

Original

# Técnicas Composicionais Pós-Tonais

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

# A música Pós-Tonal

Richard Wagner – Tristão e Isolda



# A música Pós-Tonal

Acorde de Tristão



# A música Pós-Tonal

- **Reação aos excessos cromáticos**

- Impressionismo
- Escalas não diatônicas
- Estrutura de acordes
- Paralelismo
- Pandiatonicismo

- **Extensão do ultracromatismo Wagneriano**

- Teoria dos conjuntos
- Dodecafonismo
- Serialização total

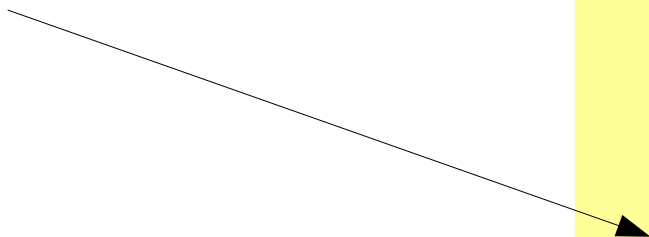
- **Outros caminhos**

- Música aleatória
- Música eletroacústica

# A música Pós-Tonal

- **Extensão do ultracromatismo Wagneriano**

- Teoria dos conjuntos
- **Dodecafonismo**
- Serialização total



# Schoenberg

## Three Piano Pieces Op.11, N° 1

Mässige

The first system of the score consists of two staves. The treble staff begins with a melodic line that includes several notes circled in red and blue. The bass staff provides a bass line with notes circled in blue and green. A large cyan oval highlights the first two measures of both staves.

The second system of the score continues the melodic and bass lines. The treble staff features notes circled in red and blue, while the bass staff has notes circled in blue and green. A large cyan oval highlights the final two measures of both staves.

First measure of the first system: Treble clef, common time signature, notes B $\flat$ , C, D, E.

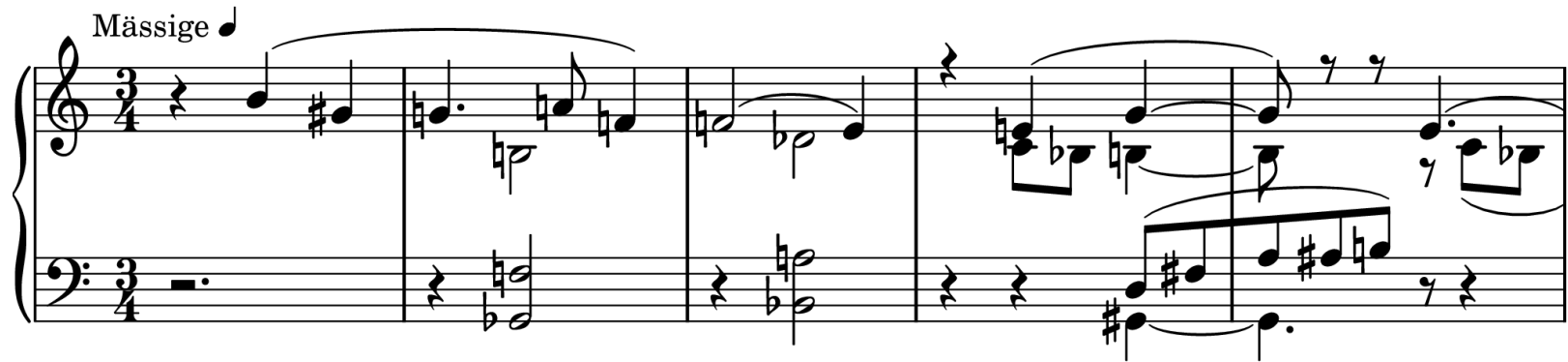
Second measure of the first system: Treble clef, common time signature, notes B $\flat$ , C $\sharp$ , D, E.

Third measure of the first system: Treble clef, common time signature, notes B $\flat$ , C, D, E, F, G, A, B.

# Schoenberg

## Three Piano Pieces Op.11, N° 1

Mässige



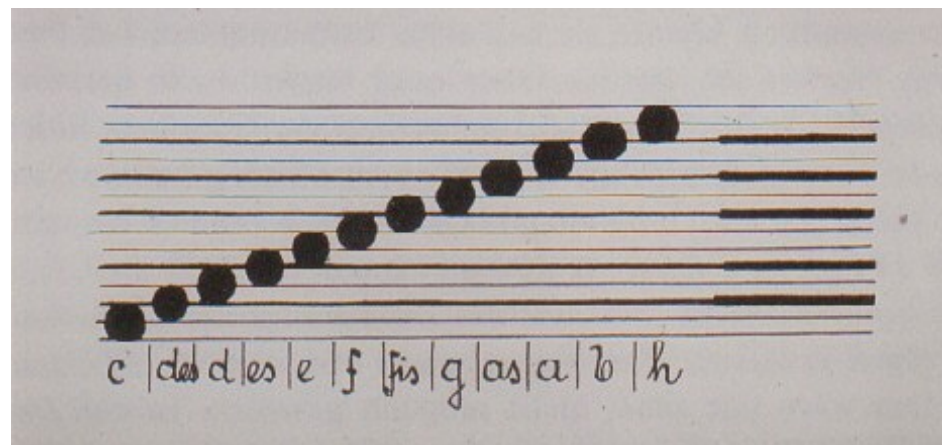
6



# Composição com as 12 notas

Josef Matthias Hauer (Áustria)

19 de Março de 1883 – 22 de Setembro de 1959)

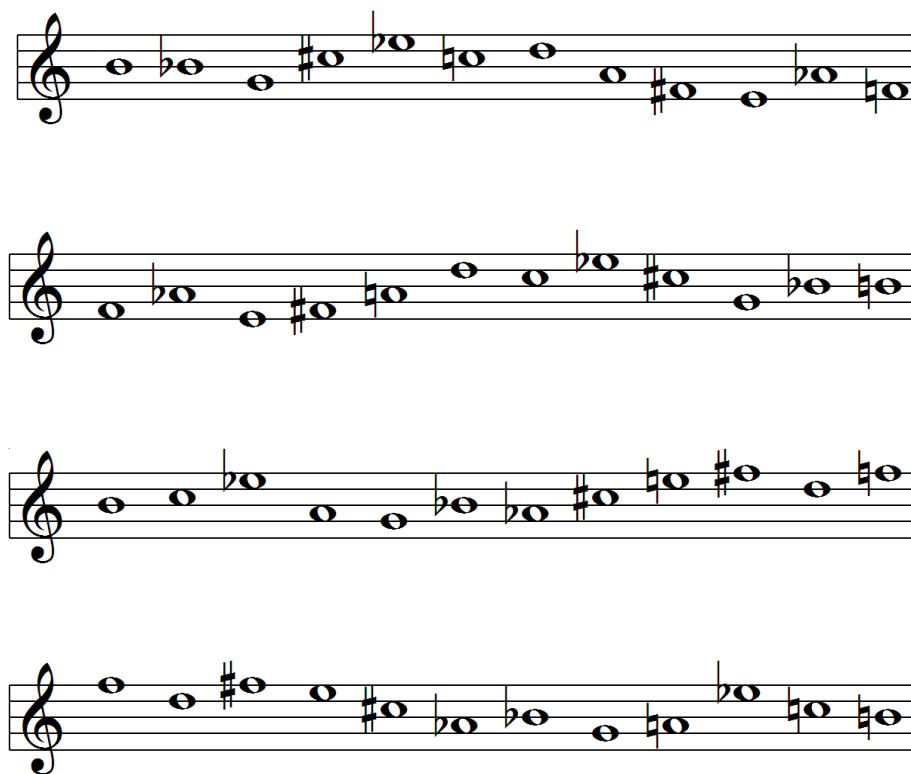




# Composição com as 12 notas

Arnold Schoenberg (Áustria – EUA)

13 de Setembro de 1874 – 13 de Julho de 1951



# Composição Pós-Tonal

- Evitar a oitava, seja como um componente melódico ou intervalo harmônico;
- Evitar os conjuntos de notas tradicionais, ou seja, qualquer um que possa sugerir uma tríade maior ou menor e até mesmo uma tônica;
- Evitar mais do que três notas sucessivas que possam ser identificadas com uma mesma escala diatônica;
- Uso de melodias extremamente disjuntas e com uma tessitura bem larga.

# Schoenberg

## Three Piano Pieces Op.11, N° 1

Mässige 



6

# Composição com as 12 notas

- Uma composição dodecafônica deve ser baseada num arranjo ou série de doze notas que é determinada pelo compositor. Esta é chamada de série dodecafônica.
- Nenhuma nota deve ser repetida até que todas as outras notas da série tenham sido ouvidas.

Existe uma exceção à essa restrição: uma nota pode ser repetida imediatamente após ter sido ouvida. Repetição também pode ocorrer no contexto de um trinado ou uma figura de trêmolo.

- A série dodecafônica pode, dentro dos limites do sistema, ser usada legitimamente em ordem reversa (retrógrado), inversão (espelhamento de cada intervalo) ou em inversão retrógrada (ordem reversa da forma espelhada).

# Composição Dodecafônica

Notas são transformadas em números

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

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

Equivalência enarmônica (dó sustenido é igual à ré bemol)

Equivalência de oitava (não importa a oitava, a classe de nota será a mesma)

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

# Composição Dodecafônica

## Exemplos de séries dodecafônicas

Ross Lee Finney – *All Alone, 24 invenções para piano, N° 14*

A musical staff in treble clef with a common time signature (C). It displays a dodecahedral series of twelve notes: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3. Below the staff, the corresponding fingering numbers are: 9, 10, 8, 7, 5, 6, 3, 4, 0, 1, 11, 2.

Anton Webern – *Sinfonia Op. 21*

A musical staff in treble clef with a common time signature (C). It displays a dodecahedral series of twelve notes: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3. Below the staff, the corresponding fingering numbers are: 9, 6, 7, 8, 4, 5, 11, 10, 2, 1, 0, 3.

Alban Berg – *Concerto para Violino*

A musical staff in treble clef with a common time signature (C). It displays a dodecahedral series of twelve notes: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3. Below the staff, the corresponding fingering numbers are: 7, 10, 2, 6, 9, 0, 4, 8, 11, 1, 3, 5.

Hugo Ribeiro – *Apocalypse*

A musical staff in treble clef with a common time signature (C). It displays a dodecahedral series of twelve notes: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3. Below the staff, the corresponding fingering numbers are: 0, 4, 2, 7, 3, 5, 11, 9, 1, 8, 10, 6.

# Composição Dodecafônica

## Exemplos de séries dodecafônicas

Hugo Ribeiro – *Apocalipse*

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

Inversão da série



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

Retrógrado

Série e suas transposições

Retrógrado da inversão



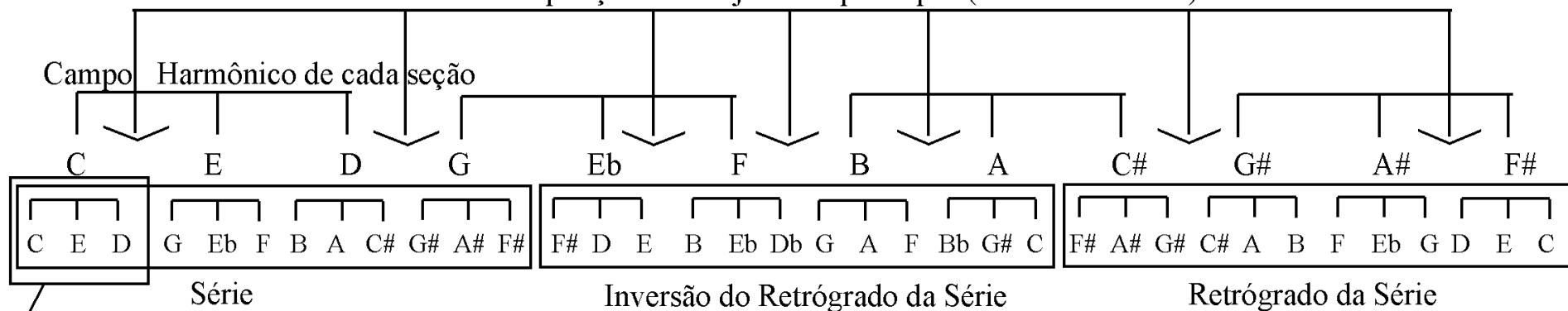
# Composição Dodecafônica

## Exemplos de séries dodecafônicas

Hugo Ribeiro – *Apocalipse*

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

### Aparição dos Anjos do Apocalipse (trechos da Bíblia)



Motivo presente no campo harmônico de Dó



# Ross Lee Finey

## All Alone

(24 invenções para piano, N° 14)

Sadly ♩ = 108

First system of the musical score for 'All Alone'. It consists of two staves (treble and bass clef) in common time. The piece begins with a piano (*p*) dynamic. The melody in the treble clef features a series of descending notes with some chromaticism. The bass clef provides a harmonic accompaniment. A crescendo hairpin is shown over the middle of the system, leading to a mezzo-piano (*mp*) dynamic.

Second system of the musical score. It begins with a measure rest in the treble clef, marked with the number 7. The bass clef continues with a melodic line. The dynamic is marked *p*. The system concludes with a double bar line.

Série original

A single musical staff showing the original series of notes: G<sup>9</sup>, A<sup>10</sup>, B<sup>8</sup>, C<sup>7</sup>, D<sup>5</sup>, E<sup>6</sup>, F<sup>3</sup>, G<sup>4</sup>, A<sup>0</sup>, B<sup>1</sup>, C<sup>11</sup>, D<sup>2</sup>.

Retrógrado da Série

A single musical staff showing the retrograde series of notes: D<sup>2</sup>, C<sup>11</sup>, B<sup>1</sup>, A<sup>0</sup>, G<sup>4</sup>, F<sup>3</sup>, E<sup>6</sup>, D<sup>5</sup>, C<sup>7</sup>, B<sup>8</sup>, A<sup>10</sup>, G<sup>9</sup>.

Série em acordes

A single musical staff showing the series of chords. The first chord is a triad (G, B, D) with fingering (2 3 5 4). The second chord is a dyad (A, C) with fingering (6 7 9 8). The third chord is a triad (B, D, F) with fingering (11 12 10).

# Ross Lee Finney

## All Alone

(24 invenções para piano, N° 14)

Série original

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

Série transposta para Dó

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

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

MD

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

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

MD

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

# Ernest Krenek, *The Moon Rises*, Twelve short piano pieces

Adagio ♩ = 42

Musical score for measures 1-6. The piece is in 3/4 time with a key signature of two flats (B-flat and E-flat). The tempo is Adagio, with a quarter note equal to 42 beats. The score is written for piano in grand staff notation. Measure 1 starts with a piano (*pp*) dynamic. Measure 2 features a crescendo leading to a piano (*p*) dynamic. Measure 3 begins with a piano (*pp*) dynamic. Measure 4 has a piano (*p*) dynamic. Measure 5 is marked piano (*pp*). Measure 6 concludes with a piano (*p*) dynamic.

Musical score for measures 7-11. Measure 7 starts with a piano (*p*) dynamic. Measure 8 features a piano (*pp*) dynamic. Measure 9 has a piano (*p*) dynamic. Measure 10 is marked piano (*pp*). Measure 11 concludes with a piano (*p*) dynamic.

Musical score for measures 12-16. Measure 12 starts with a piano (*ppp*) dynamic. Measure 13 features a piano (*pp*) dynamic. Measure 14 has a piano (*ppp*) dynamic. Measure 15 is marked piano (*pp*). Measure 16 concludes with a piano (*ppp*) dynamic. An *8va* (octave up) marking is present above the staff in measure 15.

Musical score for measures 17-20. Measure 17 starts with a piano (*pp*) dynamic. Measure 18 features a piano (*ppp*) dynamic. Measure 19 has a piano (*ppp*) dynamic. Measure 20 concludes with a piano (*ppp*) dynamic.

Ernest Krenek, *The Moon Rises*, *Twelve short piano pieces*

Adagio ♩ = 42

A musical score for the beginning of 'The Moon Rises' by Ernest Krenek. The score is written for piano and consists of two staves. The tempo is marked 'Adagio' with a quarter note equal to 42 beats. The music begins with a piano (*pp*) dynamic. The left hand plays a series of chords and single notes, while the right hand plays a more complex melodic line with some grace notes. The dynamics change to *p* and then back to *pp* throughout the piece.

Série original

A musical notation for the original series, consisting of a single staff with a treble clef. The series is a sequence of 12 notes: Bb, B, Cb, C, Db, D, Eb, E, Fb, F, Gb, G. The notes are written as half notes, and the series is divided into two groups of six notes by a double bar line with repeat dots.

Série transposta para dó

A musical notation for the transposed series, consisting of a single staff with a treble clef. The series is a sequence of 12 notes: C, C#, D, D#, Eb, E, F, F#, G, G#, Ab, A. The notes are written as half notes, and the series is divided into two groups of six notes by a double bar line with repeat dots.