

line which Berg regarded as being particularly important to the listener's understanding of both the drama and Lulu herself.¹ It was his setting of this line which Berg quoted in his tribute to Karl Kraus on his sixtieth birthday.² The Rondo material of Act II, sc. 1 reappears at its original pitch in Act II, sc. 2. In Berg's operas a musical repetition always underlines some verbal or dramatic link; the F sharp minor tonal centre is associated with Alwa's recurrent references to Lulu's eyes, the music which originally accompanied the words 'Eine Seele, die sich am Jenseits den Schlaf aus den Augen reiß' reappearing to the words, 'In deinem Augen schimmert es, wie der Wasserspiegel' ('Your eyes shimmer like the surface of water') (bar 1037) and the words 'Wenn Deine beiden grössen Kinder-äugen nicht wären' ('Were it not for your large child-like eyes') (bar 1076).

The musical material of *Lulu* can be considered as falling into three groups defined by their respective harmonic and tonal characteristics. The first group consists of those passages which exploit the harmonic and melodic differences between the various sets. These passages are based on harmonic and melodic formations associated with particular characters or events in the opera. The second group of material consists of those passages based on the harmonic, melodic and tonal characteristics which certain sets have in common and particularly on the contrast between 'white-note' and 'black-note' segments which is a feature of a number of sets. The third group consists of those overtly tonal passages which invite a traditional interpretation. These three groups of material are not mutually exclusive. A set may be handled in different ways at different points in the work. Schön's set at P-O, for example, with its characteristic opening major triad, is used as a means of identifying Schön as an individual, at I-O it is employed as a means of relating him to other characters in the opera through the harmonic and tonal areas which it holds in common with other sets whilst the D flat defined by the opening triad at P-4 acts as a leading-motive-like 'tonic' associated with his music for much of the opera.

The distinction between these three groups of material acts as a large-scale formal device, the move from one harmonic-tonal group to another articulating the overall structure of the work, in a way that I have discussed in the previous chapter.³ The tonal centres associated with Dr. Schön and Alwa are important in this respect, each acting as a point of resolution of the tonal ambiguity of the preceding sections. The dramatic significance of the coda of Schön's Sonata movement, perhaps the most memorable and immediately

¹ See Reich, 'An der Seite von Alban Berg', *Melos*, 27, 1960, pp. 74-5.

² It was Kraus who first produced *Pandora's Box* in Vienna and whose speech at the premiere had a deep influence on Berg's conception of the work. (See Reich, *Alban Berg*, London, 1965, p. 156.)

³ See p. 17 above.

striking passage in the work, will be discussed later.¹ The only other passage in the opera which has a similar effect on the listener is Lulu's great cry on her return from jail in Act II, sc. 2 ('Oh Freiherr', bar 1001), when the music moves into a clear G flat major. In its immediate context this passage serves, both musically and dramatically, as the resolution of the Melodrama of the preceding 48 bars; on a larger scale it acts as the resolution of the whole of Act II, sc. 2 up to this point. The significance of Lulu's cry of happiness on regaining her liberty becomes clear in the great duet between Lulu and the Marquis in Act III, sc. 1, when her freedom – which she describes as 'the only thing I have ever owned' – is again threatened.²

Although the interlinking of different sets through their common hexachordal or segmental content, as in the opening movement of the *Lyric Suite*, plays an important structural role in *Lulu*, it is only one of a number of interrelated elements which form the basis of the harmonic and melodic language of the opera. Together these elements create a certain kind of all-pervasive quasi-tonal harmonic and melodic atmosphere to which, as Perle has pointed out, the 'sets themselves are subordinate'.³

Whereas in *Lulu* and the *Lyric Suite* the different harmonic and melodic elements create and are absorbed into 'some kind of tonality',⁴ the harmonic and melodic language of *Der Wein* and the Violin Concerto have overtly tonal implications. The basic sets of *Der Wein* and the Violin Concerto are shown in Exx. 127a and 127b. Both sets have clear tonal connotations and the desire to enhance these tonal connotations is one of the main considerations governing Berg's choice and handling of set forms and transpositional levels in the two works.

Ex. 127



Music of *Alban Berg* (Berg's: *Der Wein*)

University of California, Berkeley

The first six notes of the set of *Der Wein* at its primary level (P-O) outline part of an ascending D minor scale.⁵ D minor is emphasized throughout as a

¹ See p. 202f. below.

² See Perle, 'The Character of Lulu: A Sequel', *Music Review*, 25, 1964.

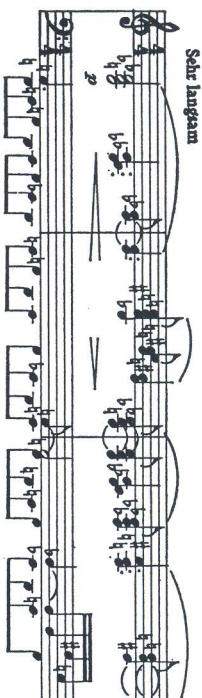
³ Perle, *Music Review*, 26, 1965, p. 275.

⁴ Perle, *Serial Composition and Atonality*, 2nd edn., London, 1968, p. 89.

⁵ Redlich ('Bergs Konzentration *Der Wein*', *Osterreichische Musikzeitschrift*, 21, 1966) has drawn attention to the fact that, although all commentators on the work have regarded the form shown in Ex. 127a as being the primary form of the set, Berg's own sketch of the set (reprinted in Reich's *Alban Berg*, London, 1963) shows the inverted form. While the single sketch-sheet for *Der Wein* in the Stadtbibliothek, Vienna, confirms that Berg regarded this as being the primary form of the set, a sketch headed 'the Twelve-note row of *Der Wein*' which Berg wrote in the guest book of Rützena Herlinger shows the ascending form

'primary tonal centre' appearing at all the important structural points of the work. *Der Wein* can be divided into three sections, each section corresponding to one of the three poems which form the text of the work. The third poem is set as a varied reprise of the first while a large part of the central section is palindromic. The opening bars of the work (bars 1-7) are based upon row forms P-O, I-3, P-7, I-8 and R-O, all of which include the three-note figure D-E-F or F-E-flat-D; these figures are extracted from the different row forms and act as a bass ostinato pattern (see Ex. 128). The same D area

Ex. 128



appears at the end of the first section, the closing group of which is approached (bars 69-72) by a series of descending D major and minor scale figures in the bass produced by juxtaposing and overlapping similar segments from the inverted form of the set at different transpositional levels. The third and final section of the work begins and ends with the D minor figurations which opened the Aria. It is significant that at the opening of the second song, the central section of the work, particular prominence is given to the triad of A major, the notes of which are extracted from a number of different row forms and form a held pedal chord on the horns. The opening of the central section thus implies a dominant relationship to the first and third sections.

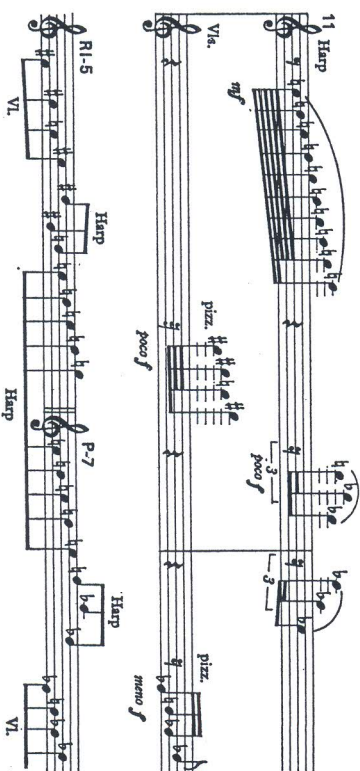
The tonal implications of the set of the Violin Concerto, which at its primary level (Ex. 127b) begins with a G minor triad followed by a D major triad, have a similar long-term structural effect on the overall plan of the work. The opening bars of the piece juxtapose the G minor area of the opening notes of the set at P-O and a tonal area around B flat, the relative major of G minor. This juxtaposition (which is, to some extent, implicit in the structure of the set, since notes 12, 1, 2 and 3 of P-O together produce a B flat major added-sixth chord which incorporates both a B flat major and a G minor triad) reappears in the chorale of the second movement and runs through the whole concerto. In the Bach harmonization which Berg uses, the chorale starts in B flat major and ends in G minor. The beginning of almost

illustrated in Ex. 127a. I shall regard the set form and level shown in Ex. 127a, which acquires a particular prominence during the course of the work, as being the primary form of the set of *Der Wein* and shall designate it P-O.

every main section of the piece is marked by a passage which opens on one of these 'tonic' triads or on triads on D or F, the 'dominants' of the original G and B flat triads.¹ The work ends on the ambiguous B flat⁶ chord.

I have said above that in Berg's music a twelve-note series is usually regarded as having other characteristics in addition to that of interval succession. In many passages of *Der Wein* the tonal implications of the series and the melodic contour with which the series is most frequently associated is often regarded as being of more importance than the interval succession. The series is frequently altered and submitted to cyclic and other forms of permutation as a means of enhancing the tonal and thematic similarities between row transpositions. A simple example of cyclic permutation, employed in order to emphasize such similarities, can be found at bars 11-12 of *Der Wein* where a statement of P-7 is fused with a cyclically permuted statement of RI-5 beginning on note 8. Notes 8-12 of RI-5 and notes 1-5 of P-7 are juxtaposed to form a single C major scale on harp; the remaining notes of the two forms of the series appear as similar three- and four-note figures on harp and pizzicato violins (Ex. 129).

Ex. 129



An example of the interval structure of the series being altered in order to emphasize the tonal and melodic similarities of two transpositional levels can be seen at bars 69-70, where the first hexachords of P-6 and P-8 are juxtaposed in the first horn part; the similarities between the two hexachords are

¹ The following plan shows the main tonal centres at the beginning of each of the main sections in the first movement of the Violin Concerto:

bar 11	a tempo	G minor
84	Tempo primo	G minor
104	Allegretto (Trio I)	D minor
114	Rustico	B flat
132	Tempo primo	D minor (reprise of Allegretto)
155	Trio II	G major/minor
173	Quasi Trio I	D minor
257	Final bar	G minor

from four forms of the basic row (I-2, R-8, P-8, RI-2). Ex. 171b shows how it can be derived from one of these forms (RI-2). One hexachord of the trope is stated as a chord; the other (with the exception of the note C) as a melodic figuration on the trumpet. The arpeggio-like ascending thirds in the trumpet part in this example are always associated with melodic statements of trope A.

Melodic statements of trope A appear only in the two parts of the second subject group,¹ although they are, to some extent, anticipated at bar 19 where the clarinet has an arpeggio-like figuration derived from notes 1-7 of P-3, the remaining notes of the row appearing as a chord on the harp.

There are no melodic statements of trope B, although the superimposed fourths and fifths which characterize the chords of this harmonic trope are reflected in many of the melodic patterns that appear during the course of the work. The parallel fourths at bars 42-7, for example, are produced by partitioning the basic row into three-note cells in a manner similar to that which generated trope B.

Horizontal statements of trope C give rise to the arpeggio-like figurations which appear at bar 97f.

The series of the Violin Concerto is shown in Ex. 172. As in *Der Wein* the main motivic patterns which characterize the series (in the case of the Violin Concerto the chains of thirds and the whole-tone segment) often appear as independent elements. At some points in the work the series is cyclically permuted so as to begin on the second note, the first note appearing at the end of the series as a means of extending the whole-tone sequence formed by notes 9-12; at other points there appear chains of whole-tones not directly derived from the set itself.

Ex. 172



To an even greater extent than in *Der Wein* the methods of set-handling employed in the Violin Concerto are determined by a desire to enhance the tonal implications inherent in the structure of the series – tonal implications that are confirmed by the inclusion, in the work, of non-dodecahphonic material in the form of a Bach chorale and the melody of the Carinthian folksong, 'Ein Vogel auf'm Zweischenbaum'.²

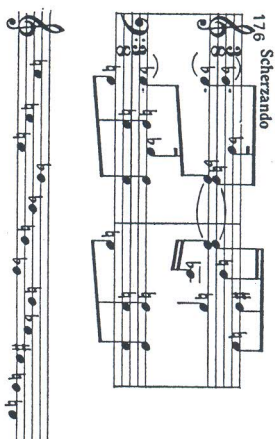
The extent to which tonal criteria determined Berg's handling of the set in the Violin Concerto is shown by his working sketches for the piece, on one sheet of which the chords that can be derived from the series are marked with chord symbols indicating their tonal relationship to one another.

¹ See P. 186 below.

² See Henwig Kraus, 'Berg's Carinthian folk tune', *Musical Times*, June, 1976, p. 487.

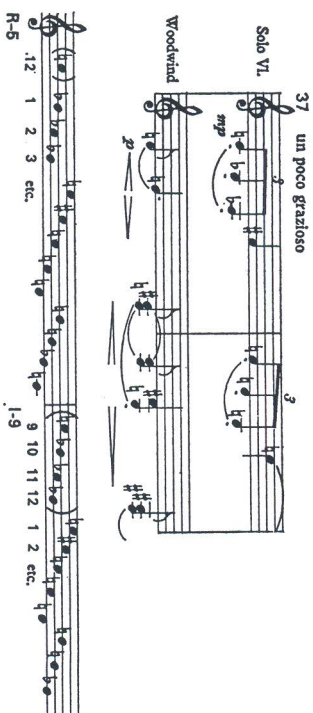
Throughout the work reordering of the internal order of segments of the series is frequently adopted as a means of emphasizing tonal connotations; Ex. 173 shows bars 176-7 of the first movement, where the opening notes of the I form of the series are reordered so as to produce an F major root position chord.

Ex. 173



As I have said above, the R and RI forms of the series of the Violin Concerto present cyclically permuted versions of the P and I forms. The passage at bars 38-9 of the first movement of the Concerto, for example, can be considered as being derived from a cyclically permuted version of either R-5 or I-9 (Ex. 174).

Ex. 174



Since, in the Violin Concerto, as in *Der Wein* and Berg's other twelve-note works, cyclic permutation is accepted as a normal method of row handling, the series has, in effect, no distinct retrograde. Because of this, and because reordering of the segments in relation to one another is also common procedure, it is frequently difficult to assign a passage to one specific form of the series with any certainty.

The series of the Violin Concerto poses the opposite problem to that posed by the set of *Der Wein* for, while giving rise to triadic harmonic formations and triadic melodic figurations that are reminiscent of traditional music, the

series does not lend itself to the formation of the non-triadic patterns – such as chromatic or scale figures – that characterize tonal music.

Such figures are obtained from the series in a number of ways during the course of the work. The open fifths that appear in the introduction to the first movement, and reappear at various points through the work, are produced by extracting alternate notes from the series in a manner similar to that which generated the Athlete's series in *Lulu* and trope *A* of *Der Wein*. Bars 1, 3, 5 and 9 of the first movement of the Violin Concerto present notes 1–9 of P-3 in this way, alternating with a similar statement of notes 1 to 9 of P-O at bars 2, 4, 6 and 10. Bar 7 presents notes 10, 11, 12 and 1 of P-3 and bar 8 notes 10, 11, 12 and 1 of P-O permuted to form a sequence of sevenths and tritones (see Ex. 175).

Ex. 175

Ex. 175 shows musical notation for Solo VI and Bass/Cl. parts. The Solo VI part is marked 'Andante' and 'ppp'. The Bass/Cl. part is marked 'mp'. The score shows a sequence of notes and chords, with some notes circled to highlight specific intervals or patterns.

Many non-triadic figurations are obtained by partitioning the series into segments and stating these segments as chords in such a way that the horizontal movement of parts produces new melodic patterns. The chromatic figurations of the second Trio (bar 155f.) are obtained by presenting the series

as a three-, four- and five-note chord sequence in the manner shown in Ex. 176.

Ex. 176

Ex. 176 shows musical notation for Solo VI and Bass/Cl. parts. The Solo VI part is marked 'ppp'. The Bass/Cl. part is marked 'ppp'. The score shows a sequence of notes and chords, with some notes circled to highlight specific intervals or patterns.

These chromatic figurations are then handled as independent motives in the cadenza of the second part of the work. Elsewhere, non-triadic figurations are obtained by combining different set forms in a variety of ways. One such way is illustrated diagrammatically in Ex. 177, the opening bars of the angular melodic line on the bass clarinet and bassoon which accompanies the solo violin at bar 35f. of the second part of the concerto. The bass clarinet and

Ex. 177

Ex. 177 shows musical notation for Solo VI, Bass/Cl., and Bass. parts. The Solo VI part is marked 'ppp'. The Bass/Cl. part is marked 'ppp'. The score shows a sequence of notes and chords, with some notes circled to highlight specific intervals or patterns.

bassoon figuration is derived from the overlapping set forms shown on the lower staves of Ex. 177; the figuration itself is shown on the staff above. During these bars the solo violin unfolds successive statements of I-2, and P-2. With the exception of those notes indicated by square brackets, which are omitted, the notes of the set forms on the two lower staves which do not appear in the bass clarinet and bassoon figuration appear in the solo violin part; these notes are indicated in the fragmentary sketch of the solo violin part on the upper staff of the example. The order of the notes indicated by arrows is interchanged.¹

In other passages of the Violin Concerto Berg adopts a technique similar to that employed in *Der Wein*. In *Der Wein* triadic harmonies were obtained from a series dominated by conjunct movement by extracting alternate notes from the set; in the Violin Concerto conjunct movement is obtained from a set dominated by triads by using two or more forms of the series simultaneously, alternating notes from each. Ex. 178a shows a melodic figuration from the first movement of the concerto produced by stating the notes of P-1 and P-3 alternately; Ex. 178b shows a passage from the Adagio of the second movement which employs three transpositions of the series simultaneously.

Ex. 178

Ex. 178a and 178b are musical notations. Ex. 178a is a single staff with a treble clef, showing a melodic line with various accidentals and a bracketed section. Ex. 178b consists of three staves, each with a treble clef, showing three different transpositions of a series simultaneously. The notation includes various accidentals, brackets, and arrows indicating specific notes and their relationships.

Although the procedures in *Der Wein* and the Violin Concerto spring from the unusual nature of the basic set of each of these works, the derivative

¹ I am indebted to Michael Taylor for his help in unravelling this passage.

operations by which the subsidiary sets of these pieces, and of the *Lyric Suite*, are obtained are very similar to those employed in *Lulu*. Berg's handling of these derivative sets is consistent with his handling of the derivative sets in *Lulu* and with other aspects of his twelve-note technique. I have said earlier that Berg usually regards his twelve-note sets as having characteristics in addition to those of interval succession and that these other characteristics are often assumed to be as important and, on occasions, more important a feature of set-identity as the interval succession. The relationship between the derivative and the basic sets in Berg's twelve-note music depends less on the preservation of interval succession than on the maintenance of these other associated characteristics. Berg may or may not choose to project compositionally the processes by which the basic set gives rise to various derivative sets; the extent to which he chooses to do so varies from work to work. Even when Berg does choose to project this process, however, the significance of the subsidiary sets depends, not on this generative process itself, but on harmonic, motivic, tonal and other properties which they hold in common with the basic set.

Berg's handling of the twelve-note method displays a typically Bergian paradox in that it seems to be based on two contradictory and, indeed, apparently mutually exclusive attitudes. On the one hand Berg's twelve-note techniques are essentially practical, pragmatic and directly concerned with the auditory experience of the listener. Thus, the Bergian series is regarded, not as an abstract interval sequence, but as a thematic phenomenon associated with a specific and easily identifiable melodic and rhythmic shape. Unless, as in *Der Wein* and the Violin Concerto, the nature of the series is such that the most important melodic and thematic features of the original are maintained in the retrograde forms, it is assumed that the retrograde forms destroy many of the identifying characteristics of the set and that the relationships between the retrograde forms and the original and inverted forms of the series are not easily perceptible; such forms are, therefore, usually avoided. Melodic fragments derived from the series are, however, frequently employed as independent figurations. Any easily recognizable characteristic or figuration may acquire its own independent identity, and, as in traditional music, the interval succession originally associated with it may be modified in order to enhance this identity. In many cases the most important characteristic of such a figuration is its tonal connotations; the implied presence of tonal criteria as factors determining Berg's handling of the set and his choice of harmonic and melodic formations itself makes the music more immediately comprehensible to the listener. All such modifications of Schoenberg's twelve-note system seem to be directly concerned with giving a definite concrete shape to the otherwise abstract interval sequence so that the listener may recognize and follow its progress more easily.

On the other hand, alongside this concern with employing the set in such a way that it produces audible and clearly perceptible relationships, there exists in Berg's music evidence of a deep interest in the abstract, intellectual possibilities of the twelve-note method; a fascination with the mechanics of set-handling. In many passages of *Lulu* the exploitation of the relationships between different sets reaches a degree of complexity that suggests a sheer intellectual delight in exploring the technical possibilities which the twelve-note system presents. The combination of seven different sets in the 'Film Music' Ostinato between Act II, scenes 1 and 2, the exploitation of the relationships between Alwa's and Schön's series in Act II, sc. 1, when Schön overhears Alwa declare his love for Lulu,¹ and the rhythmic canon at bars 811-32 of Act I, sc. 2 which combines Schön's, Alwa's and Lulu's series and the basic set are amongst the most obvious examples of such passages. It is noteworthy that these three passages, each of which is a technical *tour de force*, are amongst the most exciting in the work; I shall discuss the significance of this point in Chapter VI.² Although Berg's exploitation of the complexities of set-handling in *Lulu* has its origins in the libretto and in the dramatic situation, it is entirely typical of one aspect of Berg's character that the more elaborate and 'abstract' of his technical procedures are such that they are, by their very nature, incapable of being perceived by the listener.

George Perle has pointed out the unusual conceit with which Berg illustrates the confusion of Alwa's words 'In der Redaktion weiss Keiner was er schreiben soll' ('No-one in the editorial office knows what to write'), at bar 808 of Act I, where the vocal line represents two cyclically permuted forms of Alwa's series stated simultaneously. Similarly the curiously and inconsequently dream-like nature of the dialogue between Lulu and Alwa at bars 922-35 of the same scene is symbolized by a sequence of cyclically permuted statements of Alwa's series.³ When in Act I, sc. 1, Schön tells the Painter that the portrait needs more work done on it, the lack of formal clarity is represented by a vocal line that consists of a number of permutations of a note-collection that could be obtained from a variety of set-forms.⁴

Whatever the psychological and emotional reasons behind Berg's adoption of the twelve-note method and his desire, using this method, to write music which emphasizes its link with traditional music, there can be little doubt that he was fascinated and stimulated by the technical and intellectual problems which his attempt to reconcile the twelve-note method and the tonal

¹ II/1, bars 274, 294, 296f., 313f., 338f., 341f., 344f. The passages are discussed in Perle, *Music Review*, 26, 1965, p. 282.

² See p. 224f. below.

³ See Perle, *Music Review*, 26, 1965, p. 282.

⁴ See Reiter, *Die Zwölftontechnik in Alban Bergs Oper 'Lulu'*, Regensburg, 1973, p. 73.

system raised. The bringing together of such apparently conflicting elements is a constant feature of Berg's music.

The confrontation of twelve-note and tonal material in the Violin Concerto (in which Berg employs the Bach chorale 'Es ist genug') and in *Lulu* (in which Wedekind's *Lautentied* appears in Act III) are the most obvious examples of this bringing together of seemingly contradictory elements. Since in these works the twelve-note music is itself tonally orientated and, in certain passages, seems to work according to traditionally tonal criteria, the conflict between the tonal and twelve-note material is not as great as it might have been. The technical conceit by which Berg reconciles the two groups of material is, however, indicative of the intellectual fascination which the mechanics of twelve-note composition exerted upon him.

In the Violin Concerto the first three phrases of the chorale melody first appear on the solo violin at bar 136, where they form part of a number of

Ex. 179

136 Solo VI.

The musical score for Example 179 is a page from a music manuscript. It features five staves. The top staff is for the Solo Violin (Solo VI), with a key signature of one flat and a 4/4 time signature. It contains a melodic line with various ornaments and slurs. Below it are staves for Viola (Vla.), Double Bass (D. Bsn.), Bassoon (Bsn.), and Trombone (Tbn.). The D. Bsn. and Bsn. parts have dynamic markings like 'p' and 'f'. The Tbn. part has a 'p' marking. The bottom staff is for the Solo Viola (Solo VI), which also has a key signature of one flat and a 4/4 time signature. It contains a melodic line with various ornaments and slurs. The other staves show the accompaniment, with the D. Bsn. and Bsn. parts having dynamic markings like 'p' and 'f'.

statements of the basic series, the remaining notes of the series appearing on the bassoons, violas and second violins. The three phrases are then repeated by the wind instruments in Bach's harmonization. The way in which the first three phrases of the chorale melody are derived from the twelve-note series is shown in Ex. 179. The remaining phrases of the chorale are then unfolded in the same way, each phrase appearing first on the solo violin as part of a statement of the series, or of a number of forms of the series, and then on the wind instruments in Bach's tonal harmonization.

The melody of the Wedekind *Lautentied*, which plays an important role in Act III of *Lulu*, undergoes the same process as the chorale of the Violin Concerto but in reverse, the tune being originally presented as a diatonic melody which is then gradually absorbed into a twelve-note context. The tune first appears on the solo violin as a counter-melody to the 'Procurer's Song'¹ which the Marquis sings in Act III, sc. 1, and reappears in a more chromatic form at two later points in the same scene. The process by means of which the melody is absorbed into the twelve-note context can be seen in the orchestral interlude between Act III, sc. 1, and Act III, sc. 2, which appears as the Variation movement of the *Lulu* Suite. The first of the four variations is in an unambiguous C major and is essentially a repetition of the 'Procurer's Song' of the previous scene; the second variation is polytonal and presents the theme as a two-part canon, one group of instruments playing in C major whilst the other group plays in G flat major; the third variation is 'atonal', the theme being harmonized with chords built of superimposed fourths or of superimposed fourths and tritones; in the fourth variation the theme is finally absorbed into a twelve-note context in the way shown in Ex. 180.²

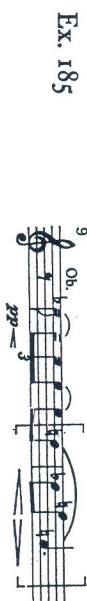
The revelation of the relationship between the melody of the *Lautentied* and the basic set of the opera does not, of course, make the earlier, non-twelve-note, statements of the melody more significant or more relevant in any way, any more than the relationship between Schön's series and the basic set, which is revealed at the moment of Schön's death in Act II, adds greater significance to Schön's earlier Sonata movement. Indeed, the identity of the Wedekind tune as a self-sufficient melodic entity is so strong that the listener is probably unaware, in the fourth variation, that it forms part of a number of

¹ The opening bars of the 'Procurer's Song' are given in Redlich, *Versuch einer Würdigung*, Vienna, 1957, p. 249, Ex. 315. The saxophone part in this example doubles the voice part which is not given.

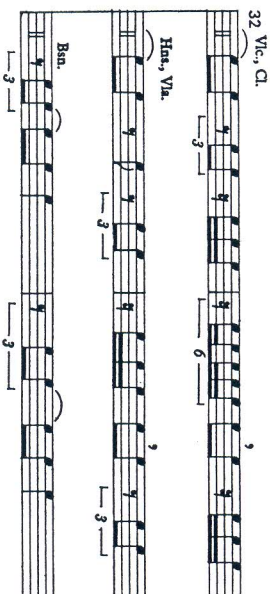
² In the *Lulu* Suite the fourth variation is followed by the first two phrases of the theme itself before being interrupted by the chords of the Marquis's Chorale which close the movement as they began it; in the opera the curtain rises at the end of the fourth variation and the original theme, now in E flat major, is heard in its entirety (played on an off-stage barrel organ) against a tremolando A major chord sustained by the orchestra, as an accompaniment to the spoken conversation between Alwa and Schigolch which opens Act III, sc. 2.

The musical score for Ex. 180 illustrates the process of absorbing the 'Procurer's Song' melody into a twelve-note context. It consists of five systems of staves, each showing a different variation of the melody and its corresponding twelve-note series. The first system shows the melody (P-6) and its absorption into a twelve-note series (I-6). The second system shows the melody (P-6) and its absorption into a twelve-note series (I-5). The third system shows the melody (P-6) and its absorption into a twelve-note series (I-3). The fourth system shows the melody (P-6) and its absorption into a twelve-note series (I-10). The fifth system shows the melody (P-6) and its absorption into a twelve-note series (I-10). The score is written in G major and includes various musical notations such as treble and bass clefs, key signatures, and time signatures.

melodic figuration shown in Ex. 185. This variant reappears, with similar melodic material, as the rhythm of a figuration shared between the flute, clarinet and oboe in bars 10–11 and later, in imitation, on the first violin, horn and cello in bars 35–8 of the fifth song of the cycle. In all these figurations the rhythm of variant *y* – the unbracketed part of Ex. 185 – appears on a repeated single note. The two rhythmic patterns – rhythm *x* and variant *y* – are superimposed at the climax of the final song (bars 30–35). The following diagram shows the rhythmic structure of bars 32–3 of the final song. Here rhythm *x* appears as repeated chords on the cello and clarinet, in canon with a modified form of *x* as repeated chords on the horns and violas. Against these, the main passacaglia theme of the song is stated, in the rhythm of a modified version of variant *y*, as repeated notes on the bassoon (Ex. 186).



clarinet and oboe in bars 10–11 and later, in imitation, on the first violin, horn and cello in bars 35–8 of the fifth song of the cycle. In all these figurations the rhythm of variant *y* – the unbracketed part of Ex. 185 – appears on a repeated single note. The two rhythmic patterns – rhythm *x* and variant *y* – are superimposed at the climax of the final song (bars 30–35). The following diagram shows the rhythmic structure of bars 32–3 of the final song. Here rhythm *x* appears as repeated chords on the cello and clarinet, in canon with a modified form of *x* as repeated chords on the horns and violas. Against these, the main passacaglia theme of the song is stated, in the rhythm of a modified version of variant *y*, as repeated notes on the bassoon (Ex. 186).



Variant *y* also appears as the rhythm of the final cadential chord of the cycle (Ex. 187).



In the early works such recurrent rhythmic patterns function only as motivic elements and, unlike those of the later pieces, exert little effect on the overall structure of the work. The recurring thematic motives in the *Attenberg Lieder* have been discussed in Chapter 2.¹ Mark DeVoto has described the 'motivicity' of the *Attenberg Lieder* as being the cycle's 'most powerfully cohesive structural force';² the rhythmic figuration discussed

¹ See pp. 34–7 above.

² DeVoto, *Perspectives of New Music*, 5, Fall/Winter, 1966, p. 72.

above is simply one of a complicated web of motives which runs through the cycle and which binds the different songs into a single unit.

The rhythmic motives in the early works, and the way in which they are handled, already exhibit three features which are to characterize many of the constructive rhythms which appear in Berg's later works:

(i) The recurrent rhythmic patterns are highly syncopated, tending to cut across the established metrical pulse and to stress those parts of the bar that would normally be unaccented.

(ii) Although such rhythmic patterns are often applied to different thematic and harmonic material they are frequently stated by the percussion or as a repeated single note in such a way as to emphasize their purely rhythmic characteristics. Such rhythms are almost always stated initially in this 'non-melodic' form and are, thus, established as independent rhythmic motives before being applied to thematic material.¹

(iii) The rhythmic patterns are often subjected to different kinds of modification, transformation or permutation. They may appear in augmented or diminished forms and may be extended, abbreviated or varied in a number of ways.

The rhythmic procedure to which Berg himself drew attention was the use of a 'Hauptrhythmus', which he describes, in his 'Open Letters' on the Chamber Concerto, as 'a rhythm that can be considered as a sort of a motive'.² In the scores of the Chamber Concerto, the Violin Concerto and *Lulu* such constructive rhythms are indicated by the symbol 'RH', a symbol which I shall adopt here. The angular and strongly syncopated nature of these patterns and Berg's practice of establishing them as self-sufficient rhythmic patterns before using them in association with thematic material (characteristics which have already been observed in the constructive rhythms employed in the early works) are usually amongst the distinguishing features of such Hauptrhythmen.

Occasionally a Hauptrhythmus first appears as the rhythm of a thematic figuration before being stated non-melodically – by the percussion or on a repeated note or chord – as a purely rhythmic motive. The Hauptrhythmen of the Violin Concerto, the Chamber Concerto and one of the variants of the RH of *Lulu* (that which is particularly associated with the Medical Specialist)³ all evolve from melodic figurations in this way. It is significant, however, that the first appearance of the symbol 'RH' in the published scores of both the Violin Concerto and the Chamber Concerto coincides with the first non-melodic statement of their respective Hauptrhythmen.

¹ See W. M. Stroh, 'Alban Berg's "Constructive Rhythm"', *Perspectives of New Music*, Fall/Winter, 1968, pp. 18–31.

² Reich, *Alban Berg*, London, 1965, p. 145.

³ See pp. 165–7 below.

roots in the fateful 'death rhythms' of Mahler's Sixth and Ninth Symphonies.¹ Emotional connotations similar to those of Mahler's 'death rhythms' seem to be an essential characteristic of Berg's Hauptrythmen. It is known that Berg considered the RH of the second movement of the Violin Concerto as having a far-reaching programmatic significance² and the Hauptrythmen of both *Mozart* and *Lulu* also acquire specific associations of this kind. The Hauptrythmen of the op. 6 Orchestral Pieces and the Chamber Concerto inhabit a similar emotional world and, although he did not reveal the programmatic significance of these rhythms, Berg may well have regarded them as having the same kind of emotional and dramatic connotations as those of the Violin Concerto and the two operas.³

In certain works Berg uses constructive rhythms that are not projected as independent musical elements and which do not function as self-sufficient rhythmic motives in the way that the Hauptrythmen do. I shall call such rhythms 'structural rhythms', a term that is not intended to imply that other constructive rhythms, such as Hauptrythmen, do not affect the structure of the works in which they appear or that all such structural rhythms have a similar function; as I shall show, some structural rhythms may be easily perceived and act as recognizable rhythmic 'themes' whilst others may be employed as procedural devices of which the listener will probably be unaware. There is some evidence to suggest that Berg himself distinguished between Hauptrythmen and other types of constructive rhythms, for although the structural rhythms of the third and fifth movements of the *Lyric Suite* (which are discussed in detail below) are indicated by 'RH' in the manuscript of the work this symbol does not appear in the published score.

The structural significance of Berg's rhythmic motives – whether Hauptrythmen or structural rhythms – differs from work to work. The RH of the Violin Concerto is unusual in that it is used throughout as a rhythmic ostinato and produces no polyphonic or contrapuntal statements.⁴ The finale of the Chamber Concerto, on the other hand, is one of Berg's most radical experiments in the possibility of using rhythm as a self-sufficient structural element.

The finale of the Chamber Concerto – which Berg entitles 'Rondo Ritmico' – is a simultaneous recapitulation of the two earlier movements. All the thematic and harmonic material of the finale has already appeared earlier in the work. The movement has, therefore, no independent thematic identity and the role of defining the formal structure – usually borne by the thematic, harmonic and tonal elements in a traditional Rondo or Sonata movement – is

¹ See Redlich, *Alban Berg*, London, 1957, p. 70.

² As is indicated in Reich's essay on the work which, Reich says, was suggested and authorized by Berg himself. (Reich, *Alban Berg*, London, 1965, pp. 178-9.)

³ Berg does say in his 'Open Letter', however, that the Chamber Concerto hides 'a world of spiritual and human references' that would make 'the adherents of programme music go mad with joy'. (Reich, op. cit., p. 148.)

⁴ See Stroth, *Perspective of New Music*, Fall/Winter, 1968, pp. 18-31.

here borne by the rhythmic elements. In his 'Open Letter' on the Chamber Concerto Berg summarizes the rhythmic structure of the movement as follows:

Three rhythmic forms: a main rhythm, a subsidiary rhythm and a rhythm that can be considered as a sort of motive, are laid under the melody notes of the main and subsidiary voices. The rhythms occur with manifold variations – extended and abbreviated, augmented and diminished, in stretto and in reverse and in all imaginable metrical shifts and transpositions, etc.¹

The 'rhythm that can be considered as a sort of motive' is the Hauptrythmus which first appears in the second movement of the work, where it develops from a melodic figuration on the solo violin in bar 294. It is stated non-melodically, as a purely rhythmic motive, on a repeated A at bar 297 and appears in this and its retrograde form at a number of points in the second movement. Like all such Hauptrythmen it has a strongly syncopated, angular rhythmic shape.

Although applied to various types of thematic material, the RH is frequently presented as a repeated single note or chord during the course of the finale itself. The Hauptrythmus is shown in Ex. 188 below.

Berg does not identify the other two rhythms which he mentions in the 'Open Letter'. The 'main rhythm' (which I shall call RT) is the dotted rhythm which appears on the solo violin at the beginning of the 'Rondo Ritmico' (Ex. 188b); the 'subsidiary rhythm' (which I shall call RS) is probably the demi-semiquaver figuration which first appears at bar 550 (Ex. 188c).

Ex. 188

Example 188 consists of three musical staves labeled a), b), and c).
 a) RH: A single staff showing a rhythmic motive consisting of a dotted quarter note followed by an eighth note, both starting on a middle line (F4).
 b) RT: A single staff showing a rhythmic motive consisting of a dotted half note followed by a quarter note, both starting on a middle line (F4).
 c) RS: A single staff showing a rhythmic motive consisting of a series of eighth notes (F4, G4, A4, B4, C5, B4, A4, G4, F4) beamed together.

The following chart details the points at which these rhythms appear, and the way in which the RH itself is handled, during the course of the finale. The RH appears in various guises throughout the movement whilst the RT

¹ Reich, *Alban Berg*, London, 1965, p. 145.

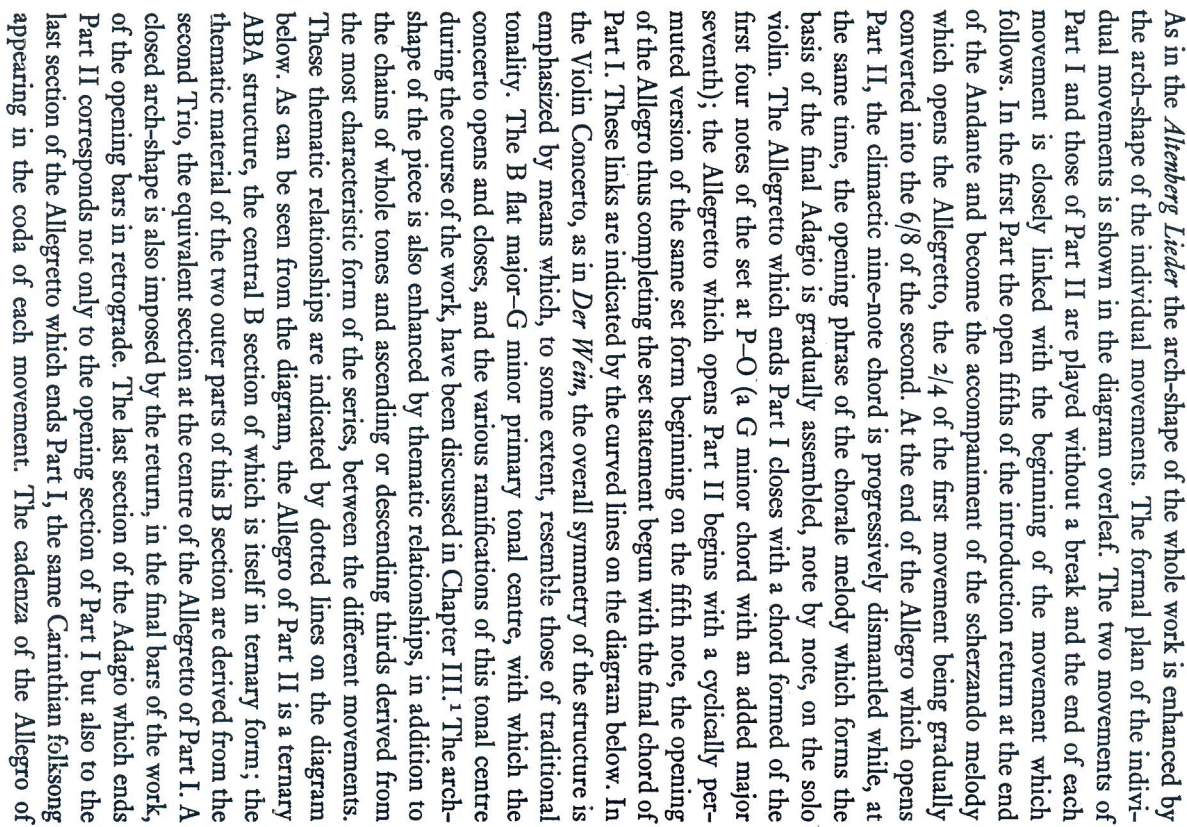
~~183~~

SONG III

SONG V
TWES A, B,

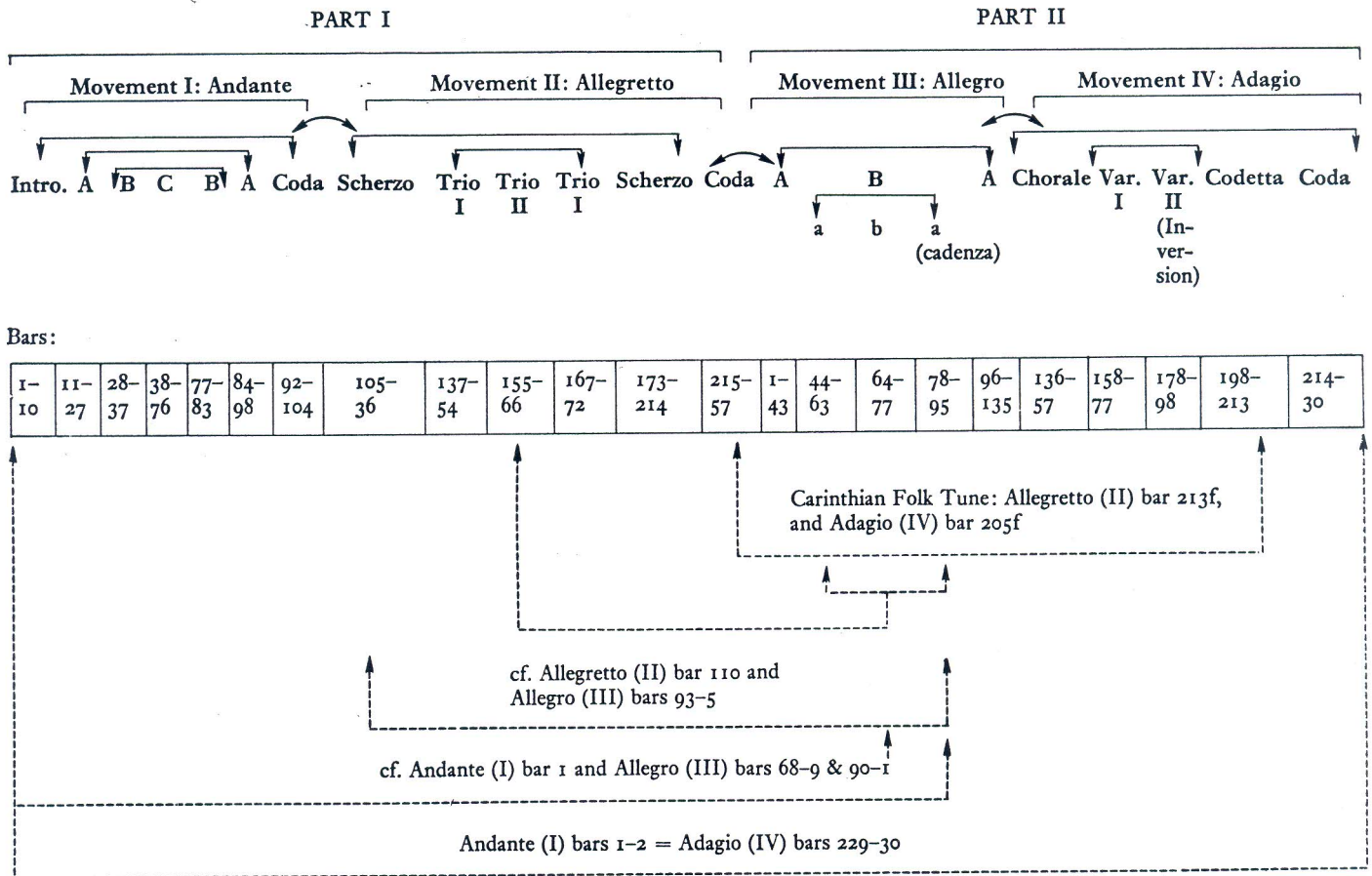
⁴Some notes on the unknown *Allenberg Lieder*, *Perspectives of New Music*, I, 1966, p. 39.

~~183~~



¹ See footnote 1, p. 103 above.

VIOLIN CONCERTO



Formal Structures

Part II not only employs material from the second Trio but also makes brief references to many other themes from Part I.

* * * *

In most of Berg's music the symmetry of the arch structure is defined not simply through relationships of tempi and thematic material between corresponding sections, as in the Violin Concerto and the *Altenberg Lieder*, or through reversing the order in which the material of the first half appears in the second half of the arch-shape, but through the strict reversal of a total musical unit so that the second half of the movement or work presents a whole section from the first half in retrograde motion. So important a feature of Berg's structural designs are such large-scale retrogrades that, with the exception of the Violin Concerto, there is not a single major work written after the op. 5 Clarinet Pieces that does not include one.¹ Sections related as original and retrograde in this way always appear at either the centre or at the two ends of the structure; that is, at the most important points of the arch.

The Orchestral Pieces op. 6 and the *Lyric Suite* provide examples of movements which close with retrograde statements of their opening material. The final section of the 'Präludium' of the Orchestral Pieces opens with a reprise of the last three bars of the orchestral introduction and concludes with eight bars which present the harmonic structure of the first eight bars of the piece in retrograde. The final section of the ternary form Allegro misterioso third movement of the *Lyric Suite* is a curtailed, but otherwise exact, retrograde reprise of the opening section. The opening scene of *Wozzeck* has a similar structure which will be discussed later.

In *Der Wein* and the Chamber Concerto the original section and its retrograde are juxtaposed to form a palindrome at the centre of each work. The general plan of the two outer sections of *Der Wein*, with their resemblance to the exposition and recapitulation of a sonata form, has already been discussed.² The overall plan of the work is a fusion of sonata form and an arch-shaped structure balanced around the palindromic central section. As can be seen from the following plan of *Der Wein* the symmetry of the whole is emphasized by the reprise of the opening bars of the work in the orchestral coda, and by the superimposition, at the beginning of the third song (bar 173f.), of the vocal line from bars 164-5 on to bars 1-5 of the orchestral introduction. This superimposition is determined by the text; the music which originally appeared to the words, 'Ich mache meines Weibes Augen

¹ The qualification 'major' work is made so as to exclude the song 'Schliesse Mir die Augen beide' and the Canon for the Frankfurt Opera.
² See p. 177 above.

11 24 11