

# CHICAGO SPIRAL

FOR FLUTE, CLARINET, SOPRANO SAXOPHONE (OR THREE FLUTES),  
DRUMS, VIOLIN, VIOLA, CELLO, AND SYNTHESIZER



BY KYLE GANN  
(1990-91)

## Chicago Spiral (1990-1)

Living and lecturing in Chicago in the 1980s, I became something of an authority on the history of the compositional scene there. Some of the earliest attention given to Chicago music was an article written by the great Italian composer Ferruccio Busoni, who visited Chicago and met two German émigré musicians who impressed him: Bernhard Ziehn (1845-1912) and Wilhelm Middelschulte (1863-1943). Ziehn, a rather fanatical contrapuntalist, solved for Busoni the mystery of how to combine the four themes in the great unfinished fugue of Bach's The Art of Fugue, enabling Busoni to complete his own Fantasia Contrappuntistica, based on Bach's fugue. And Busoni memorialized his two new friends in an article titled "Die Gothiker von Chicago" - the Gothics of Chicago, meaning that they were pursuing counterpoint with the intensity of Renaissance composers. Daringly progressive, Ziehn proposed that any combination of tones could make a usable chord, at a time when most theorists followed Helmholtz in deriving harmony from the overtone series. He taught John Alden Carpenter, and, via people like Ruth Crawford and John Becker, had a considerable influence on the early Chicago scene.

In a Chicago used bookstore I ran across Ziehn's last book, Canonic Studies, published just after his death. The book gives instructions for writing canons at every possible interval, each example going through a kind of harmonic spiral. I became fascinated with the problem, and decided to write a grand canon in honor of Ziehn, using his methods. Chicago Spiral is a nine-part triple canon in 14/8 meter and at the interval of the major second. The flute's line is echoed a step lower by the clarinet, and another step lower by the saxophone; the cello's line returns a minor seventh higher in the viola, and another seventh higher in the violin; and three lines similarly coexist in the keyboard part. In addition to the basic contrapuntal idea, the meter becomes progressively filled with different kinds of polyrhythms, which create an illusion of continual tempo change, though in reality the underlying pulse never varies. I remember in particular one three-measure passage that was such a tough nut to crack that I worked on it for three full days, Dec. 24-26, 1991.

I dedicated the piece to my good composer friend Scott Wheeler, who conducted the first performance with Dinosaur Annex in Boston.

- Kyle Gann

To Scott Wheeler

# Chicago Spiral

Kyle Gann  
1990-91

Energetically

♩ = 144

The musical score is written for a 14/8 time signature. The Flute 1 part begins with a dynamic marking of *p* and features a melodic line with slurs and ties. The Clarinet (or Flute 2) and Soprano Sax. (or Flute 3) parts also begin with a dynamic marking of *p* and play a similar melodic line. The Tom-toms, Violin, Viola, Violoncello, and Synthesizer parts are currently silent, indicated by a horizontal line with a dash.

Score is in C.

4

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

*p*

8

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vla

Vc.

*mp*

*mp*

*mp*

*p*

*p*

Chicago Spiral

Musical score for measures 12-14 of "Chicago Spiral". The score is arranged in a system with seven staves. The instruments and their parts are as follows:

- Fl. (1):** First Flute part, starting at measure 12 with a *mf* dynamic.
- Cl. (Fl. 2):** Clarinet in F part, starting at measure 12 with a *mf* dynamic.
- Sax. (Fl. 3):** Saxophone in F part, starting at measure 12 with a *mf* dynamic.
- Tom-t.:** Tom-tom drum part, starting at measure 12 with a *mf* dynamic.
- Vln:** Violin part, starting at measure 12 with a *p* dynamic.
- Vla:** Viola part, starting at measure 12 with a *mf* dynamic.
- Vc.:** Violoncello part, starting at measure 12 with a *mf* dynamic.

The score is written in 4/4 time. The key signature has one flat (B-flat). The music features a mix of eighth and quarter notes, with some slurs and accents. The dynamics are marked as *mf* (mezzo-forte) and *p* (piano).

*Chicago Spiral*

15

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mf*

*f*

*cresc.*

Detailed description: This is a page of a musical score for the piece "Chicago Spiral". It contains measures 15, 16, and 17. The score is arranged in a grand staff with seven parts: Flute 1, Clarinet (Flute 2), Saxophone (Flute 3), Tom-tom, Violin, Viola, and Violoncello. A separate Synth part is shown at the bottom. The key signature has one flat (B-flat major or D minor). Measure 15 starts with a treble clef and a key signature change to one flat. The woodwinds and strings play melodic lines with various articulations and dynamics. The Tom-tom part has a rhythmic pattern. The Synth part is mostly silent, with a few notes in measure 17 marked with a crescendo. Dynamics include *mf* (mezzo-forte) and *f* (forte).

*Chicago Spiral*

This musical score is for a piece titled "Chicago Spiral". It is a multi-staff arrangement. The instruments included are:

- Flute (1) - Fl. (1)
- Clarinet (Flute 2) - Cl. (Fl. 2)
- Saxophone (Flute 3) - Sax. (Fl. 3)
- Tom-tom - Tom-t.
- Violin - Vln.
- Viola - Vla.
- Violoncello - Vc.
- Synthesizer - Synth.

The score is written in 4/4 time. It begins at measure 18. The key signature has one flat (B-flat). The music is marked with a forte (*f*) dynamic. The synthesizer part consists of two staves (treble and bass clef). The woodwind and string parts feature melodic lines and chords, often with slurs and accents. The percussion part consists of rhythmic patterns on the tom-tom.

*Chicago Spiral*

Musical score for measures 22-25 of "Chicago Spiral". The score is arranged for the following instruments: Fl. (1), Cl. (Fl. 2), Sax. (Fl. 3), Tom-t., Vln, Vla, Vc, and Synth. The key signature is one sharp (F#) and the time signature is 4/4. Measure 22 starts with a treble clef and a key signature of one sharp. The Fl. (1) part features a melodic line with slurs and triplets. The Cl. (Fl. 2) part follows a similar melodic pattern. The Sax. (Fl. 3) part provides harmonic support with chords and single notes. The Tom-t. part consists of a rhythmic pattern of eighth and sixteenth notes. The Vln part has a melodic line with slurs. The Vla part has a melodic line with slurs and triplets. The Vc part has a melodic line with slurs and triplets. The Synth. part has a melodic line with slurs and triplets. Dynamic markings include *f* in measure 25.

*Chicago Spiral*



26

Fl.(1)

Cl.  
(Fl.2)

Sax.  
(Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

The musical score consists of eight staves. The top staff is for Flute 1 (Fl. (1)), the second for Clarinet in F (Cl. (Fl. 2)), the third for Saxophone in F (Sax. (Fl. 3)), the fourth for Tom-tom (Tom-t.), the fifth for Violin (Vln), the sixth for Viola (Vla), the seventh for Violoncello (Vc.), and the eighth for Synthesizer (Synth.). The score is divided into three measures. The first measure starts with a treble clef and a key signature of one flat. The second measure has a key signature change to two flats. The third measure has a key signature change to one flat. The score is heavily marked with triplets (indicated by a '3' in a bracket) and slurs. The Tom-tom part uses a drumstick icon. The Synth. part is written in grand staff notation (treble and bass clefs). The page number '26' is at the top left of the first staff, and '7' is at the top right of the page.

*Chicago Spiral*

Musical score for measures 29-32, featuring instruments: Fl. (1), Cl. (Fl. 2), Sax. (Fl. 3), Tom-t., Vln, Vla, Vc, and Synth. The score includes various musical notations such as triplets, slurs, and dynamics (p).

Measures 29-32:

- Fl. (1):** Treble clef, key signature of one sharp (F#). Measure 29: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 30: whole rest. Measure 31: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.
- Cl. (Fl. 2):** Treble clef, key signature of one sharp (F#). Measure 29: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 30: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 31: whole rest. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.
- Sax. (Fl. 3):** Treble clef, key signature of one sharp (F#). Measure 29: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 30: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 31: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.
- Tom-t.:** Percussion clef. Measure 29: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 30: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 31: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.
- Vln:** Treble clef, key signature of one sharp (F#). Measure 29: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 30: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 31: whole rest. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.
- Vla:** Treble clef, key signature of one sharp (F#). Measure 29: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 30: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 31: whole rest. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.
- Vc.:** Bass clef, key signature of one sharp (F#). Measure 29: whole rest. Measure 30: whole rest. Measure 31: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.
- Synth.:** Treble and Bass clefs, key signature of one sharp (F#). Measure 29: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 30: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 31: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket. Measure 32: quarter notes G4, A4, B4, C5, slurred and marked with a triplet bracket.

*Chicago Spiral*

33

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*p*

*cresc.*

*mf*

*f*

*cresc.*

*cresc.*

*cresc.*

Chicago Spiral

Musical score for measures 37-39 of "Chicago Spiral". The score is arranged in a system with the following parts from top to bottom: Fl. (1), Cl. (Fl. 2), Sax. (Fl. 3), Tom-t., Vln, Vla, Vc, and Synth. Measure 37 starts with a treble clef and a key signature of one flat. Fl. (1) and Cl. (Fl. 2) play eighth-note patterns with slurs. Sax. (Fl. 3) has a triplet of eighth notes. Tom-t. has a rhythmic pattern of eighth notes. Vln and Vla have triplet patterns. Vc has a triplet of eighth notes. Synth. has a bass line with triplets. Dynamics include *cresc.* and *mf*. Measure 38 continues the patterns with some rests. Measure 39 concludes the section with a key signature change to two flats and a final triplet in the Vc part.

*Chicago Spiral*

40

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*decresc.*

*p*

*mp*

*p*

*Chicago Spiral*

43

Fl.(1)

Cl.  
(Fl.2)

Sax.  
(Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*p*

Detailed description of the musical score: The score is for a 12-measure section of a piece titled 'Chicago Spiral'. It is page 12, starting at measure 43. The instrumentation includes Flute 1, Clarinet (Flute 2), Saxophone (Flute 3), Tom-tom, Violin, Viola, Violoncello, and Synthesizer. The music is in 4/4 time. The woodwinds (Flute 1, Clarinet, Saxophone) and strings (Violin, Viola, Violoncello) play a melodic line with eighth notes and quarter notes, often beamed together. The Tom-tom and Synthesizer provide a rhythmic accompaniment with eighth notes and quarter notes. The dynamic is marked 'p' (piano). The score includes various musical notations such as slurs, ties, and triplets.

Chicago Spiral

46

Fl.(1)

Cl.  
(Fl.2)

Sax.  
(Fl.3)

Tom-t.

*cresc.*

Vln

Vla

Vc.

Synth.

*Chicago Spiral*

49

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mf*

Detailed description: This page of a musical score, numbered 14, contains measures 49, 50, and 51. The score is for a full orchestra and includes parts for Flute 1, Clarinet (Flute 2), Saxophone (Flute 3), Tom-tom, Violin, Viola, Violoncello, and Synthesizer. Measure 49 begins with a treble clef and a key signature of one sharp (F#). The Flute 1 part starts with a half note G4, followed by a quarter note A4, and a quarter note B4. The Clarinet part has a quarter rest, followed by a quarter note G3, and a quarter note A3. The Saxophone part has a quarter rest, followed by a quarter note G3, and a quarter note A3. The Tom-tom part has a quarter note G2, followed by a quarter note A2, and a quarter note B2. The Violin part has a quarter rest, followed by a quarter note G4, and a quarter note A4. The Viola part has a quarter rest, followed by a quarter note G3, and a quarter note A3. The Violoncello part has a quarter note G2, followed by a quarter note A2, and a quarter note B2. The Synthesizer part has a quarter note G2, followed by a quarter note A2, and a quarter note B2. Measure 50 continues the melodic lines for each instrument. Measure 51 concludes the section with a double bar line. The dynamic marking *mf* (mezzo-forte) is placed above the Saxophone part in measure 51.

*Chicago Spiral*



52

Fl.(1)

*mf*

Cl. (Fl.2)

*mf*

Sax. (Fl.3)

*mf*

Tom-t.

*f*

Vln

*mf*

Vla

*mf*

Vc.

Synth.

*mf*

*Chicago Spiral*

55

Fl.(1)

Cl. (FL.2)

Sax. (FL.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*f*

3

3

Detailed description: This page of a musical score, numbered 16, covers measures 55, 56, and 57. The score is for a large ensemble. The woodwind section includes Flute 1 (Fl.(1)), Clarinet (Cl. (FL.2)), and Saxophone (Sax. (FL.3)). The percussion section features Tom-toms (Tom-t.). The string section consists of Violin (Vln), Viola (Vla), and Violoncello (Vc.). A Synth section is also present. The woodwinds play melodic lines with various ornaments like accents and breath marks. The strings play a rhythmic accompaniment with eighth-note patterns. The percussion part shows a steady drum pattern. Dynamics include a forte (*f*) marking. Measure numbers 55, 56, and 57 are indicated at the beginning of their respective staves. Some notes have a '3' above them, indicating a triplet. The score is written in a key with one flat and a 4/4 time signature.

*Chicago Spiral*

58

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*f*

*f*

*f*

*mp*

*ff*

*mp*

*mp*

*mp*

*Chicago Spiral*

61

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mp*

*f*

*mp*

*decresc.*

*mp*

5

Detailed description: This page of a musical score, numbered 18, contains measures 61 through 64. The score is arranged in a multi-staff format. At the top, the Flute 1 part (Fl.(1)) is in treble clef. The Flute 2 part (Cl. (Fl.2)) is also in treble clef and begins with a mezzo-piano (*mp*) dynamic. The Saxophone part (Sax. (Fl.3)) is in treble clef, featuring a dynamic crescendo from mezzo-piano (*mp*) to fortissimo (*f*) in the first measure, followed by a return to mezzo-piano (*mp*). The Tom-tom part (Tom-t.) is in a drum clef and is marked with a decrescendo (*decresc.*). The Violin (Vln) and Viola (Vla) parts are in treble clef, while the Violoncello (Vc.) part is in bass clef. The Synthesizer (Synth.) part is shown in a grand staff format. The key signature has one flat (B-flat), and the time signature is 4/4. The score includes various musical notations such as slurs, accents, and dynamic markings.

*Chicago Spiral*

65

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*p*

3

3

3

3

3

3

3

3

5

5

5

5

3

3

*Chicago Spiral*

67

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*pp*

Detailed description: This page of a musical score, numbered 20, covers measures 67 to 72. The score is arranged for a woodwind section (Flute 1, Clarinet in F, Saxophone in F), a percussionist (Tom-tom), a string section (Violin, Viola, Violoncello), and a Synthesizer. The woodwinds and strings play melodic lines with various ornaments such as triplets and quintuplets. The saxophone part features a more rhythmic and melodic line with triplets. The percussionist plays a steady eighth-note pattern. The string section provides harmonic support with sustained notes and melodic fragments. The score includes dynamic markings like *pp* and various articulations like slurs and accents.

*Chicago Spiral*

69

Fl. (1) *pp*

Cl. (Fl. 2) *pp*

Sax. (Fl. 3) *pp*

Tom-t. *pp*

Vln *pp*

Vla *pp*

Vc. *mf*

Synth. *pp*

5

Chicago Spiral

73

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mf*

*pp*

*mf*

*pp*

*pp*

3

3

3

3

*Chicago Spiral*



77

Fl.(1)

Cl.  
(Fl.2)

Sax.  
(Fl.3)

Tom-t.

Vln

Vla

Vc.

*mp*

Detailed description of the musical score: The score is for a 7-piece ensemble. The Flute 1 part (Fl.(1)) is in treble clef and has a melodic line starting in the fourth measure with a mezzo-piano (mp) dynamic. The Clarinet/Flute 2 part (Cl. (Fl.2)) and Saxophone/Flute 3 part (Sax. (Fl.3)) are in treble clef and have sustained notes in the first three measures. The Tom-tom part (Tom-t.) is in a drum set notation and features triplet patterns in the first two measures. The Violin part (Vln) is in treble clef and has a sustained note in the first measure. The Viola part (Vla) is in treble clef and has a sustained note in the first measure. The Violoncello part (Vc.) is in bass clef and has a sustained note in the first measure.

*Chicago Spiral*

81

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

*mp*

*mp*

*mp*



85

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

*cresc.*

*cresc.*

Chicago Spiral

88

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

*cresc.*

*cresc.*

*mf*

*cresc.*

*mp*

*mp*

*mp*

3

*Chicago Spiral*

91

Fl.(1) *f* 3

Cl. (Fl.2) *f* 3

Sax. (Fl.3) *f* 3

Tom-t. 3

Vln

Vla

Vc. *mf* 3 3 3 3

Synth. *mp* 3

Detailed description: This page of a musical score, numbered 26, covers measures 91 to 93. The score is for a large ensemble. The woodwind section includes Flute 1 (Fl.(1)), Clarinet in F (Cl. (Fl.2)), and Saxophone in F (Sax. (Fl.3)). The percussion section features Tom-toms (Tom-t.). The string section consists of Violin (Vln), Viola (Vla), and Violoncello (Vc.). A Synthesizer (Synth.) part is also present. The key signature has one flat (B-flat major or D minor), and the time signature is 4/4. The score is marked with a forte (*f*) dynamic for the woodwinds and a mezzo-forte (*mf*) dynamic for the strings. The woodwinds play complex melodic lines with frequent triplets and slurs. The strings play a rhythmic accompaniment with slurs and accents. The Tom-toms play a steady pattern of eighth notes. The Synth. part enters in measure 92 with a melodic line featuring triplets.

*Chicago Spiral*

94

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*f*

*mf*

*mf*

*Chicago Spiral*

96

Fl.(1)

Cl.  
(Fl.2)

Sax.  
(Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

The musical score for 'Chicago Spiral' on page 28 features a complex arrangement of instruments. The woodwind section includes three flutes (Fl.1, Fl.2, Fl.3) and a clarinet, all playing intricate melodic lines with frequent triplets and slurs. The percussion part features a tom-tom drum with a steady, rhythmic pattern of eighth notes. The string section, consisting of violin, viola, and violoncello, provides a harmonic foundation with similar triplet-based patterns. The synthesizer part is divided into two staves, with the upper staff playing chords and the lower staff providing a bass line, both utilizing triplets. The score is marked with a rehearsal point at measure 96. The key signature has one flat, and the time signature is 4/4.

*Chicago Spiral*

Musical score for measures 98-101 of "Chicago Spiral". The score is arranged in a grand staff with the following parts:

- Fl. (1)**: Flute 1, Treble clef. Measures 98-101 feature a melodic line with triplets and slurs.
- Cl. (Fl. 2)**: Clarinet in F major / Flute 2, Treble clef. Similar melodic line to Fl. (1).
- Sax. (Fl. 3)**: Saxophone in F major / Flute 3, Treble clef. Similar melodic line to Fl. (1).
- Tom-t.**: Tom-tom, Percussion clef. Features a rhythmic pattern of eighth notes with triplets.
- Vln**: Violin, Treble clef. Features a melodic line with triplets and slurs.
- Vla**: Viola, Bass clef. Features a melodic line with triplets and slurs.
- Vc.**: Violoncello, Bass clef. Features a melodic line with triplets and slurs.
- Synth.**: Synthesizer, Grand staff. Features chordal accompaniment with triplets.

*Chicago Spiral*

100

Fl.(1)

Cl.  
(Fl.2)

Sax.  
(Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*decresc.*

*decresc.*

*decresc.*

*f*

*f*

*f*

*Chicago Spiral*



103

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*f*

*decresc.*

*mp*

*cresc.*

5

5

5

5

5

5

*Chicago Spiral*

106

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*f*

*mp*

*Chicago Spiral*

110

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*p*

*p*

*p*

*pizz.*

*p*

*p*

*p*

3

5

5

5

3

3

3

5

3

3

3

3

3

3

3

3

3

3

*Chicago Spiral*

114

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

Chicago Spiral

117

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mp*

*arco*

*mp*

The musical score is for a piece titled 'Chicago Spiral' on page 35. It begins at measure 117. The score features seven staves: Flute 1 (Fl.(1)), Clarinet (Cl. (Fl.2)), Saxophone (Sax. (Fl.3)), Tom-tom (Tom-t.), Violin (Vln), Viola (Vla), and Violoncello (Vc.). The Synthesizer (Synth.) part is shown in a grand staff with two staves. The Flute 1 part starts with a melodic line in the key of B-flat major. The Clarinet and Saxophone parts play a rhythmic pattern of eighth notes. The Tom-tom part provides a steady pulse. The Violin, Viola, and Violoncello parts play a melodic line, with the Viola and Vc. parts marked 'arco'. The Synth. part plays a rhythmic pattern in the right hand and a melodic line in the left hand. The score includes various musical notations such as dynamics (*mp*), articulation (*arco*), and fingerings (3, 5).

*Chicago Spiral*

120

Fl.(1)

Fl.(2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mp*

*mp*

*mp*

*Chicago Spiral*

123

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*Chicago Spiral*

126

Fl.(1)  
Cl. (Fl.2)  
Sax. (Fl.3)  
Tom-t.  
Vln  
Vla  
Vc.  
Synth.

*p*  
*p*  
*p*  
*p*  
*p*  
*p*  
*p*

*Chicago Spiral*



129 39

Fl. (1)  
Cl. (Fl. 2)  
Sax. (Fl. 3)  
Tom-t.  
Vln  
Vla  
Vc.  
Synth.

*p*  
*cresc.*

Detailed description: This is a page of a musical score for the piece "Chicago Spiral". It covers measures 129, 130, and 131. The score is arranged in a grand staff format with eight staves. The instruments are: Flute 1 (Fl. 1), Flute 2 (Cl. (Fl. 2)), Saxophone (Sax. (Fl. 3)), Tom-tom (Tom-t.), Violin (Vln), Viola (Vla), Violoncello (Vc.), and Synthesizer (Synth.). The key signature has one flat (B-flat major or D minor). The time signature is 4/4. Measure 129 starts with a dynamic marking of *p* (piano) for the Violin. Measure 130 has a *cresc.* (crescendo) marking. The score features various musical notations including eighth notes, quarter notes, half notes, and slurs. The Synthesizer part has a complex melodic line with many accidentals and slurs. The Tom-tom part has a rhythmic pattern of eighth notes and rests.

*Chicago Spiral*

132

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*cresc.*

*cresc.*

*cresc.*

*Chicago Spiral*

135

Fl.(1)  
Cl. (Fl.2)  
Sax. (Fl.3)  
Tom-t.  
Vln  
Vla  
Vc.  
Synth.

*f*  
*f*  
*f*  
*f*  
*f*  
*f*  
*f*  
*f*

Detailed description of the musical score: The score is for a 3-minute and 55-second piece. It features a complex arrangement of instruments. The woodwinds (Flute 1, Clarinet 2, Saxophone 3) play melodic lines with various articulations and dynamics. The strings (Violin, Viola, Violoncello) provide harmonic support with rhythmic patterns. The Tom-tom drum and Synthesizer add to the rhythmic texture. The piece is marked with a forte (*f*) dynamic throughout. The key signature has one sharp (F#) and the time signature is 4/4. The score is divided into three measures, with the first measure starting at rehearsal mark 135.

*Chicago Spiral*

138

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*tr*

*mf*

*gliss.*

Detailed description: This page of a musical score, numbered 42, covers measures 138, 139, and 140. The score is arranged in a multi-staff format. At the top left, the measure number '138' is written. The first three staves are for woodwinds: Flute 1 (Fl.(1)), Clarinet (Cl. (Fl.2)), and Saxophone (Sax. (Fl.3)). These three parts play a melodic line with a long slur across all three measures. The woodwinds are marked with a 'tr' (trill) in measure 140. The fourth staff is for Tom-tom (Tom-t.) in a drum set notation. The fifth and sixth staves are for Violin (Vln) and Viola (Vla) respectively, both in treble clef. The seventh staff is for Violoncello (Vc.) in bass clef. The eighth staff is for Synthesizer (Synth.) in grand staff notation. The string parts (Vln, Vla, Vc.) feature a melodic line with slurs and accents, marked with a mezzo-forte (*mf*) dynamic. The Viola and Cello parts include glissando (*gliss.*) markings. The Synth part provides harmonic support with chords and single notes.

*Chicago Spiral*

141

Fl.(1) *tr* *#e* *b* *#e*

Cl. (Fl.2) *tr* *e* *tr* *e* *tr* *b* *e*

Sax. (Fl.3) *b* *tr* *b* *tr* *e*

Tom-t.

Vln *mf* *gliss.*

Vla

Vc. *gliss.* *#*

Synth.

Chicago Spiral

144 *tr*

Fl.(1)

Cl.  
(Fl.2)

Sax.  
(Fl.3)

*mp*

*tr*

*tr*

Tom-t.

*decesc.*

Vln

*gliss.* #.

*gliss.* b.

*mp*

Vla

*mp*

Vc.

*mp*

Synth.

*Chicago Spiral*

147

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mp*

*p*

*f*

*tr*

*3*

Chicago Spiral

150

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*f*

*f*

*f*

*subito f*

*f*

*f*

*f*

Chicago Spiral



152  $\flat$

Fl.(1)

Fl.(2)

Sax.(Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*f*

Chicago Spiral

153

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

*p*

*decresc.*

*decresc.*

This musical score page contains measures 153 and 154 of the piece "Chicago Spiral". The score is arranged for a full orchestra and includes the following parts: Flute 1 (Fl.(1)), Clarinet in F (Cl. (Fl.2)), Saxophone in F (Sax. (Fl.3)), Tom-tom (Tom-t.), Violin (Vln), Viola (Vla), Violoncello (Vc.), and Synthesizer (Synth.). Measure 153 features complex rhythmic patterns with triplets and quintuplets in the woodwinds and strings. Measure 154 continues these patterns, with a dynamic marking of *p* (piano) for the flute and *decresc.* (decrescendo) for the strings. The score is written in a key signature of one flat and a 4/4 time signature.

*Chicago Spiral*

155

Fl. (1) *mf* 3 3 3

Cl. (Fl. 2) *p*

Sax. (Fl. 3) 3 3 *p*

Tom-t. 3 3

Vln *decresc.*

Vla *mf* 5

Vc. *mf* 5

Synth.

Detailed description: This page of a musical score, numbered 49, contains measures 155 and 156. The score is for a full orchestra and includes parts for Flute 1, Clarinet/Flute 2, Saxophone (Flute 3), Tom-tom, Violin, Viola, Violoncello, and Synthesizer. Measure 155 starts with a tempo marking of 155. Flute 1 enters with a triplet of eighth notes marked *mf*. Clarinet/Flute 2 plays a half note marked *p*. Saxophone plays a triplet of eighth notes marked *p*. Tom-tom plays a triplet of eighth notes. Violin plays a half note with a *decresc.* marking. Viola plays a half note. Violoncello plays a half note marked *mf* with a 5th fingering. Synthesizer plays a quarter note. Measure 156 continues the patterns: Flute 1 has a triplet of eighth notes marked *mf*. Clarinet/Flute 2 has a half note. Saxophone has a half note marked *p*. Tom-tom has a quarter note. Violin has a half note. Viola has a half note marked *mf* with a 5th fingering. Violoncello has a half note marked *mf* with a 5th fingering. Synthesizer has a quarter note.

*Chicago Spiral*

Musical score for measures 157 and 158 of the piece "Chicago Spiral". The score includes parts for Flute 1, Flute 2, Saxophone, Tom-tom, Violin, Viola, Violoncello, and Synth. Measure 157 (labeled 157) features complex rhythmic patterns with triplets and quintuplets in the woodwinds and strings, and a steady eighth-note pattern on the Tom-tom. Measure 158 continues these patterns with further melodic development in the strings and synth. Dynamic markings of *mf* are present throughout.

Chicago Spiral

159

Fl.(1)

Cl. (Fl.2)

Sax. (Fl.3)

Tom-t.

Vln

Vla

Vc.

Synth.

3 3 3 3 3

3 3

3 3

3 3 3 3 3

3 3

3 3

3 3

5

5

3

3

3

3

3

3

3

*pp*

*pp*

*pp*

3

*Chicago Spiral*

161

The musical score for measures 161-164 includes the following parts and details:

- Fl. (1):** Treble clef. Measure 161 has a whole note F#4. Measure 162 has a whole note F#4. Measure 163 has a quarter rest, followed by a quarter note G4, quarter note A4, quarter note B4, quarter note C5, and a whole note B4. Dynamic *f* is indicated above the notes in measure 163, and *pp* is indicated below the whole note in measure 164.
- Cl. (Fl. 2):** Treble clef, key signature one sharp. Measure 161 has a whole note F#4. Measure 162 has a whole note F#4. Measure 163 has a quarter rest, followed by a quarter note G4, quarter note A4, quarter note B4, quarter note C5, and a whole note B4. Dynamic *f* is indicated above the notes in measure 163, and *pp* is indicated below the whole note in measure 164.
- Sax. (Fl. 3):** Treble clef, key signature one sharp. Measure 161 contains sixteenth-note triplets: F#4, G4, A4; F#4, G4, A4; F#4, G4, A4. Measure 162 has a whole note F#4. Measure 163 has a whole note F#4. Measure 164 has a whole note F#4. Dynamic *pp* is indicated below the notes in measure 162.
- Tom-t.:** Percussion staff. Measure 161 has six eighth notes: G2, A2, B2, C3, D3, E3. Measure 162 has a pattern of eighth notes: G2, quarter rest, A2, quarter rest, B2, quarter rest, C3, quarter rest, D3, quarter rest, E3, quarter rest. Measure 163 has the same pattern: G2, quarter rest, A2, quarter rest, B2, quarter rest, C3, quarter rest, D3, quarter rest, E3, quarter rest. Measure 164 has the same pattern. Dynamic *p* is indicated below the notes in measure 162.
- Vln:** Treble clef. Measure 161 has a sixteenth-note triplet: F#4, G4, A4. Measure 162 has a quarter note B4, quarter note C5, and a whole note B4. Dynamic *pp* is indicated below the notes in measure 162.
- Vla:** Bass clef, key signature one sharp. Measure 161 has a whole note F#4. Measure 162 has a whole note F#4. Measure 163 has a whole note F#4. Measure 164 has a whole note F#4. Dynamic *pp* is indicated below the notes in measure 161.
- Vc.:** Bass clef, key signature one sharp. Measure 161 has a whole note F#4. Measure 162 has a whole note F#4. Measure 163 has a whole note F#4. Measure 164 has a whole note F#4.
- Synth.:** Treble and Bass clefs. Measure 161 has a quarter rest in the treble and a whole note F#4 in the bass. Measure 162 has a quarter rest in the treble and a whole note F#4 in the bass. Measure 163 has a quarter note G4, quarter note A4, quarter note B4, quarter note C5 in the treble, and a whole note F#4 in the bass. Dynamic *pp* is indicated below the notes in measure 163.

*Chicago Spiral*

165

Fl. (1) *f* *pp*

Cl. (Fl. 2) *pp* *f* *pp*

Sax. (Fl. 3) *f* *pp* *f* *pp*

Tom-t.

Vln

Vla

Vc.

Synth.

*Chicago Spiral*

169

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mf*

*mf*

*mf*

*Chicago Spiral*



172

Fl. (1)

Cl. (Fl. 2)

Sax. (Fl. 3)

Tom-t.

Vln

Vla

Vc.

Synth.

*mp*

*pp*

*Chicago Spiral*