

Quartet op.22

Webern

(For Unit 6: Further Musical Understanding)

Background Information and Performance Circumstances

Anton Webern (1883-1945), together with Schoenberg and Berg, was one of a group of Viennese pioneers of an important early 20th Century style. From 1904 both Berg and Webern studied with Schoenberg, the acknowledged leader of the group, which has become known as the **Second Viennese School**. (The first 'School' had consisted of Haydn, Mozart, Beethoven and their 19th Century successors.)

Like Schoenberg, Webern wrote in a freely **atonal** style before following the example of his teacher and writing **serial** music from the early 1920s. Webern was also an admirer of Mahler, whose music had taken traditional tonality to chromatic extremes. Atonality, or abandonment of tonality, was the logical progression from extreme chromaticism.

A problem the composers came upon was that abandoning tonality meant that the structural support it provided was no longer available to them. One solution was to write such short pieces that structure was hardly relevant. The fourth of Webern's *Five Pieces for Orchestra op.10* contains only 28 notes, and his songs *op.3* are all between 10 and 16 bars long.

It became clear that some new structural device was necessary to replace tonality. *Serialism* was the answer that Schoenberg adopted and Webern and Berg quickly adopted it too. (See the sections on tonality and melody below.) In addition, Webern himself was very interested in Medieval and Renaissance music and used techniques, such as Mirror canon and Cantus firmus, which had been used before the tonal era.

Webern was the most extreme in his adoption of the serial technique. Whereas Berg allowed himself to repeat notes and phrases and even use notes from outside the series, Webern rigidly kept to the precise order, whether in its 'prime' (i.e. original) order, inversion, retrograde or retrograde inversion. He was also the most radical of the group in adopting new approaches to melody and textural aspects of music.

To many listeners present at the rare occasions in these early years that the music of the Second Viennese School composers was performed, the style seemed almost impossibly alien. This was also the case, even in pre-serialist days. In 1913 at a concert of their music there was a riot and the performance came to a premature conclusion. When the Nazis annexed Austria before the 2nd World War, Webern's music was banned as being 'degenerate'.

Webern was accidentally killed by an Allied soldier just at the end of the war, but his influence quickly grew, and he became the talisman for the generation of young composers who came to prominence in the 1950s. Stockhausen, Boulez, Beria and Nono all adopted Webern's radical approach to melody and texture, and some took his ideas further, in serialising other aspects of music, such as duration, tempo and dynamic level. Stravinsky referred to Webern's music as 'shining diamonds' and it is noticeable that, when he himself adopted serialism in his later years, it was very much more influenced by Webern than either Schoenberg or Berg.

The main characteristics of the music of the *Second Viennese School* are:

- Atonality.
- Dissonance.
- Use of serialism.
- Extreme brevity in the case of Webern.
- Angular melodies with wide leaps.
- An interest in pointillist writing (see melody section).

The music in the anthology is the first movement of a two-movement work, completed in 1930. The work requires highly skilled players.

Performing Forces and their Handling

- Webern was interested in achieving the widest range of timbre from a small number of players, so in this quartet there is a:
 - String instrument (violin).
 - Orchestral woodwind instrument (clarinet).
 - Saxophone (used in a completely non-Jazzy way).
 - Piano.
- Such a contrasting set of timbres would have seemed ideal to Webern as it enabled him to clarify the polyphonic textures of this piece.
- Players use a wide variety of techniques to produce the maximum variation of tone colour.
 - The violin is directed to play with mute (mit Dämpfer) up to bar 17, where the direction is Dämpfer ab (mute off).
 - The first two violin notes are played with the bow (arco), and then the third is marked to be plucked (pizzicato) before reverting to arco again. Sometimes the player has to alternate the two techniques very rapidly (bars 22-3).
 - The piano part has arrows showing the direction of spread chords (only ever two notes at a time), sometimes the more common rising spread chord (l.h. bar 14) and sometimes the descending version (same bar, right hand). The direction of the arrow also indicates the order of the notes of the series.
- The players exploit a large pitch range. The violin rises to a top C at the climax of the movement (bar 22). The piece uses the extremes of the instruments' registers (tessituras), with very little 'comfortable' mid-range writing.
- The agility required throughout is particularly difficult to achieve successfully on the Tenor Saxophone, especially given the quiet dynamic level of most of the piece.
- The Piano part can almost be considered as two separate parts in itself, as each hand takes a separate polyphonic line at times, and there are no examples of traditional piano textures such as melody and accompaniment.
- There are many other detailed performance directions: tenuto markings, staccato, slurs.
- Dynamic range is wide. Webern was particularly fond of writing quiet music. Half of his songs from op.3 and op.4 use a dynamic range from ppp to p. In this movement most of the music is quiet apart from forte markings for individual notes and accent markings. The music rises to a fortissimo climax at bar 22, before subsiding to pianissimo for the end.

Texture

- The texture is extremely thin. Even at the climax, where all five musical lines are playing (the piano part is essentially two lines of music), rests prevent more than four parts playing together simultaneously (see bar 22, 7th semiquaver).

- The music often verges on the monophonic. Only occasionally in the five bar introduction do two parts sound together.
- The music is, though, fundamentally polyphonic and contrapuntal. There are sometimes as many as five parts shared between the four players.
- Webern delighted in the use of canon (precise imitation). In this piece he writes mirror canons at the beginning and elsewhere. In a mirror canon (or canon by inversion), the standard version of a phrase is imitated by the inversion (upside down version) of the same music. At the beginning Webern actually does the reverse – the inversion in the tenor saxophone is imitated by the violin, playing a transposed version of the row.
- Webern often divides the melodic content of his row forms among the instruments, giving each only two or three notes at a time. This constant change of tone colour is called 'Klangfarbenmelodie'. (see Melody)
- This has the effect of creating small 'points' of instrumental colour, a technique which has been labelled 'pointillism'. (see Melody).

Structure and Serial technique

Serialism is the arrangement of a series of notes (also called a **Row**), usually employing all of the twelve notes of the chromatic scale, in a fixed order. The original order **Prime** – shortened to **P**, can be inverted (intervals turned upside down) – **Inversion-I**, played backwards in **retrograde-R**, or backwards and upside down -in **retrograde inversion-RI**. Each of the four versions of the series can be transposed up or down by up to 11 semitones, which is usually indicated by a number after the letter e.g. P6 = prime row transposed up 6 semitones. There are 48 possible versions of the row, which for ease of discussion, can be arranged in a matrix as follows:

	I ₀	I ₃	I ₄	I ₁	I ₂	I ₁₀	I ₉	I ₈	I ₇	I ₅	I ₁₁	I ₆	
P ₀	C [♯] / _{D_b}	E	F	D	D [♯] / _{E_b}	B	A [♯] / _{B_b}	A	G [♯] / _{A_b}	F [♯] / _{G_b}	C	G	R ₀
P ₉	A [♯] / _{B_b}	C [♯] / _{D_b}	D	B	C	G [♯] / _{A_b}	G	F [♯] / _{G_b}	F	D [♯] / _{E_b}	A	E	R ₉
P ₈	A	C	C [♯] / _{D_b}	A [♯] / _{B_b}	B	G	F [♯] / _{G_b}	F	E	D	G [♯] / _{A_b}	D [♯] / _{E_b}	R ₈
P ₁₁	C	D [♯] / _{E_b}	E	C [♯] / _{D_b}	D	A [♯] / _{B_b}	A	G [♯] / _{A_b}	G	F	B	F [♯] / _{G_b}	R ₁₁
P ₁₀	B	D	D [♯] / _{E_b}	C	C [♯] / _{D_b}	A	G [♯] / _{A_b}	G	F [♯] / _{G_b}	E	A [♯] / _{B_b}	F	R ₁₀
P ₂	D [♯] / _{E_b}	F [♯] / _{G_b}	G	E	F	C [♯] / _{D_b}	C	B	A [♯] / _{B_b}	G [♯] / _{A_b}	D	A	R ₂
P ₃	E	G	G [♯] / _{A_b}	F	F [♯] / _{G_b}	D	C [♯] / _{D_b}	C	B	A	D [♯] / _{E_b}	A [♯] / _{B_b}	R ₃
P ₄	F	G [♯] / _{A_b}	A	F [♯] / _{G_b}	G	D [♯] / _{E_b}	D	C [♯] / _{D_b}	C	A [♯] / _{B_b}	E	B	R ₄
P ₅	F [♯] / _{G_b}	A	A [♯] / _{B_b}	G	G [♯] / _{A_b}	E	D [♯] / _{E_b}	D	C [♯] / _{D_b}	B	F	C	R ₅
P ₇	G [♯] / _{A_b}	B	C	A	A [♯] / _{B_b}	F [♯] / _{G_b}	F	E	D [♯] / _{E_b}	C [♯] / _{D_b}	G	D	R ₇
P ₁	D	F	F [♯] / _{G_b}	D [♯] / _{E_b}	E	C	B	A [♯] / _{B_b}	A	G	C [♯] / _{D_b}	G [♯] / _{A_b}	R ₁
P ₆	G	A [♯] / _{B_b}	B	G [♯] / _{A_b}	A	F	E	D [♯] / _{E_b}	D	C	F [♯] / _{G_b}	C [♯] / _{D_b}	R ₆
	RI ₀	RI ₃	RI ₄	RI ₁	RI ₂	RI ₁₀	RI ₉	RI ₈	RI ₇	RI ₅	RI ₁₁	RI ₆	

Of these 48 possible versions, Webern uses 15 in this movement, with a definite plan of repetitions in particular between Exposition and Recapitulation and between the Introduction and Coda sections.

Although the tonal aspect of traditional structure was replaced by serial technique, Webern was keen to introduce Classical forms on top of the serial workings. All of his instrumental pieces of around this time and later, employ such forms, including binary, ternary, rondo and variation form. This piece could be regarded as being in **sonata form**, with introduction and coda, though it is certainly difficult for the listener to hear this, as there are none of the key relationships or thematic contrasts associated with this form. Webern adheres, however, to a broadly tripartite scheme, with a strongly 'developmental' middle section. The structure is as follows.

Bars 1-5	Introduction – mirror canon. Begins with I0 (inversion un-transposed) in tenor saxophone and piano RH, imitated by P10 (prime row transposed up 10 semitones) in violin and piano LH. The two versions of the row coincide with the Clarinet's only notes of this section, the F#s in bar 4, by which time the second part has almost 'caught' the first, finishing a semiquaver behind, as opposed to two quavers at the beginning of the section.
Bars 6-15	Exposition – with main 'cantus firmus' in un-transposed form (P0) on the saxophone (bars 6-10). The saxophone retains the melodic focus but switches to P6 for bars 10-15, using G natural as an overlapping note. Around this Webern decorates with mirror canons pairing the piano RH with Violin (I6, I0) and the clarinet with piano LH (P4,P10). Although there is no sense of two contrasting subjects here, as in traditional sonata form, perhaps the transposition of the Saxophone cantus by 6 semitones on its second appearance here is analogous to the move from tonic to dominant in conventional expositions? The exposition is then repeated , exactly as in a Classical piece.
Bars 16-23	Development section Again dominated by mirror canons – four sets this time, gradually increasing in volume, density and intensity. <ul style="list-style-type: none"> • Bars 16-18: sets I9, in Violin and piano RH, against P1 in Clarinet, piano LH and saxophone. • Bars 19-21: a very similar passage, this time using rows I10 and P0; here, however, the distribution of the notes is much more complex, with three or four instruments being involved in the statement of each row form. • Bar 21 beat 2 – bar 22 9th semiquaver: overlaps with the canon above. Only semiquavers are used here, with groups of two or three semiquavers creating a complex texture of rows R11 and RI11- the first time a retrograde has been used in this piece. This rises to a climax at the top C in the violin part' • Bar 22 ,9th semiquaver- 24, 3rd semiquaver: a retrograde (backwards) version of the music immediately preceding it, using I11 and P11 (but with the notes distributed differently among the instrumental parts). Effectively, this is a palindromic structure. This again overlaps with...
Bars 24-27	Link – this should look familiar, as it is a retrograde (backwards) version of the notes of the introduction (bars 1-5), using row forms R10 and RI10. Notice how, in a reverse of the general rhythmic patterns in the introduction, the notes here gradually get further apart, quickly dissipating the frenetic excitement of the climax of the development. There is a brief pause, on the bar line here, an example of Webern's love of occasional silence, before...

Bars 28-39	Recapitulation – This section repeats <i>exactly</i> the same row forms found in the exposition, but with the difference that the Saxophone cantus (P0,P6) is here divided among the Violin, Clarinet and Saxophone (<i>klangfarbenmelodie</i>), while the piano plays all of the decorating mirror canons (I6,P4,I0,P10).The piano has more notes to fit in here, and so uses far more two note chords than in the exposition, an example of <i>verticalisation</i> of the row. Although the rhythms are also very similar to those found in the exposition, it is debateable whether any listener without a score would recognise the connection between the two sections. This section is also repeated. Another brief pause leads to...
Bars 39-43	Coda – basically the introduction in a complex reverse version, using rows RI0 and R10 – ending with the first note of the movement - C# - the enharmonic equivalent of D flat.

Tonality

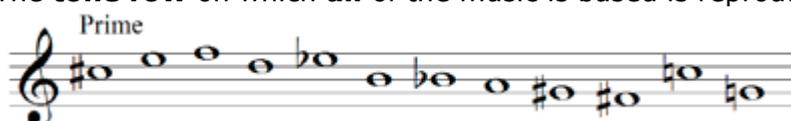
The music is **atonal** (in that there is no key). The intervallic relationships between row transpositions used can be seen as analogous to tonal key relationships created by modulation, which in this case is simple transposition of the row forms. For example, the two statements of the Saxophone cantus in the exposition are six semitones apart, exactly half an octave, and similar to the tonic-dominant relationship in tonal music.

Harmony

- Notes often occur singly, so frequently there is no harmony.
- When there are two or more notes sounding together, the effect is frequently dissonant.
- The first 'chord' at the beginning of the second bar produces a clashing major 2nd interval.
- On one of the few occasions when three notes sound simultaneously, in bar 20, a C# clashes against a D and E flat.
- Sometimes two notes of the same row are sounded, in the piano, to create a chord, in a process called verticalisation.
- Conventional harmonic progressions are not used at all here, but the level of dissonance is carefully controlled by the choice of transposition pairings. For example, at its busiest point, in bars 21-23, all four row versions of the same transposition (P11, I11, R11 and RI11) are present at once, giving a complete focus on one set of sonorities. At other times, Webern favours transpositions a tone apart, as in the mirror canons in the exposition section.

Melody

The **tone row** on which **all** of the music is based is reproduced below.



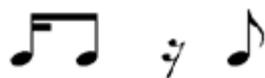
- There are 5 semitones (a favourite interval of Webern's).
- The individual notes could always be transposed up or down one or more octaves, so these semitones often became 7ths or 9ths as shown in the tenor saxophone version of the theme at bar 6.



- Wide, angular shapes are a feature throughout the movement, particularly those of a minor 9th or major 7th.
- The interval of the tritone (diminished 5th – or augmented 4th) occurs between the 10th and 11th notes of the series. This was another favourite interval, which helped to detract from any sense of key.
- The melodic lines are fragmentary (interspersed with rests).
- The technique of dividing notes between instruments, using a wide variety of instrumental techniques was called Klangfarbenmelodie - from the German words Klang (tone), Farben (colours), Melodie. This is heard right from the start, where the 10th transposition of the prime row moves around from violin (pizzicato and arco) to piano (left hand), then violin, clarinet and finally piano (left hand).
- The idea of making a melody from little splashes of varying instrumental colour was called pointillist (after the technique used by some French Impressionist painters who built up pictures from a multitude of small dots of colour).

Rhythm and Metre

- Webern's movement is mainly in triple time, though it is not easy to hear a real sense of triple metre
- The time signatures change frequently, as early as bars 3 and 4 where it moves to quintuple, and then quadruple metre and back.
- Frequent rests make the music sound very fragmentary.
- The music sounds more continuous as it reaches the climax in bar 20.
- There are three recurring rhythmic groupings:



(first three saxophone notes)



(piano in bar 3)



(violin, bars 3-4)

- These groupings are used throughout, the excitement at the climax of the development being created by the use of overlapping repeats of the second two ideas above.
- The rhythm is very precisely notated (all part of the tone colour melody idea). This is enhanced by the use of tenuto and staccato markings.
- A pause mark is used just before the recapitulation.
- The speed is slow. The marking at the beginning *sehr mässig* means 'very moderate'.

There are **frequent changes of tempo**. *Ritardando* – *a tempo* markings are used at the beginning of sections. Near the end there is a ***calando*** marking – a combination of getting quieter and slower.