

## Compare and contrast approaches to Tonality in New York Counterpoint, String Quartet number 8 by Shostakovich and Quartet by Webern.

As these pieces are all from the 20<sup>th</sup> century, each of the composers added their own interpretations with regards to tonality. I aim to analyse each piece in the context of tonality in order to answer this question.

New York Counterpoint (NYC) by Steve Reich is tonal which means it makes use of a conventional key which is B major. This can be seen from the five sharps of the key signature (and lack of D naturals and F naturals.) In fitting with the key of B major, all the notes Reich uses in NYC are from the B major scale which makes the piece entirely diatonic.

Although the piece is tonal and diatonic, Reich does not make use of functional harmony. This can be seen because of the lack of cadences and chord structures. The notes of the ostinati in the first section (bars 1-26) are based on chords four and five (E major, and F# major.) For example, in the first two bars beat 1 of bar 1 uses the notes A and C (chord V) then, the three semi quavers contain all the notes of chord IV (EGB) and the A and F just after beat four are from chord V. In the second bar, this trend continues; just after beat 1 notes from chord five are used (F and C in clarinet 7 and C and A in clarinet 8 and so on. Here, it is important to note that the notes from each chord only sound with notes from the same chord, no overlapping of notes is heard. This is a contrast to what happens later in the piece. Later in the piece, tonal blurring occurs which means that the notes from different chords (chords IV and V) sound at the same which results in a slightly dissonant blurred harmony. There is a good example of this at bar 22 on the penultimate semiquaver beat: The live clarinet and clarinet 3 are playing an E and clarinet 6 is playing a B, these notes partly make up chord four. Also, on this same beat, clarinet 1 is playing an A# and clarinet 4 is playing an F# which make up chord 5. Because these notes sound together, the notes that are heard together is B, E, F#, A#. Some of these notes are from chord four and some chord five which results in the blurred tonality because they sound simultaneously. *The reason that this tonal blurring occurs is because of phasing which is the process of adding a rest before or after the ostinati pattern. In this example, the live clarinet and clarinet six are one beat out of phase (crotchet rest at the beginning of bar 17) which means the ostinati pattern (C#, B, G#, E) now starts a beat later than it did in bar 1. (unclear)*

Another tonal device that Reich uses in NYC is the pulsating chords found at bar 27 in clarinets 7, 8, 9 and bass clarinet 10. Here, Reich adds extra dissonances to the chords. For example, on the last two semi quaver beats of bar 27 the notes that are heard are F# (cl7), B# (cl8), D# (b. Cl 9) and a C# in the bass clarinet 10. The notes make up the chord of B major (BD#F#) however the dissonance of a C# is added which creates unclear harmony. This dissonance is then extended when the chords change in bar 33. The notes heard are A#, D#, G# and E. These notes don't make up any conventional chord therefore, creating dissonance in the tonality.

String quartet 8 by Shostakovich is a tonal work in the key of C minor, this can be deduced from the key signature and the accidentals of B natural. However, the C minor tonality is unclear and undermined from the start due to the different keys that each of the DSCH motives enter in. The cello enters in the key of C minor (D, Eb, C, Bnatural are all from the C minor scale.) The viola enters in the key of G minor (A

natural, Bb, G and F# from G minor scale.) The 2<sup>nd</sup> violin enters in C minor (same notes as cello but an octave higher.) Finally, the 1<sup>st</sup> violin enters in bar 5 in the key of F minor (G, Ab, F, E natural all from F minor scale.)

It is also interesting how Shostakovich uses all twelve notes of the chromatic scale by bar 6 which firstly shows no evidence for a diatonic nature in the melody but also links the piece (weakly) with serialist techniques.

Although there is little strong evidence of functional tonality reflecting the arch form structure throughout the piece, there is an element of functional harmony found at the end of the first section. The first section (A) is from bars 1-27 (characterised by its contrapuntal exploration of the DSCM motif) and towards the end (from bars 24-26) there is a hint of a functional perfect cadence. This is because in bar 24 the notes used at beat 3 (lowest to highest on score) are: F, F, Ab, C. This makes up chord four in C minor. The next chord used is chord five in C minor at the beginning of bar 25, the notes used are: G, D, Ab, B natural. This is a major version of chord five (G, B, D) with the Ab (that drops a tone to G in the 3<sup>rd</sup> beat of 25) acting as a 9-8 suspension. Finally, the chord used at the start of bar 26 is chord I, the notes are C, C, G, C. However, there is the absence of the third note which shows whether the chord is a major or minor, so although the progression as gone IV, V, I (traditional, functional harmony) the functional harmony is not so strict because it is not a proper chord I used to finalise the cadence and section A.

Another tonal device that Shostakovich uses is the presence of a double pedal note on notes one (C) and five (G) of C minor. This is found in the B section (bars 27-44) in the 2<sup>nd</sup> violin, viola and cello and lasts for 17 bars. Again, there is no 3<sup>rd</sup> to make the tonality of this double pedal major or minor, creating an ambiguous feeling by the use of bare, open fifths.

Unlike NYC and Shostakovich's string quartet, Webern's 'Quartet' is completely atonal. It's atonal because the piece is composed using serialist techniques. This means that Webern has created a tone row which is constructed from all 12 notes of the chromatic scale, not in order and none repeated. This has the effect of placing no importance on a single note. The prime order tone row can be heard in the tenor saxophone from bars 6-10.

Because no importance is placed on a single note, it removes all the traditional and conventional elements that were laid out by 17<sup>th</sup>/18<sup>th</sup>/19<sup>th</sup> century tonality. The music isn't centred on the tonic, it has no key, it has no cadences and no deliberate harmonic chords that accompany a supporting melody. Although, there are chords they are simply a result of different permutations of the cantus firmus (prime row) overlapping, such as the climatic point at 22 and 23. In other words, any notes that sound together are not a result of deliberate harmony. There is no harmony in this work.

However, it is still interesting how the structure of the Quartet is a traditional sonata form. Conventionally, a traditional sonata form would have made use of functional harmony with modulations and different keys for different sections. As previously stated, the Quartet does none of this therefore it is an example of Webern using a traditional structure in a 20<sup>th</sup> century manner.