

Exploring Twelve-Tone Techniques: Anton Webern's *Variations for Piano, Op. 27*

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Abstract

Variations for Piano, Op. 27 is the only major solo piano repertoire by Anton Webern. The composition consists of three movements composed with twelve-tone technique with total serialism in term of pitch, dynamics, and articulation. The piece also displays Webern late musical style, outlined by the use of few chords, disjunct intervals, grace notes, and hand-crossing. In spite of the use of twelve-tone technique, the piece display composer's approach in classical form of theme and variation in the third movement and the contrapuntal style of canon in the second movement. All three movements of *Variations for Piano, Op. 27* are based on one basic tone row: E-F-C#-Eb-C-D-G#-A-Bb-F#-G-B. In this article, the treatment of twelve-tone technique in each of the movement will be discussed as well as the musical structure, style, and interesting elements.

Keyword: Variations form, serialism, twelve tone, Anton Webern

Introduction

Anton Webern was an Austrian composer and conductor, whose music had great influence on the younger generation after World War II. He was one of Arnold Schoenberg's pupils, along with Alban Berg. Webern was a member of the Second Viennese School, becoming one of the major exponents of twelve-tone technique in the second quarter of the 20th century.² His style of music changed three times: (1) in 1908 when he abandoned tonality and started

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² Kathryn Bailey Puffett, "Webern, Anton." In *Grove Music Online. Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/29993> (accessed March 30, 2019).

to write short, pointillistic pieces; (2) in 1914 when he began to connect the scattered parts of his ensembles to form continuities; and (3) in 1926 when he became interested in the 12-note technique.³ His music carries several characteristics such as extreme brevity, balanced form, wide intervals (7ths and 9ths), many rests, and low dynamic levels (*p* or *pp*), and use of pointillism for creating the disruption of melody.⁴ In his music, rhythm and meter are usually not prominent, even his music is clear but complex. Moreover, he was interested in employing canonic imitation and variation technique in his music.

Two of the most important compositional techniques found in Webern's music are brevity and the focus on individual sounds. His oeuvre of thirty one compositions is compact, within the total duration of no more than three hours. Some movements of his music last less than thirty seconds; for example, No. 4 of *Five pieces for Orchestra*, Op. 10 lasts for only nineteen seconds.⁵ Because of the brevity of his music, Webern put emphasis on each individual note, articulation, dynamic, and timbre by means of twelve-tone technique, creating a technique known as serialism.⁶

Webern's *Variations for Piano*, Op. 27, is his only major work for solo piano, completed in 1936. This work was premiered in Vienna on October 26, 1936, at a concert sponsored by the Vienna chapter of the International Society for Contemporary Music.⁷ This piece consists of three movements composed using the twelve-tone technique. Only the last movement is associated with traditional variation form. The first two movements show a balanced use of mirror forms and also present variations in the sense of varying the tone row rather than musical variation form. The work's duration is about seven minutes.

All three movements of *Variations for Piano*, Op. 27 are based on one basic tone row: E-F-C#-Eb-C-D-G#-A-Bb-F#-G-B, serving as P0 in the first movement of the piece (see Example 1). The tone row P0 is presented in the opening measures (mm. 1-7). The twelve-tone matrix of *Variations for Piano*, Op. 27 in which P0 is listed horizontally across the top row and I0 is listed vertically down the left column, is shown in Example 2.

³ Kathryn Bailey Puffett, "Webern, Anton." In *Grove Music Online. Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/29993> (accessed March 30, 2019).

⁴ Ibid.

⁵ *Music: The Definitive Visual History* (New York: DK Publication, 2013, 210)

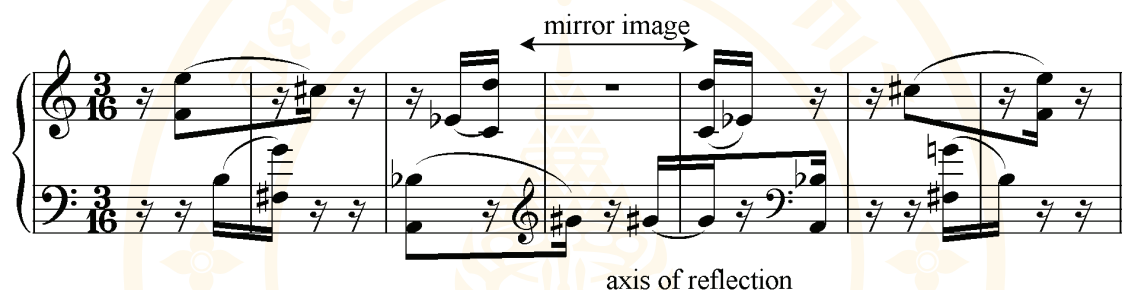
⁶ Kassel, Richard, ed. "Webern, Anton (Friedrich Wilhelm Von)." *Baker's Dictionary of Music*. New York, NY: Schirmer Reference, 1997. 1153-155.

⁷ "Variations, Op. 27" In *Classical Archives: Work: Anton Webern*, <http://www.classicalarchives.com/work/108157.html#about> (accessed March 30, 2019).

According to the diagram, the first movement consists of fourteen phrases, each of which is determined by a pair of tone rows and considered as a palindrome. The following paragraphs will describe how the palindrome operates within each phrase.

Section A comprises four phrases: mm. 1-7, mm. 8-10, mm. 11-14, and mm. 15-18. The first phrase presents a mirror-image where mm. 4-7 presents a retrograde version of mm. 1-4, with the note G-sharp (m. 4) serving as the axis of reflection (see Example 3). The mirror can be represented by the following numbers:

P0 (R.H.)	1	2	3	4	5	6	6	5	4	3	2	1
R0 (L.H.)	12	11	10	9	8	7	7	8	9	10	11	1



Example 3

The second phrase also presents a mirror image similar to the first phrase. The third phrase consists of the same material as the first phrase; however, the mirror image is treated horizontally without crossing the line. The mirror-image is represented by numbers as follows:

R0 (R.H.)	12	11	10	9	8	7	6	5	4	3	2	1
P0 (L.H.)	1	2	3	4	5	6	7	8	9	10	11	12

The fourth phrase is the same as the second phrase except for the use of ritardando at the end of the fourth phrase, suggesting the end of the section A.

While the palindrome is presented within each phrase, it also operates within a two-note group. For instance, in mm. 1-2, the right hand presents a dyad which goes to a single note while the left hand presents a single note which goes to a dyad. Moreover, in mm. 3-4, the material exchanges between left and right hands, creating an inverted palindrome (see Example 4).

Example 4



an inverted palindrome

Section A texturally presents a series of dyads in the pattern of two-sixteenth-note groupings in each hand. Although the time signature is 3/16, the two-note-group texture suggests a sense of duple meter instead of triple meter. A sense of triple meter can be felt in the second (mm. 8-10) and third phrases (mm. 11-14), where a rhythm of two-sixteenth-notes is shortened, presenting a three-note-group. However, the fourth phrase combines the three-note-groups to form a five-note group in mm. 15-17.

Section B consists of six phrases: mm. 19-22, mm. 23-26, mm. 26-30, mm. 30-32, mm. 32-34, and mm. 34-36. The concept of mirror image is presented in each phrase. The thirty-second note is predominant throughout section B. The dynamics, tempo markings (tempo-rit.), and retrogrades are among the factors that contribute to a symmetrical structure of this section. The treatment of mirror image in each phrase is presented as follows:

mm.	19-22	22-26	26-30	30-32	32-34	35-36
Mirror point:	G (m. 21)	D (m. 24)	C (m. 28)	G (m. 31)	F (m. 33)	C (m. 36)

Each note at every mirror point is often presented with *sf*. With the exception of the last two phrases, the dynamics and tempo marking of each phrase are presented in a symmetrical structure as follows:

Tempo:	Tempo	rit	Tempo	rit	Tempo	rit	Tempo
Dynamics:	<i>f</i>	<i>p</i>	<i>f</i>	<i>p</i>	<i>f</i>	<i>p</i>	<i>f</i>

In section B, hand-crossing frequently occurs. The texture of the last three phrases is similar to the texture of section A, but in a group of two-note of thirty-second- notes.

Section A' comprises four phrases: mm. 37-42, mm. 43- 46, mm. 47-50, and mm. 51-54. Section A' is similar to section A in terms of the use of mirror image and texture. The treatment of mirror image in each phrase in this section is the same as in section A. However, the rhythmic pattern is exchanged between hands, for example, the rhythmic pattern in the right hand in

section A is presented in the left hand in section A' and vice versa. Moreover, mm. 49-50 is an inversion of mm. 47-48. The last chord clearly indicates an ending because it has the longest value note of any notes in this movement. The first movement is built entirely from symmetrical phrases, in the structure of mirror image.

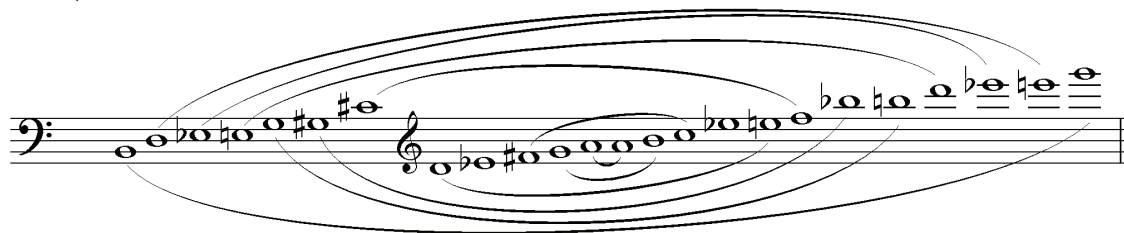
The second movement extends serial organization to other structural elements such as duration, dynamics, and articulation. Similar to the first movement, the organization of tone rows in the second movement is executed by presenting a pair of tone rows at a time. The relationship between the pairs of tone rows in the second movement is P and I. The overall structure of this movement is binary form: A (mm. 1-11) and B (mm. 12-22). The use of tone rows within each section is illustrated in the following diagram:

Form:	A	B
Tone rows content:	P4 P11	I4 I1
	I6 I11	P6 P9

The overall form of this movement can also be seen as a two-voice canon. The thematic entries within the canonic structure are presented at the interval of a major second and the time distance between the parts is an eighth-note. This canonic treatment is operative throughout the second movement. The canon is presented only in one voice in each hand.

In addition to the canonic structure, the symmetrical centering on A4 is demonstrated in this movement. Four pairs of tone rows are constructed symmetrically around the pitches A and Eb, with A4 being the central point around which the symmetry of the piece is built. In other words, for any pitch occurring below A4, there is a corresponding pitch at the same interval above A4. For instance, in the beginning, the lower voice presents B-flat which descends a minor ninth to A, whereas the upper voice presents G-sharp which ascends a minor ninth to A (i.e., mm. 1, 9, 13, and 19).

According to Wilbur Ogdon⁸, the symmetrical centering on A4 is clearly seen, if all the pitches in the movement are arranged in ascending order, from the lowest to highest (see Example 5).



⁸ Wilbur Ogdon, "A Webern Analysis," *Journal of Music Theory*, VI (1962), 133.

Example 5

The whole piece is built around A4 as the central point of symmetry. This piece has a total of 90 eighth notes. Based on the total number of eighth notes, the golden section from the end of the piece occurs in m. 9 and the golden section from the beginning of the piece occurs in m. 13. Both golden sections occur on the A-A dyad. The golden section of ninety is around fifty-five. The A-A dyad in m. 9 is the 53rd - 54th eighth note from the end, and the A-A dyad in m. 13 is the 53rd - 54th eighth note from the beginning.

The texture of this movement is mostly in a group of two eighth-notes. The rhythm of this movement is determined by the rhythm of the first row as presented in mm. 1-6. This rhythm forms a basis in other sections: mm. 6-11, mm. 11-17, and mm. 17-22.

The serial presentation of the dynamic and articulations of this piece is described as follows: the dynamic *p* is quite consistently presented with staccato indication, for example, mm. 1, 6, 9, 13, 17, and 19. Moreover, the dynamic of the juxtaposition of grace note/eighth-note is symmetrical as illustrated in the following diagram:

mm. (grace note occur)	3	6	8	17	18	21
Dynamics:	<i>p</i>	<i>ff</i>	<i>p</i>	<i>ff</i>	<i>f</i>	<i>ff</i>

A sense of unity in this piece is achieved through the recurrence of A4 as a central pitch of symmetry of the piece throughout the movement, and the movement ends with the same two pitches (Bb-G#) with which it began.

The third movement is the most extensive movement of all. This movement is the one that the title of the piece “Variation” refers to. This movement employs the canons and mirror-phrases as a means of expanding the musical ideas almost in the form of variation. Unlike the first two movements, the third movement presents only one tone row at a time. This movement consists of six sections (theme and five variations). Similar to the first two movements, all sections of this movement are equal in length, 11 measures each, making the whole movement 66 measures long. The overall structure and the use of row forms in each section is illustrated in the following diagram:

Theme	mm. 1-12	R4	RI6	P4				
Variation 1	mm. 12-23	R5	I6	R4	I7	I1	I7	I5
Variation 2	mm. 23-33	I5	P10	P5	I0	P5		
Variation 32	mm. 33-44	RI3	I3	RI2	I2	R4		
Variation 42	mm. 45-55	I5	R7	I8	R10	I11	R1	I2
Variation 52	mm. 56-66	R4	P4	RI7	I7	P4	RI6	

The Theme presents simple material which will be varied in the variations. The theme plays a major role in unifying the entire third movement by starting and ending on the same note (E-flat). Moreover, the dynamic markings create a palindrome: *p-f-p-f-f-p-f-p*. The variations employ a structure similar to the theme, but with expanded proportions.

The textures of this movement are mostly thin, consisting of single-notes with occasional chordal contrast. The texture varies from one variation to the next. Each variation of this movement shows rhythmic flow, progressing from stately to faster rhythms: the theme is mostly in half-notes and quarter-notes; the first and second variations are mainly in quarter-notes; the third variation in eighth-notes. The rhythmic pattern returns to the quarter-notes in the fourth variation and quarter-notes and dotted half notes in the fifth variation. The fifth variation is built entirely on a weak beat which creates a sense of syncopation.

Conclusion

Webern's *Variations for Piano*, Op. 27 features his late musical style, characterized by the use of few chords, disjunct intervals, grace notes, and hand-crossing. This piece exemplifies the composer's concept of integration and unity. Webern employed twelve-tone technique with the serial organization of pitch, dynamic, and articulation (total serialism). This piece also features stylistic traits of Webern's twelve-tone music: use of symmetry, pointillist texture, and contrapuntal style (canon). The concept of mirror image is conveyed by means of symmetrical construction of the tone rows. Finally, this piece also features his creative approach to the in the classic form (theme and variation).

Bibliography

- Kassel, Richard. "Webern, Anton (Friedrich Wilhelm Von)." In *Baker's Dictionary of Music*. New York, NY: Schirmer Reference, 1997.
- Music: The Definitive Visual History*. New York: DK Publication, 2013.
- Ogdon, Wilbur. "A Webern Analysis," *Journal of Music Theory*, VI (1962), 133.
- Puffett, Kathryn Bailey. "Webern, Anton." In *Grove Music Online. Oxford Music Online*, <https://doi.org/10.1093/gmo/9781561592630.article.29993> (accessed March 30, 2019).
- Roig-Francoli, Miguel. *Understanding Post-Tonal Music*. New York, NY: McGraw-Hill, 2008.
- "Variations, Op. 27" In *Classical Archives: Work: Anton Webern*, <http://www.classicalarchives.com/work/108157.html#about> (accessed March 30, 2019).
- "Webern, Anton." In *Anton Webern*, <http://www.wwnorton.com/classical/composers/webern.htm> (accessed April 30, 2009).