

# Layered Hexachords

for Studio Orchestra

Frans Absil

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## Layered Hexachords

**Composer:** Frans Absil

**Copyist:** Frans Absil

**Duration:** 2'20"

**No. of Pages:** 15

### **Instrumentation:**

Piccolo

Flute 1

Flute 2

Oboe

Clarinet (B Flat)

Bass Clarinet (B Flat)

Horn (F) 1

Horn (F) 2

Horn (F) 3

Trombone 1

Trombone 2

Bass Trombone

Drum Set

Piano

Synthesizer 1

Synthesizer 2

Synthesizer 3

Synth Bass

Solo Violin

Violin

Violoncello

Double Bass

### **Description and Performance Notes:**

This atonal example composition is used for a YouTube tutorial on sketching with hexachords. Two pitch-class sets, 6-Z12 with maximum dissonance and 6-Z49 with maximum consonance are the building blocks. Harmony is based on subsets, such as major and minor triads, the 4-25, 4-26 and 4-27 tetrachords, and continuities with the hexachords in original and inverted form.

The composition demonstrates voicing alternatives in variable density and strata harmony setting, pedal point, and progressions with chromatically moving middle parts. Melodic material is based on various expansions and melodic axes. Rhythm is partially based on an Euclidean rhythm  $rE(7,32)$ .

The instrumentation uses many synthesizers and a limited set of orchestral instruments. The project was created in the Cubase DAW, then converted to a full score.



### **Copyright Information:**

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# Layered Hexachords



Full score, dur.: 2'20"

for Studio Orchestra

Frans Absil

1 2 3 4 5 6 7 8 9 10 11 12

**Allegro rubato** ♩ = 140 **A** **Slower** ♩ = 125

Piccolo

Flute 1  
2

Oboe

Clarinet in Bb

Bass Clarinet

Horn in F 1.2.3

Trombone 1.2

Bass Trombone

Drum Set

Piano  
*p* espressivo delicato  
00(6-Z49), H(2p), max(m3, M3)

Synthesizer 1  
*p* OI(6-Z12), triads  
A NI FM8 Cm

Synthesizer 2  
*mf* AVC Mini Moog  
NI FM8

Synthesizer 3  
*pp* AVC ARP2600  
+NI Absynth  
Pigments

Synth Bass  
*pp* A Cm

Solo Violin  
*mf* molto espressivo

Violin

Violoncello

Double Bass

Layered Hexachords



13 14 15 16 17 18 19 20 21 22

♩ = 140 B ♩ = 120

Picc.

Fl. 1  
2

Ob.

Cl. in Bb

B. Cl.

Hn in F 1.2.3

Tbn. 1.2

B. Tbn.

Dr.

Pno

Synth. 1

Synth. 2

Synth. 3

S. Bass

S. Vln

Vln

Vc.

D. B.

*p*

*pp*

Abm F

Abm F

OO(6-Z12), H(2p), max{m3,M3}

AVC Mini Mdog

NI Absynth

Layered Hexachords

23 24 25 26 27 28 29 30 31 32

**C** Allegro rubato ♩ = 140

Picc.

Fl. 1  
2

Ob.

Cl. in Bb

B. Cl.

Hn in F 1,2,3

Tbn. 1,2

B. Tbn.

Dr.

Pno

Synth. 1

Synth. 2

Synth. 3

S. Bass

S. Vln

Vln

Vc.

D. B.

NI DX7

O1(4-27)

O1(4-25)

O7(4-27)

O7(4-27)

O7(4-27)

O4(4-26)

O1(6-Z12), subsets H(4p)

O4(4-26)

O1(4-25)

O4(4-26)

O0(6-Z12), H(6p)

AVC ARP2600

AVC ARP2600

AVC ARP2600

Pigments

pp

p

pp

p

mf

mf

p



33

34

35

36

37

**D** Slightly faster ♩ = 146

Picc.

Fl. 1  
2

Ob.

Cl. in Bb

B. Cl.

Hn in F 1.2.3

Tbn. 1.2

B. Tbn.

Dr.

Pno

Synth. 1  
I0(6-Z49), H(2p)  
*pp*

Synth. 2  
M chrom., div. axes

Synth. 3  
NI Absynth  
I0(6-Z49), M(E1)  
*mf*<sup>3</sup>  
*p*

S. Bass

S. Vln

Vln

Vc.

D. B.

38 First tempo ♩ = 140

39 **E**

40

41

42

43

44

Picc.

Fl. 1  
2

Ob.

Cl. in Bb

B. Cl.

Hn in F 1.2.3

Tbn. 1.2

B. Tbn.

Dr.

Pno

Synth. 1  
NI FM8  
O0(6-Z49), H(2p), max{m2, M2}

Synth. 2  
mf

Synth. 3  
O0(6-Z12), M(E2)  
mf

S. Bass  
EWO Forbidden Planet  
p

S. Vln  
p

Vln

Vc.

D. B.



45 46 47 48 49

**F**

Picc. *p*

Fl. 1  
2

Ob.

Cl. in Bb

B. Cl.

Hn in F 1.2.3

Tbn. 1.2

B. Tbn.

Dr.

Pno

Synth. 1

Synth. 2 **Pigments** M chrom., div. axes *p*

Synth. 3

S. Bass

S. Vln

Vln

Vc.

D. B.



50

51

52

53

54

G

The musical score is arranged in a system with the following parts from top to bottom:

- Picc.**: Piccolo, measures 50-54.
- Fl. 1/2**: Flute 1 and 2, measures 50-54.
- Ob.**: Oboe, measures 50-54.
- Cl. in Bb**: Clarinet in B-flat, measures 50-54.
- B. Cl.**: Bass Clarinet, measures 50-54.
- Hn in F 1.2.3**: Horns in F, measures 50-54. Includes annotations: *O0(6-Z12), H(3p)* and *O0(6-Z12), H(6p)* with first and second endings.
- Tbn. 1.2**: Trumpets 1 and 2, measures 50-54. Includes *p* and *mf* dynamics.
- B. Tbn.**: Baritone Trumpet, measures 50-54. Includes *p* and *mf* dynamics.
- Dr.**: Drums, measures 50-54. Includes *p* dynamic.
- Pno**: Piano, measures 50-54.
- Synth. 1**: Synthesizer 1, measures 50-54. Includes annotation: **NI FM8+AVC ARP 2600** and *O0(6-Z12), bass pt.* with *mf* dynamic.
- Synth. 2**: Synthesizer 2, measures 50-54. Includes annotation: *O0(6-Z49), Mc* and *I0(6-Z12), Mc* with *mf* dynamic.
- Synth. 3**: Synthesizer 3, measures 50-54. Includes triplets and *mf* dynamic.
- S. Bass**: Sub Bass, measures 50-54. Includes annotation: **NI Massive** and *mf* dynamic.
- S. Vln**: Solo Violin, measures 50-54.
- Vln**: Violins, measures 50-54.
- Vc.**: Violas, measures 50-54.
- D. B.**: Double Bass, measures 50-54.



55

56

57

58

59

60

The musical score is arranged in a standard orchestral layout. The top section includes woodwinds: Piccolo, Flutes (1 and 2), Oboe, Clarinet in Bb, and Bass Clarinet. The middle section includes brass: Horns in F (1, 2, 3), Trombones (1, 2), and Bass Trombone. The bottom section includes percussion and strings: Drums, Piano, three Synthesizers, and Bass (S. Bass, S. Vln, Vln, Vc., D. B.).

Key musical details include:

- Horns and Trombones:** Horns in F and Trombones play sustained chords with dynamics *mf* and *p*. The Bass Trombone part includes a *mf* dynamic.
- Drums:** Features a complex rhythmic pattern with many sixteenth notes and rests.
- Synthesizers:** Synth. 1 and Synth. 2 play sustained notes with specific chordal labels: *O0(6-Z12), Mc* and *O0(6-Z49), Mc*.
- Bass:** The S. Bass part features a melodic line with a sequence of notes including sharps and naturals.



61

62

63

64

Slightly faster  $\text{♩} = 146$

H

Picc. *mf* 1. *mf*

Fl. 1 2

Ob. *mf*

Cl. in Bb *mf*

B. Cl. *mf*

Hn in F 1.3 2 *mf* 2.3. a 2

Tbn. 1 2

B. Tbn.

Dr.

Pno

Synth. 1 *mf* NI DX7 O0(6-Z49), H(3p), strata I7(6-Z49)

Synth. 2

Synth. 3 *mf* NI FM8 EWO Forbidden Planet

S. Bass

S. Vln

Vln *p*

Vc. *p*

D. B. *p*



65 66 67

Picc. *f*

Fl. 1 2 *f*

Ob. *f*

Cl. in Bb *f*

B. Cl. *f*

Hn in F 1 2.3 *f*

Tbn. 1 2 *mf* *f*

B. Tbn. *mf* *f*

Dr. *mf*

Pno

Synth. 1 I10(6-Z49) O3(6-Z49)

Synth. 2

Synth. 3

S. Bass *mf*

S. Vln *mf*

Vln *mf*

Vc. *mf*

D. B. *mf*

68 69 70

Picc. 1.

Fl. 1 2

Ob. 2.

Cl. in Bb

B. Cl.

Hn in F 1 2.3

Tbn. 1.2 a 2

B. Tbn. 2.

Dr.

Pno

Synth. 1 O0(6-Z49)

Synth. 2

Synth. 3

S. Bass

S. Vln

Vln

Vc.

D. B.

*mf*

*p*



**I** Allegro rubato ♩ = 140

71

72

73

74

75

Picc.

Fl. 1  
2

Ob.

Cl. in B $\flat$

B. Cl.

Hn in F 1.3  
2

Tbn. 1.2

B. Tbn.

Dr.

Pno

Synth. 1

Synth. 2

Synth. 3

S. Bass

S. Vln

Vln

Vc.

D. B.

1.3. a 2

2.

f

mf

1.3. a 2

2.

f

mf

mf

mf

mf

mf

mf

mf

O0(6-Z12), H(3p), variable density

I4(6-Z12), H(5p)

I8(6-Z12), H(4p)

AVC ARP2600

mf

mf



76

77

78

79

Slower ♩ = 90

The musical score is arranged in a system with the following instruments and parts:

- Picc.**: Piccolo, rests throughout.
- Fl. 1.2**: Flutes 1 and 2, playing a melodic line with accents.
- Ob.**: Oboe, playing a melodic line with accents.
- Cl. in Bb**: Clarinet in Bb, playing a melodic line with accents.
- B. Cl.**: Bass Clarinet, playing a melodic line with accents.
- Hn in F 1.2.3**: Horns in F, playing sustained chords with *mf* dynamics.
- Tbn. 1.2**: Trombones 1 and 2, playing sustained chords with *mf* dynamics.
- B. Tbn.**: Bass Trombone, playing sustained chords with *mf* dynamics.
- Dr.**: Drums, playing a rhythmic pattern with accents.
- Pno**: Piano, rests throughout.
- Synth. 1**: Synthesizer 1, playing layered hexachord textures with *mf* dynamics.
- Synth. 2**: Synthesizer 2, playing a rhythmic melodic line.
- Synth. 3**: Synthesizer 3, rests throughout.
- S. Bass**: Sub Bass, playing a low-frequency line.
- S. Vln**: Solo Violin, rests throughout.
- Vln**: Violins, rests throughout.
- Vc.**: Violas, rests throughout.
- D. B.**: Double Bass, rests throughout.

Additional markings include *mf* (mezzo-forte) dynamics and a tempo change to "Slower ♩ = 90" at the beginning of measure 79.