Kathryn Bailey

In tonal music, variation is possible merely through changing the inversion or spacing of chords. What has twelve-tone technique to set against this?

-Webern, as recollected by Willi Reich1

It is difficult to come to terms with variation form in the context of the twelve-tone system, a system which employs to such a high degree variation as a musical procedure. Before all other considerations it is necessary to distinguish between variation *form* and variation *techniques*, to discover what it is that justifies calling one serial work a set of variations, while other works not so designated also follow those procedures which in traditional music are characteristic of variation form.

The most essential element in variation form is a constant factor which, although it allows the possibility of a continually changing complexion, maintains a recognizable presence throughout the work.² Traditionally, this factor has been a melody or, less often, a harmonic progression, but the very nature of the twelve-tone system excludes both these possibilities. The tone row does not act as a melody³; and harmonic progressions, in the older sense, no longer exist. For the variation form to be feasible in the twelve-tone system, it was necessary to replace the tonal constant factors with new ones. Anton Webern was particularly inventive in this respect. In his variations the constant element—the unifying factor—is in the nature of a *principle* (the word is Webern's) rather than a melodic or harmonic phrase. Thus he employs at various times the palindrome,⁴ augmentation and diminution, and rhythmic canon as bases for his movements in variation form.

Melody-hunting seems to be a popular sport with those who analyze the music of Webern. But in the case of his variations—none of which are variations on a melody—this approach is fruitless.⁵ It is the belief of this writer that Webern's motives are not, generally speaking, melodic in nature. His melodies are rarely repeated in exactly the form in which they first appear. Octave displacement, fragmentation among various instruments, inversion, retrogression, and recasting so that repetitions of a rhythmic pattern encompass different segments of the row are some of the devices Webern consistently employs. In his music it is some nonmelodic element of the musical fabric—rhythm, organization (i.e., the palindrome), timbre, or articulation—which takes on the traditional function of melody.

A further, perennial problem associated with variation form is that of giving some sort of symmetry and proportion to an intrinsically open-ended form. Composers have met this difficulty in various ways, often by combining a closed form with the iterative one.⁶ Webern's first experiment in combined forms was his *Variations for Piano Solo*, Opus 27.

This work has been an enigma to analysts because of the difficulty of explaining the first two movements as part of the variation form.⁷ But there is, in fact, no reason to insist on this analysis. Webern, in a letter to Hildegard Jone, said of this opus: "The completed part is a variations movement; the whole will be a kind of 'Suite.' "⁸ The present writer suggests that "the completed part" was the third movement, that portion of the work which is obviously in variation form. The difficulties in explaining the rest of the piece disappear when it is viewed as "a kind of suite."

The first movement is in three sections of equal length, all exploiting the palindrome created by simultaneous statements of any row-form and its exact retrograde, with the voices crossing at mid-point. The internal proportions are the same within all the sections; however, the two outer sections are so strongly similar and the middle section so contrasting that the aural effect is certainly that of an ABA form. An interesting feature of this movement is the sequential treatment in the middle section. The material from mm. 19–23 is stated again but in inversion in mm. 23–26, and it appears a third time, upright once more, in mm. 26–30. The same thing happens in mm. 30–36. This sort of treatment, which does not occur in the outer sections, is reminiscent of what one expects in a development section. This movement may be thought of as a theme and two variations, as Leibowitz has suggested,⁹ but there are also unmistakable implications of the tripartite structure of sonata form.

A similar situation exists in the second movement. It is divided exactly in the middle by the traditional double bar and repeat sign, and it exploits a mirror of another sort: the reflection caused by the nearly simultaneous statements of a row and its exact inversion. Although the two sections are precisely equal in length, it would be difficult indeed to see the second half as a variation of the first. It makes much more sense to view it as a continuation. Here, then, is a simple binary form with the unmistakable character of a scherzo or lively dance (passepied?), a type of movement traditionally employed as an inner movement and one particularly suitable in a suite.

The third movement of Opus 27 adheres carefully to all the external requirements of variation form. It is in six sections, each eleven bars in length. This movement—analyzed in considerable detail by Armin Klammer, who describes it as an arch form¹⁰—is Webern's only variation movement in which no rhythmic or organizational idea acts as a constant factor.¹¹ It is paradoxical that the outward appearance of this movement makes it the easiest of the three to categorize, for it is in truth the most revolutionary: it does away with that element of the form which had previously been thought fundamental. The only constant here is length.

The idea of combining a set of variations and a closed form, first seen in Opus 27, where one movement still pays obvious homage to traditional variation structure while the other two movements are more plausible when interpreted simply as closed forms, is consolidated in Webern's next opus, the quartet for strings. Although no part of this work is called "Variations," Webern wrote in a letter to Erwin Stein:

The first movement is a variation movement; but the variations embody an Adagio form, and that is the primary point. That is, the formal construction is based on *that*, and the variations have been designed accordingly...

It can be seen right at the beginning that thematic shapes appear in *augmentation* and *diminution*.... This has been raised to a "*principle*" for all variations. It will be found to be the basis of every variation.¹²

The particular notion of incorporating a theme and variations into an adagio form must have intrigued Webern, because such a union occurs again, in an expanded and more complex version, in his *Variations for Orchestra*, Opus 30. In letters to Willi Reich, Webern described briefly the pattern he had followed in this work:

In basic principle my "overture" is an "adagio" form; but the reprise of the main theme appears in the form of a development: therefore, this element is also present. \ldots .¹³

Also,

The theme of the variations reaches to the first double bar; it is periodic but has an "introductory" character. Six variations follow (each to the next double bar). The first presents, so to speak, the main theme of the overture (andante form) more fully developed; the second, the transition; the third, a second theme; the fourth, the reprise of the main theme—for it is an andante form!—however, in the manner of a development; the fifth, repeating the manner of the introduction and transition, is followed by a coda: variation six.¹⁴

Thus, the piece exists on two formal planes. As a closed form, it is of balanced proportions. As a variation form, it is—unlike the first movement of Opus 28—extremely free, with variations ranging in length from 11 bars containing the equivalent of 38 eighth notes (Variation 5) to 35 bars containing the equivalent of 135 quarter notes plus 11 eighth notes (Variation 6). This irregularity immediately sets the work apart from all of Webern's other variation movements.

The fact that the variations are of widely differing lengths makes it obvious that these are not variations on any sort of "theme" which implies a particular time dimension. Rather, they are variations on the two four-note rhythmic motives (henceforth to be referred to as A and B) which are stated at the beginning of the piece. The "Theme" is a continuous series of these motives in ever-changing forms.¹⁵ Thus, the length of any given section of the piece (i.e., any variation) is determined by the closed form and not by the proportions of the theme.

In the 3 May 1941 letter to Willi Reich quoted above, Webern continues his description of Opus 30:

Everything, then, that occurs in the piece comes from one of the two ideas which are stated in the first and second bars (double bass and oboe!). However, it is reduced even further, as the second figure (oboe) is already in itself retrogressive: the second two notes are the cancrizans of the first two, but rhythmically augmented. There follows in the trombone another statement of the first figure (double bass), but in diminution! And in cancrizans as to both [motives] and intervals.¹⁶

Example 1 illustrates this procedure.¹⁷



EXAMPLE 1

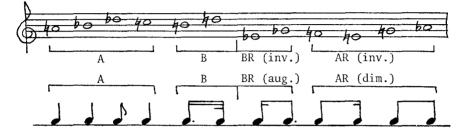
The second two notes of the second figure do not produce an exact retrograde ("Krebs") of the first two melodically, but an inverted retrograde (Krebsumkehrung). The real retrograde, produced with the alteration Webern mentions, is rhythmic. Therefore it is clear that Webern's "Gestalt" is primarily rhythmic in nature. When he says of the third figure, "Und im Krebs der Motive und Intervalle," "Motive" can refer only to rhythmic disposition. Robert Nelson would seem to be in error, then, when he says,

The theme ... consists of a succession of *melodic* [my italics] motifs drawn from the row. Two of these are basic, according to Webern, each formed of four notes, widely spread. ... From these fundamental motifs

spring the other figures that make up the theme and the six variations that follow. $^{18}\,$

The configuration of the rhythmic motives stated in mm. 1-3 is, of course, exactly analogous to that of the tone row (see Ex. 2).





However, succeeding statements of the rhythmic motives do not consistently utilize the same segments of the row. This can be seen as early as the second bar of the piece, where the second voice (viola) enters with the *first* four notes of the row, stating the *second* rhythmic motive. If Nelson's approach were correct, this figure would have borne a close melodic resemblance to the oboe statement of the same rhythmic motive in the same bar. However, it does not. The element which does remain constant throughout the variations is the rhythm.

A few general statements should be made at this point concerning Webern's manipulation of rhythm in Opus 30. The aspect of the rhythmic motives which retains its identity through sundry variations is the rhythm of attacks. Durational patterns vary continually within this framework.

Motives A and B are both subjected in the course of the piece to augmentation, diminution, and retrogression. Although these devices are applied similarly to both motives, each is also treated in a unique way. In the case of A, Variations 4 and 5 exhibit a form which bears a positive-negative relationship to the original (see Ex. 3).

EXAMPLE 3

Motive A	[]]]].		
	8 6 I P.		mm. 139-140, harp, celesta.
[negative:	[کو کو کو لو	{ \$\$\$\$	mm. 139-140, harp, celesta. mm. 140-141, vln. I; celesta, oboe.
AR			
r	5 I B B	لولوج لولو م	mm. 116-117, vc.
[negative:	\$ \$ \$ \$ \$].	{]]]	mm. 116-117, vc. m. 141, celesta, harp.

Motive B does not lend itself to this process. It undergoes a different sort of variation—reordering, or inversion of its basic elements. The halves of the motive remain intact, but they are arranged in different ways. Besides the simple prime and retrograde, there are six other combinations possible: Webern makes use of all of these (see Ex. 4).

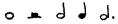
EXAMPLE 4

Two very important derivative motives make an appearance in Variation 3. These motives—here labelled C and D—are derived from B and A, respectively, and are used in the manner of a second theme. They are not subjected to inversion (see Ex. 5).

EXAMPLE 5

Retrograde forms are produced in two ways. Most often the series of durations between attacks is an exact retrograde of the corresponding series of the prime form. However, a second method leads to a further degree of variation. When the series of note-values of one of the forms containing rests is reversed, it produces a new form which is not the same as the pure retrograde, since an attack after a rest will occur "late." The first such instance occurs in Variation 1. Measures 32–34 contain the following statement of BR (see Ex. 6):

EXAMPLE 6



The exact retrograde of this occurs in mm. 40-42 (see Ex. 7).

Instead of producing the original form of B, this retrogression of the retrograde produces a variant in which blocks of time are preserved but in which the final attack occurs late within its allotted space.

This principle can be extended to allow the appearance of such variants without the prior appearance of the generative form. This procedure gives rise to new forms, of which the following will serve as illustrations (see Ex. 8):

EXAMPLE 8

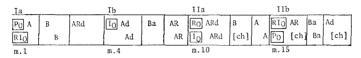
A rhythmic analysis of Opus 30 follows.

The Theme (in "an introductory character") is twenty bars in length. Two rows are present at any given time, with no overlapping or shared notes, and they yield a series of canonic statements of motives A and B. The piece opens with one voice alone, and through m. 9 the texture alternates between one and two voices in a pattern which is reversed in mm. 10–20. Fournote chords occur at three points.

Aurally the Theme is perceived in three sections, internal cadences occurring at mm. 8–9 and mm. 13–14. These cadences have in common a ritard in the *langsamer* tempo (followed at the outset of the ensuing section by a *subito lebhaft*) and statements of motive A divided between the harp and a string instrument. (These are the only appearances of the harp in the Theme and also the only times that a statement of one of the motives is split between two instruments.) There is a clean division of rows at each of these points. The dynamic pattern coincides with these cadences: m. 1 < > m. 9 > m. 14 > m. 20. Instruments are doubled (tripled, in one case) on the rhythmic motive at the places where punctuating chords occur, except at the final chord, which has the role of heralding Variation 1.

These three sections are, however, of very unequal lengths, the first being as long as the second and third combined. Although there is no cadence, the first large section divides into two halves at the point where the first row ends and the third begins (m. 4). Rhythmically, the two halves of the Theme are parallel, insofar as section IIa states the motives of section Ia in reverse order, and section IIb does the same with the motives of section Ib. This relationship is strengthened by the fact that these reversed statements are accomplished by the exact retrograde of the rows which formed the first statements: i.e., P_0 in section Ia is answered by R_0 in section IIa, and I_0 in section Ib is answered by RI_0 in section IIb. A second cancrizans situation exists within each half of the Theme. Section Ib presents a rhythmic cancrizans of the A motives used in Ia, but the B motive remains in its forward position, becoming augmented rather than reversed in Ib. A parallel situation occurs between sections IIa and IIb. Altogether, the second half of the Theme presents all the motives of the first half in reverse order, with one exception: wherever a motive is diminished or augmented in section I, it appears in its original form in section II, and vice versa. Texturally, the two halves of the Theme form an arch. So, of course, do the row statements: P_0 , RI_0 , I_0 , R_0 , I_0 , RI_0 , P_0 . The following diagram shows the rhythmic structure of the Theme (see Ex. 9):

EXAMPLE 9



Variation 1 ("main theme . . . more fully developed") is thirty-five bars in length. The texture is that of melody and accompaniment throughout; greatly augmented forms of A and B are accompanied by repeated quarternote chords in four parts. The melody notes are occasionally reinforced by doubling.

This variation divides into nine sections which form a perfect arch as illustrated in the following diagram (see Ex. 10):

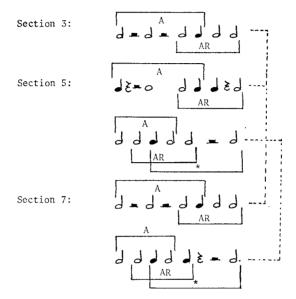
EXAMPLE 10

mm.21-23	24-26	27-31	32-34	35-39	40-42	43-47	48-50	51-55	
Ruhig	Ruhiģ	Lebhaft	Ruhig	Lebhaft	Ruhig	Lebhaft	Ruhig	Ruhig	
PP	qq	£	pp	f	pp	f	pp	pр	
AR	В	A-AR	BR	A-AR A-AR	B 🗱	A-AR A-AR	BR	A AR	

* This B is the exact rhythmic retrograde of the BR in mm. 32-34. (See examples 6 and 7.)

Sections 1, 2, 4, 6, 8, and 9 of the arch are similar and contain one fournote melodic fragment each. Sections 1 and 2 and sections 8 and 9 stand like pillars at either end of the variation and state between them all four forms of A and B; 8 and 9 present the retrograde forms of the motives which appeared in 2 and 1, respectively. The melody in section 6 is an exact rhythmic retrograde of that in section 4. The remaining three sections are more complex and very similar to each other. Section 3 contains a six-note fragment, with motives A and AR dovetailed. Sections 5 and 7 both have two such fragments stated simultaneously (see Ex. 11).

EXAMPLE 11



* See example 8 above.

Variation 2 ("transition") is eighteen bars long and in a character quite different from that of Variation 1. There are no melodies here. The texture is very thick and not apparently contrapuntal; the entire variation is a succession of four-note chords, with eight notes sometimes sounding at once.

Upon close inspection, the second variation reveals itself to be a two-voice rhythmic canon, each "voice" proceeding in four-note chords. (In discussing this variation, *voice* is used to refer to one part—i.e., row chain, succession of stacked tetrachords—of the canon. This is not to be confused with the use of *voice* elsewhere to refer to a linear progression of one note at a time.) The rows in this variation form two chains, both of which progress to m. 63 and subsequently retrogress through m. 69. As always in Opus 30, the rhythmic voices proceed within the boundaries of these row chains. The material of the canon consists of four statements of A—all produced by a 3:2 augmentation (the *sesquialtera* of the Burgundian composers)—and the first statement of C, in preparation for the variation to follow. Example 12 illustrates the forms taken by A in this variation (see Ex. 12).

In both voices the first two motives overlap one note, the last two do not.

EXAMPLE 12

mm. 56-59:
Mm. 56-59:

$$d. d. d. d.$$

 $d. d. d. d.$
 $d. d. d. d. d.$
 $d. d. d. d. d.$
 $d. d. d. d. d.$
 $d. d. d. d.$
 d

The central juncture is treated differently in the two voices in order to preserve the correct order of pitches in the serial palindrome referred to above. The voice which reaches the axis (m. 63) last must also be the first to proceed onward. Therefore, the voice which leads at the beginning of the variation, having reached the axis first, rests and begins the next motive anew, while the second voice ends its second motive and begins its third on the same (central) note. The voices proceed at the interval of an eighth note throughout. The following diagram will serve to illustrate this point (see Ex. 13).

EXAMPLE 13

Variation 3 ("second theme") is thirty-six bars long. The texture is again very thin—only two voices. Two rows progress simultaneously throughout. As might be expected, the structure of this variation presents a marked contrast to that of the preceding ones. It appears to be through-composed in four sections, each of which is roughly symmetrical in itself, as shown in the diagram below. At the center of each section stands a statement of motive C in both voices (see Ex. 14).

EXAMPLE 14

mm.	. 74	-81	mm. 82	32-95 mm. 95-100							mm.	100-	109	
Ca	C	CRa	Ca		CR	Ca	inco	omp1.	DDR	CR	DDR	DDD	Ca	D
D	c	DRa	DD	<u>D</u> R		D DRa	<u>DR</u> D	i	rreg.	Ca	-	Ba	Ca	Ba

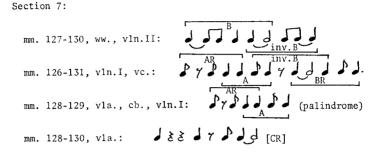
Variation 4 ("reprise of the main theme . . . in the manner of a development") is twenty-five bars long. It is, as Webern indicates, a very complex version of Variation 1. It forms an arch exactly parallel to the one in the earlier variation (see Ex. 15).

EXAMPLE 15

							1	
mm.110-113	113-115	115-119	118-121	121-125	125-128	126-130	130-132	131-134
Ruhig	Ruhig	[Ruhig]	Ruhig	Lebhaft	[Lebhaft]	Lebhaft	[Lebhaft]	Ruhig
pp	[f æ f]	f > pp	वल्	moltof >pp highest com- plexity	[ff]	ff	tff]	∯ > pp
one complete statement	one complete statement	many overlapping statements		many overlapping statements		many overlapping statements	one complete statement	one complete statemen

Again, as in Variation 1, the two sections at either end of the arch are very similar to inner sections 4 and 6. Each of these sections contains one statement of each of the simple forms of motives A and B (A, AR, B, and BR). These statements are for the most part unaltered and do not overlap. Sections 3, 5, and 7, however, are dense masses of overlapping double statements and palindromes of the sort originally presented in sections 3, 5, and 7 of Variation 1 (see Ex. 16).

EXAMPLE 16



The similarity between corresponding sections of the arch is not so clear here as it is in Variation 1. Variation 4 is continuous, and the sections overlap in nearly all cases. (For example, section 6 is comprised of four statements cello, high woodwinds, viola, and violin II—the last of which ends on the first note of m. 128. Section 7, however, has at this point already begun in violin I on the final beat of m. 126.)

Variation 5 ("repeating the manner of the introduction and transition") is only eleven bars in length. The first five bars are very similar to the opening of the piece. They contain four statements parallel to those in mm. 1–3, as shown below (Ex. 17):

EXAMPLE 17

	mm.0-1	m.2	m.2	m.3
	A: JJJĴ Bass	B: J. J. Oboe	B:	AR: Trombone
Theme	p<>pp	\$ >	գ քր	\$<>
	Lebhaft () = 160) A B ^b D ^b C		B = 112 B B D C#	P = 160 F E G A ^b
	AR: J J J) Viola	B: J 7 J 77 J Flute	B: \$ 77 \$ 77 \$ Celesta & str.	A: Violin I
Var.5	p < sf > p >	新> タ>	у р рр	s > p
	Lebhaft ($J = 160$) D E ^b G ^b F	$ \mathbf{P} = 112 \\ \mathbf{E} \mathbf{G} \mathbf{G}^{\text{#}} \mathbf{B} $	<pre>P = 112 4-note chords</pre>	$\int_{B^{b}}^{P} = 112$
	mm. 135-136	mm. 137-138	mm. 137-138	m. 139

It can be seen that the similarities between parallel statements become less marked as the variation proceeds. By the fourth statement only the notevalues and the row-segment remain parallel to the statement in m. 3. This gradual leave-taking of reminiscences of the Theme allows an easy entry into transition (Variation 2) material beginning with the statement in m. 139. The remaining seven bars of the variation (mm. 139–145) have at their center (in m. 142) the exact chord (same pitch level) which acted as the axis for the palindrome in Variation 2. Two separate rows and two row chains proceed simultaneously throughout these seven bars; they state in mm. 139– 141 a flurry of A and AR motives in diminution (\oint and \oint) which are so close together as to produce staccato pianissimo chords on every sixteenth note of the bar, reminiscent of the second variation. Following the central chord, the celesta, harp, and strings play in four-note chords on every sixteenth note of the bar the same progression of chord shapes that appeared at the end of Variation 2 (mm. 70–71) but on different pitch levels. Motives B and D are each stated once—by the celesta and trumpet and by the first violin and the variation ends with a four-part canon on A and AR. The AR is very similar to that which opened the second half of the Theme in mm. 10–11; here, the pitches are in exact retrograde two octaves higher.

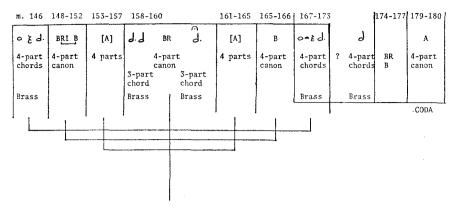
The two chains in mm. 139-45- $I_{10}-I_3-I_8$ and $R_{10}-R_3-R_8$ -progress in rhythmic canon with two exceptions. In m. 141 the harp should have \int_{γ} instead of γ \int_{γ} in order to preserve the rhythmic imitation; and the four notes B, C, A, and Ab have been inexplicably omitted in m. 142. A chord containing these notes is demanded by both the row structure and the rhythmic canon on the first beat of this bar, and it would seem likely that its absence is due to some error between manuscript and printed score.

Variation 6 ("coda") is the longest of all. In Webern's brief description of Opus 30 quoted earlier, he gives some clue as to the content of the preceding sections, but none whatever concerning the content of the coda. It is very difficult to see the relationship of some sections of this variation to the rhythmic motives which have generated the rest of the piece. Bearing in mind Webern's statement that "all that now occurs in the piece comes from one of the two ideas which are stated in the first and second bars (double bass and oboe)," the only conclusion possible is that the coda is constructed by some asymmetrical (but, judging from the rest of the piece, surely systematic) means of augmentation. Note-values divisible by 3, 5, and 7 figure very prominently in this variation; for this reason, it seems likely that the sustained brass chords at the opening ($_{o} \ge _{d}$.) announce the key to the system used subsequently. The key, however—if indeed it is one—is so subtle as to have eluded this writer to date.

This variation is in some ways reminiscent of Variation 1. The material in mm. 146–68 divides into seven sections which form an arch bounded by pairs of four-note brass chords. These chords are an immediate aural reminder of the accompaniment in the first variation.¹⁹ Also, the content of the remaining five sections alternates between B and A, as was the case earlier. Motive B stands at the center of this arch, however, and the motives on either side appear to be very irregular, although their derivation from A is indisputable (see Ex. 18).

The brass chords which close the arch in mm. 167–68 at the same time begin a new and very complex section, also circumscribed by brass chords, and ending in m. 173. This section and the one following (mm. 174–77) are difficult to explain formally, as they seem to occupy the position of a closing section, but without in any way summing up what has come before.²⁰ Within this section Webern's row structure becomes more difficult to follow

EXAMPLE 18



than anywhere else in the piece. The final two bars act as a coda to the variation and to the work, the canon on A referring to the opening of the Theme.

A comparison of the instrumental variations of Webern shows Opus 30 to be unique. Only here is there a radical departure from what variation form had been throughout its history. A form that had previously depended on successive reiterations suddenly takes on a completely new meaning in this work, uniting the complex rhythmic and metric procedures of the Burgundians with the formal sense of the 19th century. Webern says of Opus 30 in the letters to Willi Reich:

Indeed there is again the synthesis: the presentation is horizontal formally, but vertical in all other respects. \dots ²¹

... it would be fundamental to say that here (in my score) a quite different *style* is set forth. Yes, but what sort? It doesn't look like a score from pre-Wagnerian times—Beethoven, for instance—nor does it look like Bach. Should one then go back still further? Yes—but then there were no *orchestral* scores!

And yet it should still be possible to find a positive affinity with the type of presentation one finds in the Netherlanders. . . .

Now it would have to be said unequivocally: this (mine) is certainly music that's based *just as much* on the laws at which musical presentation arrived *after* the Netherlanders. Which doesn't reject the development that came then, but on the contrary desires to continue it into the future.... Thus a style... in whose formal construction *both possible types of presentation are combined.*²²

And to Hildegard Jone he wrote:

... this theme with its six variations finally produces, from the *formal* point of view, an edifice equivalent to that of an "Adagio", but in

character—in content—my piece isn't that at all—only formally.—So even though I have given the piece the title "Variations", yet these for their part are nonetheless fused into a new unit (in the sense of a different form).²³

The affinity of the Opus 30 style with the Burgundian school of the 13th and 14th centuries cannot be overlooked. The roots of Webern's style are not to be found in that other golden era of counterpoint, the Baroque, in which dense fugues grow out of themes representing the fusion of a harmonically-based melodic figure with a metrically-determined rhythm. One must look back beyond the Doctrine of the Affections and the age of improvisation and ornamentation to the intellectual processes of an earlier period, one in which it was common to think of rhythm and melody separately and during which one of the important compositional procedures consisted of combining predetermined rhythmic and melodic patterns of disparate lengths. It is this age of rhythmic complexities and puzzles, this age of predetermined coincidence, that we must examine if we are to understand the rhythmic manipulations of Webern, for it is this style, coupled with the linear forms of the 19th century, which produced Webern's "new style." It was a marriage of pure genius.

NOTES

¹ Wege zur neuen Musik, ed. Willi Reich (Vienna: Universal Edition, 1960), p. 63. All translations from this source are by the author.

² George Perle's "consistent referential element." See his discussion of Opus 21 and Opus 31 in Serial Composition and Atonality (London: Faber & Faber, 1962), p. 139.

³ "The twelve-tone row is, in general, not a 'theme,'" according to Webern. Reich, *Wege*, p. 59.

⁴ The most striking use of the palindrome as a basis for variations is the second movement of the *Symphonie*, Opus 21. For analyses, see H. Wiley Hitchcock, "A Footnote on Webern's Variations," *Perspectives of New Music* 8, no. 2 (1970):123-26; and, from the same issue, Mark Starr, "Webern's Palindrome," 127-42.

⁵ Robert Nelson, in his article "Webern's Path to the Serial Variation," *Perspectives of New Music* 7, no. 2 (1969):77, speaks of "a gently swaying melody played by the clarinet" as the theme of the Opus 21 variations. He appears to be unconcerned both by the fact that this melody is a transposed statement of the inverted row and would therefore presumably have to be considered a variation itself, and by the complete disappearance of this "melody" after its initial statement.

⁶ See Brahms's Fourth Symphony, final movement; the finale of Beethoven's Ninth Symphony; and Act II, Scene I of Berg's *Wozzeck*.

⁷ See René Leibowitz, Schoenberg and His School, trans. Dika Newlin (New York: Philosophical Library, 1949), pp. 226-38, for one analysis of these movements.

⁸ Letters to Hildegard Jone and Josef Humplik, ed. Josef Polnauer, trans. Cornelius Cardew (Bryn Mawr: Theodore Presser Co., 1967), p. 32 (letter of 18 July 1936).

⁹ Leibowitz, Schoenberg, pp. 226-38.

¹⁰ "Webern's Piano Variations, Op. 27, Third Movement," Die Reihe No. 2 (1959):81-92.

¹¹ "... the variations reproduced no *thematic* aspect of the 'theme'. This means that in this work *everything is variation*, or, to put it another way, *everything is theme*.... Webern's piano

variations are, then, a basic contribution to the 'athematic' method of composition." Leibowitz, Schoenberg, p. 241.

¹² Schoenberg, Berg, Webern: The String Quartets. A Documentary Study, ed. Ursula v. Rauchhaupt, trans. Eugene Hartzell (Hamburg: Deutsche Grammaphon Gesellschaft, 1971), p. 132 (letter from May 1939).

¹³ Reich, Wege, p. 67 (letter of 3 March 1941).

¹⁴ Ibid., p. 68 (letter of 3 May 1941).

¹⁵ "Such and such a number of metamorphoses of the first shape constitute the 'theme'. This, as a new unit, passes again through such and such a number of metamorphoses; these, again, fused into a new unit, constitute the form of the whole." Polnauer, *Letters*, p. 44 (letter of 26 May 1941).

¹⁶ Reich, Wege, p. 68. The original German reads:

Alles nun, was in dem Stück vorkommt, beruht auf den beiden Gedanken, die mit dem ersten und zweiten Takt gegeben sind (Kontrabass und Oboe!). Aber es reduziert sich noch mehr, denn die zweite Gestalt (Oboe) ist schon in sich rückläufig: die zweiten zwei Töne sind der Krebs der ersten zwei, rhythmisch aber in Augmentation. Ihr folgt, in der Posaune, schon wieder die erste Gestalt (Kontrabass), aber in Diminution! Und im Krebs der Motive und Intervalle.

¹⁷ All musical examples are by the author.

¹⁸ Nelson, "Webern's Path," pp. 88-89.

 19 It should be noted here that the four-note chords which opened and closed Variation 1 were also stated by the brasses.

 20 Serially, however, the material in mm. 167–80 is a partial summing-up of previous events. Variation 6 consists of two pairs of parallel row chains. One pair of prime chains proceeds with a consistent overlapping throughout the variation. The second pair of chains—one prime and one retrograde—proceeds similarly up to m. 167, at which point the system of overlapping is changed so that each chain retrogresses through its series of transpositions to end on the same level as that on which it began.

²¹ Reich, Wege, p. 67 (letter of 3 March 1941).

²² Ibid., pp. 67-68 (letter of 3 May 1941).

²³ Polnauer, Letters, p. 44 (letter of 26 May 1941).