

*Some Observations on the Row Technique in Webern's
Opus 25*

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There are many aspects of Webern's *Drei Lieder* that are noteworthy and deserve discussion in their own right. I am thinking specifically of the composer's penchant for creating discrete cellular structures, each with its own pitch, rhythmic, dynamic, and articulative character, and his way of shaping these structures into a well organized, but still multifarious, work of art. As interesting as these phenomena are to the theorist, I nevertheless wish to devote my attention in this article to the specific properties of the row, the manner in which it is used, and how it affects certain aspects of harmonic organization.

The row of the songs (see Example 1) is composed essentially of seconds and thirds; it contains only one perfect interval and no tritones. In keeping with other rows used by Webern, it has an internal symmetrical organization.¹ For instance, the row may be divided into four three-note aggregates, each containing a major third and minor second. Aggregates A, B, and D are transpositions of each other, while aggregate C is a variant of these, with the minor second added beneath the lower member of the third rather than the upper.

EXAMPLE 1

The image shows a musical staff with two systems. The top system is a single melodic line with 12 notes, numbered 1 through 12 above the staff. The notes are: 1 (F#), 2 (G), 3 (A), 4 (B), 5 (C), 6 (D), 7 (E), 8 (F#), 9 (G), 10 (A), 11 (B), 12 (C). Brackets below the staff group the notes into four aggregates: A (notes 1-3), B (notes 4-6), C (notes 7-9), and D (notes 10-12). The bottom system shows four chords labeled A, B, C, and D, each consisting of three notes. Chord A is F#-G-A, B is G-A-B, C is A-B-C, and D is B-C-D. The notes in the chords are positioned below the staff lines.

A row such as this, containing certain inner symmetrical relationships, is like those used by Schoenberg in that it is not merely an arbitrary ordering of twelve pitch classes, but rather an unfolding of a central pitch concept which initially manifests itself in much smaller aggregates or row segments. These then evolve into the entire row through various transpositions, inversions, retrogrades, or variants.² It would therefore seem more prudent to think of the row not so much as the representation of the primordial pitch concept of the piece, but rather as a more complex manifestation of this concept. Once these pitch concepts reach this state of evolution (the row), Webern, like Schoenberg, tries to emphasize certain inherent relationships among various forms of the row and their transpositions. He accomplishes this by binding various forms of the row together through tones which function in both sets. This process occurs in both the vertical and horizontal dimensions of the

piece by means of elisions between both simultaneous and successive statements of the row. Consequently, the function of the elision goes well beyond that of merely avoiding any unnecessary duplication.

In the first song Webern limits his use of the series to the original (O), the inversion transposed up two semitones (I_2), and the respective retrograde forms. A comparison of O and I_2 reveals that the pitches C# and G fall in identical positions in both forms.³ In the chart below, as well as in others subsequently presented, the tones holding the same position in various forms of the series are connected in boxes, and the tones involved in elisions are connected in circles.

EXAMPLE 2

Example 2 shows two staves of music. The top staff is labeled 'O' and the bottom staff is labeled 'I₂'. Above the staves, measures 1 through 12 are numbered. The notes in the O staff are: 1 (C#), 2 (D), 3 (E), 4 (F), 5 (G), 6 (A), 7 (B), 8 (C#), 9 (D), 10 (E), 11 (F), 12 (G). The notes in the I₂ staff are: 1 (D), 2 (E), 3 (F), 4 (G), 5 (A), 6 (B), 7 (C#), 8 (D), 9 (E), 10 (F), 11 (G), 12 (A). Circles connect notes that are identical in pitch and position between the two series: (O1, I₂7), (O2, I₂8), (O3, I₂9), (O4, I₂10), (O5, I₂11), (O8, I₂4), (O9, I₂5), (O12, I₂2). Boxes connect notes that are identical in position but different in pitch: (O1, I₂1), (O2, I₂2), (O3, I₂3), (O4, I₂4), (O5, I₂5), (O6, I₂6), (O7, I₂7), (O8, I₂8), (O9, I₂9), (O10, I₂10), (O11, I₂11), (O12, I₂12).

Webern emphasizes the relationships between O and RI_2 by stating the original at the outset and following it immediately with a statement of RI_2 in both piano and voice. The pitch G performs a dual function, or elision, in both series.

There are only two departures from strict serial writing in the first song. One occurs in measure 5, where Webern repeats pitch 9 (F#) of RI_2 in the piano after it is sung by the soprano. The other instance takes place in measure 11, where Webern repeats pitches 10 and 11 (B^b and B) of R. Curiously enough, this is done in the line "noch einmal bin ich ganz ins Werden hingestellt und bin auf Erden."⁴ Could it be that Webern resorts to a subtle bit of word painting by using two unaccountable pitches in referring to mortality?

In the second song Webern uses O_5 , I_7 , and their respective retrograde forms. Notice that these series stand in the same relationship to each other as do those of the first movement, except that they are both transposed a perfect fourth higher.

The example below indicates tones which appear in identical positions in these various forms, as well as tones which frequently are involved in elisions.

EXAMPLE 3

Example 3 shows two staves of music. The top staff is labeled 'O₅' and the bottom staff is labeled 'I₇'. Above the staves, measures 1 through 12 are numbered. The notes in the O₅ staff are: 1 (G), 2 (A), 3 (B), 4 (C), 5 (D), 6 (E), 7 (F), 8 (G), 9 (A), 10 (B), 11 (C), 12 (D). The notes in the I₇ staff are: 1 (A), 2 (B), 3 (C), 4 (D), 5 (E), 6 (F), 7 (G), 8 (A), 9 (B), 10 (C), 11 (D), 12 (E). Circles connect notes that are identical in pitch and position between the two series: (O₅3, I₇4), (O₅4, I₇5), (O₅5, I₇6), (O₅6, I₇7), (O₅7, I₇8), (O₅8, I₇9), (O₅9, I₇10), (O₅10, I₇11), (O₅11, I₇12). Boxes connect notes that are identical in position but different in pitch: (O₅1, I₇1), (O₅2, I₇2), (O₅3, I₇3), (O₅4, I₇4), (O₅5, I₇5), (O₅6, I₇6), (O₅7, I₇7), (O₅8, I₇8), (O₅9, I₇9), (O₅10, I₇10), (O₅11, I₇11), (O₅12, I₇12).

Interestingly enough, these elisions always occur between voice and accompaniment, and not in either part alone.

Webern uses four different types of elisions in this song, the most common occurring when the original and retrograde forms of the same transposition appear simultaneously. The following chart indicates the measure, the form, and the pitch integer involved.

<i>Measure</i>	<i>Form and transposition</i>	<i>Tone performing dual function</i>
7	R ₅ and O ₅	4
11-12	I ₇ and RI ₇	10
30	RI ₇ and I ₇	6
40	O ₅ and R ₅	8

A second type of elision takes place when original and retrograde forms appear consecutively. For instance, in measure 9 the last three tones of O₅ are also the first three tones of R₅, and in measure 18 the last two tones of RI₇ are the first two tones of I₇.

A third type of elision occurs when Webern combines two separate statements of the same form. One statement begins before the other; the second is stated in quicker rhythmic values, so that it ultimately coincides with the first. At this point, a single statement of the remaining pitches suffices to complete both statements. Illustrations of this procedure appear in measures 15 (RI₇), 20 (R₅), and 27 (I₇).

The last type of elision involves two different forms, each transposed to a different pitch. Here, Webern permits a single pitch to function in both statements simultaneously. (See the chart below and Example 3.)

<i>Measure</i>	<i>Form and transposition</i>	<i>Elision</i>
6	RI ₇ and R ₅	2=7
14	O ₅ and RI ₇	10=5
15 and 29	O ₅ and RI ₇	12=12
22 and 30	I ₇ and R ₅	12=12
31	RI ₇ and R ₅	4=11 and 2=7
35	RI ₇ and R ₅	3=6

Two other departures from strict serial writing appear near the end of this song. Both are quoted in Example 4. Notice that in the first illustration (measure 33) pitch 3 of RI₅ appears prematurely, and in the second illustration (measure 39) pitch 12 of I₇ appears prematurely and the statement of pitch 12 of R₅ is deferred.

In the third song Webern returns to the forms and transpositions used in the first song. Again he uses both tones eight and twelve of O and I₂ in elisions. An interesting device appears in measures 48 to 54, where a statement of the original is interrupted by the completion of a statement of the retrograde. This is followed by a statement of I₂, which shares certain pitches of the O form. (See Example 5.)

EXAMPLE 4

Langsamer, ♩ = ca 84

A

p Doch ra - stet end-lich er

Immer langsamer, ♩ = ca 58

B

pp Dann müs - sen sie

EXAMPLE 5

rit. ----- *tempo*

48 sie an ----- *p* bis zum Rand

The chart below shows the first and last notes of the various forms used in the three songs.

EXAMPLE 6

The image shows three staves of musical notation, labeled 'Song 1', 'Song 2', and 'Song 3'. Each staff contains four measures of music, with notes and rests. Above each staff are labels for the series forms used in each measure:

- Song 1: O, R, I₂, RI₂
- Song 2: O₅, R₅, I₇, RI₇
- Song 3: O, R, I₂, RI₂

 The notation consists of a treble clef, a key signature of one sharp (F#), and a 4/4 time signature. The notes are quarter notes, and the rests are quarter rests. The series forms are represented by specific intervals between notes.

Since the role of the series has grown to include a greater number of formative functions, and since it has become increasingly more necessary to speak of serial technique in terms of a more pervasive musical control, it has become equally unfashionable to think of the series primarily as a substitute for tonality. However, we do know that Schoenberg and most of his early disciples understood that the row *could* replace the formative function of tonality within a piece, and that “transpositions function in a similar manner to modulation in tonal music. . . .”⁵ This is nowhere more evident than in these three songs. For instance, notice (in Example 6) that Webern has created two tonal areas, represented by O–R and I₂–RI₂. O–R can be understood to be the tonic area, while I₂–RI₂ can be understood to be its most important auxiliary area (analogous to the dominant in tonal music). In the second song O–R is transposed to O₅–R₅, and I₂–RI₂ to I₇–RI₇; thus while both are transposed, the same relation remains intact (again having analogous antecedents in tonal music). In the final song Webern returns to the forms and transpositions of the first song. Therefore, we see that, in addition to creating a tripartite tonal organization, Webern regards the function of these transpositions as analogous to that of modulations in tonal music.

It is customary to think of Berg, rather than Webern, as the link between serialism and the tonal music of the past. Even the last works of Schoenberg seem, on the surface, to have a closer kinship to their classical forebearers, and this is especially true when one takes into account their harmonic vocabulary and the nature of their gestures. Because of his enormous originality and depth, Webern is generally accepted as the point of departure for the second and third generations of serialists. To many minds it is Webern, and not Schoenberg, who stands out as the consummate creative spirit of this school. It is interesting, therefore, to see that Webern did not, in fact, turn his back on the past but rather was able to rework older concepts of organization and blend them with new approaches, materials, and gestures into a highly original and provocative musical language.

NOTES

¹ The row of the *Symphony, Op. 21* is arranged so that the second hexachord contains the intervals of the first hexachord but in reverse order; the row of *Cantata No. 1, Op. 29* is arranged so that the transposed retrograde is the same as the inversion, and the retrograde inversion the same as the original.

² For a fuller discussion of the process, see George Rochberg's *The Hexachord and Its Relation to the 12-Note Row* (Bryn Mawr, Pa., 1955); George Perle's review of Rochberg's book in the *Journal of the American Musicological Society* (1957) 10:55–59; Donald Martino "The Source Set and Its Aggregate Formations," *The Journal of Music Theory* (1961) 5:224–73; and John Verrall's "A Method for Finding Symmetrical Hexachords in Serial Form," *The Journal of Music Theory* (1962) 6:277–82.

³ In this article only forward forms of the row are given; i.e., O and I, since R and RI can easily be deduced by reading these forms backwards.

⁴ "Once more I in creation's portal live my hours and yet am mortal." (Translated by Eric Smith.)

⁵ J. Rufer, *Composition with Twelve Notes*, trans. H. Searle (New York, 1954), p. 86.