

6-Z13

Contiguous subsets of the ordered form

Trichords

1	2	5					3-3
	2	5	4				3-2
		5	4	8			3-3
			4	8	7		3-3

Tetrachords

1	2	5	4				4-3
	2	5	4	8			4-12
		5	4	8	7		4-3

Pentachords

1	2	5	4	8			5-16
	2	5	4	8	7		5-10

6-Z42

Contiguous subsets of the ordered form

Trichords

0	3	11					3-3
	3	11	10				3-4
		11	10	6			3-4
			10	6	9		3-3

Tetrachords

0	3	11	10				4-4
	3	11	10	6			4-20
		11	10	6	9		4-4

Pentachords

0	3	11	10	6			5-Z38
	3	11	10	6	9		5-Z38 (1T9)

Schoenberg
Die Jakobsleiter

Hexachords

6-Z13 [324222]

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

original ordering

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

6-Z42

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

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

Subsets and Supersets of 6-Z13 and 6-Z42

9 1.2 2.1 3.1 4.1 5.1 7.1 8.1 10.4 11.1

8 1.1 4.1 5.1 12.1 13.1 18.1 20.1 27.1 28.4

7 4.1 31.1 38.1

6-Z13

5 10.2 16.2 19.2

4 3.2 9.1 10.1 12.2 13.2 15.2 17.1 18.2 29.2

3 2.4 3.4 5.4 7.2 8.2 10.2 11.2

9 2.2 3.2 5.2 7.1 8.1 10.2 11.1

8 3.2 9.2 10.1 12.1 13.1 15.1 17.1 18.1 29.1

7 10.1 16.1 19.1

6-Z42

5 4.2 31.2 38.2

4 1.1 4.2 5.2 12.2 13.2 18.2 20.1 27.2 28.1

3 1.2 2.2 3.2 4.2 5.2 7.2 8.2 10.4 11.2

Subsets and Supersets of 6-Z19 and 6-Z44

9 1.2 3.4 4.4 5.2 7.2 8.1 10.2 11.4 12.6

8 4.2 5.1 7.2 8.2 15.1 17.2 18.2 19.3 20.2 26.2 27.1

7 6.1 21.1 22.2 32.1 37.2 38.1

6-Z19

5 16.1 17.1 18.1 20.1 21.1 22.1

4 3.1 7.1 8.1 12.1 14.2 16.1 17.1 18.2 19.3 20.1 29.1

3 2.2 3.4 4.4 5.2 8.1 9.1 10.1 11.4 12.1

9 2.2 3.4 4.4 5.2 8.1 9.2 10.2 11.4 12.6

8 3.2 7.2 8.2 12.1 14.2 16.1 17.2 18.2 19.3 20.2 29.1

7 16.1 17.2 18.1 20.1 21.1 22.2

6-Z44

5 6.1 21.1 22.1 32.1 37.1 38.1

4 4.2 5.1 7.1 8.1 15.1 17.1 18.2 19.3 20.1 26.1 27.1

3 1.1 3.4 4.4 5.2 7.2 8.1 10.1 11.4 12.1

6-14

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

First statement →

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

6-22

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

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

← first statement

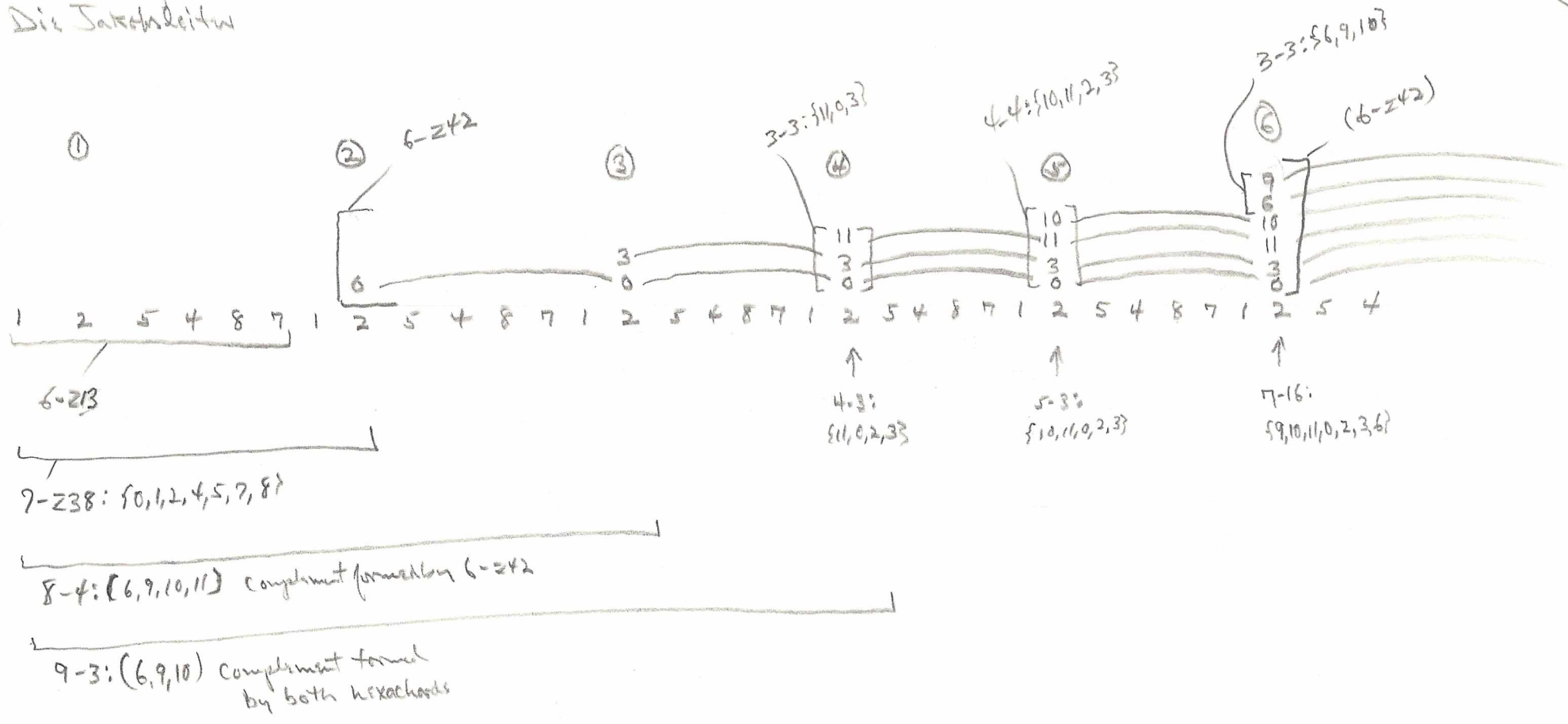
6-Z26

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

6-Z48

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

Schoenberg
Die Satzschritte



Schoenberg
Die Jakobleiter

(7)

(7)



8	1	7	5	4	2	5	7	2	1	8	7	1	4
8	2	5	1	8	7	8	5	2	1	8	7	8	1
2	5	1	8	7	4	2	5	1	8	7	4	2	5
5	2	1	8	7	8	5	2	1	8	7	8	5	2
1	8	7	4	2	5	1	8	7	4	2	5	1	8
8	2	5	1	8	7	8	5	2	1	8	7	8	5
2	5	1	8	7	4	2	5	1	8	7	4	2	5

6-213 in lower parts
to m. 9 (recovered)

Schoenberg
Die Takataleitur

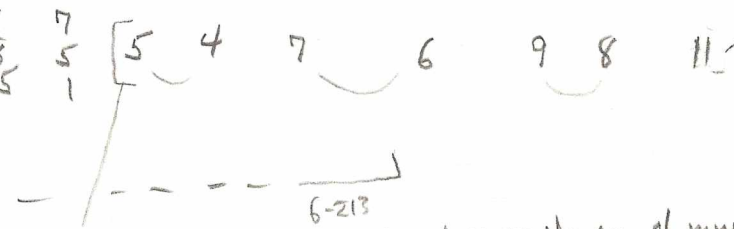
8

8	4	2	5	4	2	4	7	5	1	4	2	4	7	1	4	2	4	7	1	4	2
2	1	8	7	1	4	8	4	2	5	1	4	8	4	5	1	4	7	1	5	1	4
7	5	4	2	8	1	7	5	4	2	8	1	7	5	4	2	8	1	7	5	4	2
5	2	1	8	7	5	1	5	2	1	7	5	1	5	2	1	7	5	1	5	2	1
1	8	7	4	2	5	1	8	7	4	2	5	1	8	7	4	2	5	1	8	7	4

Parity, A₄

9

? 6-213: {1,2,4,5,7,9}



8-4: — subset structures under — of, min. 1-3
{10,1,2,3}

6-213: 5 6 9 8 11 0
(non-constig.)

Schoenberg
Die Jakobsleiter

7-21: {0, 1, 2, 4, 5, 8, 9}

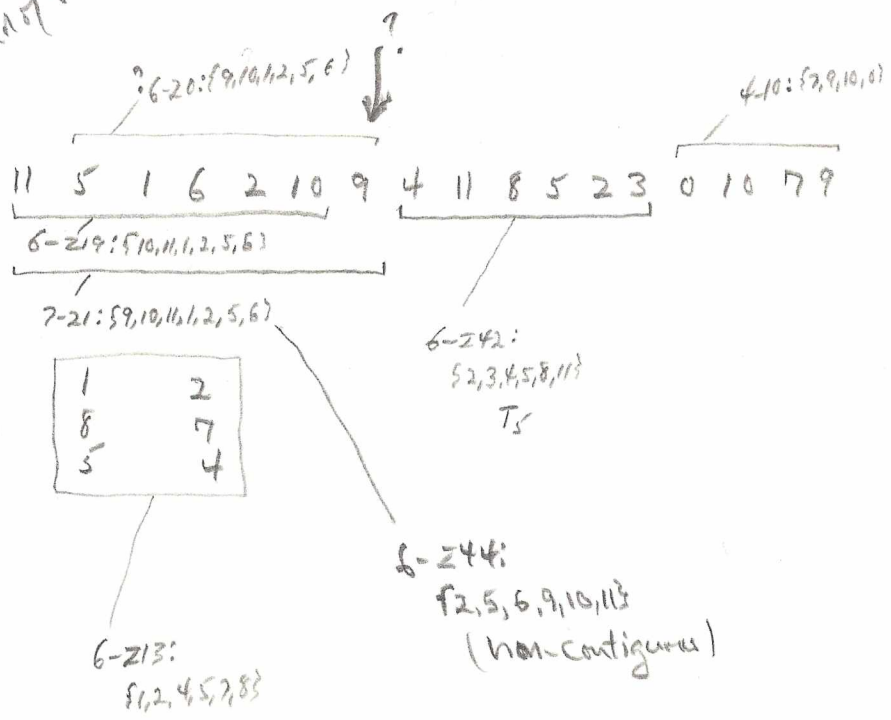
0											0
8					8					8	0
5	5	9	5	8	5	5	9	5	8	8	
9	9	5	9	5	9	9	5	9	5	5	
2	4	2	4	2	2	4	2	4	2	2	
4	2	8	2	4	4	2	8	1	4	4	
1	8	1	8	1	1	8	1	8	1	1	

!6-219: {1, 2, 4, 5, 8, 9}

[6-244: {5, 8, 9, 0, 1, 2, 3} - non contiguous]

(10)

End of 8-4

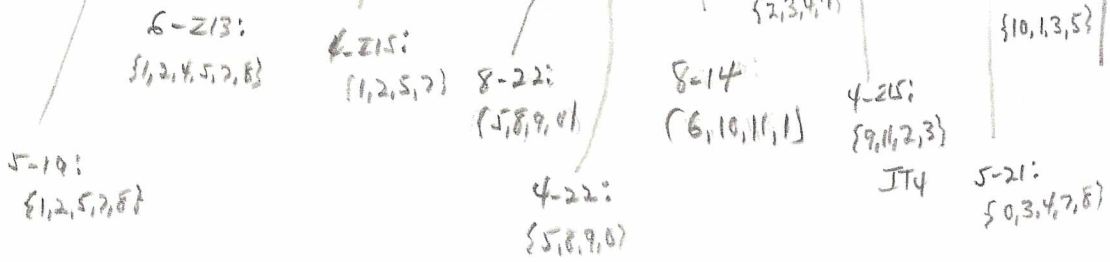
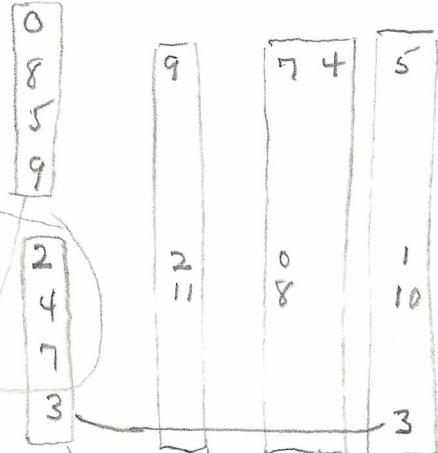
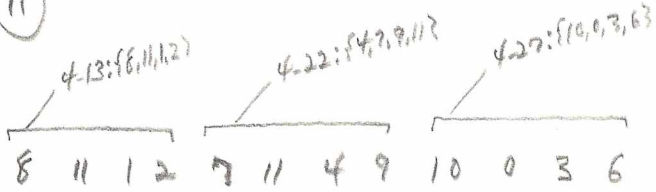


Here the notated rhythmic groupings do not correspond to the structural pc sets

Schoenberg Die Jakobsleiter

↓prechstimmens beginn (12)

(11)



Die Jakobsleiter
Misc. notes

According to Leonard Stein (conversation with Schoenberg),
in 1944 Schoenberg realized that the Jakobsleiter came close
to being a 12-tone piece and considered recomposing it in
that way. *See Margana & Stefan*

But this seems highly unlikely in view of multiple hexachords
employed in the piece.

Schoenberg
Die Jakobleiter

12

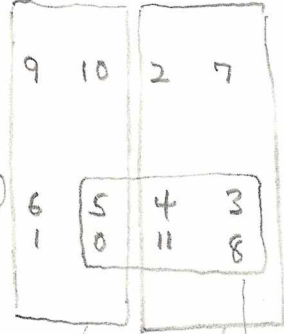
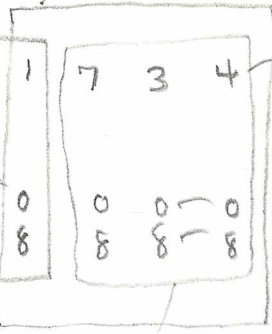
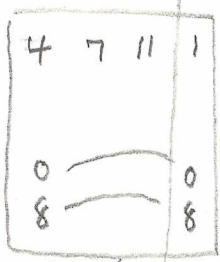
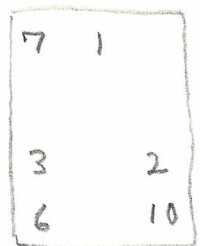
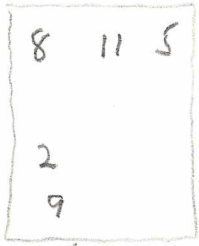
13

14

(?)

6-219: {0,1,3,4,7,8}

? 6-18: {2,3,4,7,9,10}
Spst. [8 10]



5-31:
{9,11,2,5}
(\subset 6-242)

! 6-244:
{1,2,3,6,7,10}

6-244:
{4,7,8,11,0,1}

IT₂
(min. invov.)

5-21:
{0,3,4,7,8}
as subset
of 6-219

6-219:
{10,11,1,2,5,6,8}
[6-219: {6,7,10,11,1,2,3}]

6-219:
{5,6,9,10,0,1}

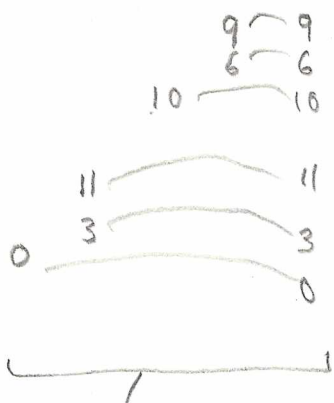
6-244:
{8,11,0,3,4,5}

6-244: {2,3,4,7,8,11}

? 6-244:
{10,1,2,5,6,7}

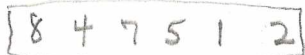
Schoenberg
Die Jakobaleiten

15



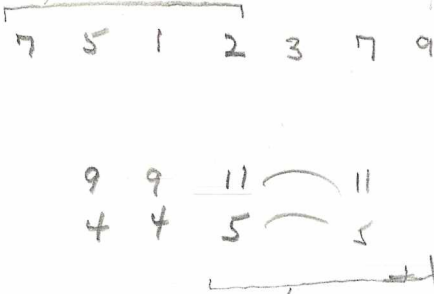
6-242
as at opening

16



6-213 as at opening

17



4-215: {1, 2, 5, 7?}

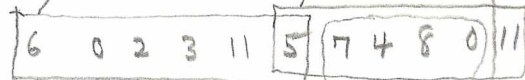
18

? 6-226: {2, 3, 5, 9, 11}
compl. of 6-248

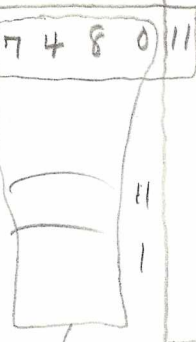
? 6-248: {4, 5, 9, 11, 12}

B⁴? 6-244: {1, 2, 3, 6, 7, 11}

6-213: {1, 0, 2, 3, 5, 6?}



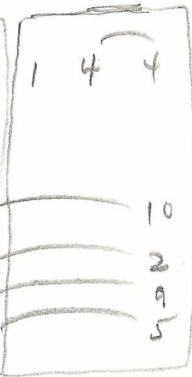
11
1



11
1



10
2
9
5



19

6-244:
{2, 5, 6, 9, 10, 11}

6-244:
{4, 7, 8, 11, 0, 1}

4-20:
{9, 10, 2, 5}

6-219:
{9, 10, 1, 2, 4, 5}

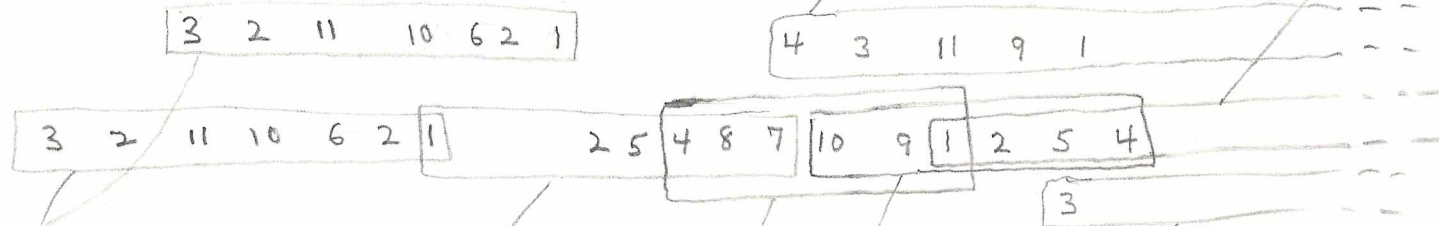
5-20:
{9, 10, 2, 4}

Schoenberg
Die Jakobaleiten

(20) (21) (22)

(23)

Choral
& perc.



other occurrences?
6-22: {9, 11, 13, 4, 5}

6-213: {1, 2, 4, 5, 7, 8}
original ordering

6-14: {10, 11, 1, 2, 3, 6}

6-213:
{1, 2, 4, 5, 7, 8}
original ordering

6-219:
{9, 10, 1, 2, 4, 5}

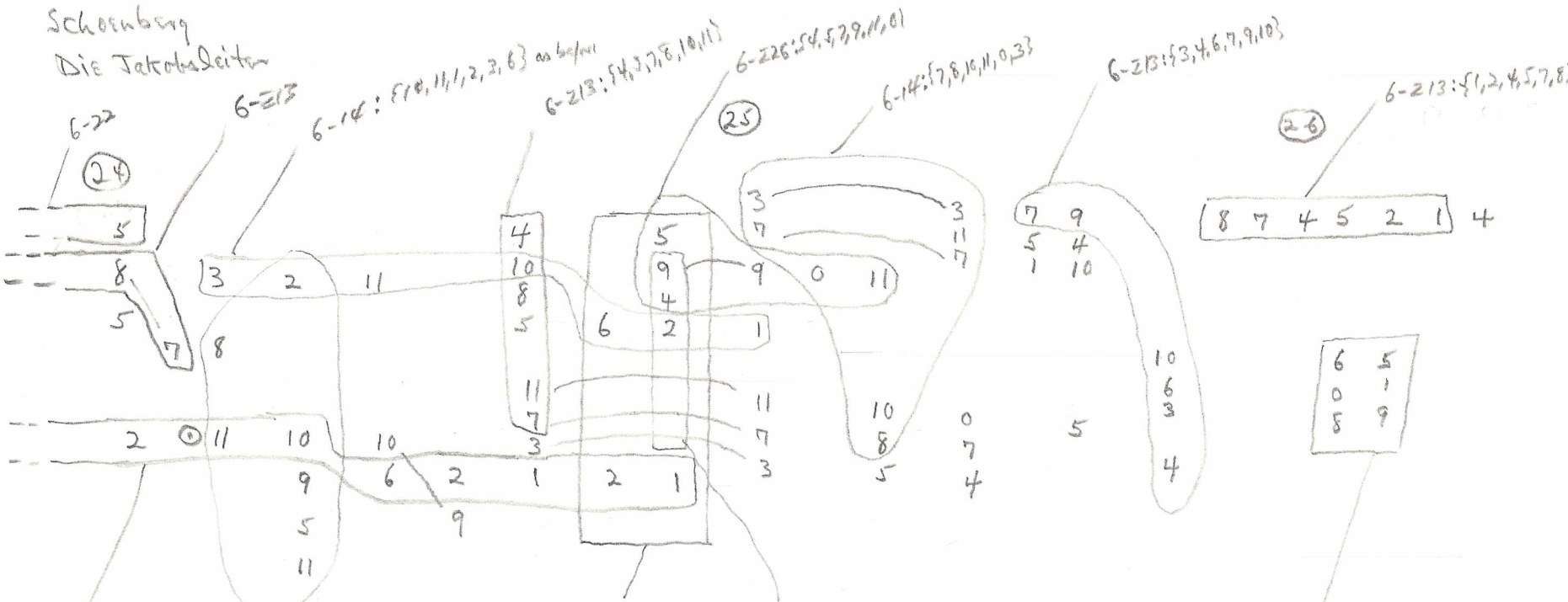
6-14:
{10, 11, 1, 2, 3, 6}

6-242:
{7, 8, 9, 10, 1, 4}

New section
(No pc until
me 25)

? New hexachords:
6-14
6-22

Schoenberg
Die Jakobsläden



- 6-14
- 6-242: {8,9,10,11,2,5}
- 6-14: {1,2,4,5,6,9} excluding 11,7,3
- 6-248: {2,3,4,7,9,11}
- 6-24: {10,11,0,3,5,7}
- 6-213: {9,10,11,1,2,3,6} as before
- 6-213: {4,7,7,8,10,11}
- 6-226: {5,4,5,7,9,11,0}
- 6-14: {7,8,10,11,0,3}
- 6-213: {3,4,6,7,9,10}
- 6-213: {1,2,4,5,7,8}
- 6-14
- 6-242: {8,9,10,11,2,5}
- 6-14: {1,2,4,5,6,9} excluding 11,7,3
- 6-248: {2,3,4,7,9,11}
- 6-244: {10,11,0,3,4,7}
- 6-213: {7,8,10,11,1,2}
- 6-22: {5,7,9,11,0,1}
- 6-248: {10,11,0,3,5,7}
- 6-219: {5,6,8,9,0,1}

also:
6-213: {4,5,7,8,10,11} composite segment
① last + wags

? 6-244: {9,10,11,2,3,6}

? 6-22: {5,7,9,11,0,1}

? 6-248: {10,11,0,3,5,7}

Schoenberg
Die Faktorsleiter

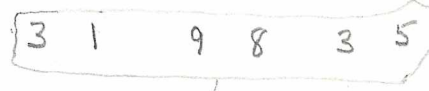
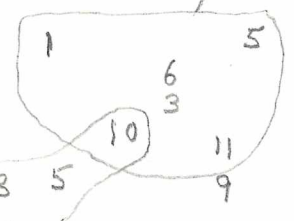
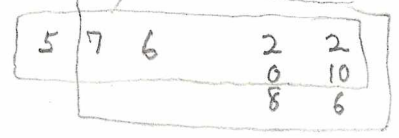
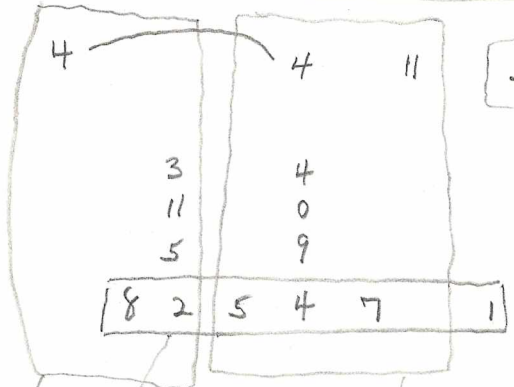
(26)

6-213: {1, 2, 4, 5, 7, 8}
neg. form

(27)

6-248: {5, 6, 7, 10, 0, 2}
6-22: {6, 7, 8, 10, 0, 2}

6-226: {10, 11, 1, 3, 5, 6}



6-213:
{1, 2, 4, 5, 7, 8}
neg. form

6-248: {8, 9, 10, 1, 3, 5}

6-242:
{2, 3, 4, 5, 8, 11}

6-226:
{4, 5, 7, 9, 10, 0}

? 6-244: {5, 6, 7, 10, 11, 2}

? 6-22: {0, 1, 2, 4, 6, 8}

Die Jakobsleiter
Notes

1. General problem of segmentation from the piano-vocal score.
"Voice-leading" and orchestration note clearly notated, probably.
2. The main elements appear to be hexachords:

6-Z13/42
6-Z19/44 (*the signature*)

6-14

6-22

6-Z26/48

? 6-20

3. Complicated interlocking of these hexachords in many passages, with 6-Z13/42 and 6-Z19/44 marking ends of sections and other significant points in the music.

4. Historical footnote: Schoenberg apparently planned to recompose Die ~~xxx~~ Jakobsleiter as a 12-tone work (~~apparently in 1944 - see Messiaen~~)

See "My Evolution" in Style & Idea, p. 88-89

1920 Passacaglia

(Maegnard's description incorrect)

A M S: 3 Nov. '74

Claudio Spies

DIE JAKOBSEITER

Hexachordial collection

Interval list:
 1st: 3
 2nd: 2
 3rd: 4
 4th: 5
 5th: 2
 6th: 2

Vector

Complementary hexachord / (complementary collection) /

mm. 1-8

6-213

6-242

Schoenberg: sketch (1922)

Literal repetitions: m. 11 - 284
 m. 177 - 179
 250 - 251
 291 - 295

306 - 307
 452 - 456
 497 - 481

228-274 errors in numbering
 m. 382
~~528~~
 528

Handwritten musical score for Clarinet (Cl.) and Oboe (Ob.).

Measures 675-676: Cl. and Ob. parts with notes and slurs. Measure 675 includes a dynamic marking of *mf*.

Measure 677: Cl. part with notes and slurs. Measure 677 includes a dynamic marking of *mf* and the number (1922).

Measure 8-28: A sequence of notes with a handwritten annotation $(= 6-213 4X)$.

6/ Extension of the hexachordal collection to octatonic collection:

Handwritten musical score showing an octatonic collection.

Top staff: A sequence of notes with slurs and accents, including a circled '2' and a circled '(2)'.

Bottom staves: Four staves showing the octatonic collection in different positions, labeled 3:, 4:, 5:, and 6:.

Left side: A list of intervals and their counts:

- int. 1: 4
- 2: 4
- 3: 8
- 4: 4
- 5: 4
- 6: 4

Handwritten musical notation on a grand staff. The notation includes notes, stems, and brackets. The word "harmonic" is written in purple ink at the bottom right of the staff.

Handwritten musical notation for Clarinet (Cl.). The notation includes notes, stems, and dynamic markings like "p". Measures 291 and 295 are indicated above the staff.

- 6-2+2

5 The 'other' hexachord, in an ordering:

Schoenberg: sketch (1922)

Handwritten musical sketch for Schoenberg (1922) on a grand staff. The notation includes notes, stems, and dynamic markings. The number "4-18" is written on the left, and "679" appears in two places. The word "upper part" is written vertically on the left side.



SCHOENBERG:
DIE JAKOBSLEITER

EXAMPLES

ALAN LESSEM (YORK UNIV)

(i)

12-note theme in Symphony
(Schoenberg)
Sketches in Brit. Museum

Ex. 1

6/4

1 2 3 4 5 6

zellig

Sketchbook 4

{1, 2, 4, 5, 7, 8}

Ex. 2

6/4

2 1 4 3 6 5

4 sections

9 10 11 0 3 6
0 1 2 3 6 9

Ex. 3

6/4

2 1 4 3 6 5

Ex. 4

6/4

1 4 3 6 5 2 2 1 4 3 6 5 6 5 3 4 1 2

Ex. 5

Handwritten musical notation for Exercise 5, consisting of three staves (a, b, c) with lyrics in German. The notation includes notes, rests, and fingerings.

a) Nord Raub Blut Wun---den ein Weib Küss

b) Wun---den ein Weib Küss

c) O — wie schön lebt sich's noch im Dreck

~~4/4~~
3/4

Ex. 6

Handwritten musical notation for Exercise 6, consisting of two staves (a, b) with lyrics in German. Staff (a) includes fingerings (1-5) and accents. Staff (b) shows a piano accompaniment with chords and bass lines.

a) Ich soll--ke nicht nä--her denn ich ver--lier--e da--bei

b) Piano accompaniment for the first system of Ex. 6.

Ex. 7

Handwritten musical notation for Exercise 7, consisting of three staves (a, b, c) with lyrics in German. Staff (a) includes lyrics and a fermata. Staff (b) includes lyrics and a fermata. Staff (c) is marked as wordless.

a) Ich bin ein fun--ke nur vom hei-----li--gen feu-----er

b) ich bin ein dröh--nen nur der hei-----

b) Licht — sind ihre Blätter an--zu--schauen wei-----ssen Mon--

c) (wordless)

EXAMPLE 8.

Handwritten musical score for Example 8, consisting of seven staves. The notation includes various musical symbols, accidentals, and performance markings.

- Staff 1 (Treble Clef):** Starts with a treble clef and a common time signature. It contains several notes with accidentals (sharps and flats) and rests. A handwritten "H₁" is written below the first measure.
- Staff 2 (Treble Clef):** Contains notes with accidentals and rests.
- Staff 3 (Treble Clef):** Contains notes with accidentals and rests.
- Staff 4 (Treble Clef):** Contains notes with accidentals and rests.
- Staff 5 (Treble Clef):** Contains notes with accidentals and rests. A handwritten "Solo via." is written above the first measure.
- Staff 6 (Treble Clef):** Contains a sequence of notes with accidentals.
- Staff 7 (Treble Clef):** Contains notes with accidentals.

Performance markings and dynamics include:

- o=d. 6** (written above the first measure of Staff 1)
- ff** (written above Staff 4)
- all. Gaiga** (written above Staff 4)
- sf** (written above Staff 4)
- pp** (written below Staff 5)
- poco rit.** (written below Staff 5)
- a tempo ohne accel. und ohne cresc.** (written to the right of Staff 5)

Accidentals and notes are written throughout the score, including sharps (#), flats (b), and naturals (n). Some notes have slurs or ties.

6-Z19

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

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

6-Z44

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

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