countersubject, Kerman's argument would be substantiated[78], for the rhythm and style of these countersubjects (particularly the second) are of greater consequence than their precise pitches: the important factor is not whether or not their intervals are accurately preserved, but rather that both are melodic variations upon the subject and consequently the texture is saturated with a single theme to which allusion may now be made in three different, and distinctly individual, rhythms simultaneously. Until the return of the countersubject from Fugue I (b. 414 ff.), there is very little material which cannot reasonably be traced to the subject.

305-308: the end of the exposition is connected to the first series of entries by a link episode which modulates from A♭ major to F minor. Though normally a simple modulation between related keys, Beethoven here inserts an unrelated harmony, I in G♭ major, between the I in A♭ major and the V^7 in F minor. This unusual procedure may be explained by reference to the subject which invites the stepwise movement implicit within the use of neapolitan harmony (G♭ in F minor). Future passages also entail such deviations from the harmonic norm which may likewise be traced to the subject[79].

308-350: a substantial portion of Fugue III is now based upon a harmonic device postulated both by the Overtura and by the subject itself, the cycle of fifths. The first cycle begins immediately, dealing with a four-note fragment of the subject, and this is subsequently repeated with the fragment altered slightly (b. 350 ff.). Between these passages lies an extended continuation of the first cycle, based on the tail end of the subject descending enharmonically to G♭♭ minor[80]. Grew erroneously states:

> "This episode moves from A flat to F minor, through a series of sharp keys - I use the italics to direct attention to the exceedingly significant circumstance that it is only here, in the entire course of this long work, that sharp keys are employed." 81

Although an 'exceedingly significant circumstance', it is one upon which he offers no elaboration. The fact is that, as Bullivant observes,

> "the notation in sharps is meaningless." 82

During these cycles Beethoven engages the listener's attention both by the sheer energy of the music and by the grinding dissonances which frequently occur because of the subject's readiness to be construed as an alternation of auxiliary and essential notes. Such harmonic disagreements were latent within the Ursubjekt but it is in this section of the fugue that they find their most striking realisation so far. It is the relentless exploitation for harmonic effect of this melodic characteristic of the subject, and of both the present countersubjects, which gives the Grosse Fuge its boldly uncompromising sound, for in almost every bar there are dissonant notes directly related to the subject's melodic structure.

The series of entries which now begins involves the reduction of the subject to a mere four notes in a manner typical of Fugue III, for the subject in its entirety, as heard during the exposition, is only once restated and even then altered slightly (vl.I, b. 370 ff.). In Fugue I the principle at work is that of development by rhythmic variation, the subject being stated in full but its length and rhythmic environment being subjected to constant alteration; here however the principle is that of melodic variation, the subject being split into a number of units which are then reassembled in various ways. The thematic catalogue in Ex. 5.32 shows upon which parts of the original the main versions of the subject during the remainder of Fugue III are based. The subject as given inverso in E♭ major (vl.I, b.416 ff.) seems to place more emphasis

upon the principle of rhythmic variation than upon that of restructuring the subject by a re-ordering of its constituent parts, though this latter principle is evident in the omission of its final unit. This is significant for it is precisely at this point, as the technique of melodic variation just described gives way to that of rhythmic variation in the manner prescribed by Fugue I, that the countersubject to that fugue returns. Thus, in Fugue III the subject is broken down into its basic elements before being reconstituted in the coda, and the relentless progress of the music assured in thematic terms by a deliberate avoidance of full statements of its lengthy subject.

The present series of entries illustrates this point by reducing the subject to a basic four-note figure which is presented by each of the four instruments in descending fifths. An extra entry in stretto (vlc., b. 322 ff.) re-introduces the trill figure as an impetus for the episode which then begins, and at the same time prepares the next series of entries which likewise involves the juxtaposition of the subject's opening and concluding notes. This latter series of entries (b. 350 ff.), although in essence a repeat of the preceding series (b. 308 ff.), is an important point in the fugue, for with the first entry begins the continuous quaver movement which relates back to the triplet version of the countersubject heard during Fugue I (b. 138 ff.). In view of the importance of this movement in the structure the first series of entries and the episode which follows (b. 308-50) are constructed in such a way as to lead up to the viola entry on C (b. 350 ff.) in order to maximise the dynamic injection of energy which occurs at this point. The most obvious way in which this is achieved lies in the sheer predictability of the lengthy enharmonic cycle of fifths and also in the apparent disintegration of the counterpoint during the episode, which tends more and more to be heard homophonically even though a fragment of the subject is continually being presented in stretto: see Ex. 5.33. This paradox

of homophonic-sounding counterpoint arises because of the harmony, which invites the ear to dissociate the opening tied note from the remainder of the fragment. After this the introduction of a new rhythm in combination with the subject, in an unambiguously contrapuntal texture, will inevitably claim the listener's attention as a landmark in the structure.

These harmonic and textural preparations for the viola entry are complemented in melodic terms by the technique of thematic reduction, as summarised in Ex. 5.34 whose brackets group together those phrases occurring during the entries and those during the episode. Ex. 5.34 (iii) acts as a transition between those fragments which refer to the opening of the subject (Ex. 5.34 (i) and (ii)) and those which deal with its concluding trill figure (Ex. 5.34 (iv)-(vi)), since it juxtaposes the two, with the central portion of the subject omitted. This promotes continuity between the two sections and prepares the shift in emphasis away from the opening of the subject to its trill figure, making the viola entry, which reinstates the subject's long opening note, considerably more emphatic. A further contributing factor is the way in which the rhythm and shape of Ex. 5.34 (v) are curtailed in order to initiate the new quaver accompaniment as shown in Ex. 5.34 (vii); this is one of the most striking means by which the viola entry is brought to the listener's attention as a new and important event in the fugue.

What Ex. 5.34 does not show however, is a certain degree of overlapping between these phrases: thus, a reduced version of Ex. 5.34 (vi) may be noted as early as b. 328-9 (vla.) while Ex. 5.34 (iv) persists throughout the episode in spite of the reductions which take place concurrently in the other voices. This in no way detracts from the general effect of thematic reduction which is readily perceived; in fact the insistence upon Ex. 5.34 (iv) provides an appropriate anticipation of the harmonic treatment of the forthcoming entries, for, like those entries, it entails

the apparently premature introduction of the first note which clashes with the surrounding harmony. Beethoven's treatment of this dissonance is ingenious: it is at first a relatively mild disagreement, the suspended third of a V^7 harmony which, instead of falling and then resolving upwards, simply remains constant (e.g. vl.II, b.326-7). During the course of the episode this mild dissonance is tempered, becoming consonant (e.g. vla., b.338-9) but with the entry of the subject in the viola Beethoven resorts again to a dissonant note and selects one harsher than the original suspended third (vla., b.350-51), to which however he subsequently returns (vl.II, b.354-5). Clearly the effect of this is further to emphasize the viola entry. This consideration of the episode illustrates a point made earlier[83], the way in which an essentially rhythmic feature of the Ursubjekt takes on an harmonic significance.

350 - 379: the harmonic structure of this section, to which the preceding episode has so masterfully directed the attention, is of great interest in view of its relationship to the melodic contour of the subject. It is therefore summarised in Ex.5.35 which indicates also the point at which the subject enters and the way in which its opening note relates to the surrounding harmony. From this simplification it is immediately apparent that the underlying harmonic principle is yet again a cycle of fifths; although such cycles are common in Beethoven's fugues, notwithstanding his tutor's dismissal of their suitability to fugal writing[84], and although they are of especial interest in the Grosse Fuge given its subject and the structure of the Overtura, yet there can be no doubt that an ordinary cycle at this stage would have become tedious, since no other harmonic principle on the large scale has so far been employed since the end of the exposition. Beethoven therefore enriches this progression with a harmony whose suitability is assured by reference to the subject; the resultant progression is simplified in Ex.5.36.

The harmony concerned (marked 'x' in Ex.5.36) is neapolitan-sounding relative to the key which precedes it (and thus originates in the second note of the subject) and based on the ♭VI of the key which follows. It is enhanced moreover to become an augmented sixth harmony, a transformation which is the direct result of the non-essential notes of the subject, as shown in Ex.5.37. Its presence at first is tentative (B♮, vl.II, b.350) then more emphatic (E♮, vl.II, b.357) until finally it is confirmed as an integral part of the harmony by its additional introduction in one of the accompanying parts (A♮, vl.II, b.361). Thus, the basic harmonic structure of this passage is coloured in a manner which is entirely appropriate given the melodic contour and implications of the subject.

Upon reaching A♭ major the cycle of fifths is aborted and there is a supertonic shift to B♭ minor, followed by a temporary interruption in G♭ major for an entry of the subject in full. This key is unexpectedly introduced in a manner which has obvious parallels with the end of Fugue I, but B♭ minor is then re-established and endures for some time. This important key is supertonic relative to the A♭ major tonality of Fugue III and acts as a preparation for the ultimate return to B♭ major. Its introduction is emphasized by a passage of harmonic reduction, summarized diagrammatically in Ex.5.38, which is offset by the avoidance of a clear V harmony and solid Perfect cadence. In this way the extended passage in B♭ minor (b.365-403) is the undisputed harmonic goal of the preceding modulations, but the music sweeps on to its melodic goal, the entry of the subject in the key of G♭ major which is a temporary interruption of B♭ minor. This entry is highlighted by a brief suggestion of thematic reduction as noted in Ex.5.39 and by the chromatically rising bass which simply settles onto chord VI. The passage thus illustrates Beethoven's mastery of harmonic balance, a local balance between emphasis and diversion of emphasis which keeps the music surging onwards and prevents the Grosse Fuge from ever becoming static or predictable. The

key of B♭ minor is the point of arrival in harmonic terms - harmonic reduction and supertonic modulation constituting emphasis - while G♭ major is the climax of this passage in melodic terms - thematic reduction leading to the only complete entry of the subject in the entire fugue after the exposition, constituting a diversion of emphasis, away from the real harmonic goal towards a temporary substitute. This juncture of the fugue is important to the tonal balance of the movement on the larger scale also, for in Fugue III Beethoven comes closest to upsetting the equilibrium by emphasizing the tonality of A♭ major so extensively. As Bullivant observes:

> "the key of A flat is pushed to the very brink of overbalancing the key-scheme of the whole work - but by a miracle it never does." 85

This 'miracle' is achieved partly by the avoidance of a final I chord in prominent A♭ major cadences (b.453 and b.510 ff.) but also by the present extended dwelling upon B♭ minor, without which the drastic return to B♭ major prior to the coda would not convince. So often the tension within the Grosse Fuge arises from the delicacy of this balance as the whole giant structure strains against the bounds of musical sense, pushing them to their limits but never quite beyond.

The unorthodox means by which G♭ major is 'established' is worthy of consideration for it entails the progression Ic - I with the expected intermediate V omitted. This is typical of late-period Beethoven and here it is particularly apposite for it enhances the effect of this key as one of interruption. Only when the fortissimo G♭ in the 'cello is heard and there are two bars of this harmony, does G♭ major become accepted as the new tonal centre. In addition, the absence of the V harmony implies that this key of interruption is not here to be established with any degree of permanence; in fact there is not even a hint of modulation: the I in B♭ minor is simply stated with its fifth

omitted and the new I added to initiate the entry of the subject[86]. At this point the trill, present in the Overtura but absent thereafter until reintroduced in the Allegro molto e con brio in preparation for Fugue III, bursts out and begins to dominate the texture. Quaver movement is continued by the second violin with a dissonant grace-note on every beat in the manner prescribed by the subject, and the level of dissonance further raised by a tonic G♭ pedal which is heard beneath all but the entire entry, including its passing modulation to the supertonic minor. The most important modification made to the subject is its rhythmic displacement by half a bar which results from the reduction of its fifth note: see Ex.5.40. This G♮ is thus treated as a non-harmony note resolving onto the A♭ in accordance with my analysis of the subject as an alternation of essential and non-essential notes. Moreover, the grace-note in the second violin at this point is transferred from the first to the second quaver of the beat to ensure that the dissonant G♮ is in no way mollified.

378 - 414: as this entry concludes the 'cello slides emphatically back onto the V of B♭ minor, reversing the process of the chromatically rising bass by which G♭ major had been reached, and initiating a stretto of entries of the subject drastically reduced so that it now consists of just three notes; on alternate pairs of entries a grace-note is added which suggests the first four notes of the subject and puts Beethoven's understanding of his subject in this manner beyond all doubt. That Beethoven is on this occasion working with general shape rather than with precise intervals is attested by the various deformations of the opening semitone (vla., b.380-83 for example), so Kerman's observation is of relevance here, though not on the large scale as he intends it[87]. This passage, whose purpose it is to prepare the later return to B♭ major, is constructed about a lengthy elaboration of B♭ minor

scales in contrary motion which at times incorporate a D♮ to effect a passing modulation to E♭ minor. After the first two entries the anticipatory dotted crotchet is dropped: it is required only at the beginning of the stretto to wrench the music back into B♭ minor, firstly on F in direct opposition to the G♭ major tonality, and secondly on G♭ itself, that that note might be reinterpreted as VI in the new key rather than as I in the old. The constant introduction of the subject at the upper second reminds one of a canon which Beethoven sent to Steiner in the summer of 1819 (WoO 173). A hand identified by Schünemann as Czerny[88] and by Schindler as August Friedrich Kanne[89], writes in the conversation book towards the end of March 1820 of this canon:

> "keiner hat ihn aufgelöst/ich habe ihn aufgelöst,/ denn er tritt in der/Sekunde ein [he here quotes the canon with its solution: see Ex.5.41] er geht in infinitum." 90

414 - 432: the passage of B♭ minor preparation ends with a shift from the minor to the major key and cadences into E♭ minor for a homophonic link passage which moves at the last to E♭ major. The cadence is unusually emphatic for only rarely in this work are chords placed firmly on the beat in a solidly unambiguous cadential progression such as this. The reason for this degree of emphasis becomes immediately apparent as the original countersubject is reintroduced in $\frac{6}{8}$ time and combined with a new version of the subject in a light exposition which is described by Kirkendale as a

> "free fantasy ... hardly fugal." 91

This is the only occasion during Fugue III upon which a low dynamic is used; it marks the first suggestions of the original countersubject, almost as if Beethoven is pondering momentarily upon the case for its reintroduction before the subject bursts in abruptly, fortissimo thrusting its way upwards[92]. In view of the emphasis which has been given in the preceding section to the trill figure from the subject, that portion of

it which is now to be developed concentrates only upon its first three notes. The treatment is by inversion and the intervals are preserved exactly in contrast to the freedom with which they are handled during the preceding passage. This is the first occasion in the entire movement so far upon which the subject is treated at any length by inversion[93], and Beethoven announces this manner of treatment in the foregoing homophonic link passage by inverting the material of an earlier episode[94]. By re-writing the opening note of the subject Beethoven intensifies the syncopation present in the original and imparts to it a sense of upward striving, so characteristic of this fugue and of Op. 106 (IV). Any difficulties which might stem from the extreme length of the Grosse Fuge are continually forestalled by the abundant wealth of melodic and rhythmic invention with which Beethoven approaches his material, for each new working out of the subject serves only to generate more energy, and thereby to ensure the inexorable progress of this gigantic and unbridled fugue.

An important modification, the insertion of an upwardly-resolving non-harmony note, is made to the end of the subject in its present form. Kerman derives this grace-note from the preceding episode[95] which is correct given that the E♮ is not actually part of the inverted subject: see Ex.5.42. However, the use of such notes is implied by the melody of the subject from the very beginning of the movement, not merely during these last few bars, and this subtle alteration therefore picks up one of the implications of the Ursubjekt. The E♮ also has the effect of producing a four-note cell equivalent to the upper of the two voices as suggested by the subject; this is depicted in Ex.5.43 which should be compared with Ex.5.1. The reintroduction of the countersubject which has been absent from the texture for a substantial period of time is inevitably an event of some importance and tends to give the impression that the movement is drawing to a close. In Op. 106 (IV) this implication is confirmed by the introduction of a V pedal as the countersubject

returns after a lengthy absence (b. 318 ff.), but in Op.133 the sense of impending conclusion is undermined by the tonality. Nonetheless Beethoven is drawing together the threads of his composition: in spite of the enormous coda to the Grosse Fuge, Fugue III is destined shortly to draw to a close, and the original countersubject, which is now being combined with the material of Fugue III, will then be climactically combined with that of Fugue II also, taking on in both instances the rhythm of the appropriate countersubject.

432–453: the exposition of the inverted subject in E♭ major is followed by an episode which re-establishes A♭ major in preparation for the final section of this fugue. This juncture is approached by a thematic reduction of the subject as illustrated in Ex. 5.44. Although this instance (like that in Ex. 5.34) differs from normal practice in that one fragment (Ex. 5.44 (ii)) persists after its reduction has been stated (Ex. 5.44 (iii)), yet it is readily discerned, for Beethoven leads the ear down through the quartet in the manner outlined by Ex. 5.45 and thus directs the attention to the 'cello fragments which constitute the final stage in this process of thematic reduction (Ex. 5.44 (iv)).

The harmonic structure of this episode is summarised, with the requisite textural simplifications, in Ex. 5.46 for it is directly influenced by the melodic contour of the subject and its implied supertonic modulation. The rate is one harmony per bar, except that ties indicate the prolongation of a harmony by a further bar, while the barlines denote that there is a change of harmony within b. 448. It is evident that each key is affirmed by one bar of I harmony, followed by two bars of V-functioning harmony which resolves either in a Perfect or Interrupted cadence. On two occasions however, the initial I chord is inflected by sharpening the root, which produces a diminished harmony capable of resolution in the supertonic key. The harmonies chosen to accompany the

present fragment of the subject thus parallel those implied by the melody of the original whole, as indicated by the upper brackets in Ex. 5.46 and by the simplification in Ex. 5.47[96]. The supertonic modulation is here compressed into a single note and implied, not by the subject, but by the accompanying voices: see Ex. 5.48. In this way the subject is projected into the harmonic structure on the small scale, as well as in the manner postulated by Kerman in connection with Op. 131[97]. The episode ends with an emphatic A♭ major cadence whose final unharmonised note is taken up as the beginning of the final stretto based upon the subject recto and inverso.

453-510: now that the subject has been given in inversion this manner of treatment comes very much to the fore, particularly in the forthcoming climactic passage (b. 477-92) and in the subsequent return of the Meno mosso e moderato. The stretto moves from A♭ major into the supertonic B♭ minor, returning home through descending fifths. Each time A♭ major tonality is heard it encompasses a feint towards the supertonic key in a manner identical to the preceding episode (b. 453-60 and b. 471-6): in both passages the harmony is of exemplarary economy, yet sufficient to draw attention to the important supertonic key which here acts as a direct preparation for its impending and decisive, if somewhat abrupt, return as I of the overall structure. First however is the climactic conclusion to Fugue III; the chromatic nature of this passage, which inevitably stupefied Beethoven's contemporaries[98], is already apparent during the stretto as minor ninth harmony is lavishly employed. If the string quartet is to be regarded as a conversation between four intelligent people[99], that conversation now becomes decidedly heated, as the music erupts in a veritable welter of unstable chords whose only tonal anchor is the pedal E♭ in the 'cello[100]: eleven of these sixteen bars (b. 477-92) may be described as diminished seventh harmony, two as augmented and only the remaining three as V^7 and I in A♭ major, the

latter moreover always in an unstable second inversion. When the status quo is re-established by a typical late-period cadence in A♭ major, Ic-I with the intermediate V harmony omitted, the tortured third fugue breaks, finding its release in a climactic A♭ major repeat of material from Fugue II, transformed.

The reintroduction of this material is a stroke of pure genius, for it is in the preceding climax to Fugue III that the quartet medium is forced to the very brink: here more than anywhere else is the Grosse Fuge, more indeed than anywhere in his entire oevre, Beethoven absolutely demands of his listeners that they rethink their aesthetics: here the most dissonant of harmonic progressions is heard, the greatest possible extremes of register are spanned and the utmost independence is given to each member of the overburdened quartet. Only with the re-introduction of the healing melody from the Meno mosso is this tension resolved. No finer example of melodic transformation may be found in Beethoven's music as the gently flowing melody of Fugue II now emerges with a strength of character and purpose which previously it lacked: it offers healing and new-found strength, growing organically out of Fugue III in a way impossible at the end of Fugue I. Previously Fugue II was a tender pianissimo frequently in homophonic style, but here the texture is indubitably contrapuntal and the dynamic level raised to forte, modifications which Kirkendale regards as being dependent one upon the other[101], though both are in any event required by the present context. The tonality is also raised so that the Meno mosso is now in the super-tonic key relative to its former G♭ major presentation.

The most significant difference however between the original introduction of this material and its present reprise, is one neither of textural and dynamic concern nor even of tonality: it is one of purpose. Originally the Meno mosso was an interruption, a break in continuity, a new beginning,

here it is without doubt a continuation, a fulfilment, a resolution of the preceding fugue. To that end it is noticeably more diatonic than the grinding dissonances which precede it and the upward straining towards the supertonic, which has been one of the main generating forces of the movement, now absents itself as the diminished seventh leap of the subject is softened into a minor seventh. The change of purpose which underlies this repeat of the Meno mosso is a compositional feature which exemplifies Beethoven's adoption in a fugal context of one of the dramatic processes of sonata form, the transformation of thematic material for structural purposes. Finally one may note that this reprise entertains the technique of inversion which featured so prominently at the end of Fugue III: the four-note cell of the subject is reflected mirror-wise and when this passage is repeated in double counterpoint (b. 501-8) a most unusual viola part arises from fragmentary references to the original counter-subject recto and inverso alternately. The Meno mosso then breaks off unexpectedly on a fortissimo Ic chord in A♭ major and in the silence one waits expectantly for its resolution.

511-564: what follows is perhaps the most daring passage in the entire Grosse Fuge, a series of chords which drag the music, almost against its will, into B♭ major. This modulation, which originates in the supertonic implications of the subject, is rich in upwardly-resolving grace-notes characteristic of the subject; these are indicated with a slur in Ex. 5.49. The first harmony in this homophonic link passage reassures, for it conforms to the listener's expectations. There then follows a passage of dawning realisation, realisation that A♭ major harmony is being circumvented, and this is confirmed suddenly like a slap in the face as the dominant minor ninth harmony resolves (incorrectly) into B♭ major and the perky Allegro molto e con brio dances almost insolently before the listener as though nothing had happened. This lightweight repeat which demands relatively little concentration allows time for the new

key to be accepted as the I and leads directly into what proves to be a substantial coda. It also continues that process initiated by the preceding Meno mosso and taken up more succinctly in the coda, a process of reiteration which

> "has the effect of binding the whole together in a way - dare one say? - utterly superior to that of the Ninth itself." 102

Coda

565-657: although a specifically fugal texture has long since been abandoned we may place the beginning of the coda at that point at which the identical repeat of the Allegro molto e con brio breaks off (b. 565). Originally this passage had modulated to A♭ major for Fugue III, but it now cadences into B♭ major (which becomes V of the IV). A homophonic passage divides the quartet in two and exploits the

> "latent two-part writing" 103

of the subject. The harmony at this point may be heard in either of the ways noted in Ex. 5.50, both of which originate with the subject: Ex. 5.50 (i) makes use of the subject's auxiliary notes to enliven a simple alternation of V^7 and I harmony while Ex. 5.50 (ii) involves stretching the V harmony into an augmented harmony in a manner which clearly relates back to the upward-straining of the Ursubjekt. The textural idea which underlies these bars is soon repeated in simplified form with the melody of the subject restored[104] but extended sequentially to produce a series of implied supertonic modulations: see Ex. 5.51. Here in this extended version it resembles more closely than anywhere else Beethoven's early drafts for the subject as quoted by Nottebohm[105]. The creation in this way of a two-part texture out of a single melodic line is reminiscent of Op. 106 (IV, b. 196-200); curiously that passage is of notable similarity to the subject of Op. 133 with its alternation of semitones (or occasionally tones) and larger intervals: see Ex. 5.52. The coda to Op.133 continues by treating its material in inversion, the common

technique which only recently made its climactic debut near the end of Fugue III. The subsequent re-introduction of the subject in even notes marked pizzicato, which produces an effect not dissimilar to that of Unterbrechung, is of interest because its sequential repetitions again lengthen it in the manner of the early sketches: see Ex. 5.53[106]. The octave transposition which this new division of the subject between viola and 'cello entails, is then continued in the bass line which outlines the supertonic harmony, leading into a lofty pianissimo presentation of the subject over a sonorously spaced accompaniment which involves the minimum of movement; this passage is described admirably by Grew as

"the spiritual climax of the Grosse Fuge." 107

The inflection towards A minor, which is twice stated but fails actually to resolve into that key, is a result of the preceding extensions of the subject; the sharpest tonality heard since the Overtura, this timeless gazing towards unapproached vistas seems to imply a reluctance to return flatwards: it is a glimpse of heaven, a yearning for realms as yet unapproached, which is thrust aside as a series of syncopated stabs in the silence wrench the music earthwards to B♭ major. The texture which initiated the coda is then re-introduced, oscillating about dominant-sounding harmony before being diverted to an inconclusive close in the IV.

657-741: at this point recollection of each of the three fugues is made, mirroring as it were the Overtura, and thereby creating a structural unity which far surpasses that found in any of Beethoven's earlier works. The key chosen for this passage is the IV, an important tonality which refers back to the final bars of the Andante (Op.130 (III), b. 86-7); Fugue I is recalled at the original pitch (vl.I replacing vla.) but breaks off abruptly before the slide into C minor can contradict its IV implications; Fugue II is transposed and modified to intensify the IV emphasis; Fugue III re-establishes the I beyond doubt. This recollection of preceding

material perfectly draws together the threads of the movement, balances the Overtura and is, as Bullivant notes,

"a device unique in fugue." 108

The repetition of material from Fugue III also harks back to the Overtura by syncopating the subject without first informing the listener of this fact[109].

The I is thus re-established, but there is one final subtlety Beethoven wishes to indulge before drawing this colossal movement to a close, one last ambiguity he intends to exploit. The original combination of subject and countersubject in Fugue I hints briefly at E♭ major before the sharpening of the subject's opening note forces the music into C minor: this IV tendency (restated in b. 657-9) is now exploited more fully, the B♮ proving to be the enharmonic dominant minor ninth in E♭ major as shown in Ex. 5.54. This musical pun hinges upon the dual role of the subject's second note which may be treated as the neapolitan note, implying resolution downwards, or as the sharpened I, connoting a supertonic modulation and resolving upwards. Here this process is transferred to the local V and the ambiguity enhanced by the non-committal chord onto which the preceding diminished harmony resolves (E♭ and G in b. 693 which might denote I in either C minor or E♭ major). It is a delicate balance, but the pedal in the 'cello prevails and E♭ major is firmly established. The ambiguous B♮/C♭ is then reintroduced, this time resolving upwards but still avoiding C minor and now heading for the I. A valedictory trill figure emphasizes the I before the fugue subject, sonorously doubled at the upper octave, makes its final appearance with the original countersubject, whose present syncopation brings to its final conclusion the process of rhythmic variation begun in Fugue I. The present entry actually begins in E♭ major and the B♮/C♭ ambiguity at first remains; C minor is now established however (b. 721 and, more emphatically, b. 723) and acts as supertonic in B♭ major. An important point regarding

IV emphasis in the Grosse Fuge may be noted: the combined subject and countersubject of Fugue I, if removed from context, suggest a modulation from E♭ major to its supertonic F major via the expected route, C minor. Their initial combination however directly follows the end of the Overtura and therefore places them in a B♭ major context which is confirmed throughout Fugue I. In the coda this material is restated at the same pitch (implying B♭ major) but in a specifically IV context (b. 653-9), and in the very last section of this enormous structure the two themes, again at the same pitch discounting octave transpositions, are harmonised from the outset in the IV key (b. 716 ff.). Significantly the one stage of rhythmic variation in Fugue I not to be given in the I occurs in the IV (b. 57 ff.), as does the re-introduction of the original countersubject during Fugue III (b. 414 ff.). The gradual strengthening of the IV tonality which thus becomes evident during the course of the Grosse Fuge, is typical of Beethoven's style and has been observed also in Op.110 and Op.120. The present entry of subject and countersubject in the IV modulates into B♭ major, and swift cadences in G minor, E♭ major and C minor outline the supertonic triad for the last time, in a manner similar to that found earlier in the coda (vlc., b. 605-8), before a final surge of energy brings the Grosse Fuge to its abrupt and somewhat perfunctory conclusion.

1. Kirkendale writes of Op. 133:
"... its direct prototype is J.S. Bach's Art of Fugue ... The Great Fugue was his [Beethoven's] Art of Fugue, his summary of the various fugal techniques."
Warren Kirkendale: Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979), p.268. These claims however would be more appropriate if made in connection with Op. 106.

2. Joseph Kerman: The Beethoven Quartets (London, 1978), p.374.

3. Erwin Ratz: 'Die Originalfassung des Streichquartettes Op. 130 von Beethoven' in Österreichische Musikzeitschrift, vol. 7 (1952), p.83. Quoted in Warren Kirkendale, op. cit., p.256.

4. Arnold Schering: Beethoven in neuer Deutung (Leipzig, 1934), p.52. Quoted in Warren Kirkendale, op. cit., p.256.

5. The repeat of the Meno mosso e moderato (b.493-510) is regarded as part of the third fugue; see below, pp.200-201.

6. Philip Radcliffe: Beethoven's String Quartets (London, 1965), p.137. It has nonetheless been described as 'formless', as noted by Sydney Grew: 'The Grosse Fuge The Hundred Years of its History' in Music and Letters, vol. 12 (1931), p.141.

7. Harold Truscott: Beethoven's Late String Quartets (London, 1968), p.86.

8. This feature is exploited in the coda (b.581 ff.).

9. Warren Kirkendale, op. cit., p.256.

10. ibid., p.257.

11. Sydney Grew, op. cit., p.141.

12. Deryck Cooke: Vindications Essays on Romantic Music (London, 1982), p.143 et seq.

13. This point is made briefly by Donald Francis Tovey: Essays in Musical Analysis vol. II (London, 1970), p.170.

14. Basil Lam: Beethoven String Quartets (London, 1979), p.107.

15. The material with which vl.I begins the fugue is referred to as the 'countersubject'. This is discussed below; see below, pp.160-62.

16. Gustav Nottebohm: Zweite Beethoveniana (Leipzig, 1887), p.5.

17. The Observer (June 17, 1962) quoted by Warren Kirkendale op. cit., p.257.

18. Gustav Nottebohm, op. cit., p.6.

19. ibid., p.129.

20. ibid., p.130.

21. ibid., p.136.

22. ibid., p.319.

23. Kurt von Fischer: Die Beziehungen von Form und Motiv in Beethovens Instrumentalwerken (Hildesheim, 1972), p.60.

24. Gustav Nottebohm, op. cit., p.543. In W.T.C. II, fugue III the third voice enters in inversion. Its subject is similar to the beginning of Beethoven's Op. 79 which is inverted as the Alla danza tedesca of Op. 130. These two movements are discussed by Misch, who does not however mention W.T.C. II, fugue III: Ludwig Misch: Beethoven Studies, trans. by G.I.C. De Courcy (Oklahoma, 1953), pp.14-18.

25. Gustav Nottebohm, op. cit., p.544.

26. ibid., p.543.

27. ibid., p.279.

28. Warren Kirkendale, op. cit., p.268 and Joseph Kerman, op cit., p.276 et seq.

29. Kirkendale lists the limited examples of this in Albrechtsberger's time and states:

> "Albrechtsberger was no longer able to take his musical examples for syncopation and interruption from fugues of Bach and Handel, as he did the other main figures, but had to draw upon his own works."

Warren Kirkendale, op. cit., p.263.

30. Cf. for example, vl. I, b.141-2 with vl. I, b.35-8.

31. Daniel Gregory Mason: The Quartets of Beethoven (New York, 1947), p.231.

32. Warren Kirkendale, op. cit., p.259. See also Harold Truscott, op. cit., p.95 and Basil Lam, op. cit., p.109.

33. Joseph Kerman, op. cit., p.282. See also Roger Fiske: Beethoven's Last Quartets (London, 1940), p.43.

34. Philip Radcliffe, op. cit., p.139 et seq.

35. Roger Bullivant: Fugue (London, 1971), p.81.

36. ibid., p.33. See also Roger Bullivant: 'Counter-subject' in The New Grove Dictionary of Music and Musicians, ed. by Stanley Sadie (London, 1980), vol. 4, p.852.

37. Warren Kirkendale, op. cit., p.267. Kirkendale however refers to the works which follow this tradition as 'double fugues': ibid. p.61.

38. Erwin Ratz, op. cit., p.85 et seq. Quoted in Warren Kirkendale, op. cit., p.258, n.175.

39. Joseph Kerman, op. cit. p.287. See also Warren Kirkendale, op. cit., p.259, Basil Lam, op. cit., p.108 et seq. and Martin Cooper: Beethoven The Last Decade 1817-1827 (Oxford, 1985), p.383.

40. See for example, Daniel Gregory Mason, op. cit., p.233, Harold Truscott, op. cit., p.99, Roger Fiske, op. cit., p.42, Martin Cooper, op. cit., p.382 and Joseph de Marliave: Beethoven's Quartets, trans. by Hilda Andrews (New York, 1961), p.294. Ratner describes it as
"Fugue II. A minimal fugue ..."
Leonard G. Ratner: Classic Music Expression, Form, and Style (London, 1980), p.269.

41. See App. I, pp.254-5, (4).

42. Jospeh Kerman, op. cit., p.275.

43. The supertonic major might also be implied, since Beethoven's major keys often include the flattened sixth; see for example, Op. 133, b.279 and b.295.

44. Warren Kirkendale, op. cit., p.267.

45. See Gustav Nottebohm, op. cit., p.550.

46. The arrangement is listed by Warren Kirkendale, op. cit., p.226.

47. ibid.

48. See Gustav Nottebohm, op. cit., p.319.

49. Kirkendale does mention this element of dynamic contrast: Warren Kirkendale, op. cit., p.266.

50. This view is confirmed by the added B♭ in vl. I, b.37. By writing A♮ and by giving the F# its full value, Beethoven could, had he so wished, have preserved the harmonic rhythm of b.33-4.

51. See below, pp.175-6.

52. The vlc. A♮ in b.73[2] is a decoration of the B♭ and does not preclude resolution into the minor.

53. Joseph Kerman, op. cit., p.283.

54. This fragment is further discussed below; see below, pp.175-6.

55. Cooper suggests:
"[such] harmonic side-slips ... which are most frequent in the keyboard works, are partly manual in origin."
Martin Cooper, op. cit., p.178.

56. Cf. b.66, b.73, b.79-80 and b.82-3 which are all based upon the same tonal centre.

57. Cf. b.30-34 with b.86. The harmonic principle is the same, but in b.86 it is severely compressed.

58. See above, pp.172-3.

59. Refer to Ex. 5.15.

60. Cf. with Op. 133, b.414 ff. and Op. 106 (I), b.133 ff.

61. Basil Lam, op. cit., pp.110-11.

62. The vla. introduces D♭ in b.117; cf. with D♮ in vl. II, b.37.

63. Allgemeine musikalische Zeitung (1826) quoted by Warren Kirkendale, op. cit., p.257.

64. Nor does the Grosse Fuge as a totality conform to Grew's simple-minded attempt to explain its structure by reference to existing models:

> "Movement (1) [i.e. Fugue I] is as an exposition of themes ... Movement (2) [i.e. Fugue III] is as a development of the same themes. Movement (3) [i.e. the coda] is as a coda to the other two movements. Read thus, the Grosse Fuge becomes simply a large example of sonata first-movement form."

Sydney Grew: 'The Grosse Fugue: an Analysis' in Music and Letters, vol. 12 (1931), p.260.

65. See above, pp.175-6.

66. Warren Kirkendale, op. cit., p.259, n.180.

67. The use of D♭ major in Op. 106 (IV) however, is appreciably more significant than that of mere preparation for G♭ major.

68. Regarding the vlc. line, refer to App. II.

69. Cf. this accentuation with the subject in $\frac{6}{8}$ time.

70. Cf. with the beautiful semiquaver decoration of the harmony in Op. 110 (I, b.35-7) which is later intensified (b.94-100).

71. Joseph Kerman, op. cit., p.281.

72. See above, p.21.

73. Refer to App. II.

74. Refer to Ex. 5.11.

75. Johann Georg Albrechtsberger: Gründliche Anweisung zur Composition (Leipzig, 1790), p.183. See Warren Kirkendale, op. cit., pp.62-3.

76. Cf. Op. 131 (I), vl. II, b.9 ff.

77. See above, p.185.

78. I refer to his claim that thematic contour is more important than precise intervals; see above, p.182.

79. See for example, b.350 ff.

80. This obviously bears comparison with Op. 106 (IV), b.140 ff.

81. Sydney Grew, op. cit. (The 'Grosse Fugue': an Analysis), p.258.

82. Roger Bullivant, op. cit. (Fugue), p.166.

83. See above, p.168.

84. Johann Georg Albrechtsberger, op. cit., p.196. See Warren Kirkendale, op. cit., pp.66-7.

85. Roger Bullivant, op. cit. (Fugue), p.166.

86. This method of changing key is reproduced exactly in Op. 131 (II, b.192 - III, b.1).

87. Joseph Kerman, op. cit., p.281. See above, p.182.

88. Elliot Forbes (ed.): Thayer's Life of Beethoven (Princeton, New Jersey, 1964), p.744, n.49.

89. See Karl-Heinz Köhler and Grita Herre (editors): Ludwig van Beethovens Konversationshefte (Leipzig, 1972), vol. I, p.388, n.62. A profile of Kanne is given on p.421, n.79. According to Kinsky the author of this entry in the Conversation Book is not known: he mentions:

"[eine] Eintragung von unbekannter Hand."

Georg Kinsky: Das Werk Beethovens Thematisch - Bibliographisches Verzeichnis seiner Sämtlichen vollendeten Kompositionen (München, 1955), p.678.

90. Karl-Heinz Köhler and Gritta Herre, op. cit., p.391.

91. Warren Kirkendale, op. cit., p.260.

92. This is similar to Op. 106 (I, b.133-8) with the dynamics reversed.

93. There have been limited instances of inversion (vlc., b.153 ff; vl. I, vl. II and vla., b.175-6 and Fugue III, main countersubject), but this is the first extended application of this common technique.

94. Cf. b.403-13 with b.326-51.

95. Joseph Kerman, op. cit., p.292, Ex. 148.

96. The Roman numerals in Ex. 5.46-8 denote keys rather than harmonies.

97. Joseph Kerman, op. cit., p.275.

98. The first review is cited above; see above, p.178.

99. This, I believe, is Goethe's description.

100. Cf. Op. 111 (I, b.86-90).

101. Warren Kirkendale, op. cit., p.266.

102. Roger Bullivant, op. cit., (Fugue), p.167.

103. Warren Kirkendale, op. cit., p.260.

104. In the preceding passage (b.565-81) the subject was present in a rhythmic and textural sense, but its melodic shape was absent.

105. Gustav Nottebohm, op. cit., p.550.

106. Cf. with b.581 ff. and Ex. 5.51.

107. Sydney Grew, op. cit. ('The Grosse Fuge: an Analysis'), p.259.

108. Roger Bullivant, op. cit. (Fugue), p.167.

109. A melodic alteration to the subject at this point is noted in App. I.

Chapter 6

The String Quartet in C# minor, Op. 131

The Role of the Fugue

The fugue with which the C# minor quartet begins is in many ways exceptional; its most striking innovations are listed by Kirkendale as follows:

> "Here, for the first time in the repertoire of chamber music, a fugue is used (a) for the first movement of a cycle, (b) in the key of c# minor, (c) in slow tempo ..., (d) headed molto espressivo." 1

The present fugue thus differs in almost every respect from the Grosse Fuge which directly precedes it[2], yet it is, as will be seen, a most logical, one might almost say the only possible, sequel to that work[3]. Hitherto the fugues have assumed the role described by Spink:

> "... by placing a suitably weighty movement such as a fugue at the end, a kind of culminating apotheosis is achieved, which seems to function retrospectively as a cohesive agent." 4

With the Grosse Fuge this principle is taken to its very limits, if not beyond, and thereafter Beethoven naturally felt it necessary to address fugue from a different angle. For the first and only time in his oevre the fugue is placed first and from it grows the entire structure. The role of fugue has changed: no longer does it sum up the work, providing a powerful climactic alternative to the conventional rondo finale for which Beethoven had little time during his last years, but rather it is a tender non-violent opening movement from which the entire work evolves, a seed which provides the materials for growth and unification. As Kerman observes:

> "His task [in the fugue of Op. 131] was not emphasis or summary, but laying ground for the coming work in its entirety." 5

Such a radical alteration as the transference of the fugue to the beginning of the work seems inevitably to demand a much deeper integration of the fugue into the total structure. Indeed, it is the

manner and extent of this integration which, above all else, make the present fugue exceptional, for that remarkable unity of expression which was demonstrated within the Grosse Fuge is here externalised, the present fugue belonging as a result to the rest of the work in a way that no other can claim to belong to its fellow movements. Significantly the sketches bear witness to the fact that Beethoven himself attached particular importance to the structure of this work as an entity, a feature discussed by Winter[6]. If his suggestion that such sketches, or

> "telescoped drafts for an entire work." 7,

may be a feature primarily or only of the late-period style proves correct, then our appreciation will be enriched of what may be described as a new attitude towards composition, a new approach, not only to the fugue, but to the overall structure of the work as a whole. This attitude finds its most perfect realisation in the quartet presently under discussion, of which it has been remarked, on the strength of the extant score sketches:

> "this most organic of the late quartets appears to have evolved through a uniquely organic process." 8

Before proceeding with the discussion, there is one potential misunderstanding which requires clarification: the analyses which form the heart of this thesis are, as already noted, formal rather than genetic and thus based upon the music in its definitive form; I do not therefore regard it as inconsistent to observe that the fugue acts as a generic impetus for the remainder of the work, whilst acknowledging that those details of the fugue which serve this purpose may in reality have arisen during the compositional process as a result of later features of the work. This factor affects our consideration of the IV and ♭II tendencies of the quartet and their relationship to the fugue exposition[9]. Winter's consideration of the 'Kullak' sketchbook leads him to venture that the relationship of the subject to the remainder of the quartet is

> "inverse to our expectations." 10

Nevertheless, this intelligence does not greatly alter one's experience of the music: the fugue is placed first and the subsequent movements are heard in the light of what has preceded. The matter is put into perspective by Winter himself when he states:

> "insights into the development of a work do not affect our final judgement concerning its definitive shape ... However, sketchbooks can reveal something of how Beethoven viewed his own creations." 11

This is indeed the case and, perhaps inspired by Winter's observations, I propose to precede the analysis of the fugue itself with a brief consideration of the tonal structure of the quartet as a whole, a 'tonal overview' of the work in its definitive form introducing, as seems necessary, harmonic details which may be traced back, in the listener's experience if not in the compositional process, to the fugue with which the work begins.

The Tonal Structure of the Quartet

Nominally the C# minor quartet is in seven movements, more than are to be found in any other of the Beethoven quartets, though this number is reduced to five by Cooke so as to balance perfectly with the A minor quartet, its counterpart about the central B♭ major quartet which forms the apex of his arch-form interpretation of the last five quartets[12]. He reasons:

> "What is called no. 3 in the score is in fact no more than a link ... I take the so-called no. 6 ... as a slow introduction to the so-called no. 7." 13

Although we may concur with his understanding of the third movement as transitional - it is notated in three sharps even though it sounds in B minor - yet his analysis, it seems to me, does little justice to the beauty of the Adagio quasi un poco andante which, quite apart from being arguably one of the most beautiful passages in the entire quartet, is (as I hope to demonstrate below) a masterly and vital part of the overall tonal structure of this work; it should therefore be viewed as Truscott suggests, as

"undoubtedly a movement in its own right." 14

Still more damaging to our understanding of the quartet is Abraham's narrow-minded dismissal of the first movement:

> "the seven movements are soon seen to be the usual four, with a fugal prologue and two interludes..." 15

This inexplicable reluctance to acknowledge the originality of the musical structure is rightly discredited by Tovey:

> "This fugue is clearly bent on its own business and shows no sign of being an introduction to anything else." 16

Most significantly however, the quartet *might* be regarded as being in one continuous movement, the continuity of the musical thought and the sense of organic growth out of the fugue being underlined in score by the insertion of the new key signature at the end of each 'movement'. A novel approach to the structure therefore seems appropriate: rather than regard the work as a series of tonics (C#, D, B etc.), one or two of which may be placed in brackets depending on whether the quartet be deemed to contain five, six or seven movements, I prefer to regard it as a series of degrees of tonality, four sharps, two sharps, three sharps etc. In this way the work falls into six sections in a manner consistent with the view expressed above, that the 'third' movement is transitional while the 'sixth' is of somewhat greater importance[17]. My reason for regarding the work in this way is that it illustrates most clearly the manner in which the quartet moves unexpectedly to a remote key at the end of the fugue[18], before returning home by a gradual sharpening of the tonality until the home V is reached. In this respect the tonal structure of the quartet may be seen to depend upon two harmonic features which find their origin in the fugue exposition: the unexpected introduction of D major (mvmt. II) relates back to the subject and its answer, while the gradual sharpening of the tonality (mvmts. II through VI) places each key in a IV relationship to that which follows, like a series of Plagal

cadences, and this refers back to the choice of a IV answer. Additionally these two important tonal events are seen to be closely related to each other since, given the present subject, only a IV answer will provide the desired emphasis upon the ♭II. Thus a new kind of relationship may already be discerned between the fugue subject and the tonal structure, not merely of the fugue, but also of the total work as an entity.

By the end of the variation movement considerable emphasis has been given to the ♭II key by reference to its I (Allegro) and V (Andante). The Presto movement in E major restores the tonal balance of the quartet, bridging the gap between the I and the ♭II key, for it continues the cycle by adding a further sharp but thereby returns the music homewards by introducing the relative major of the home I. The abrupt change of the tonal landscape at the end of the first movement thus means that by progressively sharpening the tonality Beethoven is leading the music nearer to, not further away from, the home I. This process is continued in the Adagio: the need for the home V explains not only the use of G# minor in preference to B major, the next key in the cycle, but also the crucial role in tonal terms of this movement in the scheme of the quartet, for the change of key from E major to C# minor would be simple enough without the need for a lengthy passage in G# minor. However, after such a protracted emphasis upon the ♭II key and its V, the home V is positively required. The tender lyricism of the Adagio is of course a musical as well as an harmonic necessity, being the perfect foil to the finale which thereafter sounds that much more resolute and determined in its course[19].

The quartet as a whole then, stands in the key of C# minor, but it is a modal C# minor which is not without its ambiguities. Referring to the fugue, Mason queries:

"May not its final chord sound to us more like the dominant of F sharp minor than like a conclusive tonic in C sharp major?" 20

This is an ambiguity which prevails even at the end of the entire quartet, and Mason's suggestion that it may have been

"purposely devised" 21

finds possible support in the sketches, for Beethoven considered, but ultimately rejected, the use of D♭ major as a final means of invoking I stability; as Winter observes:

"E# suggests a resolution to F# whereas F is notationally stable." 22

On the face of it Beethoven's decision to abandon these attempts might appear to indicate that the resultant ambiguity was deliberate[23]. However, the fact that he contemplated such a conclusion would seem rather to suggest that he had reservations about the ambiguity, at least initially, but found the sketched postlude inappropriate and therefore expunged it. The uncertainty with which the finale ends, at first an alarming option, may have appeared more attractive with the passing of time, as Beethoven became more convinced of its suitability to the rest of the quartet[24]. The penchant for modality which characterises the quartet, in part a result of this decision, is, like the very use of fugue itself, a reflection of Beethoven's growing interest during the last years of his life in the music of the past.

The tendency of the music towards its IV, explicit in the outer movements as just described, is confirmed in the inner movements by a notable lack of emphasis upon their respective V keys. The Allegro in D major makes no extensive use of its V key and harmonises its main theme with an alternation of I and IV chords, while the Andante follows the harmonic scheme of its theme loyally, at least until the coda: although reaching the V key briefly at the end of the first eight-bar phrase, the theme's main modulation, occurring as expected towards the centre of its second

half, is to the IV key: see Ex. 6.1. When in the coda these confines are broken, the tonalities used outline the key of the ♭VI, V of the ♭II (C major, b.231 ff. and F major, b.254 ff.[25]). The Presto movement likewise avoids emphatic modulation to the V, again preferring the local IV(Ritmo di quattro battute) and concentrating elsewhere upon the relative minor. Reference to the mediant minor (b.33-44 for example) anticipates the dramatic key-change at the end of the movement. In the beautiful Adagio there is hardly scope for modulation, but fleeting references are made to the relative minor. Although the first statement of the theme ends with a regular Perfect cadence such solid V - I progressions are subsequently avoided by delayed resolution of the bass note. The finale is a sonata form structure whose first subject is restated at the end of the exposition in the IV[26], which key is also used in the recapitulation for the references to the first movement fugue subject (b.184 ff.). The second subject, in the relative major, is recapitulated in the ♭II key (b.216 ff.).

While it is true that extensive use of the V is not necessarily expected in a minor key movement, the relative major being preferred, yet these observations show how considerable is the emphasis given instead to the IV and ♭II keys. It is well-known that Beethoven at one stage intended beginning the finale in the ubiquitous IV key, continuing

"später nach cis moll." 27

It is thus clear that the tonal predilections manifested in the fugue are perpetuated throughout the entire quartet: in Beethoven's earlier works the fugue summed up events, here in initiates them.

The Thematic Structure of the Quartet

Having dealt briefly with the harmonic structure of the quartet we may now turn our attention to its thematic structure. The quartet's most

striking thematic feature is the return of the fugue subject in the finale which is similar to, though less blatant than, the reintroduction of earlier material in the Grosse Fuge. By relating the outer movements in this way Beethoven strengthened the thematic unity of the work as a whole and integrated the fugue into the total structure in a deliberate and conscious manner[28]. At this point I would like to pursue this question of thematic interrelationship more deeply, citing as evidence of the quartet's unity two important and clearly related thematic ideas.

In Appendix I certain of Beethoven's late-period themes are analysed as melodies constructed out of pairs of semitonally related notes separated by a variable interval[29]. This compositional principle is evident throughout the present quartet as illustrated in Ex. 6.2 which demonstrates a thematic relationship, not only between the first and last movements, as observed by Cooke[30]. but also between the remaining movements. In Ex. 6.2 the relevant notes are re-ordered and transposed for ease of comparison. It is remarkable that a perfectly balanced structure emerges, the movements pairing off with each other as indicated by brackets, and remarkable also that the transitional 'third' movement has no place in this scheme, thus confirming the above interpretation of the quartet[31]. Moreover, each of the themes here quoted occurs at the beginning of its particular movement, rendering the relationship more conspicuous[32].

The second thematic idea to which I referred is no more than a variant upon the first, the variable interval being reduced so that four adjacent notes of the chromatic scale are heard. However, unlike the first motif, the notes of the second occur regularly in the same order: the cell is first heard as E# - F# - E♮ - D# (mvmt. I, vl.I, b.7-8). No

mention is made of this particular fragment by Cooke, although it permeates the quartet; on its next appearance it is woven conspicuously into the false entry in stretto during the fugue exposition, hardly a common feature: see Ex. 6.3. Its use in this way, as an integral part of the subject, underlines its derivation from the four essential notes of the subject by a reduction of the variable interval (see Ex. 6.4), and this feature is much used in the first episode (b.20 ff.). So important is the figure that Beethoven in the present entry writes A#, even though this is cancelled immediately by the viola presenting the subject (b.11). In addition the fragment is given in stretto by the violins at this point as shown in Ex. 6.5.

Given the nature of Classical harmony, it is obvious that this four-note cell will readily occur in the works of many composers[33]. As Cooke states:

> "Certain simple pitch-patterns have been used constantly by all composers throughout the whole tonal period." 34

However, it does seem to be of particular importance to this quartet, not simply because of its relationship to the themes stated in Ex. 6.2, but also as a thematic cell in its own right. A few examples of its use in subsequent movements may be cited, some of the more important of which are quoted in Ex. 6.6. The theme upon which the variation movement is based contains this figure twice, overlapping with itself sequentially (Ex. 6.6 (i); cf. with Ex. 6.3). Inevitably this recurs at corresponding points throughout the movement in varying degrees of prominence: an example is given from var.II where the motif is elaborated upon briefly (Ex. 6.6. (ii)) and one from var.VI where it occurs very prominently, but at a point which does not correspond to its position in the original theme (Ex. 6.6 (iii)). In the Adagio the figure is very noticeable because it arises as a result of the introduction of the neapolitan A♮ into the G# minor melody (Ex. 6.6 (iv)). A further

allusion to it is made at the end of this melody where the final note (E♮ instead of E#) is provided by the viola. In fact this is not dissimilar to the bass line at the end of the fugue exposition where the expected note (E#) is given by the same voice, as shown in Ex. 6.7[35]. Beethoven must have attached some import to the 'cello fragment here quoted, for his refusal to alter it in any way results in consecutive perfect fifths between the outer voices at the first important structural juncture of the fugue. It seems reasonable to assume that he was aware of this fact, but felt the fifths to be justified, perhaps because the 'cello A♮ strengthens the thematic connection with the Adagio, but also because of overriding harmonic considerations discussed in the analysis[36]. Curiously these fifths have, as far as I am aware, escaped mention in the Beethoven literature.

There can be no doubt that, however skillfully woven the fabric of the quartet as a whole may seem, the greatest affinities are to be found between the outer movements which alone share the C# minor tonality and the explicit use of the fugue subject. It is not therefore surprising that the fugue under discussion should appear also in the finale, as noted in Ex. 6.6 (v) and (vi). The second of these instances is of particular interest, because it combines in the same voice the figure inverso (lower bracket) overlapping with itself recto (upper bracket). Though here chromatic, it is similar in effect to the diatonic second half of the fugue subject, since both themes revolve upon themselves in a non-directional manner evoking a sense of temporal suspension[37]. In the finale Beethoven subsequently reiterates the importance of the fragment by extending his material as shown in Ex. 6.8. Further conspicuous use of the fragment, inverted or otherwise modified, may be found throughout the quartet: in the Andante it is used noticeably inverso in var.VI which may be compared with the finale theme quoted

in Ex. 6.6 (vi): see Ex. 6.9. In the Presto movement it is transformed into a bright major melody by abolishing the chromatic inflection and by using the resultant diatonic version in retrograde: see Ex. 6.10. The melody thus created is given in Ex. 6.11, its second appearance in the movement, for the accompaniment here features the original chromatic fragment, also in retrograde. Finally two prominent statements of the fragment in parallel octaves may be mentioned, one from the Andante, one from the finale: see Ex. 6.12. The second of these is of especial import since it occurs right at the end of the quartet and summarizes the central theme of the work by juxtaposing the home I and its ♭II key. Although four adjacent semitones may be heard in the bar following the D major scale (D, B#, C#, D#) and the notes may therefore be related to the fragment by interversion[38], it seems logical to consider the phrase in the manner indicated in Ex. 6.12; this is simply the fragment inverted and may readily be perceived as such in performance (cf. also with Ex. 6.9). The instance cited in Ex. 6.12(i) does however rely upon interversion in order to be related to the original, but its presentation forte in parallel octaves renders it sufficiently conspicuous to justify considering it in this way.

While on the subject of thematic relationships there are several further points to be noted briefly, though they do not directly concern the fragments just discussed. The first relates to the last two movements of the quartet and shows how the finale theme in a dotted rhythm picks up the neapolitan inflection from the Adagio as a means of juxtaposing the home I and ♭II keys: see Ex. 6.13. This is particularly noticeable because the two themes, although in different movements, are not far apart, and also because in the finale Beethoven introduces dynamic contrast and alters the bowing to highlight the ♭II digression. Rhythmic similarity and the consistency of location of the fragments quoted within their overall phrase structures are further contributing

factors. The second observation concerns the fugue subject as it is restated in the finale and the fact that the dotted melody is subsequently deflected, adumbrating the contour of the recapitulated subject, but softening the augmented second into the melodic minor scale (vl.I, b.44 ff.): see Ex. 6.14. The augmented second is incorporated within this melody at a later stage, prior to the statement of the fugue subject in the IV (vl.I, b.173-4): see Ex. 6.15. Finally it is worth noting that the finale includes yet another theme whose structure is dependent upon pairs of semitonally related notes, namely the conspicuous scalic figure in semibreves which is introduced concurrently with the adoption of a contrapuntal texture (b.94-117). Zickenheiner relates this by inversion to the finale theme and refers with singular aptitude to

> "Die gegenseitige Beeinflussung und Durchdringung von kontapunktischen und harmonischen Elementen." 39

The analysis of the fugue now follows. The fact that it is preceded by so extended a consideration of the quartet as a whole is indicative of the increased depth of integration manifested in this quartet. Tonal and thematic integration are increasingly prominent factors of the late-period fugues and there can be no doubt that the present relocation of the fugue is crucial in bringing this trend to its ultimate and most perfect realisation.

Analysis of the fugue

1 - 20: the C# minor fugue is described by Kerman as

> "harmonically Beethoven's most accomplished." 40

Its rich harmonic language is indeed advanced, yet in spite of its chromatic nature it has a timeless quality unmatched in Beethoven's other compositions, a timelessness which is often achieved through harmonic simplicity and the unhurried crotchet pulse which flows like liquid once the subject has been stated[41]. Although unambiguously in C# minor through-

out - at no point does it sound like E major - the subject divides by virtue of its rhythmic, dynamic and harmonic contrast into two halves which Cooke relates by inversion[42]. The meandering nature of the second half of this subject, which turns upon itself almost with no sense of direction or purpose, contrasts markedly with the first half whose clear harmonic goal is the V of the ♭II key, and in the answer the ♭II note itself. It is this apparently aimless wandering of the second half of the subject, its

"calmly flowing Palestrinian quarter notes," 43

as Kirkendale describes it, which is responsible for the timeless quality of the music, a feature further enhanced in the exposition by the regularity with which the voices enter as the music unfolds and by the complete absence of a regular countersubject. Within these opening bars of the fugue are sown the seeds for the remainder of the work, the ♭II emphasis and the strong tendency of the music towards the IV key. Although comparatively few of the sketches have survived it is clear that the IV answer was only decided upon by Beethoven after he had first, and after some deliberation, rejected the conventional V answer[44]. Nor was the all-important D♮ an automatic choice for at least some of the extant sketches include D# as the fourth note[45]. In the final version however, Beethoven overcame any reservations he may have had and selected the only answer which would emphasize both the IV and ♭II keys; the harmonic implications of this decision, which have not been adequately explored in the Beethoven literature, are manifested throughout the quartet, as demonstrated above, and also within the fugue itself, for the fugue may be viewed as a ternary structure whose outer sections in the I key feature strong pulls towards the IV, and whose central section modulates fairly rapidly (and generally through falling fifths) before settling into A major and D major. These two keys are the more clearly emphasized by the highest entry of the subject in the entire fugue and by a subsequent

reduction of the texture as the material is presented in a passage of free canonic writing.

Although in some respects a travesty of the original, the harmonic summary in Ex. 6.16 does indicate those keys which are selected for prominent treatment during the fugue, and in so doing bears witness to the positive correlation which exists between the tonal structure of the fugue and the melodic contour and implications of its subject and answer. These keys are further emphasized during the exposition by the subtle use of foreign notes and harmonies woven into the larger structure (which in essence is I - IV repeated, closing on V). The IV answer, for example, is accompanied by a melody which makes no pretence at constituting a regular countersubject but which does introduce a G♮ , ♭II in relation to the IV (v1.I, b.7). A G♯ would simply have given the diminished harmony in that key, but Beethoven immediately reinforces the ♭II emphasis heard in the subject and its answer. When the viola enters in C♯ minor the tonality shifts briefly to A major, V of the ♭II key and relative major of the IV (b. 11-12). The key of A major thus links these two important keys by functioning as the most closely related tonality to both of them, V of a major key and relative major of a minor; it is for this reason that it is used so extensively at the heart of the quartet. Its introduction here is in part an harmonic consequence of the four-note fragment discussed above[46]; an Interrupted cadence in A major naturally leads into the IV for the 'cello entry, but this modulation is momentarily questioned by the insertion of the home V which will be heard in retrospect as chord II major in the IV: the progression is summarised in Ex. 6.17.

The IV answer in the 'cello is harmonised in the major, which innovation gives the D♮ an even greater impact and anticipates the end of the fugue where the I major is saddened by the tragic flattened sixth (b. 116 ff.).

The present entry, like the last, wanders into the key of A major, but the route it takes is indicative of the chromaticism of much of the writing[47]: the G♮ heard against the original answer is brought forward to become a complete G major harmony in second inversion reached via an augmented chord. When this G♮ slides neapolitan-like onto an F# , the music passes briefly through B minor before reaching A major: see Ex. 6.18. The omission of both the G# and F# from the chord marked 'x' in Ex. 6.18 is a simple but ingenious way of rendering this unlikely progression logical, for the ambiguous chord which results bridges the gap between B minor and A major by committing itself fully to neither of these keys[48]. The suitability of this digression to the present quartet - Beethoven could have moved with comparative ease from F# major to A major - lies in its initial emphasis upon local ♭II harmony. The final entry of the exposition thus comes to a close in the VI key and it is only by virtue of a brief sequence through B minor that the I is re-established. These last bars are of exceptional harmonic interest: the diminished harmony in F𝄪 is, as it were, an inflected form of the chord ^{7}IIb major (E♮ replacing D#), but it is restated after Ic with a potent modification: the A# is exchanged for an A♮ , producing the enharmonic V^{7} in the ♭II key: see Ex. 6.19. This of course resolves as an augmented sixth harmony, but the omission of chord Ic between it and the V gives rise to consecutive perfect fifths between the outer parts[49]. These are so prominent that they are unlikely to be accidental and it is therefore possible that Beethoven was deliberately using them to draw attention to the important extra harmony by which they are caused. The I and ♭II keys are thus placed side by side at the beginning of the quartet, even as they are similarly to be juxtaposed with more emphasis in the finale (b.329 ff.).

In addition to its customary functions the present exposition thus serves to alert the listener to the tendency of the quartet to focus upon the

IV and ♭II keys. This purpose is achieved directly by the IV answer and by the carefully-placed sforzandi, and indirectly by the several harmonic features just described. These harmonic subtleties are complemented by a rhythmic fluidity in those voices not presenting the subject, which accounts in part for the timeless other-worldly atmosphere here created; as an illustration of this the rhythm of the first violin part is quoted in Ex. 6.20, the bracket indicating the initial presentation of the subject.

20-34: the 'cello melody from the end of the exposition continues into the episode, thus preventing a complete break between exposition and episode, but a sudden change in texture and register clearly demarcates the beginning of the first episode. This episode takes up the false entry in stretto from the exposition (v1.II, b. 9-11) by developing the head of the subject in stretto, with an accented passing note generally inserted between its third and fourth notes. This further explains in retrospect the use of a false entry in the exposition, for it deepens the thematic link with the material of the episode which is to follow. The first half of the episode (b. 20-28) is based almost entirely upon the opening notes of the subject modified in this way: the subject thus becomes the four-note fragment discussed above, here fulfilling its implied harmonic function, since the passage is based upon descending fifths: see Ex. 6.21[50]. The rate of harmonic change is slow, one harmony per bar, but suspensions, retardations and accented passing notes (bracketed in Ex. 6.21) are admitted, the net effect of which is the syncopation of the harmonic rhythm. This is similar in principle, but quite different in its manner of exploitation, to the written grace-notes in Op. 133 and justifies Cooke's disregard of the B# in his analysis of the fugue subject as two fragments related by inversion[51].

An interesting harmonic feature of this episode is the fluctuation which occurs between major and minor tonalities: the exposition ends in C# minor which then becomes major and F# major is first heard as F# minor.

This is not unusual for it simply shows that Beethoven wished to concentrate upon minor keys, making them major as necessary to form the V of each new key in the cycle. However, B major oscillates rather more between major and minor than is needful, and on descending to E major an unexpected D♮ is inserted very prominently in the 'cello (b. 24); this suggests an immediate descent to A major, but the D♮ resolves incorrectly and is then contradicted by a D# of equal prominence which confirms the key of E major[52]. Such alternations between a given note and its inflected self are a recurrent feature of the quartet, particularly where the fifth degree of the scale is concerned. The most notable example of this may be heard in the melody at the beginning of the Allegro where A# and A♮ are alternated in D major[53]. Similar alternations may be heard in the central section of the fugue (E♮ and E# in A major and A♮ and A# in D major, b. 63-79); in the Andante both the fourth and fifth degrees of the scale are affected, the latter relating as noted above to the four-note fragment: see Ex. 6.22[54]. In the Presto, which is more light-footed, the only chromatic note to be heard in almost the first thirty bars is the sharpened fifth, which is twice introduced and cancelled. Generally the effect of sharpening the fifth is of course to imply, or force, a modulation to the relative minor[55]. In this particular work, however, it serves also further to weaken the natural pull of the V, whose supremacy in this quartet is perpetually usurped by the IV key. It is therefore significant that the most conspicuous of these alternations in the entire quartet, the Allegro as mentioned above, should introduce the sharpened fifth merely as an accidental, with no attempt to set up the relative minor, and that the passage within which this happens should be based solely upon I and IV harmony, with no reference whatsoever to the V or relative minor: see Ex. 6.23[56].

The fugue episode under discussion continues with another instance of this harmonic feature: as E major is established a dynamic increase leads

to a sforzando augmented chord which returns the music to C# minor by sharpening the fifth degree of the scale. This is a musical pun on the flattened sixth (C♮) which is heard directly beforehand in the second violin, but the B# is immediately cancelled, producing the alternation of natural and sharpened 'fifth' shown in Ex. 6.25. This is followed by a telescoped repeat of the harmonic content of the preceding bars[57], the fragment again fulfilling its natural harmonic function: see Ex. 6.26. The high incidence of the fragment during these bars is an indication of its general importance, but its presentation in the 'cello, highlighted by the change of register, is of particular note: here the fragment is not required for purposes of modulation, but the G♮ harks back to the exposition, sounding as ♭II relative to the new I. Conspicuous reference to the exposition is also made by the first violin which indubitably takes up the false entry upon which the episode has so far been based (cf. v1.I, b. 26-9 with v1.II, b. 9-12). The remainder of the episode is generated by the 'cello line (transferred subsequently to v1.I) which denudes the head of the subject of its rhythmic shape and compresses it so tightly that it overlaps with itself in the same voice: see Ex. 6.27[58]. This passage releases the tension created by the sforzando augmented chord and allows the music to continue to unfold in that timeless manner referred to above. By simplifying the harmony (in b. 31-4), raising the texture, and displacing the melody of the compressed subject by half a bar, a new sound is created, though the material is actually an immediate repeat of what precedes.

34-63: the viola now enters with the subject in G# minor in one of the rare relatively complete middle entries. A beautiful passage flows effortlessly through B major and G# minor as the second half of the subject is passed around the quartet, its supreme relaxation in a dimension beyond time illustrating Beethoven's ability in his last years to combine depth of expression with the simplest of harmonic means[59]. The 'cello fragment (in b. 38-40), again pointed by a change of register

and sounding not unlike a false entry in spite of its opening fifth, is entirely appropriate, for it omits the chromatic part of the subject leaving it to be dealt with in the next section of the episode[60]; this latter-mentioned treatment of the subject is comparable to its earlier development: see Ex. 6.28 and compare with Ex. 6.21. This episode as a whole (b. 38- 53) thus resembles the first episode (b. 20-34) by dividing the subject into two parts which are developed separately, but reverses the process of that episode by dealing with the latter part of the subject first. In the present episode the concentration upon the appropriate part of the subject is more single-minded than in the first and the whole process more protracted.

A further similarity between the two episodes is their emphasis upon sequential writing: the present episode leaps up to D# minor and then falls through fifths until it reaches the IV major (b. 49), whereupon it appears to change direction, rising in a stepwise manner to the IV of the IV, B major[61]. Although the music passes very briefly through C# minor *before reaching* E major (b. 54-5), the key of B major is clearly heard as the climax of this sequence, because it is upon reaching this key that continuous quaver movement begins and the subject enters in stretto between the outer instruments, the 'cello leading, the first violin in diminution. In fact B major is only the next step in the series of descending fifths, which continues thereafter at a slower pace through E major, A major and D major, the ♭II key and the centre from which the home I is then re-established. The tonal structure of the fugue thus mirrors that of the quartet as a whole: descending fifths followed by a falling semitone in the fugue are balanced in the quartet by a rising semitone and ascending fifths, as illustrated in Ex. 6.29 (i) and (ii) respectively[62].

The interpolation of G# major and A# minor (b. 51-2, bracketed in

Ex. 6.29 (i)) between F# major and B major prevents the sequence from becoming monotonous by disguising its continuation, and in so doing throws emphasis upon the IV key and its IV by making them pillars of the harmonic structure, rather than keys of lesser import through which the music quickly passes. This also suggests a change in harmonic pace, since it takes four bars instead of the customary one for the music to 'descend' from F# major to B major. In fact this implied reduction in the harmonic pace is soon exploited by the use of non-modulating sequences in the keys of E major and A major, notwithstanding the increase in melodic pace which may be heard concurrently (b. 55-62). Ex. 6.30, taken from the heart of the central section of the fugue, illustrates this contrasting use of melodic and harmonic rhythm, the inner staves depicting firstly the decreasing duration of a sequentially repeated melodic fragment (an example of which is given on the uppermost stave) and secondly the increasing duration of the tonalities visited[63]. It is important to note that both of the keys to which I referred earlier as 'pillars of the harmonic structure' are given a time extension which places them outside this scheme of decreasing harmonic pace: they are marked 'x' in Ex. 6.30. Any two adjacent keys in the cycle could readily have been accentuated in this way and further highlighted by the insertion of the appropriate intervening tonalities; however, given the importance of the IV in this quartet it cannot be deemed anything less than deliberate that that point at which Beethoven chose to upset the steady descent by fifths should be the point at which the IV key is reached, and that subsequently our attention should be directed to its IV.

63-67: the climax of this central section of the fugue is the lofty entry of the subject in A major, displaced by half a bar. The subject has previously been combined with itself in diminution (b. 52-5), but here double diminution is featured also, and there are three entries in stretto two of which prove false: see Ex. 6.31. The presentation of the

subject by the first violin is the only entry in the middle section of the fugue to preserve the contour of the subject in full, though certain melodic alterations discussed below are admitted. It is also the highest entry in the entire fugue and may therefore be regarded as its undisputed melodic climax. The whole texture is in fact raised aloft in an ethereal passage with no instrument sounding below middle C for the duration of the entry and beyond; thereafter the music subsides gently, relaxing into the return of the home I. The entry also gains much from the preceding sequence whose lengthy crescendo and rinforzando conclusion set it perfectly into relief, for it is marked not merely piano but dolce: this contrast is enhanced by the cessation of quaver movement as the subject enters. The whole passage thus demonstrates the crucial role of dynamic gradation as an integral and complementary feature of the music; this of course is generally true of late-period Beethoven, but especially so in the case of this fugue, which is proportionately richer in dynamic nuances and subtleties of phrasing than any other of the fugues.

The tonality chosen by Beethoven for this vital point in the structure is A major, the key poised midway between the IV and ♭II centres. In this case it functions as V of the ♭II, D major into which the music descends after the entry, but the IV inclination is upheld by the rhythmic modification made to the two entries in diminution; the dotted rhythm now heard emphasizes the sharpened fifth in A major and its attendant allusions to the local relative minor, the home IV. Although the music remains anchored in A major by the I pedal (vlc., b.63-5), an Interrupted cadence in F# minor is superimposed, as shown by brackets in Ex. 6.32. This progression is the direct result of the auxiliary nature of the subject's second note, for the fundamental progression at this point involves only I and IV harmony in A major: see Ex. 6.33[64]. The introduction of E# as a decoration upon IV harmony in A major is parallelled in the Andante (b.6), as is the present alternation of the

natural and inflected fourth and fifth degrees of the scale: see Ex. 6.34 and compare with Ex. 6.22. The present inflections permit the four-note fragment to be incorporated within the latter part of the subject, as indicated on the uppermost stave of Ex. 6.34; the subject is here marked by a bracket.

67-90: the tendency of the preceding section towards the local relative minor is retained in this episode as the sharpened fifth is introduced and cancelled in A major and D major; such allusion in place of assertion gives rise to a subtle harmonic flexibility by which this movement appears to transcend the constraints of temporality, as the fugue evolves at a leisurely pace which is at once sombre and majestic. This effortless imitative passage, and the winding development of the second part of the subject once the I is re-established exhibit an harmonic simplicity which is typical of this unhurried and spacious fugue, but it is a simplicity offset throughout by kaleidoscopic invention[65]. The present interplay between the local I and its relative minor is not a struggle between two keys, each trying to assert its superiority, but a gentle give-and-take which imbues the harmony with a fluidity unmatched in Beethoven's earlier works. This harmonic flexibility is manifested also in the transition from D major to C# minor which is summarised in Ex. 6.35; the implied progression is indicated on the lower stave, but the failure in reality to emphasize D major by placing unadulterated I harmony after V (at the points marked 'x' in Ex. 6.35) gives rise to a veiled elusive progression whose uncertainties are unexpectedly resolved by the shift to C# minor. This harmonic suppleness may be attributed in part to the use of suspensions (marked with a slur in Ex. 6.35) which tend to blur the harmonies together[66]. The simplification in Ex. 6.35 also illustrates how Beethoven is able to heighten the effect of the I return by repeating the D major cadence (indicated by brackets), but withholding, and thereafter diverting, its resolution[67]. In this way the attention is directed to the relationship between the

I and ♭II which is fundamental to this quartet[68].

During this episode the subject is treated by thematic reduction until only three notes remain; this cell is expanded by a perfectly natural insertion as the first stage in the rebuilding of the subject: see Ex. 6.36. Then, as this portion of the subject revolves timelessly in each of the four lines of the quartet, a more important thematic relationship is brought to the fore, that which concerns the two different halves of the subject which are at once contrasted and related: thus far the two halves of the subject have generally been used independently of each other as a basis for development in the episodes, but at this point they are combined within the same melodic line which sings out prominently at the top of the texture: see Ex. 6.37. This is a masterstroke, for by combining the two halves of the subject in this way, Beethoven prepares the imminent return of the fugue exposition wherein the subject is accompanied by a quaver motif clearly derived from its own thematic material. Equally well this melody adumbrates the augmented subject which is destined to make a climactic appearance during the repeat of the fugue exposition. Three voices are thus implied by a single melodic line, the latter part of the subject (Ex. 6.37 (i)), the head of the subject (Ex. 6.37 (ii)), and the head of the augmented subject (Ex. 6.37 (iii)), a marvel which serves both to demonstrate the thematic unity between the contrasted halves of the subject and also to anticipate the final section of the fugue[69].

90-107: once C# minor has been established, a brief detour is made through the IV key (b. 89-90) before the texture is abruptly severed, leaving the home V unresolved. As when a fugato occurs in an essentially homophonic movement, such a reduction of the texture serves as a departure for some new and significant event: here it is the final section of the fugue, introduced by a canonic figure based upon the second half of the fugue subject, which thereafter accompanies the

subject, though with less rigour than would a regular countersubject. In this respect it thus differs from Fuge III of Op. 133, though the principle is the same.

From the beginning of this section until the end of the fugue there is a gradual enriching of the texture and a raising of the dynamic level, culminating in the sonorous magnificence of the coda. The entries in this section of the fugue match those of the original exposition (the fourth now preceding the third) but some very illuminating alterations are made: see Ex. 6.38. In the first pair of entries (b. 92-7) an E♯ in the viola (Ex. 6.38 (ii)) maintains the IV emphasis created by the answer, which is itself substantially altered, firstly to avoid fifths with the viola and thereafter by diminution so as to melt into the accompanying quaver figure (Ex. 6.38 (v)). The second pair of entries however (b. 98-107) is of even greater interest, for in addition to similar melodic-harmonic alterations, it entails important dynamic modifications which radically change the gentle meandering nature of the second part of the subject. The first significant alteration is the

"thrilling D sharp" 70

which wrenches the music back from the IV key to the I, wherein this entry continues by virtue of further modifications (Ex. 6.38 (vi)). This utterly unexpected and astonishing transformation is in direct contradiction to the neapolitan D♮ whose implications are masterfully withheld until the end of the 'cello entry: this majestic presentation of the augmented subject (Ex. 6.38 (iii)), altered initially to serve as an answer, is perfectly regular until its final note enforces the most dramatic neapolitan digression of the fugue thus far. It is on this account that Beethoven re-composes the dynamic structure of the subject, marking the G♮ rinforzando and preceding it with a lengthy crescendo[71]. As a result the harmonic and melodic goal of the subject have been shifted from the fourth to the final note and its character totally

transformed: no longer is the element of drama restricted to the first half of the subject, but instead it flows over with greater potency, welding the two contrasted halves of the subject together. Since this final entry of the subject (in the home I, but encompassing a temporary shift to the IV) moves so purposefully to the ♭II key, it sums up climactically the most vital tonalities of the fugue: this is illustrated in Ex. 6.39[72].

107-121: upon completion of the first violin entry (b. 102), the accompaniment to the augmented entry is enriched by numerous references to the head of the subject in diminution with the dotted rhythm re-introduced (cf. vl.II, b. 63-4). In the coda this modification is at first retained in the non-diminished subject (vla., b. 107-8 and vl.I, b. 108-9), producing an eliptical series of harmonies whose avoidance of solid cadences renders imperceptible the division between entry and coda, and thus promotes that fluidity of harmonic style characteristic of this timelessly evolving structure: by delaying the resolution of a particular note, and by then altering slightly the harmonic perspective from which it is perceived upon resolution, Beethoven is able to create a constantly evolving harmonic landscape. The cadence in C# minor for example (b. 108), does not actually resolve in that key because of the retardation in the viola: when C# is given the harmony is changed, moving apparently towards B major, though this key is also avoided by a retardation (vl.I, b. 109), causing its V^7 to be heard retrospectively as IV^7 major in the home I (b. 108-10). Only as the slowly-descending bass reaches C# is the subject restored to its original rhythm, and then the I proves major, anticipating the tierce de Picardie conclusion and entertaining that tonal ambiguity which fully justifies Ludwig's observation regarding this quartet:

"Music had never before been so daring." 73

The coda, whose syncopated harmonic structure is summarised in Ex. 6.40[74], is thus a conception of genius whose raison d'être lies in the opening of the exposition and its initial emphasis upon IV and ♭II harmony: after a brief digression to the IV (b. 110–12) the I major is re-established, but this is no ordinary tierce de Picardie of the kind mentioned by Beethoven to the Archduke Rudolph:

> "the major third at the close has a glorious and uncommonly quieting effect. Joy follows sorrow, sunshine - rain." 75

Rather it is charged with a heart-rending pathos which finds a release of sorts, not in the final major chord, but in the ♭II key of the light-footed Allegro which follows on immediately. This dramatic use of the I major is achieved by flattening the second and sixth degrees of the scale, which tends to make the I chord sound as V of the IV (minor). These are also the very notes which featured so prominently at the beginning of the fugue exposition as a means of emphasising the ♭II key. They are both present in the climactic augmented sixth chord to which the entire repeat of the fugue exposition has been steadily and purposefully directing its course: this chord thus sums up the entire fugue, with its neapolitan D♮ wailing out above the texture before resolving onto the I major, only to be repeated sforzando on the weakest beat of the bar[76].

As this analysis has shown, the present fugue, indeed the quartet as a whole, is a masterly demonstration of the potency and depth with which Beethoven developed that compositional principle which is founded upon the interdependence of thematic content and harmonic structure; it is doubtless for this reason that Beethoven considered this to be his finest quartet.

1. Warren Kirkendale : Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979), pp.270-71.

2. Winter writes :

> "The sketches up to folio 10r in Kullak suggest that the composer proceeded directly from the Grosse Fuge to the opening fugue of Op.131, as if the profound catharsis of the former had released the serene lyricism of the latter."

Robert Winter : 'Plans for the Structure of the String Quartet in C Sharp Minor, Op.131' in Beethoven Studies 2, ed. by Alan Tyson (London, 1977), p.114. This is contrary to Beethoven's normal procedure, as is mentioned ibid., n.14.

3. Matthews' comparison of the last three sonatas with Op. 106 is relevant here also: he states:

> "Everest had first to be climbed."

Denis Matthews: Beethoven Piano Sonatas (London, 1979), p.48.

4. Ian Spink : An Historical Approach to Musical Form (London, 1967), p.132 (italics mine).

5. Joseph Kerman : The Beethoven Quartets (London, 1978), p.302 (italics mine).

6. Robert Winter, op. cit. Brandenburg however expresses his reservations :

> "Ich finde die darin vertretene These von der Relevanz der Konzeptskizzen ("tonal overviews") für die tonale Struktur des Satzzyklus nicht allzu überzeugend."

Sieghard Brandenberg : review in Beethoven - Jahrbuch, vol.X (Bonn, 1983), p.421.

7. Robert Winter, op. cit., p.109.

8. Douglas Johnson, Alan Tyson, and Robert Winter : The Beethoven Sketchbooks . History . Reconstruction . Inventory (Oxford, 1985), p.482.

9. I do not here mention the VI emphasis of the subject which is taken up in the variation movement, since this may be regarded as a reinforcement of the ♭II key rather than as a separate tonal event. The two important tonal planes are the IV and ♭II rather than the VI and ♭II, as implied by Winter when referring to

> "... the previous selection of the submediant and flat supertonic for prominent treatment in the quartet."

Robert Winter, op. cit., p.115.

10. ibid.

11. ibid., p.110.

12. Deryck Cooke : 'The Unity of Beethoven's late Quartets' in The

Music Review, vol.24 (1963), p.32.

13. ibid., p.42.

14. Harold Truscott : Beethoven's Late String Quartets (London, 1968), p.116.

15. Gerald Abraham : 'Beethoven's Chamber Music The Last Quartets' in New Oxford History of Music, vol.VIII (The Age of Beethoven 1790 - 1830), ed. by Gerald Abraham (London, 1982), p.301 (italics mine).

16. Donald Francis Tovey : 'Some Aspects of Beethoven's Art Forms in Music and Letters, vol.8 (1927), p.148.

17. This is the view taken by Mason who describes the finale as

> "the last of the six movements."

Daniel Gregory Mason : The Quartets of Beethoven (New York, 1947), p.262. See also ibid., n.13. Significantly both of the last two movements were numbered '6' by Beethoven : see Robert Winter, op. cit., p.134, n.26. In the present thesis the movements are referred to as the fugue, Allegro, Andante, Presto, Adagio and finale, lest the numbering in the score appear contradictory to my interpretation of the structure.

18. Tovey correctly observes that this remote key is

> "in spite of all the emphasis that prepared it, utterly unexpected."

Donald Francis Tovey, op. cit., p.149. Cf. with the introduction of G♭ major at the end of Fugue I in Op.133. The preparation renders *the move logical, but not expected and certainly not* inevitable.

19. The reintroduction of the fugue subject in the finale is generally referred to in purely negative expressive terms ; there is however a serenity in this movement's sadness, a peace of mind and assurance for the future which transcend any present elements of hopelessness or resignation. However grim this finale sounds, it lacks neither spirit nor resolve ; in this respect it is similar to the tragic conclusion to Dichterliebe, but in Schumann's work there is no such assurance, merely the despair which finds its apotheosis in the piano postlude.

Incidentally, Mason, referring to the finale, mentions the fugue subject's

> "inconclusive close on D sharp [which seems] charged with a hopeless melancholy."

Daniel Gregory Mason, op. cit., p.264. For some reason he fails to observe that this is balanced by a perfectly regular answering phrase which leads back to the I, C#.

20. ibid., p.245. He is not convinced by Tovey's assertion that the D# in b.116 ff. precludes this interpretation : see ibid., p.245-6. The tierce de Picardie in the first movement of a minor key

work is rare in Beethoven, as noted by Robert Winter, op. cit., p.115.

21. Daniel Gregory Mason, op. cit., p.267.

22. Robert Winter, op. cit., p.124.

23. This is Winter's view ; see ibid., p.125.

24. Evidence of similar reserve may be found in his tentative adoption of a IV answer.

25. Neither of these keys is initially established by a Perfect cadence.

26. Lam describes this as

> "the balancing feature to the subdominant of the fugue exposition."

Basil Lam : Beethoven String Quartets (London, 1979), p.128.

27. See Gustav Nottebohm : Zweite Beethoveniana (Leipzig, 1887), p.10.

28. Fiske nonetheless remains sceptical, describing this as

> "a presumably intentional resemblance."

Roger Fiske : Beethoven's Last Quartets (London, 1940), p.58.

29. See below, pp.251-2 and Ex.App.1.

30. Deryck Cooke, op. cit., p.33 and p.43, Ex.48-50.

31. See above, pp.214-5.

32. The G# minor melody is given in the treble clef as at b.6 ff. for convenience's sake. The portion quoted entails no intervallic deviations from the opening statement in the vla., b.2 ff.

33. See for example, Beethoven, Op.106 (IV,b.200 ff.) and Ex.4.33-4).

34. Deryck Cooke, op. cit., p.30. A further example is discussed by Hugh Arthur Scott : 'That Finger-Print of Beethoven' in The Musical Quarterly, vol.16 (1930), pp.276-89. This concerns a three-note figure discovered by Ernest Newman, which

> "occurs with quite extraordinary frequency"

(ibid., p.277), yet in the present view with less power to convince.

35. In its simplest harmonisation the E# provides resolution into the major key, E♮ the minor. The occasional lowering of the fragment's final note is therefore to be expected.

36. See above, p.226.

37. The second half of the fugue subject suggests a reduction of the harmonic pace, as mentioned in the analysis ; see above, p.224.

38. Interversion is defined by Cooke as

"the switching around of the notes of a phrase."

Deryck Cooke, op. cit., p.34.

39. Otto Zickenheiner : 'Zur Kontrapunktischen Satztechnik in Späten Werken Beethovens' in Beethoven-Jahrbuch, vol.IX (Bonn, 1977), p.558. See also Notenbeispiel 3 on p.559.

40. Joseph Kerman, op. cit., p.274.

41. This quality is remarked upon by Fiske who writes of Op.131 :

"it has a timeless unworldly quality that only a man cut off from his fellow men could have conceived."

Roger Fiske, op. cit., p.47. Matthews likens its

"noble pathos, far removed from the fierce counterpoint of the Grosse Fuge"

to W.T.C. I, fugue IV, also in C# minor : Denis Matthews : The Master Musicians Beethoven (London, 1985), p.145.

42. Deryck Cooke, op. cit., p.42, Ex.41. The elements of contrast within the subject are mentioned by Marliave who describes it as

"profound sadness [followed by] still resignation."

Joseph de Marliave : Beethoven's Quartets, trans. by Hilda Andrews (New York, 1961), p.297.

43. Warren Kirkendale, op. cit., p.270.

44. See Robert Winter, op. cit., p.113, Ex.1 and p.119, Ex.2. Nottebohm observes :

"Unter den etwas später geschriebenen Skizzen ... machen sich reale Beantwortungen des Themas (in der Oberquinte oder Unterquarte von der ersten Note an) bemerkbar."

Gustav Nottebohm, op. cit., p.7.

45. These are mentioned by Robert Winter, op. cit., p.115.

46. This occurs in vl.I, b.10-12. See above, pp.219-21 and refer to Ex.6.5.

47. The obvious route, enharmonic alteration of a diminished harmony (E# - F♮) is not atypical of Beethoven : see for example Op.90 (I, b.87-92).

48. Cf. Op.106 (I, b.37), where an unharmonised D pivots between B♭ major and G major.

49. The enharmonic V^7 in the ♭II key is recalled, resolving correctly, in the final bar of the Adagio (b.28).

50. The notes of the fragment are re-aligned in Ex.6.21 to clarify their relationship to the simplified harmonic structure at the rate of one harmony per bar. In an early copy of the fugue this relation-

ship between fugue subject and fragment is absent : see Emil Platen: 'Eine Frühfassung zum Ersten Satz des Streichquartetts Op.131 von Beethoven' in Beethoven-Jahrbuch, vol.X (Bonn, 1983), pp.294-5. Such striking improvements are rarely immaterial.

51. Cf. Deryck Cooke, op. cit., p.42, Ex.41 with Beethoven's treatment of the B# in vl.I, b.21.

52. Mason writes :

> "the cello D natural ... may possibly be an error, but is found in all early editions of the score except that of Holle-Liszt, and in the original parts ... D sharp ... not only sounds better but makes better sense."

Daniel Gregory Mason, op. cit., p.242, n.3.

53. Originally this melody was shorter than its present form :

> "[Sie] ist in der ersten Skizze kürzer und anders gefasst, als im Druck."

Gustav Nottebohm, op. cit., p.7. Its extension permits further alternation of A# and A♮.

54. Lam remarks upon this theme's

> "mild chromaticism of secondary sevenths alternating D sharp with D natural."

Basil Lam, op. cit., p.124.

55. The examples cited of an inflected fifth all occur in a major key.

56. In the Adagio the second degree of the scale is occasionally lowered, and this contrast between A# and A♮ is taken up immediately the finale begins : see Ex. 6.24, where the relevant notes are marked 'x'.

57. The tonal structure of b.21-7 is duplicated in b.27-31, but the implied move to A major (b.24) now intervenes between E major and C# minor (b.29).

58. Cf. Op.111 (I), b.146-9.

59. Comparable profundity is belied by apparent simplicity in var.VI of the Andante where every unessential detail is pared away, leaving the theme outlined initially in the 'cello (cf. vl.I, b.1-4 with vlc., b.187-90).

60. This subtlety is absent from the early copy discussed by Platen where there is no sense of false entry : Emil Platen, op. cit., p.296.

61. The enharmonic notation in flats is of course a matter of convenience ; consideration of the real tonalities is more helpful at this stage in illuminating the tonal structure of the fugue.

62. The bracketed 'B' in Ex.6.29(ii) indicates the tonality of five

sharps which is given as G# minor for reasons discussed above ; see above, p.216.

63. The concluding bars in A major entertain certain allusions to B minor.

64. In Ex.6.33 vl.II is scored in semibreves to facilitate distinction of the three voices on a single stave.

65. Kerman comments upon the numerous harmonisations of the subject's sforzando note : Joseph Kerman, op. cit., pp.295-6 and Example 149.

66. Cf. Beethoven's pedal markings in the opening movement of his only other C# minor work, Op.27 no.2.

67. The first G# is supplied by analogy with b.80.

68. Beethoven at one stage planned a C# minor scherzo with a trio in D major ('Kullak', folio 14 v.) : see Robert Winter, op. cit., p.129, n.19. This was subsequently considered in F# minor, but rejected ('Kullak', folio 21 r) : see ibid., p.126.

69. The simultaneous presentation of both parts of the subject is an implied feature of the first episode (vl.I and vlc., b.28-31).

70. Alan Edgar Frederic Dickinson : Beethoven (London, 1941), p.217.

71. In the early copy discussed by Platen, Beethoven's dynamics are guided by the same purpose, but less inventive : see Emil Platen, op. cit., p.302.

72. The final C# minor harmony is here bracketed because resolution is delayed and I harmony in C# minor avoided.

73. Emil Ludwig : Beethoven Life of a Conqueror, trans. by George Stewart McManus (London, 1945), p.254.

74. Dynamics are added in Ex.6.40 only where they are used consistently throughout the four instruments of the quartet.

75. Friedrich Kerst : Beethoven The Man and the Artist as Revealed in His Own Words, trans. by Henry Edward Krehbiel (New York, 1964), p.26, no.42.

76. The rhythmic and dynamic significance of Beethoven's unusual notation in the final bars of the fugue is discussed by Platen, whose explanation is that it imparts rhythmic clarification to the changing dynamics : Emil Platen : 'Ein Notierungsproblem in Beethoven's späten Streichquartetten' in Beethoven-Jahrbuch, vol.VIII (Bonn, 1975), pp.147-56. Refer to his comments on Beispiel 11 and 12, p.152 and cf. Beispiel 16, p.155.

Concluding Remarks

The present thesis was initiated with a detailed analysis of the late-period instrumental fugues of Beethoven from a tonal and thematic perspective as its primary objective. The realisation of this objective constitutes the preceding chapters which are the basis upon which any conclusions are to be formed. Thus it is the task of this final section of the thesis very briefly to summarise the findings of the analyses and, where appropriate, to draw comparisons between the fugues discussed.

The first striking feature to emerge from a consideration of these fugues, even before analysis is begun, lies in their diversity of expressive moods and the wide range of emotional worlds they inhabit. Analysis shows that this variety is dependent upon many factors, tonality, tempo, dynamics and texture to name but a few. It also shows that the uniqueness of each fugue is in part the result of the pre-selection by Beethoven (whether consciously or subconsciously) of a number of specific 'musical arguments' from which to fashion the structure and character of the fugue. In this context I use the term 'musical argument' to refer to a specific compositional feature or characteristic, generally tonal or thematic, which is shown by the analyses above to be one of the relevant fugue's main driving forces, breathing vitality and purpose into the music. For example, the tendency of some of the fugues towards the IV key is to be understood as a musical argument since this emphasis upon a secondary tonal centre in opposition to the I creates a tonal imbalance, introducing tension or uncertainty which requires resolution. Although certain of the arguments identified during the course of this thesis may recur from one fugue to another, no two fugues are founded upon an identical combination of arguments and this is doubtless a significant factor in the creation of a distinct identity for each fugue.

The following is a skeletal outline, almost in note form, of the more

significant musical arguments relevant to each of the fugues, as identified during the preceding analyses; here the fugues are dealt with in chronological order and reference is made also to the balance of emphasis between subject and countersubject though this cannot always be considered a musical argument by the above definition: it is useful nonetheless to begin to evaluate the changing nature of this relationship at this stage:

Op.102: an element of conflict between duple and triple meter is evident. The subject is in contrast to its countersubjects.

Op.106: metrical conflict becomes a recurrent, indeed fundamental, characteristic of the fugue; the tonal relationship I-♭II/#I is important, as is the descent by thirds from which it is derived. The subject remains in contrast to the other thematic material.

Op.110: the I is opposed by the IV key. The complete subservience of the countersubject and its subsequent omission from the texture anticipate the C# minor fugue from Op.131 wherein a regular countersubject, however subservient, fails even to appear.

Op.120: the I is again opposed by the IV key. Contrast returns between subject and countersubject though the latter is in reality a variant upon the former; this is an extension of the thematic relationship evident in Op.110, the principle (that of doubling the subject at the lower third) being retained but with a different result.

Op.133: in this the most complex of the fugues the II becomes the all-pervading secondary tonal centre; great emphasis is placed upon

the ♭VII in relation to which the I sounds as II. The transition from contrasted subject and countersubject (Op.102) to monothematic fugue (Op.131) is encapsulated within the gradual emergence of the subject over its several counter-subjects.

Op.131: the I is now opposed by two closely related keys, the IV and ♭II; both of these keys have been referenced in the earlier fugues, the IV in Op.102, Op.110, Op.120 and Op.133, the ♭II in Op.106 and to a lesser extent in Op.133. The varying degrees of thematic contrast and balance of emphasis between subject and countersubject in the earlier fugues are here transcended in a monothematic structure which relies rather upon subtle differences between the two halves of its subject than upon its combination with a second theme. Thus, in both a tonal and a thematic sense, this fugue is, as it were, a distillation of Beethoven's hightened perception of the significance of these factors in the realm of fugal composition. It is in every way possible a fitting crown to his late-period fugal masterpieces.

This simple summary highlights the raw materials of each of the fugues, hidden often beneath the surface, but extracted by analysis. It also serves as a mine of information by which to illumine the development of Beethoven's fugal style over the last years of his life, the only period at which the fugue was to him as a composer a significant musical genre. It shows, for example, that the tonal imbalance which results from the establishing of a second tonality in opposition to the I is a recurrent feature of the fugues, becoming more pronounced towards the end of Beethoven's life. Clearly this technique is not so simplistically enforced that each fugue exploits it more daringly than does the last, but a

general trend is in evidence: tonal conflict of this kind is minimal in Op.102 - the IV is prophetically conspicuous towards the end but this is not uncommon and the I is never under serious pressure. In Op.131 however, the emphasis placed upon the IV and ♭II is substantial, both within the fugue and within the quartet as a whole, and this greatly undermines the supremacy of the I. Some of the intermediate fugues exhibit a gentle pull towards a second tonal centre which gradually becomes more insistent: this is the case in both Op.110 and Op.120 where it is again the IV key which seeks to overthrow the home I. Of course, the V had never been an automatic choice for Beethoven as the most important tonal centre besides the I in a major key work, but in the late-period fugues it is shunned with a consistency uncommon elsewhere, generally being confined to the exposition where it serves less as a key in its own right than as an intensification or confirmation of I tonality. The local V is used for the same reason throughout the fugues (A♭ major in Op.106 at b.65 ff., for example) but the use of the home V as an independent tonal centre within the structure of the fugue is extremely limited. One of the few examples is the E♭ major exposition of the inverted subject in Op.133 (b.414 ff.) but that is V only in relation to the A♭ major tonality of Fugue III, and IV relative to the I of the structure as a whole.

Another particularly interesting characteristic of Beethoven's fugal style to which reference is made in the above summary is the evolving balance of emphasis between subject and countersubject. As with tonal balance, the fugue from Op.102 appears to be the least complex in this respect, the subject being readily distinguished from its countersubjects and undoubtedly registering more prominently in the listener's consciousness. However, as the analysis of this fugue shows, overt thematic contrast merely conceals a deeper unity (refer to Ex.1.7). This principle is developed in Op.120 where the subject and countersubject are at once more

contrasted and more closely related than is the case in Op.102. Beethoven achieves this paradoxical balance by introducing a stronger rhythmic contrast between the themes while ensuring their mutual dependence upon the same thematic idea (a stepwise descent through a third - refer to Ex.3.2). At the climax of the fugue he is able further to elaborate upon this feature in a marvellous demonstration of the thematic unity between his ostensibly diverse themes (refer to Ex.3.19). In his lengthiest and most varied essay in the form, the Grosse Fuge Op.133, the degree of thematic contrast between subject and countersubject is a structural consideration and actually undergoes transformation during the course of the movement: initially there is maximum contrast (Fugue I) but this is then softened (Fugue II) and diminished (Fugue III) until the relationship is such that monothematicism would be the logical next step. The re-emergence of the subject as the primary, dominating thematic element of the work is achieved in parallel with this process, but although the Grosse Fuge may be viewed in this way, as the subject warding off opposing thematic contenders in its quest for self-assertion, yet at the deeper level there still remains that fundamental emphasis upon conceptual unity of thematic content which is characteristic of each of the late-period fugues.

Thus, even when there is a marked thematic contrast between subject and countersubject, a conceptual unity may be perceived at the deeper level. This observation is significant for it has direct bearing upon Beethoven's decision to abandon the countersubject altogether in the fugue from Op.131. It is of course arguable that this view of Beethoven's fugal development in terms of thematic contrast, leading from contrasted subject and countersubject to monothematic fugue, is simplistic and that, had Beethoven written sixty fugues instead of a mere half dozen, one would expect to find fugues with no countersubject interspersed among

those with one or more countersubjects, so that it would be meaningless to talk in this way of a tendency towards ever-increasing thematic economy, the logical consequence of which is monothematicism. While this supposition is in itself not unreasonable, the conclusion to which it leads is debatable: the fugues analysed exhibit a general trend to monothematicism rather than a step-by-step transition and it is therefore likely that with a larger number of works upon which to base one's evaluation of this feature the same overall trend would be apparent. Moreover, one's perception of Beethoven's fugal development must rest upon the fugues actually composed rather than upon those hypothetical works which are the product of conjecture: Beethoven did not write sixty fugues and in the few fugues which he did write there is a discernible sense of experimentation and discovery as he searched for an ideal fugal application. The evolution of thematic balance, which is one of the more interesting aspects of his search, is a factor brought to light as a result of the analyses above.

Thus far the tonal and thematic considerations which have arisen during the analyses have been discussed independently of each other. It has however been often suggested throughout the course of this thesis that there is a positive correlation between the tonalities implied by the various subjects and the keys through which their respective fugues progress. Once again this is a compositional feature which appears to be more forcefully employed in the later fugues, particularly Op.133 and Op.131. In the fugue from Op.102 whose subject is purely diatonic this technique is not used, but with Op.106 it becomes evident, asserting itself with a degree of emphasis which is commensurate with one's perception of the fugue's harmonic structure in terms of descending thirds. In other words, since the interval of a third is an undeniable melodic element not only of the fugue but of all four movements, the relationship between thematic contour and harmonic structure in the fugue is dependent upon one's analysis of the fugue structure and the extent

to which that structure is dependent upon descending thirds. The fugue subject from Op.110 is, like that from Op.102, devoid of chromatic inflections, but unlike the earlier subject it is constructed with a secondary tonal centre clearly in mind. This is reflected in the harmony of the fugue where the IV is an ever-present threat to the home I, but it does not influence the actual tonal structure of the fugue. The realisation of the subject's implications on a scale such as this is reserved until the final stages of Beethoven's fugal development. Thus, in Op.120 the interdependence of thematic contour and harmonic structure is limited, even when compared with the earlier fugues. This is primarily because Beethoven ties the structure of the fugue so closely to that of the waltz. In the Grosse Fuge this self-imposed constraint does not apply and there are numerous parallels between the contour of the subject and the overall structure and harmonic details of the fugue. It is the fugue from Op.131 however which most perfectly demonstrates Beethoven's exploitation of this technique, for by bringing the fugue to the beginning of the work he is able to allow the harmonic implications of its subject and answer to permeate not only the fugue but the quartet in its entirety. This more than anything else must account for his frank and undisguised satisfaction with what many deem to be the pinacle of his creative output, the String Quartet in C# minor, Op.131.

Appendix I

The second section of the Introduction dealt with the style of analysis used during this thesis and raised the question of whether or not the composer's subconscious has a significant role to play in the creation of his works. In particular it dealt with the possibility of thematic interaction between different sections of a musical structure. In this Appendix I propose briefly to focus upon one such thematic relationship in so far as it concerns a number of different compositions by Beethoven. I do not for a moment suggest that these works be regarded as anything other than separate individual compositions, merely that they have in common a single generic factor of which, it seems reasonable to suppose, Beethoven was not entirely conscious. This factor is a basic pitch pattern, which appears repeatedly in various but easily recognizable guises, and which is related to the pattern mentioned by Nottebohm as the basis of the A minor String Quartet, Op. 132: he refers to

"das aus vier Ganznoten bestehende Motiv." 1

Although the importance of this motif is generally well-known, no one has yet suggested that it is itself a derivative of the B-A-C-H motif. In the present view it is this figure, the B-A-C-H motif, rather than Nottebohm's four-note cell, which is of <u>fundamental</u> importance as the subconscious source of inspiration for many of Beethoven's late-period themes; since it is so often associated with a fugal texture, it is of particular relevance to this thesis and its implications are the topic for the present discussion.

The B-A-C-H motif may be regarded as consisting of two pairs of semitonally related notes (B♭-A and C-B♮); if these notes are re-ordered to form a chromatic scale, and the interval between the two pairs regarded as a variable (marked with a bracket in Ex. App. 1(i)), the

B-A-C-H motif may readily be transformed into a number of themes, as shown in Ex. App. 1[2]; these themes, according to the size of the variable interval, are the countersubject from Op. 120 (var. 32), the opening theme from Op. 127 (IV), the subject from Op. 131 (I), the contrapuntal opening from Op. 132 (I) and the subject from Op. 133[3]. It is clear that in two of these cases the B-A-C-H motif is simply stated in retrograde motion (Ex. App. 1(ii) and (iii)), and clear also that only one of the themes quoted is not specifically contrapuntal (Op. 127, IV); such unison writing however, as that with which this movement begins, is suggestive of potential counterpoint and relates also to one of Beethoven's first ideas for the use of the B-A-C-H motif: see Ex. App. 2[4]. This factor underlines the motif's essentially fugal or contrapuntal character in Beethoven's (subconscious) perception of it. It's presence may be noted also in a less exalted context in September 1825, as Beethoven filled the hiatus while Sir George Smart thought up a theme for improvisation: if the fragment concerned (Ex. App. 3(i)) is repeated several times, as Thayer's continuous past tense would seem to imply[5], its relationship to the B-A-C-H motif becomes immediately apparent: see Ex. App. 3(ii)[6]. This incident is indicative of the extent to which the B-A-C-H figure pervaded Beethoven's subconscious thoughts at this time. Previously, in that very same month, his subconscious pre-occupation with the motif had surfaced, alcohol-induced, in the form of a canon to the text 'Kuhl nicht lau' which is listed by Kinsky as WoO 191[7].

It follows from the Introduction to this thesis that the extent of Beethoven's awareness of the motif in each of the above instances lies beyond the scope of precise evaluation. His conscious interest in the motif however, is beyond doubt, for the sketchbooks testify to a repeatedly expressed desire to use this figure as the basis of an overture. Nottebohm dates Beethoven's first allusion to this intention from

1822:

"Die erste Andeutung zur Composition einer Bach-Ouverture ist in einer Bemerkung
auch statt einer neuen Sinfonie
eine neue Overture auf B a c h
sehr fugirt mit 3
(Posaunen? Subjekten?)

enthalten, welche zwischen Skizzen zur neunten Symphonie vorkommt und ihrer Umgebung nach in das Jahr 1822 zu setzen ist." 8

Beethoven's desire to honour the memory of Bach, though not his ideas for the Overture, dates from as early as 1809, for a sketchbook of that year contains fragments of a quintet headed

"Denkmal Johan Sebastian Bachs Quintett." 9

In 1817 he had attended a concert which had included an arrangement of the B-A-C-H motif from the Art of Fugue[10], but only in the final years of his life does the motif permeate his thoughts so fully. Nottebohm gives 1825 as the year in which Beethoven turned his attention to the projected Overture for the last time, before finally abandoning it:

"Der letzte Ansatz ... geschah im Jahre 1825." 11

It is significant that the themes quoted in Ex. App. I all lie roughly within this period (1822-5) and yet more significant that Beethoven's final attempt should occur contemporaneously with the Grosse Fuge, for no other work so closely follows the intentions Beethoven had for his B-A-C-H Overture as does the Grosse Fuge. Although never actually composed as such[12], Beethoven's intentions for the Overture were exorcised through the composition of the Grosse Fuge, his subconscious realisation of an otherwise unfulfilled idea. The remainder of the present discussion takes the form of a summary of observations which indicate the depth of the relationship between these two works :

(1) As already noted, the Grosse Fuge dates from the very year of Beethoven's last reference to the B-A-C-H Overture; this final sketch

is located at the beginning of a book which concentrates initially upon the Cavatina from Op.130 and then upon the Grosse Fuge itself[13]. The anecdotes related above in connection with Sir George Smart and Kuhlau both date from September 1825, the very time that the Grosse Fuge was approaching completion. Kinsky writes of Op. 130

> "Es wurde ... im August 1825 ... ausgearbeitet und - mit der Fuge (Opus 133) als Schlusssatz - im November beendet." 14

(2) The description of the opening section of the Grosse Fuge as 'Overtura' suggests a subconscious link with the B-A-C-H overture. Cooper[15] and Kerman[16] both comment upon this inappropriate title, but neither offers an explanation. The sketch referred to in (1) above features the double-dotted rhythm characteristic of the French overture, but this is absent from the Grosse Fuge.

(3) The B-A-C-H motif implies a modulation from a B♭ tonic to the supertonic, C minor. This implication is realised in Fugue I of the Grosse Fuge where supertonic modulations are a recurrent feature[17]. On the large scale the return from the A♭ major tonality of Fugue III to the home I, B♭ major is the most striking and memorable change of key in the quartet. In a local sense this too is a supertonic modulation.

(4) The design of the Grosse Fuge, whose structure falls into three main sections, perfectly accords with Beethoven's memorandum of 1822, the missing word of which might be 'Fugen' or 'Teilen' rather than 'Posaunen' or 'Subjekten' as postulated by Nottebohm[18]. An earlier memorandum in a sketchbook from 1817 is also of note: this sketchbook contains excerpts copied from the Art of Fugue (Contrapunctus IV) in the same year that Beethoven attended a performance of C.P.E. Bach's 'Die Israeliten in der Wüste' for which the final fugue on the name B-A-C-H served (perhaps significantly) as the overture[19]. The memorandum

is as follows:

> "alle 3tte Stücke eine wahre Fuge zum B. das Trio neues Sujett welches alsdenn beim Wiederholen dem ersten Thema zum Kontrasubject dient." 20

Although there is no specific mention of the B-A-C-H motif, the subdivision of the musical structure into sections of three units has a familiar sound, while the repetition of a new subject serving as countersubject is a simple anticipation of the more complex thematic interaction to be found between the three sections of the Grosse Fuge.

(5) The subject of the Grosse Fuge, formed of semitones and larger leaps in alternation, naturally tends to imply two voices. In its final fortissimo peroration the upper voice is modified in such a way that it incorporates the B-A-C-H motif in a most prominent manner: see Ex. App. 4. This provides a link with the subject of Fugue I, whose deviations from the Ursubjekt permit this very allusion, though in less conspicuous form: see Ex. App. 5.

(6) Finally it should be noted that the Grosse Fuge, whose structure and lesser details are permeated throughout with the implications of its subject, is consistent with Beethoven's plans for the B-A-C-H Overture, as summarised by Nottebohm:

> "Jenes Motiv sollte den Kern der Composition bilden ... In der Ouverture über den Namen B a c h und in deren ausgesprochenem fugirtem Wesen sollte der Kunst Bach's eine Huldigung dargebracht werden." 21

The importance of the B-A-C-H Overture to Beethoven is beyond doubt: the fact that he expressly stated his intention to compose this piece on a number of occasions, and his known esteem for Bach[22], suggest that this was not a project which he lightly ignored. What is not clear is the extent to which he actually pursued his intentions in composing the Overture: according to Nottebohm, six of the eight sides in the relevant

sketchbook deal with the B-A-C-H Overture, a sure indication of its importance to the composer:

> "Dass Beethoven wiederholt auf den Gedanken zurückkam, eine solche Ouverture zu schreiben, beweist, dass es damit ernstlicher gemeint war, als mit jener Symphonie." 23

Cooper however, discredits this interpretation of the sketches, and attributes them to the Tenth Symphony which he is currently attempting to reconstruct[24]. His article is in part a preparatory justification for his forthcoming reconstruction, in part a response to Winter's dismissal:

> "the sole possible verdict ... is that Beethoven was completely innocent of having done any more than thought about a Tenth Symphony." 25

Doubtless a good deal more will shortly be penned regarding the 'Tenth' but, whatever the outcome, it will not substantially alter the correlation noted above between the B-A-C-H Overture and the Grosse Fuge.

1. Gustav Nottebohm: Zweite Beethoveniana (Leipzig, 1887), p.551.

2. Analysis of the themes as formed of pairs of semitonally related notes is not unjustified: it is clear from the sketchbooks that this is precisely the manner in which Beethoven formulated the subject of Op. 133: see ibid., p.550-51.

3. Other themes, similarly constructed, might also be found, as, for example, the Allegro theme from Op. 111 (I). Schauffler notes the appearance of the B-A-C-H motif as early as Op. 59 no.2 (II, vlc., b.63-4) and suggests that it might have inspired the opening theme of the movement. See Robert Haven Schauffler: Beethoven The Man Who Freed Music (New York, 1929), pp.185-6.

4. This is quoted by Gustav Nottebohm, op. cit., p.578.

5. Elliot Forbes (ed.): Thayer's Life of Beethoven (Princeton, New Jersey, 1964), p.963.

6. Cooper compares this theme with the second of the Elf Neue Bagatellen, Op. 119: Martin Cooper: Beethoven The Last Decade 1817 - 1827 (Oxford, 1985), p.71.

7. Georg Kinsky: Das Werk Beethovens Thematisch-Bibliographisches Verzeichnis Seiner Sämtlichen Vollendeten Kompositionen completed and edited by Hans Halm (München, 1955), p.693.

8. Gustav Nottebohm, op. cit., p.577.

9. ibid., pp.268-9.

10. See Warren Kirkendale: Fugue and Fugato in Rococo and Classical Chamber Music (Durham, N.C., 1979), p.214, The Art of Fugue b).

11. Gustav Nottebohm, op. cit., p.579.

12. Nottebohm classifies the B-A-C-H Overture under the title "Liegengebliebene Arbeiten." ibid., p.573 et seq.

13. See ibid., pp.11-12 and cf. with p.1.

14. Georg Kinsky, op. cit., p.392.

15. Martin Cooper, op. cit., p.382.

16. Joseph Kerman: The Beethoven Quartets (London, 1978), p.277.

17. Cf. the prominent introduction of A♭ in the countersubject (Op. 133, b.31) with the sketches cited by Gustav Nottebohm, op. cit., pp.577-8. The supertonic modulation is also realised in the canon WoO 191.

18. See ibid. which is quoted above.

19. This concert was mentioned earlier: see above, p.253. Thayer notes the possibility that it was on this occasion that Beethoven conceived the idea of a B-A-C-H Overture: see Elliot Forbes, op. cit., p.691.

20. Gustav Nottebohm, op. cit., p.351.

21. ibid., pp.579-80.

22. He once remarked that Bach (meaning 'brook') ought to have been named Meer (meaning 'ocean').

23. Gustav Nottebohm, op. cit., p.13.

24. Barry Cooper: 'Newly Identified Sketches for Beethoven's Tenth Symphony' in Music and Letters, vol. 66 (1985), pp.9-18.

25. Robert Winter: 'Noch einmal: Wo sind Beethovens Skizzen zur Zehnten Symphonie?' in Beethoven - Jahrbuch, vol. IX (1977), p.552.

Appendix II

The purpose of this appendix is to list the more significant textual uncertainties in respect of the fugues analysed above. The primary editions consulted during the preparation of this thesis are GA and HV, except in the case of Op. 133 and Op. 131 where EE has been used in place of HV, since the latter is still awaiting publication. These editions of the fugues have been thoroughly compared in every detail, but many of the discrepancies are not deemed to merit inclusion below. Other editions have also been consulted and observations pertaining to them are made at selected points. Certain other observations, based upon a document or edition which has not been consulted, have been assimilated from a secondary source; where this is the case, the remark concerned is placed in brackets with a brief description of the nature of that source. All editions are referred to throughout in abbreviated form in the manner prescribed at the beginning of the Bibliography where they are listed in full.

Finally it should be noted that the present appendix is structured according to the ordering of the analyses above in Parts I and II of the thesis.

The 'Cello Sonata in D major, Op. 102 no.2 (III)

3	'leggiermente' in GA is bracketed in HV.
6^2 and 7^2	vlc.: minims marked '>' in HV but '≻' in GA. The reading in GA seems more consistent with 'sfp' used in similar places later (e.g. in pf., b.18 and 19). However GA and HV both give '>' in pf., b.12 and b.13.
16 - 20	HV marks b.16-17 'sempre piano'. In GA this is deferred until b.20.

86^1 pf.: GA gives F# as sop. crotchet. HV also gives F# but adds '♮' above. PE gives F# without comment.

112^3 - 4 pf.: GA gives 'f' at b.112^3; HV replaces this with 'cresc. poco a poco' in b.112^3- 4.

112^3 - 4 vlc.: GA gives 'cresc.' at b.112^3. HV adds in brackets 'poco a poco' in b.113 - 4.

127^1 pf.: GA gives E as first quaver in alto, as does PE; HV gives C#.

133^3 pf.: HV gives B# as last quaver in RH. In GA and PE F# is added an augmented fourth below.

138^1 pf.: GA and PE give C𝄪 as first quaver; HV gives D𝄪.

184^3 - 5^1 pf.: sop. tied D crotchets in GA are replaced in HV by a crotchet D followed by a crotchet E. PE follows GA.

185^3 - 92^2 pf.: bass notes are tied in HV, but not in GA. Similarly bass, b.199 - 200 and the pedal in b.202 - 22. HV however brackets the tie from b.203 - 4.

209^1 pf.: GA and PE give G as bass note beneath trill; HV gives A.

215^2 vlc.: GA and PE give C♮ as the first quaver; in HV the '♮' is bracketed.

234^1 pf.: GA gives C# as second alto quaver; HV and PE give E.

The Piano Sonata in A♭ major, Op. 110 (III)

61^2 - 2^1 alto: the text of GA and HV is an improvement upon the two autograph copies discussed in John V. Cockshoot: The Fugue in Beethoven's Piano Music (London, 1959), pp.99-100. (These autographs give alto of b.62^1 as three quavers, F and E♭ leaping to B♭ in the first and to E♭ in the second. The F is tied to b.61^2 in

both cases. OE follows the second autograph: see footnote, p.303 in HV.) AB also follows the second autograph, and adds a slur between the F and E♭ quavers in b.62[1].

146[2] - 7[1] alto: the quaver D is tied over the barline in HV; this tie is absent from GA and also from AB and SU.

160[2] - 68[1] The 'cresc ---' ends in b.163 in GA but is extended to b.168[1] in HV. In AB and SU the dotted line is absent and, one must assume, the crescendo continues as in HV.

170[1] HV gives 'p'; absent from GA, AB and SU.

181[1] HV gives bracketed 'sf'; absent from GA.

187[2] bass: the fourth semiquaver is given as G in GA, AB and SU; HV gives B♭. (The correctness of the B♭ in HV is confirmed by Beethoven's alteration of the first autograph and by the second autograph: see John V. Cockshoot, op. cit., p.107.)

190[1] bass: the second semiquaver is given as D♭ in GA, but as E♭ in HV. AB and SU also give E♭. (OE gives E♭, whereas both autographs and copy give D♭: see footnote, p.308 in HV.)

193[2] bass: GA gives the last semiquaver as D♭; HV gives E♭. AB and SU give D♭. (Autograph gives D♭ changed to E♭. Second manuscript copy gives E♭. OE and copy revised by Beethoven however give D♭: see footnote, p.308 in HV.)

Thirty-three Variations on a Waltz by A. Diabelli, Op. 120 (var.32)

6 sop.: phrase mark ends on third beat in GA, but on fourth beat in HV.

35^1 GA and HV both give 'ff' below the bass; HV gives 'f' below RH in addition. UE gives 'ff' and 'f' but brackets both.

84^2 and 4 HV gives an additional 'sf', not present in GA, below the bass. No comparable 'sf' is given in $b.85^2$ however.

117^2 GA and HV give 'p'. UE however gives 'pp' and omits 'sempre p' in b.120.

154^4 sop.: GA and HV give D♭ as the last quaver. UE however gives E♭. (Ratz, p.xxxiii in UE, regards D♭ as a mistake since MS and OE give E♭ for this quaver. OE gives A♭ for the alto quaver below it.)

The Piano Sonata in B♭ major, Op.106 (IV)

43^1 sop.: HV gives E♮ but GA and SU give E♭. AB gives '♮' in square brackets. (OE gives E♭; first London edition gives E♮; see footnote, p.258 in HV.)

45^3 bass: second semiquaver is marked '♮' in GA, AB and SU. HV gives E♭ but inserts '(♮?)' above.

48^2 alto: in GA the trill is given a concluding turn absent from HV. This is a recurrent difference between these two editions. On one occasion the trill is written in full by Beethoven (sop., b.345) and a turn is included.

57^2 sop.: GA gives G♭ as the second semiquaver, as does AB. HV and SU place a bracketed '♭' before the G.

60^1 sop.: HV gives a bracketed 'sf' which is absent from GA. Similarly bass, $b.63^1$.

75^2 alto: GA gives the last semiquaver as G♮, as do AB and SU. HV however inserts '(♭?)' above the G.

76^1 and 2 alto: GA gives the second and seventh semiquavers as G♮, as do AB and SU. HV also gives G♮ but adds '(♭?)' and '(♮?)' above them respectively.

85^{2-3} sop.: GA marks the quavers staccato and the crotchet 'sf'. These markings are omitted in HV and AB. SU inserts the staccato but places the 'sf' in brackets. Similar discrepancies recur throughout this passage.

97^{1} alto: GA, HV and SU give E♭ as the first quaver. AB adds a bracketed G♭ a sixth below. Thus Tovey in AB, p.142:

> "all old editions agree in ... omitting ... G♭. Evidently the G♭ has been mistaken for the tail of a quaver."

111^{1} bass: GA gives the second quaver as A♭, as does SU. HV inserts '(♮?)' beneath the A♭. AB precedes the A♭ with a bracketed '♮'.

184 GA gives 'ben legato'; HV gives 'non ligato'. AB gives 'non legato'. See also Tovey's comment in AB, p.143.

197^{2} alto: the semiquaver is marked '♮' in HV and AB, cancelling the G# in sop., $b.197^{1}$, but the '♮' is absent from GA and SU.

201^{2} bass: HV gives '(#?)' beneath the third semiquaver; absent from GA, AB and SU.

245^{2} bass: the '♮' above the trill in GA is bracketed in HV.

262^{3} sop: GA gives C#, as does SU. HV gives C# but inserts '(♮?)' above, while AB precedes the C# with a bracketed '♮' and inserts '#?' above. Tovey, p.144 in AB, argues in favour of C♮:

> "Beethoven ... hardly ever forgets a precautionary accidental. Now if he meant C# here he would surely have marked it..."

285^{2} bass: HV, AB and SU give the second semiquaver as E♮ without comment. In GA however the E is preceded by a '♭' in spite of the key signature. This is not necessarily a misprint for '♮', since GA is generally more liberal with precautionary accidentals than is HV.

335^{2} alto: GA precedes the second semiquaver with a precautionary '♭'. HV gives '♮' in brackets. AB gives E♮ but adds '♭?' above; SU gives E♮ without comment.

368^{3} alto: HV gives a bracketed '♭' above the G♭ trill; absent from GA.

The String Quartet in B♭ major, Op. 133

161 - 5 vlc.: in EE the 'cello begins on B♭ a minor 7th above middle C; in GA it is scored an octave higher. Similarly b.176-83^{1} and b.209-16.

212 vlc.: the semiquavers in GA are B♭-A♭-G♭-F leaping to E♭-D♭-E♭-C: in EE the notes are A♭-F-G♭-F leaping to E♭-D♭-C♭-B♭.

334 vl.I: marked 'tr' in GA but '♮tr' in EE.

573 - 4 vlc.: the tie over the barline in GA is omitted (presumably by mistake) in EE.

580 vl.I: the G dotted crotchet and crotchet are tied in GA, but not in EE.

616 - 7 vla.: marked 'sempre pp' in EE, but not in GA.

The String Quartet in C# minor, Op. 131

14 vlc.: decrescendo 'hairpin' in GA absent from EE.

81^{3} vla.: 'cresc.' in GA is absent from EE.

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HV : Beethoven Werke Herausgegeben vom Beethoven-Archiv Bonn unter Leitung von Joseph Schmidt-Görg G. Henle Verlag München-Duisburg, Abteilung VII, Band 5 (1961) and Abteilung V, Band 3 (1971).

HV : Beethoven Klaviersonaten Nach Eigenschriften und Originalausgaben herausgegeben von B.A. Wallner G. Henle Verlag (München, 1980).

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