



# WILLIAM O. SMITH

*Five Pieces for Clarinet Alone*



# William O. Smith: Composer & Clarinetist

## ■ Early Life and Training

- Born in **1926** in **Sacramento, California**.
- Inspired by **Benny Goodman** to pursue both **jazz and classical clarinet**.
- Studied with notable composers, including **Darius Milhaud** and **Roger Sessions**.

## ■ Dual Career in Jazz and Classical Music

- Known as **William O. Smith** in classical music and **Bill Smith** in jazz.
- Pioneered **multiphonics and extended techniques** for clarinet.
- Influential in both **jazz ensembles** (e.g., Brubeck Octet) and **classical composition**.

## ■ Jazz & Classical Fusion

- Combined jazz and classical elements, including **atonality** and **twelve-tone** techniques.
- Milhaud's influence: encouraged blending jazz roots with classical techniques.

# Five Pieces

- Written in 1959
- **Key Features**
  - Polyphony in monophonic line
  - Intervallic collections
  - Twelve-tone techniques
- **Influences**
  - Bartók: A major influence, as noted by Mitchell (1984).
  - Octatonic Scale: Frequently used as a basis for pitch collections, akin to Bartók's style.

- Of the *Five Pieces*, Smith has stated: “In one of these I tried to give the impression of a three- or four-voiced fugue by having one note in each register – but it had not entered my mind that a woodwind instrument could play more than one note simultaneously”

Vigorous  $\text{♩} = 112$

**A**

**B**

**A'**

© Copyright 1963 by Universal Edition (London) Ltd., London

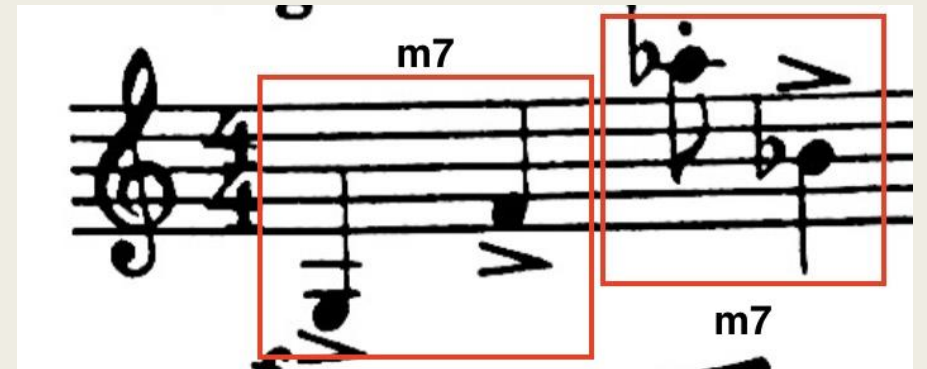
# The first movement - Vigorous

A B A' with coda form

**Coda**

# The first movement - Vigorous

- Begins with the pitches G-F-A $\flat$ -B $\flat$ , forming the pitch collection, prime form (0235)
- A subset of the octatonic scale
- A pair of minor sevenths, the pitch collection (02)
- Minor seven pervasive interval in this piece
- Establishing the registral space into three lines
  - Below the staff
  - In the staff
  - Above the staff



- Contrasted with the opening motive
- In m.2, fast, accented sixteenth notes
- A subset of the octatonic scale (A-B-C-D-Eb)
- The last three note C#-F#-E, forming a new collection (025)



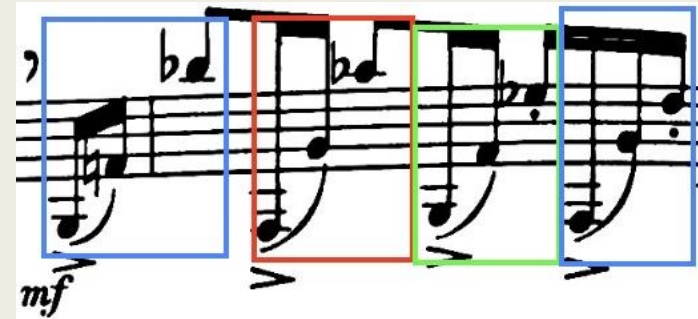
- Back to longer values notes
- the pitches A-G-F#-E, forming a collation (0235)
- A subset of octatonic scale
- Or two minor seven or a pair collection (02).





- In m. 4, alternating between the new collections (013) and (024)

- In m. 8
- The first two notes of each group are (02)
- Respond to the previous motive
- Three notes are made of (025) (013) (024)
- All from the same octatonic scale (1,2)



### The first movement

0	10	9	7	2	3	5	8	6	4	11	1
2	0	11	9	4	5	7	10	8	6	1	3
3	1	0	10	5	6	8	11	9	7	2	4
5	3	2	0	7	8	10	1	11	9	4	6
10	8	7	5	0	1	3	6	4	2	9	11
9	7	6	4	11	0	2	5	3	1	8	10
7	5	4	2	9	10	0	3	1	11	6	8
4	2	1	11	6	7	9	0	10	8	3	5
6	4	3	1	8	9	11	2	0	10	5	7
8	6	5	3	10	11	1	4	2	0	7	9
1	11	10	8	3	4	6	9	7	5	0	2
11	9	8	6	1	2	4	7	5	3	10	0

- The beginning of the B section
- Main collection (013)
- Complete twelve-tone
- (013), (015), (013), (025)

The image shows a musical score for the first movement, featuring a twelve-tone collection. The score is written on a single staff with a treble clef and a key signature of one flat (B-flat). The tempo is marked *a tempo*. The dynamics are *p* (piano) and *mf* (mezzo-forte). The score is annotated with four boxed sections, each labeled with a three-digit number in a colored box: (013) in red, (015) in green, (025) in purple, and another (013) in red. The first (013) is above the staff, while the others are below. The score ends with a fermata and a *mf* dynamic marking.

- The coda section, respond to the opening motive, a pair of (02) and three different registers.
- Respond to three note group's pitch collection (024)
- The (0235) appear again to respond to the opening motive

The image shows a musical score on a single staff with a treble clef and a key signature of two sharps (F# and C#). The score is annotated with several colored boxes and labels:

- A green box labeled (024) encompasses the first three measures, which contain a whole note chord (F#, C#, G#) and a whole note chord (F#, C#, G#).
- A yellow box labeled (02) encompasses the first two notes of the first measure (F# and C#).
- A green box encompasses the first two notes of the second measure (F# and C#).
- A red box labeled (0235) encompasses the first four notes of the fourth measure (F#, C#, G#, C#).
- A yellow box encompasses the last four notes of the fourth measure (C#, G#, C#, G#).

Handwritten annotations include arrows pointing from the (0235) box to the first two notes of the first measure, and other arrows pointing to various notes throughout the score. The score ends with a double bar line.

# Overview of the first movement

## Octatonic and twelve-tone

- Based on octatonic scales and twelve-tone
- Utilizes all styles of octatonic scales.

## Key Motives and intervallic collections

- Prime Forms: (0235), (025), (013), (024).
- Significance of Motive: (02) or a pair of minor seventh

## Character of Vigorous:

- Many accents articulated and keeping moving between three registral spaces quickly.
- The strong opening motive.

# The second movement - Flowing

- Continue to emphasize the interval of the second and seventh
- Loosely appropriating twelve-tone techniques

# The second movement - Flowing

The image shows a musical score for a piece titled "Flowing" with a tempo of 160. The score is written in 3/4 time and consists of six staves. The first staff is labeled "A" and contains a melody starting with a green box around the first two notes, labeled "(015)", and a red box around the next two notes, labeled "(013)". The second staff continues the melody. The third staff is labeled "B" and contains a different melody. The fourth staff is labeled "A'" and contains a melody that begins with a green box labeled "(015)" and a red box labeled "(013)", mirroring the first staff. The score includes various musical markings such as *p*, *mf*, *mp*, *pp*, *rit.*, *a tempo*, and *accel.*. There are also trills marked with "tr" and dynamic markings like "pp" at the end.

- A B A' ternary
- The opening motive are (015) and (013)

- Mm. 11- 15, B section contain a tone row of all twelve notes and distributed into pairs of major or minor seconds.
- This twelve-tone includes these four prime forms: (025), (025), (025), (013)

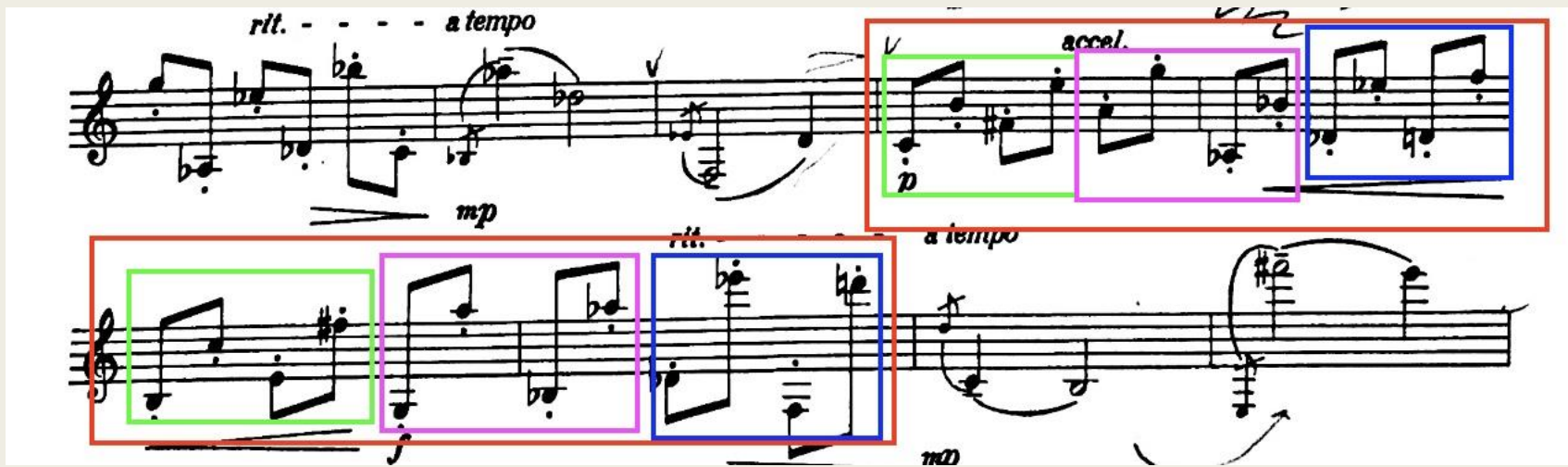


The image shows a musical score with two staves. The top staff contains a melodic line with various dynamics and tempo markings. The bottom staff contains a bass line. Hand-drawn boxes and labels identify specific twelve-tone forms:

- A green box labeled **(015)** highlights a sequence of notes in the lower staff.
- A red box labeled **(013)** highlights a sequence of notes in the lower staff.
- A purple box labeled **(025)** highlights a sequence of notes in the upper staff.
- A red box labeled **(013)** highlights a sequence of notes in the upper staff.

Tempo markings include *rit.*, *a tempo*, and *accel.*. Dynamic markings include *mf*, *mp*, and *p*.

Before entering to the A' section, another complete twelve-tone appears and prime form are (025), (013), (015) and (013)



Measures 25-26 and 27-28:

Two additional twelve-tone rows from *different row matrices*.

### 3 Four-Note Groups:

Each row includes 3 distinct four-note groups and the combination of each group is the same but different order of notes.

### 4 Three-Note Groups:

the intervallic collections of mm. 25-26: (016), (025), (026), (013)

the intervallic collections of mm. 27-28: (015), (013), (025), (014)

The ending part:

A complete twelve-tone and the prime forms are (013), (024),  
(013), (025)

(0235) appears again

The image shows a musical score for a twelve-tone ending. The score is written on a single staff in treble clef. The key signature has one sharp (F#). The music is divided into several sections, each enclosed in a colored box and labeled with a prime form:

- A red box labeled (013) covers the first two measures.
- A green box labeled (0235) covers the first two measures.
- A blue box labeled 024 covers the next two measures.
- A purple box labeled (025) covers the next two measures.
- A red box covers the final two measures of the twelve-tone sequence.

After the twelve-tone sequence, there is a *rit.* (ritardando) marking with a dotted line. The music then continues with two measures of tremolos, each marked with *pp* (pianissimo) and a fermata.

# Overview of the second movement

- Main three-note motive: (013)(015)(025)
- Ending part respond to the (0235)
- More complete twelve-tone rows
- Character of *Flowing*:
  - No accent in this movement
  - Longer note value but tempo is 160

# The third movement - Rhythmic

- Polyphony in monophonic line
- Twelve-tone
- More systematical than the second movement

**A** Rhythmic ♩ - 138

**B**

**C**

*mp* *mf* *pp* *f* *p* *ff* *mp* *p* *pp* *molto f* *rit.* *normale*

To Eb  
To C

A B C ternary  
Through-composed

The first twelve notes of the movement form the tone row:  
 Eb-Bb-Ab-F-G-E-F#-C#-B- A-  
 C-D

The row contains no minor seconds, but has six major second/minor seventh intervals, pointing again to the significance of the collection (02).

The prime form colletions of this row are (027), (013), (027), (025)

Tone Row Matrix

0	7	5	2	4	1	3	10	8	6	9	11
5	0	10	7	9	6	8	3	1	11	2	4
7	2	0	9	11	8	10	5	3	1	4	6
10	5	3	0	2	11	1	8	6	4	7	9
8	3	1	10	0	9	11	6	4	2	5	7
11	6	4	1	3	0	2	9	7	5	8	10
9	4	2	11	1	10	0	7	5	3	6	8
2	9	7	4	6	3	5	0	10	8	11	1
4	11	9	6	8	5	7	2	0	10	1	3
6	1	11	8	10	7	9	4	2	0	3	5
3	10	8	5	7	4	6	1	11	9	0	2
1	8	6	3	5	2	4	11	9	7	10	0

4

Rhythmic ♩ = 138

# Mm. 5-8

## P0 row

### Polyphony in monophonic line



Tone Row Matrix

0	7	5	2	4	1	3	10	8	6	9	11
5	0	10	7	9	6	8	3	1	11	2	4
7	2	0	9	11	8	10	5	3	1	4	6
10	5	3	0	2	11	1	8	6	4	7	9
8	3	1	10	0	9	11	6	4	2	5	7
11	6	4	1	3	0	2	9	7	5	8	10
9	4	2	11	1	10	0	7	5	3	6	8
2	9	7	4	6	3	5	0	10	8	11	1
4	11	9	6	8	5	7	2	0	10	1	3
6	1	11	8	10	7	9	4	2	0	3	5
3	10	8	5	7	4	6	1	11	9	0	2
1	8	6	3	5	2	4	11	9	7	10	0

Fragments of row

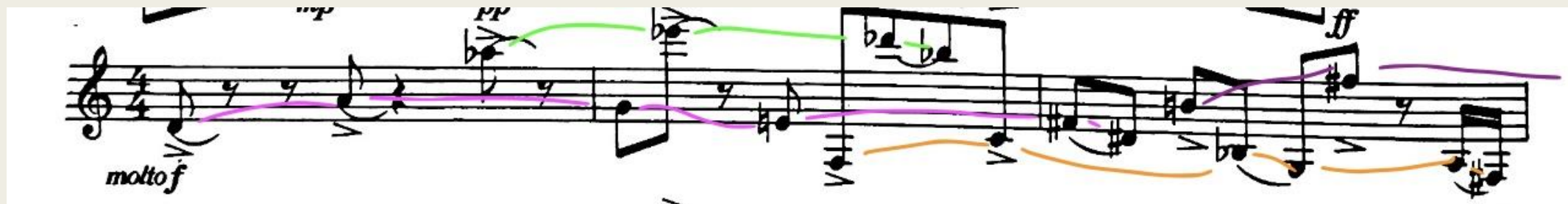
Fugue style

Accents on first two notes

Polyphony in monophonic line

Tone Row Matrix

0	7	5	2	4	1	3	10	8	6	9	11
5	0	10	7	9	6	8	3	1	11	2	4
7	2	0	9	11	8	10	5	3	1	4	6
10	5	3	0	2	11	1	8	6	4	7	9
8	3	1	10	0	9	11	6	4	2	5	7
11	6	4	1	3	0	2	9	7	5	8	10
9	4	2	11	1	10	0	7	5	3	6	8
2	9	7	4	6	3	5	0	10	8	11	1
4	11	9	6	8	5	7	2	0	10	1	3
6	1	11	8	10	7	9	4	2	0	3	5
3	10	8	5	7	4	6	1	11	9	0	2
1	8	6	3	5	2	4	11	9	7	10	0



The ending part respond to pitch collections  
(013), (025) and (0235)

The image shows a musical score for guitar, likely a piece by Debussy titled "UE 18656". The score is written on a single staff in treble clef. It is divided into three distinct sections, each enclosed in a colored box and labeled with a pitch collection:

- (013)**: The first section, enclosed in a red box, contains two measures of music.
- (025)**: The second section, enclosed in a purple box, contains two measures of music.
- (0235)**: The third section, enclosed in a green box, contains the final four measures of the piece. This section includes dynamic markings: *rit.* (ritardando) over the first two measures and *normale* (normal) over the last two measures. It also features articulation marks: upward and downward arrows above the notes.

Below the staff, there are guitar-specific notations: fret numbers (0, 1, 2, 3, 5) and string numbers (1-6) are indicated for various notes. The piece concludes with a double bar line.

*rit.*    ↑    ↓    normale    ↑    ↓    normale

T o o Eb    T o o o o  
 o o o o    x x x x x  
 o o o o    o o o o o  
 o o o o    x x x x x  
 o o o o    o o o o o  
 o o o o    x x x x x  
 o o o o    o o o o o

3658

- The ending part
- Microtonal
- New sonority

# Overview of the third movement

- All intervallic collections or complete twelve-tone are from the same row matrix.
- Utilize different rows to make fugue style in monophonic line (polyphony in the monophonic line)
- The microtonal makes new sonority
- Character of *Rhythmic*:
  - The arrangement of accents make this movement sound like a lively Dance music, *swinging*
  - No *rit.*, no *accel.* in this movement, performance should really stick on the tempo
  - No *cresc.*, no *dim.*, only including dynamic marks and changing them immediately.

# The fourth movement - Singing

- Twelve-tone technique

Singing ♩ = 72

**A**

**B**

**A'**

# The fourth movement - Singing

- A B A' structure
- A' section is the inversion of A section

# THE A SECTION

THE INTERVALLIC COLLECTIONS OF THIS TWELVE-TONE ARE (013), (015), (013), (025), ARE THE SAME WITH THE FIRST MOVEMENT.

The image shows a musical score for a twelve-tone piece, annotated with intervallic collections. The score is written in 4/4 time and includes dynamics such as *mf*, *fp*, *p*, and *rit.* The annotations are as follows:

- P0** (red box): A red box highlights a sequence of notes in the first staff, labeled "P0".
- I0 (lack of 6)** (green box): A green box highlights a sequence of notes in the second staff, labeled "I0 (lack of 6)".
- P7** (blue box): A blue box highlights a sequence of notes in the third staff, labeled "P7".
- I7** (brown box): A brown box highlights a sequence of notes in the third staff, labeled "I7".
- P7 (LACK OF 9)** (blue box): A blue box highlights a sequence of notes in the fourth staff, labeled "P7 (LACK OF 9)".

The fourth movement

0	10	1	3	8	7	5	2	4	6	11	9
2	0	3	5	10	9	7	4	6	8	1	11
11	9	0	2	7	6	4	1	3	5	10	8
9	7	10	0	5	4	2	11	1	3	8	6
4	2	5	7	0	11	9	6	8	10	3	1
5	3	6	8	1	0	10	7	9	11	4	2
7	5	8	10	3	2	0	9	11	1	6	4
10	8	11	1	6	5	3	0	2	4	9	7
8	6	9	11	4	3	1	10	0	2	7	5
6	4	7	9	2	1	11	8	10	0	5	3
1	11	2	4	9	8	6	3	5	7	0	10
3	1	4	6	11	10	8	5	7	9	2	0

# THE B SECTION AND A' SECTION

- a tempo

mf

R2

I7

P7

mp

cresc.

fp

f

molto

P

The fourth movement

0	10	1	3	8	7	5	2	4	6	11	9
2	0	3	5	10	9	7	4	6	8	1	11
11	9	0	2	7	6	4	1	3	5	10	8
9	7	10	0	5	4	2	11	1	3	8	6
4	2	5	7	0	11	9	6	8	10	3	1
5	3	6	8	1	0	10	7	9	11	4	2
7	5	8	10	3	2	0	9	11	1	6	4
10	8	11	1	6	5	3	0	2	4	9	7
8	6	9	11	4	3	1	10	0	2	7	5
6	4	7	9	2	1	11	8	10	0	5	3
1	11	2	4	9	8	6	3	5	7	0	10
3	1	4	6	11	10	8	5	7	9	2	0

The respond to the (0235) AND (013)

A musical score on a single staff with a treble clef. The score consists of two measures. The first measure contains a sequence of notes: a quarter note (G4), an eighth note (A4), a quarter note (B4), and an eighth note (C5). The second measure contains a quarter note (D5), an eighth note (E5), a quarter note (F5), and an eighth note (G5). The notes are grouped into pairs: (G4, A4) and (B4, C5) in the first measure; (D5, E5) and (F5, G5) in the second measure. Handwritten annotations in green boxes are placed below the notes: (0235) under the first pair of notes in both measures, and (013) under the second pair of notes in both measures. The first measure is marked with a dynamic of *p* (piano). The second measure is marked with a dynamic of *molto* (molto). The score is annotated with green and red boxes and labels (0235) and (013).

# Conclusion of the fourth movement

- Most of phrases are made of complete twelve-tone row, all rows are from the same row matrix.
- The A' section is the inversion of section A, seem like responding to the only retrograde row in the B section.
- Character of *Singing*:
  - Tempo are slower and the value of notes are longer, music tend to be sung.
  - Many cresc. and dim. make music more lyric.

# The fifth movement - Spirited

- Twelve-tone technique
- Intervallic collections, (013), (024), (025) and (02)

**A**

Musical score for section A, consisting of five staves of music. The first staff begins with a dynamic marking of *f*. The second staff includes dynamic markings of *p* and *sf*. The third staff features a *cresc.* marking. The fourth staff ends with a *f* marking. The fifth staff begins with a *p* marking. The music is written in 4/4 time and includes various articulations such as slurs, accents, and dynamic hairpins.

Musical score for the first three staves of section A'. The first staff has a dynamic marking of *f*. The second staff includes dynamic markings of *mf* and *f*. The third staff features a *pp* marking and a *cresc.* marking. The music is written in 4/4 time and includes various articulations such as slurs, accents, and dynamic hairpins.

**A'**

Musical score for section A', consisting of two staves of music. The first staff begins with a dynamic marking of *ff*. The second staff includes a *rit.* marking and a *p* marking. The music is written in 4/4 time and includes various articulations such as slurs, accents, and dynamic hairpins.

**B**

Musical score for section B, consisting of two staves of music. The first staff begins with a dynamic marking of *ff*. The second staff includes a *p* marking. The music is written in 4/4 time and includes various articulations such as slurs, accents, and dynamic hairpins.

### The fifth movement

0	11	9	6	8	10	1	3	4	2	5	7
1	0	10	7	9	11	2	4	5	3	6	8
3	2	0	9	11	1	4	6	7	5	8	10
6	5	3	0	2	4	7	9	10	8	11	1
4	3	1	10	0	2	5	7	8	6	9	11
2	1	11	8	10	0	3	5	6	4	7	9
11	10	8	5	7	9	0	2	3	1	4	6
9	8	6	3	5	7	10	0	1	11	2	4
8	7	5	2	4	6	9	11	0	10	1	3
10	9	7	4	6	8	11	1	2	0	3	5
7	6	4	1	3	5	8	10	11	9	0	2
5	4	2	11	1	3	6	8	9	7	10	0

Spirited ♩ = 120

**P3**

(013) (024) (013)

(025)

*p* *sfz* *f*

THE SAME PRIME FORM COLLECTIONS OF THE FIRST MOVEMENT.

(0235)

A musical score for a piano piece, likely in 4/4 time, showing the final measures of a movement. The score is written on a grand staff with a treble clef on the left and a bass clef on the right. The key signature has one sharp (F#). The music consists of two staves. The upper staff features a melodic line with eighth and sixteenth notes, including a triplet of eighth notes. The lower staff provides harmonic support with chords and bass notes. A green box highlights the first four measures of the upper staff, and another green box highlights the first four measures of the lower staff. The piece concludes with a *rit.* (ritardando) marking and a *p* (piano) dynamic marking. The final notes are marked with accents.

THE END OF THIS MOVEMENT

# Overview of the fifth movement

- Still includes few twelve-tone rows
- Emphasize on intervallic collections
- Sounds like the fastest movement in this piece, even though the tempo speed is the fastest one, but there is no any note value longer than eight note.
- Character of *Spirited*:  
Many accents, fast, moving fast between three register. Almost no space to take a break.

# How they work together as a group?

- The same intervallic collections:
  - Three-note groups: (013), (025), (024)
  - Four-note group: (0235)
- All complete twelve-tone row must include the collections of (013) and (025)
- Each movement is short, light and with different dance-like rhythm, just like a suite.
- Even though each movement has precise times, but articulations, keeping changing meter make rhythm blur.

# Extended technique - *Multiphonic*

- **1959 Inspiration:** Heard *Berio's Sequenza I* for solo flute.
- **1960 Guggenheim Fellowship:** Spent a year in Europe researching clarinet multiphonics.
- Documented over **200 multiphonics** with notes on quality, dynamics, and difficulty.
- Works:
  - Variants:* First composition utilizing multiphonic sounds.
  - Duo for Clarinet and Recorded Clarinet.*



## Extended technique - *Multiple Clarinets*

- **Ancient Greece Influence:** Inspired by the *aulos*, a double-pipe instrument depicted in Greek art (1977).
- **The Double Clarinet:** Added a mouthpiece to the lower joint as well as the upper joint.
- **Works:**  
Five Fragments (1977)  
Ritual (1989)  
Epitaphs (1993)