

Webern's Influence on Serialism in Barbara Pentland's *Symphony for Ten Parts*

Barbara Pentland was a Canadian composer in the 1900s. Her career spanned several decades, and her compositional style developed tremendously throughout her life. Her stylistic changes were influenced by specific mentors within her career. Pentland attended the Darmstadt Summer Course for New Music in 1955. This experience was so important to her that she referred to her compositional style as PD, pre-Darmstadt, and AD, after-Darmstadt. During her pre-Darmstadt years, her work was neoclassical, influenced by Aaron Copland with whom she studied at Julliard. However, during her after-Darmstadt years, she began to adopt more serial techniques since she worked closely with Webern at Darmstadt. When speaking of Webern, she said,

“Webern was a king of a fresh way of looking at the relationship of tones and the use of simple material in a more sophisticated and very strong way, and I began to think in that direction. So my music took on more of the controls of the twelve-tone, serial technique” (Cornfield 2003).

One of her significant compositions after her summer at Darmstadt was *Symphony for Ten Parts*. This symphony was written in 1957 and shows that Pentland treated serialism as “a governing principle rather than a strait jacket” (Cornfield 2003). In this presentation, I aim to disentangle the individuality of Pentland's compositional technique from its indebtedness to Webern. I will compare both composer's significant symphonies: Pentland's *Symphony for Ten Parts* and Webern's *Symphony Op. 21*. This presentation will unfold in 5 sections: the use of tone rows, the aesthetic impact of repetition, the tradition employment of form, the use of Klangfarbenmelodie, and motivic unity and development.

these rows in a double canon creates the kind of strict intervallic and contrapuntal relationships commonly recognized as part of Webern's style.

Figure 2: Webern, *Symphony Op. 21 mm. 1-13*

Pentland is much freer in her use of rows. In *Symphony for Ten Parts*, Pentland's rows have nine to ten pitches. The opening of the symphony's first movement presents all variations of the row. Here, variations do not mean what they would typically mean in a serial piece with Prime, Retrograde, Inversion, and Retrograde Inversion as the different variations. Instead, each time the rows occur, it begins with the same pitches, but the last few pitches are always different (Figure 3).

Figure 3: Pentland, *Symphony for Ten Parts* Row Structure

Blue:	[E	B	C#	F	D	C	Bb	Eb	Ab] = [4e1520t38]
Red:	[E	B	C#	F	D	C	Eb	G	A] = [4e1520379]
Green:	[E	B	C#	F	D	C	Bb	A	G] = [4e1520t97]

In the first eight measures the first row is played by the xylophone and trumpet. The second row is played by the violin and viola. The final row is played by the cello (Figure 4). Let's listen. All of the rows begin with the same pitches in the same order. However, the last three pitches in each row are different. This particular use of these rows differentiates Pentland's style from Webern's while still showing a clear influence. Strict serialism might include expectations for hearing twelve unique pitches in a row, but Pentland denies this expectation by ending the row after nine to ten notes.

Figure 4: Pentland, *Symphony for Ten Parts* mm. 1-8

While Webern's symphony employs a strict use of tone rows, it is important to mention the aesthetic impact of repetition in this piece. Joseph Straus identifies a number of "myths" in his book *Twelve Tone Music in America*, one of which is the myth of serial purity. The myth of serial purity maintains that serial compositions follow rules about avoiding placing emphasis on any one of the twelve tones through repetition or doubling (Straus 2009, 183). Straus also states that no composition has followed this myth completely, and *Symphony Op. 21* is no exception. As we turn back to the opening of Webern's symphony, it is evident that in this

double canon, not only is there a specific pattern for the pitches, but the rhythmic durations also follow a specific pattern. Both rows that begin the piece have the exact same rhythmic pattern. The F# seen in the first full measure is a repeated note. The repetition here seems to create a sense of stasis by lingering on one pitch that is heard for a longer amount of time before moving to the next pitch in the row. The A natural seen in measure three has the same purpose in the second row introduced in the opening (Figure 5).

Figure 5: Webern, *Symphony Op. 21* Repeated Notes

The image displays a musical score for Webern's *Symphony Op. 21*, focusing on the opening measures. The score is written for Clarinet in Bb, Bass Clarinet in Bb, Trumpet, and Harp. The key signature is one flat (Bb) and the time signature is 2/8. The Clarinet in Bb part shows a repeated note (F#) in the first measure, followed by a longer note (A natural) in the second measure. The Bass Clarinet in Bb part shows a repeated note (F#) in the first measure, followed by a longer note (A natural) in the second measure. The Trumpet part shows a repeated note (F#) in the first measure, followed by a longer note (A natural) in the second measure. The Harp part shows a repeated note (F#) in the first measure, followed by a longer note (A natural) in the second measure. The repeated notes are highlighted in blue in the original image.

Pentland applies the idea of repetition in a different manner in the opening of *Symphony for Ten Parts*. Rather than repeating single pitches like Webern, Pentland repeats groups of notes or gestures. First, it is important to note that these gestures act like motivic ideas in Pentland's symphony while rows act as "melodic" or motivic ideas in Webern's symphony. The repeated gestures have a continuation-like function which in turn creates more forward momentum, rather than stasis. There are two examples of fragments that were composed out of the original row. The first gesture of a major 2nd is a clear example of a

continuation-like fragment. The surface rhythmic activity becomes busier and faster because of this repetition. This gesture creates forward momentum towards the next section of the piece. The second gesture of a minor third has more of a call-and-response function. Although the dynamics move from soft to loud, the change in instruments from gesture to gesture is heard like a call-and-response. This idea also creates a space for forward motion since it still has a continuation-like function (Figure 6).

Figure 6: Pentland, *Symphony for Ten Parts* mm. 1-4

The musical score for measures 1-4 of Pentland's *Symphony for Ten Parts* is presented. The score is for ten instruments: Flute, Oboe, Horn in F, Trumpet in C, Xylophone, Timpani, Violin I, Viola, Violoncello, and Double Bass. The tempo is Andante with a quarter note equal to 60 beats per minute. The score shows a call-and-response structure between the Xylophone and Violin I. A green box highlights a melodic fragment in the Xylophone part, and a red box highlights a corresponding fragment in the Violin I part. A green arrow points from the Xylophone fragment to the Violin I fragment. Dynamics include *f*, *mp*, and *mf*. Performance instructions include *pizz.* (pizzicato) and *arco.* (arco).

Klangfarbenmelodie refers to “a succession of tone-colours related to one another in a way analogous to a relationship between the pitches in a melody” (Rushton 2001). Coined by Schoenberg, the term implies that the timbral transformation of a single pitch could be perceived as a melodic succession. This concept was also prominent in many of Webern’s compositions. *Symphony Op. 21*’s use of Klangfarbenmelodie is clear. Looking at the opening theme again, the four rows are broken up between the highest and lowest instruments to show

a large contrast (Figure 7). The melody, which in this case is the row, is distributed between instruments to create a unique textural quality.

Figure 7: Webern, *Symphony Op. 21* Use of Klangfarbenmelodie

Pentland uses a similar technique to Klangfarbenmelodie where ideas are distributed between instruments. However, she does not distribute an entire row like Webern. Instead, she takes the smaller gestures that were mentioned previously and assigns them to multiple instruments. Looking back at this this opening movement, the smaller two note motives are moved between instruments (Figure 8). If these ideas were used in one instrument rather than many, the gesture may feel more like an ostinato. Taking what would have been an ostinato and applying Webern's technique gives the passage a unique timbre, which is the purpose of Klangfarbenmelodie. Another important note is that when these moments occur, the texture is not dense. The light texture allows moving the gesture between instruments to be the highlight and the main idea during these passages.

Figure 8: Pentland, *Symphony for Ten Parts* Use of Klangfarbenmelodie

The image shows a musical score for Pentland's *Symphony for Ten Parts*. The score is for ten instruments: Flute, Oboe, Horn in F, Trumpet in C, Xylophone, Timpani, Violin I, Viola, Violoncello, and Double Bass. The tempo is marked 'Andante' with a quarter note equal to 60 beats per minute. The score includes various dynamics such as *f*, *mp*, *mf*, and *p*, and articulations like *pizz.* (pizzicato) and *arco.* (arco). A green arrow points from a note in the Xylophone part to a note in the Violin I part, illustrating the Klangfarbenmelodie technique. A red box highlights a note in the Violin I part, and a red arrow points to it from the text '(arco)' below it.

It is typical of the Second Viennese School and other post-tonal composers to use traditional forms in this newer compositional technique, and Webern is one of the more prominent composers to follow this idea. In *Symphony Op. 21*, Webern's use of form is clear. He frames the movement with double canons and has a palindromic B section in the middle. There are repeat signs, and the symmetry of the B section points toward a sonata form. The double canons in the A section are like two key areas, while the palindromic section leads towards the double canons again which act like a recapitulation. However, since the B section does not incorporate typical developmental techniques like sequences, and an increased surface rhythmic activity, the overall form could also be considered as ternary form. Both considerations are traditional forms used in several post-tonal and serial pieces.

Like Webern, Pentland takes on the traditional symphonic form, but she showcases more specific elements of this form rather than just the basic ideas. The first movement of

Pentland’s symphony resembles a fugue. The movement opens with three occurrences of a row, which can resemble the entrances of three voices in a fugue (Figure 9).

Figure 9: Pentland, *Symphony for Ten Parts* Fugal Entrances

This musical score illustrates the initial fugal entrances in Pentland's *Symphony for Ten Parts*. The score is arranged in two systems. The first system includes Flute, Oboe, Horn in F, Trumpet in C, Xylophone, and Timpani. The second system includes Violin I, Viola, Violoncello, and Double Bass. The music is marked 'Andante' with a tempo of 60. Various dynamics such as *f*, *mp*, and *mf* are used. Performance instructions like 'pizz' (pizzicato), 'arco' (arco), and 'con sord.' (con sordina) are present. The score shows staggered entries of a melodic row across different instruments, characteristic of a fugue.

Each voice enters one at a time like a subject and answer would in a fugue. After these entrances, there are many passages that incorporate developmental features, like episodes in a fugue (Figure 10).

Figure 10: Pentland, *Symphony for Ten Parts* Developmental episodes

This musical score shows developmental episodes from Pentland's *Symphony for Ten Parts*. The score is arranged in two systems. The first system includes Flute, Oboe, Horn, Trumpet, Xylophone, and Timpani. The second system includes Violin I, Viola, Violoncello, and Double Bass. The music is marked 'And.' (Andante) and 'tranquillo (sempre)'. Dynamics such as *mf*, *f*, and *p* are used. Performance instructions like 'con sord.', 'accel. e cresc.', and 'A Tempo' are present. The score shows various developmental features, including episodes and passages that incorporate developmental features, like episodes in a fugue.

Finally, the original row returns at the end of the movement like a coda in a fugue. It is clear that traditional forms are used in serial pieces like these symphonies, but Pentland takes this idea one step further by including more specific elements of the traditional form (Figure 11).

Figure 11: Pentland, *Symphony for Ten Parts* Fugal coda

Finally, both composers use a limited number of pitch-class intervals to create a sense of unity in their compositions. Webern chooses pitch-class intervals that are part of interval-class 1. In this prime row, there are six unordered pitch-class interval 1, highlighted by the brackets. Since Webern follows a strict serial style, UPCI1 is seen throughout the entire movement in his use of twelve-tone rows (Figure 12).

Figure 12: Webern, *Symphony Op. 21* UPCI 1 in prime row

PO: (0 9 t e 7 8 2 1 5 4 3 6)

Pentland takes the idea of unity by using a few UPCIs rather than just one. By using UPCI2, UPCI3, and UPCI5, Pentland is able to take the idea of unity one step further. She uses

these multiple UPCIs on their own to begin and combine them later in the movement to develop motivic ideas throughout the movement. First, the opening of Pentland’s symphony has instances of UPCIs 2, 3, and 5 in separate gestures, specifically in measure 5 and 6 (Figure 13). Let’s listen. This is a significant moment for these motives. UPCIs 2 and 3 are used as part of the original row. UPCIs 2 and 3 have previously been mentioned as a use of Klangfarbenmelodie and repetition to create a sense of continuation.

Figure 13: Pentland, *Symphony for Ten Parts* First Instance of UPCIs 2, 3, and 5

The image shows a musical score for Pentland's *Symphony for Ten Parts*, measures 5 and 6. The score is for a ten-part ensemble: Flute, Oboe, Horn in F, Trumpet in C, Xylophone, Timpani, Violin I, Viola, Violoncello, and Double Bass. The tempo is marked *Andante* with a quarter note equal to 60 beats. The score includes various dynamics (f, mp, mf, p) and articulations (pizz., arco). Red and green boxes highlight specific musical gestures in the Xylophone and Violin I parts.

This UPC15 gesture is especially significant, since this is the first time more than one instrument plays it at the same time (Figure 14). The motive is followed by a triplet figure, all played forte which serves to highlight this gesture. This gesture also feels like a cadential idea or the end of a phrase, similar to a tonal “sol-do” gesture which provides it with more importance.

Figure 14: Pentland, *Symphony for Ten Parts* UPCI 5

The musical score for Figure 14 shows measures 5 and 6 of a passage from Pentland's *Symphony for Ten Parts*. The score is arranged in a system with ten staves, each representing a different instrument: Flute (Fl.), Oboe (Ob.), Horn (Hn.), C Trumpet (C Tpt.), Xylophone (Xyl.), Timpani (Timp.), Violin I (Vln. I), Viola (Vla.), Violoncello (Vc.), and Double Bass (Db.).

In measure 5, the Flute and Oboe play a melodic line. The Oboe part is marked with a forte (*f*) dynamic. The C Trumpet, Xylophone, and Viola parts are also present, with the Viola marked with a mezzo-forte (*mf*) dynamic. The Xylophone part has a 'sm' marking and a triplet. The Viola part has a triplet and a forte (*f*) marking.

In measure 6, the C Trumpet, Xylophone, and Viola continue the melodic line. The Viola part is marked with a forte (*f*) dynamic. The Xylophone part has a triplet and a 'sm' marking. The Viola part has a triplet and a forte (*f*) marking.

Later in the piece, Pentland combines the UPCIs to develop these motivic ideas (Figure 15). In this passage, the figures have a continuation like function as they pass through different instruments in a fragmented manner. This larger motivic idea is seen moving from the oboe to flue while simultaneously occurring in the violin. It is clear that this motive is meant to be highlighted through the many methods mentioned previously. This passage occurs after the previous measures that introduce UPCI 2, 3 and 5, as separate gestures. It could be thought that the larger motive appears to emerge from the combination of these shorter ideas.

Figure 15: Pentland, *Symphony for Ten Parts* Combination of UPCI 2, 3, and 5 to create (01357)

The musical score for Figure 15 shows the combination of UPCI 2, 3, and 5 to create (01357). The score includes parts for Flute, Oboe, Horn in F, Trumpet in C, Xylophone, Timpani, Violin I, Viola, Violoncello, and Double Bass. The Flute and Oboe parts feature a sequence of notes highlighted in red, representing the combination of UPCI 2, 3, and 5. The Violin I part also features a sequence of notes highlighted in red, representing the combination of UPCI 2, 3, and 5. The Xylophone and Double Bass parts include markings for 'accel. e cresc.'

Finally, UPCIs 2, 3, and 5 join together again near the end of the movement to create a final motive. In measure 30 to 33, (01357) is used to conclude the movement (Figure 16). Let's listen. This final development of all three UPCIs can be thought of as a way of bringing all previous motives back to create a sense of recapitulation during the last moments of the movement. This is also the final way in which Pentland takes UPCIs and develops them in the movement. It is clear that Pentland had specific UPCIs in mind like Webern. She was able to take her influence from Webern one step further by highlighting the development of these UPCIs into larger motivic ideas.

Figure 16: *Symphony for Ten Parts* Final use of (01357)

The image shows a page of a musical score for 'Symphony for Ten Parts'. The score is arranged in a system with ten staves. From top to bottom, the instruments are: Flute, Oboe, Horn in F, Trumpet in C, Xylophone, Timpani, Violin I, Viola, Violoncello, and Double Bass. The Flute and Violin I parts are highlighted with red boxes. The Flute part starts with a red box around the first few notes, followed by a 'f' dynamic marking and a triplet. The Violin I part has a red box around the first few notes, followed by a '(Tutti)' marking and a red box around the next few notes. The Viola part has a red box around the first few notes, followed by a 'mf' dynamic marking and a red box around the next few notes. The Violoncello part has a red box around the first few notes, followed by a 'mf pizz.' dynamic marking and a red box around the next few notes. The Timpani part has a 'cresc.' marking and an 'A Tempo' marking. The Trumpet in C part has an 'mp' marking and a 'flutter' marking. The Oboe part has an 'mf' marking and a 'f' marking. The Xylophone part has an 'mf' marking. The Double Bass part has an 'mf' marking. The score is in 4/4 time and features a variety of rhythmic patterns and dynamics.

To conclude, Webern's influence on Pentland is clear in *Symphony for Ten Parts*.

Webern uses compositional techniques mainly seen in twelve tone serial composers. Pentland takes these ideas but is able to apply or modify these techniques to fit her own compositions style. While she is able to recognize Webern's influence, she highlights her own application of this influence. Her use of tone rows, repetition, form, and motivic unity and development allowed her to explore ideas first seen in Webern while still applying her own unique style. Further research can be done on Barbara Pentland. This might include exploring more of her influences and how this shaped her compositional techniques. I would also like to dig deeper into other compositions that had a clear influence from Webern. Finally, there are several other Canadian composers from the 1900s, whose lives and compositional careers were similar to

Pentland, such as Violet Archer and Jean Coulthard. I hope that my research on Pentland will encourage other theorists to delve deeper into these other composers. Thank you.

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