Steve Reich’s New York Counterpoint:

Style, form and interpretation

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PREFACE

The form of this analysis of New York Counterpoint has been guided, primarily, by the recording of the piece itself. Although much of the research could not have been done without the score, and is often concerned with those aspects of construction which are not immediately audible, I have begun with the surface of the music and worked inwards, in the hope that the results yielded by an analysis of the score should not distort or contradict the patterns and structures that are heard when the piece is played. Steve Reich wrote in 1974 that, “There would be no interest in the music if it were merely systematic. You want to hear music that moves you, and if you don’t, then you’re not really very curious to find out how it was put together.”¹ I was moved the first time that I heard New York Counterpoint and then having satisfied my curiosity as to how it was put together, my enjoyment of the piece has not diminished. I consider my research in this thesis to have been essentially a personal lesson in compositional method.

For the convenience of the reader, all references to pitch in New York Counterpoint correspond to the score, in which all clarinet parts are written in Bb, and not to the actual sounding pitch of the recording.

CHAPTER ONE – STYLE

“Electronic music as such will gradually die and be absorbed into the ongoing music of people singing and playing instruments...The pulse and the concept of clear tonal centre will re-emerge as basic sources of new music.” ² This prediction, taken from an essay by Steve Reich – ‘Some Optimistic Predictions about the Future of Music’ (1970) - was made fifteen years before he wrote New York Counterpoint in 1985. As far as Reich himself is concerned, the years 1970–85 have seen a close adherence to this prediction. Reich’s dissatisfaction with electronics, stems not only from the limited capabilities of machines, which admittedly are becoming rapidly more sophisticated, but also from their inherently unmusical accuracy which is unlikely to change.

New York Counterpoint is scored for ten clarinets (two of which are bass clarinets and a third which doubles on bass) as well as a live clarinet. While the piece could be played by eleven clarinetists, it is intended to be performed by soloist and tape. The tape is prepared by the soloist simply by multitracking the ten clarinet parts, over which the live clarinet part is played in performance. The preparation of the tape is crucial, both in synchronizing each subsequent part to the overall pulse, and also in the mix-down, in which a balance is needed for the parts to make sense to the whole, not to mention the importance of a sensitive interpretation.

Reich would be the first to point out that his objection to electronics is primarily directed towards electronically generated sounds and not towards the use of tape and, to a certain extent, ‘musique concrète’. In 1980, he produced My Name Is: Ensemble Portrait, a speech-based tape piece similar to Come Out (1966) which he considers to be an ongoing piece. In 1982, Reich wrote Vermont Counterpoint, scored for eleven flutes, but also intended to be performed by soloist and tape. Flautist, Ransom Wilson writes, “I resolved at once to ask Steve Reich to compose a work for me. Though I'd no idea how he could fit his techniques to a flute work, I felt the result could be extraordinary. Reich was not easy to reach - but eventually we did speak about it, and his answer was a resounding ‘No’.” ³ Reich’s last work for a homogeneous instrument group was Six Pianos (1973) written nearly ten years previously, and so his change of mind, in writing a solo piece for Wilson, marked a turning point in Reich’s development, especially since the two works that preceded it, Tehillim (1981) and Variations for Winds, Strings and keyboards (1980), are both scored for larger ensembles and even orchestra. New York Counterpoint, as the title would suggest, bears much resemblance in technique to Vermont Counterpoint, written three years earlier.

³ S. Reich, Vermont Counterpoint, Angel, CDC-47331, sleeve notes, p.10.
Robert Schwartz has noted that “Each new work appears to capitalize on techniques used in immediately preceding compositions, but also adds novel ideas which will in turn stimulate later development.” ⁴ This is essentially true, although Reich sometimes puts techniques that he has developed aside for many years and then returns to them from a new perspective. Of Vermont Counterpoint, Reich says that “Though the techniques used include several that I discovered as early as 1967 the relatively fast rate of change (there are rarely more than three repeats of any bar), metric modulation into and out of a slower tempo, and rapid changes of key may well create a more concentrated and concise impression.” ⁵ Reich is referring to Violin Phase (1967) which is for four violins, or violin and tape, and is a prototype of Vermont Counterpoint (1982) and New York Counterpoint (1985) in a number of ways. Violin Phase is the first piece in which Reich, as he says, ‘points out’ the resulting patterns (caused by canonic phasing of the motive) “by doubling one of the pre-existing patterns with the same instrument, i.e. a violin in Violin Phase. The pattern is played very softly, and then gradually the volume is increased so that it slowly rises to the surface of the music and then, by lowering the volume, gradually sinks back into the overall texture while remaining audible”. ⁶

In Violin Phase, the performer is free to find those patterns that they find most musically interesting; and in the score ⁷, Reich suggests some patterns found by Paul Zukovsky and Shem Gibbory on their respective recordings of the piece. In Vermont Counterpoint and New York Counterpoint, however, the resulting patterns are written out, and thus Reich removes from the performer, the choice of resulting patterns by making them part of the compositional process. Violin Phase and New York Counterpoint also have in common 12–beat phrases that can be divided up into three groups of four quavers or four groups of three quavers. additionally, the longest note in both pieces is a dotted crotchet.

The pulsing harmonic cycle which opens New York Counterpoint first appeared in Reich’s music in Music for Eighteen Musicians (1976) and is also found in The Desert Music (1983) for orchestra and chorus, and Sextet (1984). Whereas in Sextet, Reich uses a cycle for the first and fifth movements, another cycle for the second and fourth movements, and yet another for the third – in New York Counterpoint, Reich uses only one cycle; twice in the first movement and once (transposed) in the second movement.

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⁴ K.R. Schwartz, Steve Reich, Music as a gradual process, part 2, Perspectives of New Music, Vol. 20, p. 278.
⁵ S. Reich, Vermont Counterpoint, Angel, CDC-4133L, sleeve notes, p. 11.
⁶ S. Reich, Writings About Music, Nova Scotia College of Art and Design Press, Canada, 1974, pp. 53-54
The stylistic development of Reich’s harmonic palette has been steady and linear in its move from pentatonic pitch sets, through diatonic and modal pitch sets with modulations to relative keys, to an increasingly chromatic, yet still jazz-orientated sense of harmonic progression. Reich says of Sextet that, “The harmonies used are largely dominant chords with added tones creating a somewhat darker, chromatic, and more varied harmonic language than in my earlier works.” New York Counterpoint, more than any other work by Reich up to this time, employs jazz-orientated harmonies, particularly in its use of $13^{\text{th}}$ chords constructed from alternating major and minor 3rds. Four Organs (1970) is based on a dominant $11^{\text{th}}$ chord; however, the major and minor 3rds that it is built from do not alternate sequentially, as the dominant $7^{\text{th}}$ (flattened $7^{\text{th}}$) creates a tritone from the major $3^{\text{rd}}$, thus giving two successive minor 3rds. New York Counterpoint, in contrast to this, uses primarily $13^{\text{th}}$ chords which, because of their internal structure, contain no tritones.

A technique which Reich has developed right from the outset of his recognized career is canon. Even the early tape pieces It’s Gonna Rain (1965) and Come Out (1966) which are musique concrète pieces using speech as their material, are elaborate, micro-rhythmic canons which gradually move out of, and back into phase. Drumming (1971) was a watershed in Reich’s development of canon as it marks the end of his use of the gradual phase-shifting process. In 1972, Reich wrote Clapping Music in which the phase-shifting process is no longer gradual, but immediately shifts to the next position once the old position has been held for twelve repeats. Drumming, however, is important for Reich’s first use of “gradually substituting beats for rests (or rests for beats) within a constantly repeating rhythmic cycle.” This process, which allows the listener to follow clearly the gradual construction of the motive from a couple of notes to the whole, is employed by Reich in all of his major works (with the exception of Tehillim and Variations for Winds, Strings and Keyboards – whose principles are more concerned with elaboration, rather than basic construction) from Drumming (1971) up to and including New York Counterpoint (1985).

In New York Counterpoint, whose duration is about eleven and a half minutes, four minutes (or a third of the piece) is devoted to the important process of substituting beats for rests in canon, in order to construct the contrapuntal webs for each of its three movements. Once the pattern is completed it is coloured and elaborated in a number of ways. Reich says of Sextet (1984) that “Sudden change of rhythmic position (or phase) of one voice in an overall repeating contrapuntal web first occurs in my Six Pianos of 1973 and occurs throughout this work.” This is putting aside Clapping Music (1972) which does this in a rudimentary fashion; however, speaking of complex structures, Sextet is

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8 S. Reich, Sextet, Nonesuch, 79L38-1, sleeve note.
9 S. Reich, Drumming, Nonesuch, 79170-2, sleeve note.
10 S. Reich, Sextet, Nonesuch, 79138-1, sleeve note.
important because it is the first work in which this technique is explored motivically. The use of this sudden canonic phase-shifting technique is quite sophisticated by the time it is employed in New York Counterpoint. Since New York Counterpoint is not concerned with phase-shifting as a structural process, but with the elaboration of a particular canonic distance, sudden phase-shifting to a different canonic position is used in the third movement in conjunction with rhythmic modulation, in order to stress either a duple or triple grouping.

Tehillim is important in the development of canon in Reich’s music because it uses strict canonic imitation with much longer melodies, or cantus firmus. This opened up possibilities of metrical fluidity and variation which short scale repetition in his earlier works did not permit. Four-part canon is used in the voices in the first movement; however, the canonic distance that separates the four voices is different between each part. This removes any consistently duple or triple pulse in favour of a naturally asymmetrical rhythmic propulsion that is created by Hebrew cantillation. In the second movement, Reich treats the cantus firmus melody with faburden harmonies, of parallel 6ths. These two different treatments of the cantus firmus are integral to Reich’s stylistic development, because he synthesises them into a type of ‘faburden-canon’ in Vermont Counterpoint (1982) and later, in New York Counterpoint (1985). The latter two works, whilst having short motives (of no longer than two bars) instead of a cantus firmus, incorporate multiple canonic entries (usually three), each of which is harmonized in faburden style in 6ths (Vermont Counterpoint) or 10ths (New York Counterpoint).

Reich’s treatment of this ‘faburden-canon’ in Vermont Counterpoint and The Desert Music (1983) has an added element, as the three harmonized entries are sometimes separated equally by a dotted crotchet (three quavers), producing an echo effect. At Fig. 10 of Vermont Counterpoint, flute 2 follows flute 1, the leader, by three quavers; flute 3 follows flute 2 by three quavers, and this creates a 6/8 grouping with a triple feel (four groups of three quavers), while the metre is 3/4 (three groups of four quavers). By Fig. 21, this three-part echo canon is harmonized a 6th higher in faburden style in the piccolos. This metric ambiguity created by echo-canon is found in exactly the same fashion in the Desert Music in the first violins at Fig. 295 in the fifth movement, harmonized a 6th lower in the violas. New York Counterpoint uses echo-canon in the second movement (Fig. 50) at the distance of two semi-quavers, thus strengthening the accent of the duple metre (three groups of four semi-quavers). All three canonic entries are harmonized at the 10th.

Not only are the harmonies in Steve Reich’s more recent music incorporating a more colourful jazz-idiom than his earlier works, but the rhythms also display a more jagged contour of accents and displacements of the beat. The first time that ‘swing’ quavers have been used by his ensemble is in the fifth (and final) movement of Sextet; however, it is often difficult to tell whether the quavers are
straight or ‘swung’ due to the “tiny micro-variations of the pulse, created by human beings.” 11 In New York Counterpoint, there are definite sections within the first and third movements, where Richard Stoltzman swings the quavers, however, as with Sextet, this swing is not notated in the score, and it appears that Reich is happy to leave this to the interpretation of the performer. Since this phenomenon is relatively new in the stylistic development of Reich’s music, it is not unnatural that he may wish to hear a number of interpretations before altering the score, if in fact the score needs any alteration, for as Robert Schwartz points out, “At each step of his compositional development, Reich has made a conscious effort to explain various aspects of his creative processes in a manner that will bridge the gap between the composer/creator and the listening public.” 12

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12 K.R. Schwartz, Steve Reich, Music as a gradual process, part I. Perspectives of New Music, Vol.19, p. 375.
CHAPTER 2 – HARMONY

The key to harmonic organization in *New York Counterpoint* can be found in the opening chord cycle which is presented as a series of eight pulsating repeated quaver chords (see Chart 1):

**Chart 1: N.Y.C. pulsing repeated quaver chord cycle with dovetailed overlapping**

![Chart 1: N.Y.C. pulsing repeated quaver chord cycle with dovetailed overlapping](image)

The last four chords are an exact repetition of the first four chords. Also, the fourth chord is a simple re-voicing of the second chord. This leaves three basic chords forming an eight-chord pattern thus:

1 – 2 – 3 – 2 – 1 – 2 – 3 – 2

The harmonic content of this eight-chord cycle is carried right through the piece, and can be analysed as a progression of twenty-three chords (see Ex.1):
Those first three chords are all 13th chords and are constructed by stacking alternating major and minor 3rds (except for the second chord whose 13th – Bb – is missing, but is implied by the first and third chords which both contain Bb). This stacking of 3rds is disguised within the vertical texture by octave displacement (see Ex.2):

What is highlighted by the registral displacement, however, is that these alternating 3rds can also be perceived as the interlocking of two separate cycles of 5ths; one starting on Bb and the other starting on Db (see Ex.3):
The cycle starting on Bb extends to D (four 5ths stacked) and the cycle starting on Db extends to Bb (three 5ths stacked). Since there are twelve notes in the cycle of 5ths, this pattern of alternating 3rds, as constructed with two cycles of 5ths, would extend for twenty-four notes before the pattern would repeat itself seven octaves higher. However, Reich makes use of only the first two octaves plus a major 3rd of this pattern, keeping it essentially within diatonic boundaries.

The first chord, on Bb, has a minor 3rd (Db) upon which is stacked a major 3rd (F - making a 5th) upon which is stacked a minor 3rd (Ab - making a 7th) and so on, sequentially, until seven notes comprise a 13th chord. The second chord begins on Db, the 3rd in the preceding chord, while the third chord starts on F, the 3rd in the second chord. Because all three chords overlap (they all contain the notes F, Ab, C, Eb and G), they can be regarded as subsets of one chord of alternating major and minor 3rds based on the Bb (the lowest note of the first chord) up to the D natural (the highest note of the third chord).
This forms what might be termed a 17th chord from which all eight chords of the opening cycle (up to Fig. 8) are directly derived (see Ex. 4):

Of course, in jazz harmony stacked thirds extend only to a 13th – since the 15th returns to the tonic. But alternating minor and major thirds extends through the harmonic cycle of 5ths such that the theoretical 17th is D natural (where the 3rd is Db). This forms a harmonic cross-relation with interesting, complex harmonic colour.
Since the second chord, on Db, always appears between the first and third chords within the eight-chord cycle, it acts as a harmonic pivot for the first forty-seven bars (up to Fig.8). These bars could be loosely categorized as being in the Dorian mode with Bb as root. Bb Dorian has the same pitch content as Ab major, implied by the four flats of the key signature, so that the Bbmin17 chord is basically accommodated within the key signature. The ‘I7th’ – D natural – represents the extension beyond the diatonic framework of the key signature, so the third chord (whose highest note is D natural) is perceived as containing the most harmonic tension.

The opening up to Fig.8, discussed above, uses nine of the available eleven clarinets. When the pulsing figure returns at Fig.37 near the end of the first movement, and also at Fig.54 in the second half of the second movement, seven of the clarinets are already taken up with the canonic process. This leaves, in both instances, only four clarinets (two of which are bass clarinets) to represent the original pitch content of nine clarinets. Reich chooses the four notes that he considers to be the most important, or the most musically interesting, of the seven notes that comprise a 13th chord. Because the three notes missing in each 13th chord are contained within the canonic process, which is going on concurrently, the ear naturally fills in the three notes missing in each of the chords pulsing below.

Fig.37 uses the same three 13th chords as the opening, but in a condensed order, thus:

1 – 2 – 3 – 1 – 2 – 3

In the first chord, the 3rd, 9th and 13th are implied (see Chart 2):
In the second chord (from Fig. 37), the $5^{th}$, $11^{th}$ and $13^{th}$ are implied, and in the third chord, the $5^{th}$, $7^{th}$ and $11^{th}$ are implied. This third chord, which has D natural as its $13^{th}$, is sustained in both instances for only six bars (instead of eight) and this may be due to it being the furthest extension of harmonic tension.

At Fig. 54 (the second movement), the six-chord cycle of Fig. 37 is transposed up a minor 3rd within the key signature of B major, but maintaining the order, $1 - 2 - 3 - 1 - 2 - 3$. Interestingly, these three $13^{th}$ chords all have $7^{th}$ and $11^{th}$ degrees, their $5^{th}$ and $13^{th}$ degrees implied by the canonic process above (see Chart 2 above).

This leaves the canonical processes of the middle of the first movement, the start of the second movement and all of the third movement (which does not have a pulsing harmonic cycle) to be
analysed. The rate of harmonic change in these sections is much slower, since the main interest is in motivic construction and its resulting horizontal patterns.

At Fig. 8 in the first movement, the hexachordal pitch collection of the motive provides an 11th chord starting on F, the lowest note in the motive, which the ear retains as the fundamental tone to which all others are related (see Ex.5):

**Example 5 - N.Y.C. chord reduction, Figs 8 to 28**

![Chord Reduction Diagram]

The key signature of Ab major and its implied tonality is not clinched until Fig.22 with the Db in the live clarinet. This is important in light of the earlier conflict between Db and D natural as the D natural would have implied the leading note to the dominant, Eb major. In the preceding bar, at Fig. 21, Ab is also introduced as the lowest note, and so, by Fig. 22, Ab major is firmly established as the tonal centre and can be grouped as a 13th chord (comprising the seven notes of the diatonic scale, grouped in alternating major and minor 3rds) starting on Ab (see Ex. 5 above).

At Fig. 28, the range is lowered with the introduction of a low F, again in the live clarinet, shifting the tonal centre to the relative minor, and analysable as a minor 11 (add b13) chord based on F. This remains static harmonically until Fig.37 with the first return of the pulsing chord cycle as discussed above.

The second movement, beginning at Fig.44, pivots from an F13 chord (the D natural implying an F Dorian pitch set) at the end of the first movement, to an F#11 chord (the 13th missing from the hexachordal pitch set) being the dominant of the key signature, B major. The pivotal notes are Ab which becomes G#, and Bb which becomes A# (see Ex.6):
In this instance, the lowest note (A#) has not been taken as the root of the chord, since it would form a diminished triad with an added 7th, 9th and 13th, but no 11th. The F# as the root of the chord makes much more sense within a system of interlocking cycles of 5ths, since it has a perfect 5th. It should be pointed out, however, that the 3rds in this instance do not stack strictly in alternating major and minor 3rds, but comprise a dominant 11th chord, as in *Four Organs*, mentioned in the previous chapter. Aurally, F# as root is strengthened by its rhythmic separation on the sixth quaver beat of the first bar of Fig.44 (see Ex.7):

**Example 7 – N.Y.C. Fig. 44**

This dominant relation of the chord to B major, within its hexachordal pitch set remains until Fig.54 with the introduction of D# in clarinet 9, which clinches the B major tonality of the pulsing chord cycle which has already been mentioned. Unlike the D natural in the first movement that undermined the four-flat key signature, there are no accidentals in the second movement. At Fig.60, once the pulsing cycle has finished, we are left with the same F#11 chord that the second movement started with at Fig.44.

Harmonic analysis in the third movement is increasingly problematic since the key signature is deceptive. The four-flat key signature at Fig.61 might suggest a similar tonal centre to the first
movement (also in four flats), however, the B natural which is consistent through the opening process undermines the key signature (see Ex.8):

Example 8 – N.Y.C. Fig. 61

If it had contained six flats, instead of four, then B natural would become the enharmonic equivalent of Cb, and this would make G natural the furthest extension beyond the tonal centre (see Ex.9):

Example 9 – N.Y.C. rescoring of Fig. 61

Since at Fig.61, Db is the lowest note, this would make a 9th chord on Db with G natural, a sharp 11th. Within a six-flat key signature (Gb major) the Db11 chord would exist as the dominant of the key signature in precisely the same manner as the F#11 chord exists as a dominant in B major at Fig.44, at the start of the second movement. It is possible that Reich has put the third movement into four flats, instead of the seemingly more logical six flats, for the convenience of the performer. At Fig. 67, with the introduction of the bass clarinets, the harmonic content is further complicated with the addition of A natural, while retaining the A flats in the contrapuntal web above, while putting Eb firmly in the bass. In pitch content, this could form an intervallically symmetrical chord; two augmented triads (starting on A and B) evenly flanking the note Ab (see Ex.10):
Example 10 – N.Y.C. chord reduction of Fig. 67

With Eb in the bass, however, this chord could also be analysed as an Eb13 chord with flattened 5th (A natural = B double flat) and 13th (B natural = C flat) degrees. It should be mentioned that this chord is not as dissonant as it appears. Within jazz-orientated harmonies, it is simply an added-note chord that does not require any particular resolution. It is used, however, in oscillation with an F#min13 chord constructed from alternating major and minor 3rds (see Ex.11):

Example 11 – N.Y.C. chord reduction of Figs 67 to 87

This oscillation continues until Fig.85 where liquidation of the pitch content commences. This liquidation is initiated by the dropping out of the bass clarinets, leaving the Db9/#11 chord found at the beginning of the third movement. This hexachordal pitch set is reduced to just five notes at Fig.87, with the omission of the F, leaving the same 11th chord found at Fig.54 minus the 11th (F#). This is further reduced at Fig.88 to a G# minor triad with an added 11th (C#). At Fig.89, however, a 7th (F#) is added to the G#–based chord, and functions as a flattened leading note to the top G# at Fig.90.

The piece ends on just two notes, G# and D#, forming a 5th, which has been a prominent registral interval throughout. What is more, this particular 5th is found in twenty-one of the twenty-three chords analysed, making it a binding harmonic ingredient (see Chart 3):
The only chords lacking this 5th (G# and D#) at Fig.44 and its return at Fig.60, actually have G# as the 9th of their F#/11 chord, as mentioned earlier. If the 13th were added, it would be D# – the note missing in the hexachordal pitch collection. And as that note (D#) clinches the tonality at Fig. 54, this missing 13th is implied by its harmonic surroundings in the same way that the 13th in the second chord of the very first chord cycle at Fig.1 is implied (see Chart 2). The piece opens with Ab (G#) and Eb (D#) which mirrors the ending in its lack of a 3rd, making the open 5th the most important harmonic interval.
CHAPTER 3 – MOTIVE

The most important device of motivic construction in *New York Counterpoint* is canon. All three movements are concerned with constructing a six-part web of counterpoint which is subsequently coloured by various techniques including harmonic variation, the doubling of resulting patterns, and metric modulation. It is the purpose of this chapter to expose the intricacies of the canonic constructions and subsequent resulting patterns as well as looking at the intervallic content and manipulation of the motives.

In the first movement, the canonic construction takes places between Fig.8, with the first entry of the motive in clarinet 1, and Fig.35 by which time clarinets 1 to 6 complete the canonic process. This process, while in strict rhythmic canon, is not a canon in the literal sense of having strict imitation of rhythm and pitch. The canonic distance is highlighted by tenuto markings that show the start of each ‘loop’ (see Ex.12):

**Example 12 – N.Y.C. Fig. 35**

In the first movement, at Fig.35, clarinets 1 to 6 have independent pitch, although the pitch contour within the strict rhythmic imitation has intervallic similarities between them, as will be demonstrated later in this chapter.
The rhythmic canon is in three parts; clarinet 4 rhythmically doubles clarinet 1 at a 10th below; clarinet 5 doubles clarinet 2 also at a 10th below; clarinet 6 doubles clarinet 3 in a similar fashion. This relationship of clarinets 1 and 4, 2 and 5, 3 and 6 in the first movement is also manifest in the process of canonic construction as will be shown. The live clarinet builds up each six-note motive from one or two notes, by substituting beats for rests, and then transplants it into each subsequent clarinet by means of a crossfade. The whole process, therefore, is constructed and transplanted by the live clarinet, except for the 1st clarinet, which emerges fully formed from Fig.7 at the end of the pulsing harmonic cycle.

The distance of rhythmic canon between clarinets 1 and 4 and clarinets 2 and 5 is five quavers, however, the distance between clarinets 2 and 5 and clarinets 3 and 6 is only three quavers. This asymmetry gives the rhythmic texture an interesting contour of accents which offsets the metre (3/2) in which the overall pulse is felt.

At Fig.9, the live clarinet starts substituting beats for rests to construct the six-note motive that it will transplant into clarinet 2. Since clarinet 1 began its motive on the dotted crotchet at bar five of Fig.7, and since the other five notes are quavers, we can define the number of each note of the rhythmic motive, one to six beginning on the dotted crotchet (see Ex.13):

**Example 13 – N.Y.C. Fig. 7, bar 5**

The live clarinet at Fig.9 therefore introduces notes five and six of the motive which it repeats three times (see Ex.14):

**Example 14 – N.Y.C. Figs 9 to 12**
At Fig.10, the live clarinet adds the first note to notes five and six and this is repeated twice. At Fig.11, notes two and three are added and this bar is not repeated. The fourth (and final) note is added at Fig.12, completing the six-note motive. At Fig.13, this motive is crossfaded into clarinet 2.

This process, from Fig.9 through to Fig.12, for the construction of the clarinet 2 motive is imitated exactly by the construction of the clarinet 5 motive from Fig.25 through to Fig.28 (see Ex.15):

**Example 15 – N.Y.C. Figs 9 to 12 compared with Figs 25 to 28**

As noted above, there is a relationship between clarinets 1 and 4, 2 and 5, and 3 and 6. The motives for clarinets 2 and 5 are constructed in the same note sequence: 5 – 6 – 1 – 2 – 3 – 4, by the live clarinet. Also, the number of repeats for each figure sequence (Figs 9 to 13 and 25 to 29) is: x3, x2, x1, x2, x2, for clarinets 2 and 5.

Clarinets 3 and 6 also share this relationship, but with a different note order and bar repeat sequence. The live clarinet substitutes beats for rests to build up the motive for clarinet 3 from Figs 15 to 17 and transplants it with a crossfade to clarinet 3 at Fig.18. This is mirrored by the same process for clarinet 6 from Fig.31 to Fig.34. The note sequence shared by clarinets 3 and 6 (as constructed by the live clarinet) is: 1 – 2 – 3 – 4 – 5 – 6, and the bar repeat sequence is: x3, x2, x2, x2. The relationship between clarinets 1 and 4 (other than their rhythmic identicality doubled at the 10th) is only implied because the live clarinet does not gradually construct the motive for clarinet 1. As already stated, clarinet 1 emerges fully formed out of Fig.7. Nevertheless, the note sequence for clarinet 4 is: 5 – 6 – 2 – 3 – 1 – 4, the fourth note (Fig.22) of the motive being the first Db to clinch the tonality, as demonstrated in the previous chapter. The bar repeat sequence for the construction of the clarinet 4 motive is: x3, x3, x2, x2, which separates it from the sequences for clarinets 2 and 5, and 3 and 6, even if its correlation to clarinet 1 is only implied.

Once the canonic web for the first movement has been constructed, Reich introduces resulting patterns in the live clarinet. From Fig.36 to Fig.43, there are six resulting patterns which correlate to the six-chord pulsing harmonic cycle below, which begins at Fig.37 as described in the previous
chapter. The live clarinet merely brings to the surface patterns that already exist within the contrapuntal web.

At Fig. 36 the live clarinet fades in a six-note resulting pattern taken from notes in clarinets 1, 2 and 3 (see Ex. 16):

Example 16 – N.Y.C. Fig. 36

The first note of the resulting pattern (Eb) correlates to the Eb at the start of the bar in clarinet 1; the Ab on the second crotchet beat correlates to the Ab on the second beat of the clarinet 2 motive and so on, forming a doubling pattern thus:

1 – 2 – 2 – 2 – 3 – 1

The second resulting pattern, one bar after Fig. 38, doubles lower notes from clarinets 4, 5 and 6 forming a different doubling pattern thus (see Ex. 17):
Example 17 – N.Y.C. Fig. 38, bar 2

5 – 6 – 6 – 4 – 4 – 5 – 5

The third resulting pattern, one bar after Fig. 39, takes some licence in its doubling capacity since the Bb on the eighth quaver beat is not actually sounded on the eighth quaver beat of any of the six clarinets playing the canonic web below. It is taken from clarinet 2 which sounds the Bb on the sixth quaver beat, but since it is a dotted crotchet, it is sustained until the eighth beat, where the note is resounded in the live clarinet (see Ex.18):
This also occurs in the fourth resulting pattern at Fig. 40 where the G on the seventh quaver beat of the live clarinet re-sounds the G in clarinet 5 which is sounded on the sixth quaver beat but is sustained until the seventh quaver beat, as it also is a dotted crotchet. The fifth resulting pattern at Fig. 41 is two bars long (all other resulting patterns in the first movement are only one bar long) and since the canonic web in clarinets 1 to 6 is only one bar in length before it repeats itself, this adds a new dimension to the concept of repetitive duration. The sixth and final resulting pattern (Fig. 42) simply takes the first bar of the fifth pattern and adds an Ab to the final quaver beat.

The contrapuntal web in the second movement is in strict canon except for two small pitch changes. At Fig. 53, the F# on the last quaver beat of the clarinet 2 motive would be the B above it; and the C# on the last quaver beat of clarinet 5 would be the G# above it (see Ex. 19):
The motive is harmonized at the 10th in faburden style, as in the first movement, so that the six-clarinet web is in three-part canon at the unison. As with the first movement, the clarinets are grouped in pairs 1 and 4, 2 and 5, and 3 and 6; but this is not evident right from the start of the second movement (Fig.44) since Reich juggles the parts with crossfading, two bars after Fig.47, so that clarinet 7 becomes clarinet 1, clarinet 8 becomes clarinet 4, and so on (see Ex.20):
Example 20 – N.Y.C. Fig. 47, bar 3

However, by Fig. 53, the construction and transplantation is complete, clearly displaying its grouping. Since these pairs of clarinets are brought in together (as opposed to the first movement in which the clarinets are brought in one at a time), their relationship does not need to be shown by demonstrating their construction.

The distance of rhythmic canon between clarinets 1 and 4, and 2 and 5 is a quaver, as between clarinets 2 and 5, and 3 and 6 (see Ex.19). Once fully constructed (Fig.52) this produces an echo effect which is highlighted by subsequent resulting patterns (see Ex.21):
From Fig.53 through to Fig.60 there are four different resulting patterns which overlay a six-chord harmonic cycle starting at Fig.54. Unlike the first movement, therefore, each resulting pattern does not overlay each chord of the pulsing cycle exactly.

The four resulting patterns contrast in register since the first and third patterns (at Fig.53 and two bars before Fig.57 respectively) double high notes found in clarinets 1, 2 and 3, whereas patterns two and four (two bars after Fig.55 and two bars before Fig. 59 respectively) highlight lower notes found in clarinets 4, 5 and 6.

The clarinet grouping for the construction of the canonic web in the third movement is similar to that for the second movement. The basic motive is also two bars in length (see Ex.7). The first pair of clarinets (eventually clarinets 2 and 3 crossfaded from clarinets 7 and 8) enter whole at Fig.61. From Fig.62 to 65, the second pair of clarinets (eventually clarinets 5 and 6) are gradually constructed by substituting beats for rests, following the first pair at the canonic distance of a crotchet. At Fig. 66, however, any expectations set up by the previous construction process of the second movement (Figs 44 to 52) are thwarted. Not only do the motives for the next two clarinets (4 and live) enter fully formed at the forte marking, suddenly completing the contrapuntal texture (see Ex.22), but they do not enter as a third pair at a subsequent canonic position (as in the second movement):
The live clarinet adds a third faburden harmony to clarinets 2 and 3, and clarinet 4 adds a similar harmony to clarinets 5 and 6. Since the clarinet 1 track is not used in the third movement, the live clarinet functions both as clarinet 1 and for simultaneous resulting patterns, as will be seen later in this chapter. This changes the grouping from 1 and 4, 2 and 5, 3 and 6, as in the first and second movements, to live, 2 and 3, against 4, 5 and 6, for the third movement.

At Fig.67 the bass clarinets start building up a rhythmic pattern based on two notes; A and Eb. This is the first time that they have had any motivic interest, since their function in the first two movements involved pulsing on only one note for each chord of the harmonic cycles. Clarinet 10 (bass) is in rhythmic canon with clarinet 9 (bass) at the distance of the minim. Since the primary interest in the motive for clarinets 9 and 10 is rhythmic, further discussion of this motive will be delayed until the following chapter.

Resulting patterns in the third movement begin at Fig.70, once the bass clarinet motives are completed. Unlike the first two movements, they do not borrow notes from the whole contrapuntal web. Rather, from Fig.70 to 88, resulting patterns involve only the live clarinet and its canonic
follower, clarinet 4. A paradigmatic analysis of the live clarinet part from Fig.66 to the end produces five paradigms; A, B, C, D, and E (see Chart 4):

Chart 4 – N.Y.C. – paradigmatic analysis of Live clarinet, Fig. 66 to end
All paradigms are derivative of paradigm A. The paradigmatic chart shows that there is an oscillation between paradigms B and C as well as a return of paradigm A. This complexity of variation and recurrence is not present in the first two movements.

The motive for paradigm B is the same as for paradigm A except that it has three added notes which are substituted for rests. At Fig.70, the Db on the seventh quaver beat of the first bar of the motive, and the B naturals on the seventh and twelfth quaver beats of the second bar all come from the rhythmic position of clarinet 4 (see Ex.23):

Example 23 – N.Y.C. Fig. 70

Not only is the live clarinet the leader of the 4th clarinet, which is following in canon, but the live clarinet also doubles some of the notes of its follower. This dual level mode of the live clarinet may be referred to as canonic ‘bi-locality’.

Paradigm C is more complicated in its borrowings since there is also a displacement of notes which, while taken from the motive, do not correspond to their rhythmic position in either the live clarinet or clarinet 4, its canonic follower. At Fig.73 in the live clarinet, notes on the second, fourth, fifth, eighth, ninth and eleventh quaver beats of the first bar are taken from clarinet 4. The Ab on the fifth quaver beat of the first bar, however, is displaced one quaver beat earlier than where its true leader position is. All figures under paradigm C are polyrhythmic in that the bass clarinets are in 12/8 while the other clarinets are in 3/2. Because of this metric ambiguity, Reich has changed the time distance that separates the follower and the leader of the canon from two quavers to three. As a result of this there is a variation in each clarinet of the canonic web. Clarinets 2 and 3 have quaver beats five to eight altered in pitch; and clarinets 4, 5 and 6 have a quaver beat inserted which offsets the whole phrase (see Ex.24):
By Fig.89, the parts are swapped so that the live clarinet is in canon with clarinet 7, which is chosen in preference to clarinets 3 or 6 (which are left blank) simply for tape preparation purposes, since clarinet 7 is used for high notes.

Movements one and three are motivically similar since the two-bar motive of the third movement is developed from the one-bar motive of the first movement (see Ex.25):
Example 25 – N.Y.C. motivic comparison of the first and third movements

The second half of the first bar of the two-bar motive corresponds rhythmically to the first half of the one-bar motive, while the first half of the second bar of the two-bar motive corresponds rhythmically to the first half of the one-bar motive. The falling 5th from quaver beats five to six in both motives is prominent, and in the one-bar motive there is a further falling 5th to the eighth quaver beat, making a falling 9th out of two stacked 5ths, a feature which has been seen to be prominent in harmonic construction as well. In contrast to this, the most prominent horizontal interval in the motive for the second movement is the 3rd, which is also important in harmonic construction.
CHAPTER 4 – RHYTHM

Many aspects of rhythm in New York Counterpoint have been dealt with in the previous chapter on motive since the nature and construction of the various canons involves the interaction of pitch and rhythm. This chapter therefore deals with those aspects of rhythm that are not affected by pitch organization. Most importantly this involves metric ambiguity, metric modulation and the pulse, which will be examined in each movement.

In an interview concerning The Desert Music (1983), Steve Reich commented that “Very often, I'll find myself working in 12 beat phrases, which can divide up in different ways; and that ambiguity as to whether you’re in duple or triple time is, in fact, the rhythmic life blood of much of my music.” 13 This is exactly the case with New York Counterpoint since all phrases have twelve beats. From the outset of the first movement, Reich notates the metre as 6/4 = 3/2, implying a metric ambiguity. From Figs 1 to 7, however, the pulsing crescendos are effectively without metre, since the barlines are not stressed. In fact, Reich purposely avoids introducing any of the crescendos at the beginning of the bar (except for the very first bar) so that when the first motive is introduced three bars before Fig.8, it crystallizes a sense of metre (i.e. 3/2). It is curious that Reich introduces one bar of 2/2 three times at the end of the first three D11 chords (2 within 1 – 2 – 3 – 2 – 1 – 2 – 3 – 2) since its metrical implication is not felt amidst the overall decrescendo.

From Figs 8 to 35, while the canonic web is being constructed, the 3/2 metre is stable. Within the canonic web, however, there is potential for regrouping which can be realized by the live clarinet, bringing to the surface the groupings already within the web, but not stressed. Of the six resulting patterns in the first movement from Figs 36 to 43 (described in the previous chapter), it is the fourth resulting pattern, one bar after Fig.40, which highlights a 12/8 grouping (see Ex.26):

Example 26 – N.Y.C. Fig. 40, bar 2

![implied 12/8 grouping](image)

This ambiguity is not stressed by Richard Stoltzman on the recording; 14 this will be discussed in greater detail in the next chapter.

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13 S. Reich, The Desert Music, Nonesuch, 79101–1, sleeve note.
14 S. Reich, New York Counterpoint, RCA., 5944–1.
At the start of the second movement (Fig.44), the metre changes from 3/2 to 3/4, but the indication ‘minim equals crotchet’ in the score, means that the metrical pulse is effectually unchanged. Because of the placement of two semiquavers as an anacrusis to a crotchet, however, there is a tendency for the ear to divide the two-bar motive (in 3/4) into one bar of 4/4 and one bar of 2/4 (see Ex.27):

Example 27 – N.Y.C. Fig. 44

From this perspective, the canonic web for the second movement contains more ambiguity than the canonic web for the first movement. As with the first movement, it is the resulting patterns which have the potential to establish a new grouping in the second movement. The third resulting pattern (two bars before Fig.57) does precisely this. Grouped in 6/8, it creates a distinct ambiguity within the 3/4 metre, an ambiguity which is supported by clarinets 7 and 8 (part of the pulsing harmonic cycle below) which enter on the fourth quaver beat of Fig. 57 stressing the strong beat within a 6/8 grouping (see Ex.28):

Example 28 – N.Y.C. two bars before Fig. 57

Two bars before Fig.59, the fourth and final resulting pattern re-establishes the strength of the 3/4 grouping indicated by the metre.
In the third movement, Reich uses more than ambiguity to propel the rhythmic texture forwards. Although the main metre of this movement is 3/2 (as in the first movement), Reich introduces a polymetric element into the score by putting the bass clarinets in 12/8 for all of the figures listed under paradigm C (see Chart 4 above). Clarinets live to 6 are not changed into 12/8, probably because Reich wants the listener to hear differently what is in theory not changing at all. Because of the pervasive accent of the bass clarinets (while in 12/8), clarinets live to 6 take on a 12/8 grouping, even though they are played in 3/2. In fact, Stoltzman evens out the quavers (previously swung) at this point on the recording, but this will be explained fully in the next chapter.

This rhythmic modulation first occurs at Fig.73 and the preparation leading up to it should be examined. The motive for bass clarinets 9 and 10 is constructed from Figs 67 to 70, by substituting beats for rests. The rhythm of the motive is derived from the two-bar motive for clarinets live to 6 in the third movement (see Ex.29):

Example 29 – N.Y.C. rhythmic comparison of bass clarinet motive to motive for clarinets live to 6 at Fig. 70

Bass clarinet 10 follows bass clarinet 9 in rhythmic canon at the distance of a minim. At Fig.72, the phase position of bass clarinet 9 changes so that it now follows bass clarinet 10 at the distance of a crotchet. This change in phase position is a leap of a dotted minim (one half bar) and it aligns the bass clarinets with clarinets live to 6 at their canonic distance of a crotchet.

When the metre is modulated at Fig.73, Reich changes the canonic distance of the followers from a crotchet to a dotted crotchet (or three quavers) so that the echo reinforces the triple-quaver subdivision of the 12/8 grouping. Reich also regroups the bass clarinet motive into a triple-quaver pattern (see Ex. 30):
In bass clarinet 9, the note on the third quaver beat is moved to the fourth quaver beat, while the notes on the fifth and sixth quaver beats are moved to the seventh and eighth quaver beats, and the note on the ninth quaver beat is placed on the tenth. The rhythm of bass clarinet 10 is correspondingly altered so that it leads bass clarinet 9 by a dotted crotchet. This 12/8 grouping, for figures listed under paradigm C, oscillates with the 3/2 grouping, for figures listed under paradigm B (see Chart 4), until Fig.86 with the permanent return of the 3/2 metre.

From Fig.88 to the end, there is ambiguity created by the lowest note, G#, which is found in clarinets 2 and 5 creating a 3/4 pattern. This grouping is not dominant but it undermines the strength of 3/2 in favour of 6/4, which, as Reich has indicated in the score, equals 3/2 (see Ex.31):

Example 31 - N.Y.C. Fig. 90 with reduction of resulting pattern
CHAPTER 5 – PULSE, INTERPRETATION, STOLTZMAN

“The choice of pitch and timbre in my music has always been intuitive. Even the choice of rhythmic structure or system is finally intuitive.” 15 Coupled with Reich’s intuitive writing style is his concern for interpretation of his works. Particularly with music that is specifically written to create ambiguity, it is important that the performers share this intuition if this sense of ambiguity is to be conveyed to the listener. Reich is concerned with giving the listener choices, not the performers, and this necessarily implies that the performers must be able to present the listener with the choices, intended by the composer, intuitively. “One’s listening mind can shift back and forth within the musical fabric, because the fabric encourages that. But if you don’t build in that flexibility of perspective, then you wind up with something extremely flat-footed and boring.” 16 If the performers do not understand this flexibility of perspective, it is unlikely that they will convey the flexibility to the listener.

In reply to a letter that I wrote to Reich, concerning Richard Stoltzman’s recording of New York Counterpoint, Reich stated that, “There’s a ‘jazz influence’ on almost all of my music so naturally, Stoltzman plays a heavily jazz influenced piece likewise with that feel. I like it.” 17 Since Reich is obviously satisfied with Stoltzman’s recording, there is much benefit to be gained by a close examination of Stoltzman’s interpretation, as it will provide some insight into the intuition with which the piece was written.

Robert Stock, of the New York Times, wrote in 1983 that, “Perhaps because of his jazz heritage, Stoltzman is committed to a search for spontaneity in performance. He doesn’t write in new notes, but he does stretch the traditional dynamics of a score and experiment with the colors and direction in a phrase.” 18 In regard to New York Counterpoint, it is Stoltzman’s phrasing that is of most interest. There is no room for improvisation; even the resulting patterns are written out, unlike Violin Phase where the performer is free to find their own patterns. Interpretation, therefore, is channelled primarily through pulse. Reich has written that “In any music which depends upon a steady pulse, as my music does, it is actually tiny micro-variations of that pulse created by human beings, playing instruments or singing that gives life to the music.” 19

Metric ambiguity, as discussed in the previous chapter, is relatively straightforward in the score. A 6/8 grouping in a 3/4 metre can be interpreted as a syncopation within 3/4 or a new metrical feel in itself

16 S. Reich, The Desert Music, Nonesuch, 79101-1, sleeve note.
as 6/8. Putting this ambiguity into reality, so that the listener has a ‘flexibility of perspective’, however, is somewhat more complex. To draw an analogy with a light switch will demonstrate how fickle, metric ambiguity actually is in performance. To turn a light switch on and off is straightforward. However, to move the switch to a middle point, between on and off, so that the light flickers requires a particularly fine adjustment. So too, to modulate from 3/4 to 6/8, for a competent performer, is relatively straightforward, but to find a balanced middle point of accent stress, where the listener has this ‘flexibility of perspective’, is also a particularly fine adjustment, and it is here that the ‘tiny micro-variations of the pulse created by human beings’ are so essential in determining the perception of metre.

As already noted, ‘Stoltzman plays a heavily jazz influenced piece (New York Counterpoint) likewise with that feel’. In the first and third movements, Stoltzman ‘swings’ the quavers (see Chart 5):

**Chart 5 – N.Y.C. – interpretation of quavers by Stolzman**

Swing, as such, has been the subject of keen debate. The simple generalisation is that 4/4 in swing equals 12/8, such that two quavers in swing equate to a crotchet and quaver in the same pulse (see Ex.32):
Example 32

'swing quavers'

\[
\begin{array}{c}
\text{\textendash} \\
\end{array}
\]

However, most jazz musicians would argue that to call 4/4 in swing, l2/8 is simplistic; that what makes swing feel like swing is the accent on the second and fourth crotchet beats within 4/4 along with more subtle variations of the long-short duration (‘heavy’ swing, etc.). There is often more to swing than a pure triplet grouping; yet there are also clear notational and compositional possibilities in that hemiola relationship.

For the purposes of this analysis, a reasonably approximate attempt to transcribe Stoltzman’s rhythm (i.e. Figs 8 to 35) would conflict with the even-quaver notation of the score in favour of swung quavers (see Ex.32).

Six quavers with swing (in 3/4 metre) could equate to either three crotchet–quaver groups in compound time (9/8) or three crotchet–quaver triplet groups still in 3/4 (see Ex.33):

Example 33

\[
\begin{array}{c}
\text{\textendash} \\
\end{array}
\]

Within a 3/4 grouping, three pairs of quavers, swung, would equal three pairs each comprising a crotchet and a quaver, so that 2+2+2 = 3+3+3. This swinging of the quavers does not alter the pulse of the grouping. However, if the same six quavers were grouped in a 6/8 metre, the proportions change when the quavers are swung (see Ex.34):
Example 34

Three written quavers with swing would equal a crotchet–quaver–crotchet grouping in the first half of the bar ($2 + 1 + 2 = 5$); whereas in the second half of the bar, the final three quavers would equal a quaver–crotchet–quaver grouping ($1 + 2 + 1 = 4$). This means that $3+3$ in written quavers would result in a proportion of $5+4$ once swung; put simply, swung quavers in a $6/8$ grouping do not bisect the bar as do even quavers.

If a light switch flickers three-sixths of the way between on and off, it probably will not flicker four-ninths of the way between on and off, it will just stay on. Similarly, as Reich points out, metric ambiguity is concerned with an accent-stress balance, measured in ‘micro-variations’; a $5+4$ swing grouping will always tilt six written quavers into a $3/4$ feel with a syncopation, but never into a $6/8$ grouping. This is why the fourth resulting pattern of the first movement (see Ex.26) does not audibly convey its $12/8$ grouping within the $3/2$ metre. There is no ‘flexibility of perspective’ at this point because Stoltzman swings the quavers, disrupting a potentially even balance within a $12/8$ grouping. In contrast to this, the third resulting pattern of the second movement (see Ex.28) is played with even quavers by Stoltzman and the $6/8$ grouping within the $3/4$ metre creates a distinct metrical ambiguity.

Metric ambiguity is not the only consideration in the interpretation of New York Counterpoint, for it would arguably be a lesser piece if it were played with even quavers throughout (despite no indication in the score that it shouldn't be played with even quavers throughout). Further, it is reasonable to suggest that Stoltzman may have been aware that swung quavers stifle metrical ambiguity for triplet quaver groupings; since in the third movement, he evens out the swing in all the figures listed under paradigm C (see Table 3) in which the bass clarinets are in $12/8$, thus modulating from duple ($3/2$) to triple ($12/8$) time.

From Figures 31 to 43, Stoltzman overlays the swinging quavers of the canonic web (clarinets 1 to 6) with the even quavers of the pulsing harmonic cycle (clarinets 7 to 10). Both fit comfortably within the $3/2$ metre, especially since the metrical implication of the pulsing cycle is elastic, being more concerned with gradual linear crescendo and decrescendo. Since Reich has stated that the ‘ambiguity
as to whether you’re in duple or triple time is, in fact, the rhythmic life-blood of much of my music’, we can view this superimposition of even and swung quavers as a further extension of the duple-triple dichotomy into the subdivision of the triplet semiquaver, which is interesting considering that the shortest note in the first and last movements is a quaver, and that a semi-quaver in the second movement equals, in tempo, a quaver in the first (see Ex.35):

Example 35

This seemingly invisible division of the triplet semi-quaver is created entirely by Stoltzman’s superimposition of even and swung quavers.

Because the ear arguably does not perceive two different metres simultaneously, but will relate one to the other, this presents two possibilities. Either the ear will fluctuate between hearing even quavers and swung quavers in the same way that the eye will blink at a perceptually ambiguous drawing by Escher and see it back to front; or alternatively, the ear will hear the compound result of both even and swung quavers with the smallest division of the pulse being the triplet semi-quaver. The former is more realistic, however, being an example of ‘flexibility of perspective’.
POSTLUDE

The success of *New York Counterpoint* (1985) as a piece is due mainly to its fluency of techniques already grasped by Reich in earlier pieces. It may not be a watershed in Reich’s development, as are *Drumming* (1971) and *Tehillim* (1981); and it can be seen as a refinement of *Violin Phase* (1967), written nearly two decades earlier, in its homogeneous instrument group and doubling of resulting patterns caused by canonic phasing.

The importance of *New York Counterpoint* for Reich’s future compositions, however, must be considered. The piece sounds so effortless, that one is inclined to overlook the mastery in its compression of techniques (previously employed in the chamber and orchestral pieces) into a piece scored only for clarinets. This compression and refinement, in turn, creates the potential for expansion of these consolidated techniques and ideas. As noted in the first chapter, “Each new work appears to capitalize on techniques used in immediately preceding compositions, but also adds novel ideas which will in turn stimulate later development.”

It is possible that Reich will capitalize on the jazz influence which, while present in all of his music, has taken on a particularly strong influence in *New York Counterpoint*. The interpretation of the piece by Richard Stoltzman, as a classical/jazz musician, is important because he juxtaposes straight and swung quavers vertically, as well as horizontally, in a way that opens up a new and deeper level in the duple-triple ambiguity which is present in all of Reich’s music. Reich’s use of jazz-orientated harmonies based on alternating major and minor stacked 3rds is also new to *New York Counterpoint* and shows much potential for future development.

The impact of *New York Counterpoint*, stylistically, may yet to be felt; artistically, however, it reflects the character of one of the most significant composers of the Postmodern era, performed by one of the most stylistically-versatile clarinetists of that time.

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Appendix 1. a) ‘Unpublished letter to Steve Reich’ (17 May 1988)

Dear Mr. Reich...

I am a final year B.Mus (hons.) student at the University of Melbourne. As part of my course I am writing a 10,000 word dissertation on your piece, New York Counterpoint. My reason for writing to you is regarding a discrepancy between the score (Hendon music) and the recording (Richard Stoltzman) of New York Counterpoint.

It seems to me that Stoltzman "swings" the quavers in the 1st and 3rd movements, however there is no marking in the score to the effect of "\[\text{\textasciitilde} \text{\textasciitilde} : \text{\textasciitilde} \text{\textasciitilde}\]". Moreover, in the 3rd movement, where ambiguity is created by the 12/8 grouping within the metre of 3/2 (ie; figure 73 in the bass clarinets), Stoltzman seems to even out the swing in order to emphasise the new grouping.

I like the contrast between "swung" and "straight" quavers (as played by Stoltzman), particularly when they are superimposed in the 1st movement (ie; figure 37), however, this contrast is not indicated in the score and if I am to feature it in my analysis, I must know whether this was your intention or artistic licence on Stoltzman's part. Could you please write me a short letter explaining your original intentions regarding this matter.

I understand that you are a busy man, however I would be most grateful if you could find the time to write to me.

Yours faithfully,

Stuart Greenbaum

nb: I have sent this letter twice, care of two different addresses, in the hope that you will receive at least one of them. I apologize if you receive the second copy of this letter.
Dear Stuart Greenbaum,

It’s nice to hear you’re writing 10,000 words about *New York Counterpoint* for a ten minute piece that’s 1,000 words a minute... I hope you’re making a real analysis & I’d be interested to read what you come up with.

Your question seems a little strange. Of course my pieces are ‘interpreted’ — by Stoltzman, Ransom, whoever, Michael Tilson Thomas and by my own ensemble. And of course there’s a ‘jazz influence’ on almost all my music so naturally Stoltzman plays a heavily jazz influenced piece like this with that feel. I think. Good luck! Steve Reich