

OCTA-HEPTA-DIA COMPLEX

1.12-0  
Schoenberg, Pierrot Lunaire

(28)

A: {0,1,3,6,9}  
B: {6,9,0,2,3}

1.12-1  
Ruggles, Angels

(1)

A: {10,11,2,3,6}  
B: {10,11,2,3,6}  
C: {3,6,7,10,11}

1.12-2  
Stravinsky, Le sacre du printemps

S A B C D E

↓ ↓ ↓ ↓ ↓ ↓

(2+4)

1.12-3  
Schoenberg, Op.11/2

(50)

7-238: {2,3,4,6,7,9,10}

C<sub>1</sub> (4-229)

A: {9,10,11,1,2,4,5} (7-238) D C<sub>2</sub> (4-229)

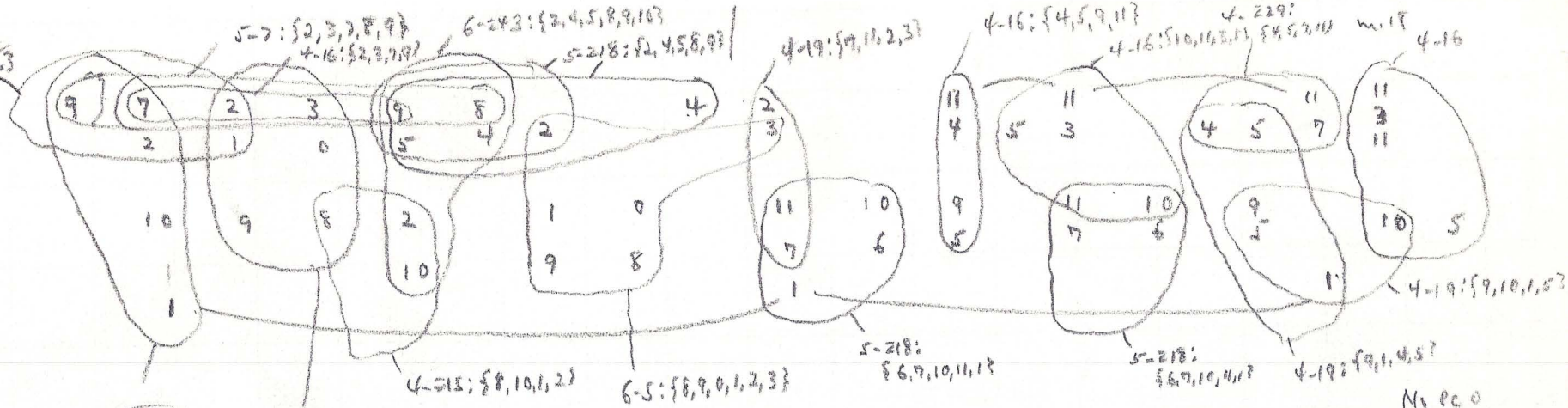
4-229: {8,0,2,3}

4-229: {2,3,5,9}

B: {0,1,2,3,5,8,9} (7-218)

m.17

~~4-16: {7,9,1,2,3}~~

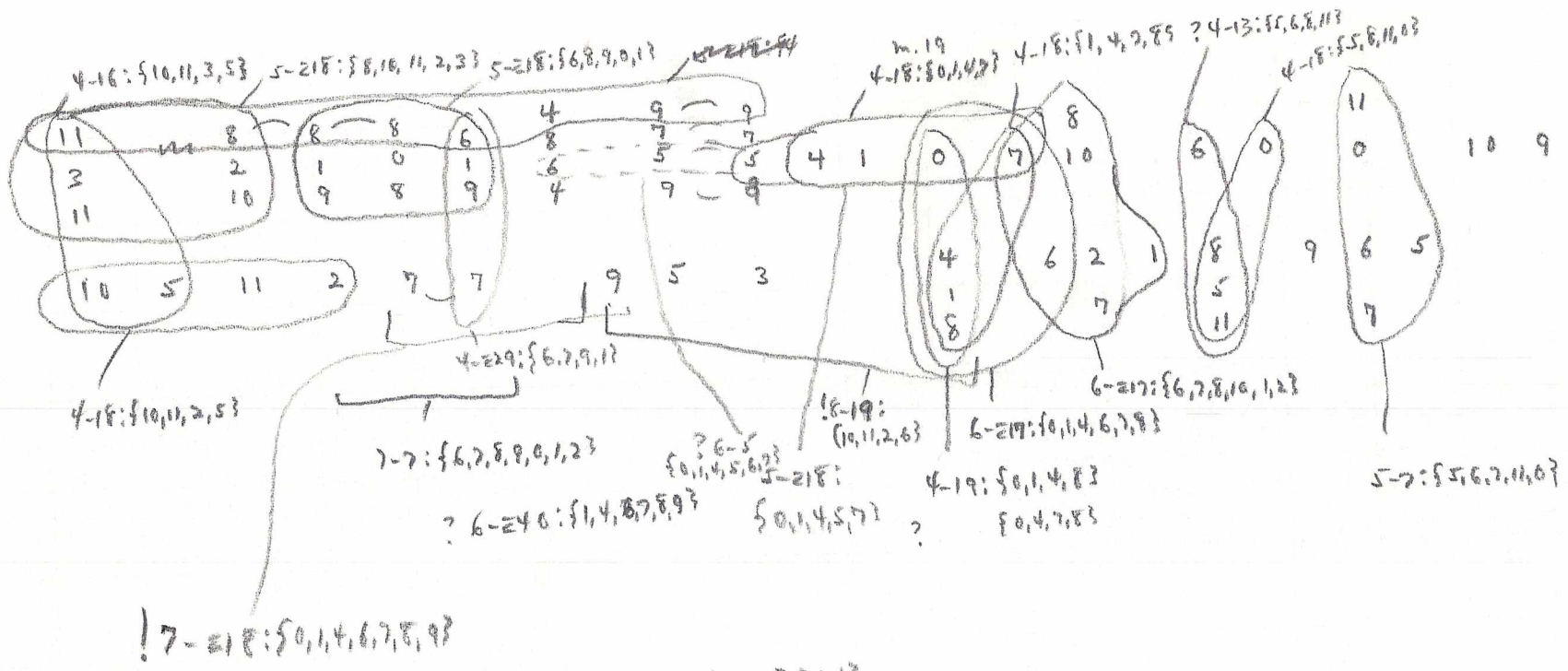


No pc 6  
pc 11  
1 pc 3  
1 pc 7  
1 pc 4  
1 pc 5

$5-218: \{7,9,10,1,2\}$   
 $4-18: \{7,10,1,2\}$   
 $6-5: \{8,9,0,1,2,3\}$   
 $4-15: \{8,10,1,2\}$   
 $5-218: \{8,9,0,1,2,3\}$   
 $6-5: \{8,9,0,1,2,3\}$   
 $4-19: \{8,9,0,4\}$   
 $5-218: \{8,9,0,1,3\}$   
 $7-218: \{0,1,2,3,5,8,9\}$   
 $5-218: \{8,9,0,1,3\}$   
 $7-7: \{2,8,9,10,1,2,3\}$   
 $5-238: \{2,5,8,9,10\}$   
 $\{9,0,3,4,5\}$   
 $4-12: \{2,4,5,8\}$   
 $4-19: \{10,2,4,5\}$   
 $\{2,3,5,9\}$   
 $\{1,2,4,9\}$   
 $4-16: \{4,5,9,11\}$   
 $4-16: \{10,11,1,3,4,5,7,10\}$   
 $4-229: \{4,5,7,10\}$   
 $4-19: \{9,11,2,3\}$   
 $5-218: \{6,9,10,11\}$   
 $5-218: \{6,9,10,11\}$   
 $4-19: \{9,1,4,5\}$   
 $4-16: \{4,5,9,11\}$   
 $4-16: \{10,11,1,3,4,5,7,10\}$   
 $4-19: \{9,10,1,5\}$   
 $4-19: \{3,4,5,6,9,10,11\}$   
 $6-5: \{4,5,6,7,10,11\}$   
 $7-218: \{9,10,1,3,4,5,6\}$   
 $5-7: \{4,5,9,10,11\}$   
 $7-7: \{3,4,5,6,9,10,11\}$   
 $4-19: \{5,6,9,11\}$   
 $4-19: \{3,7,10,11\}$

No pc 0  
pc 2  
pc 8

m. 18



not p. 2  
10  
11

~~$7-218: \{4, 5, 6, 9, 10, 11\}$~~

2.24

5-238: {1,0,1,4,5,8}

5-218: {1,0,0,1,4,5}

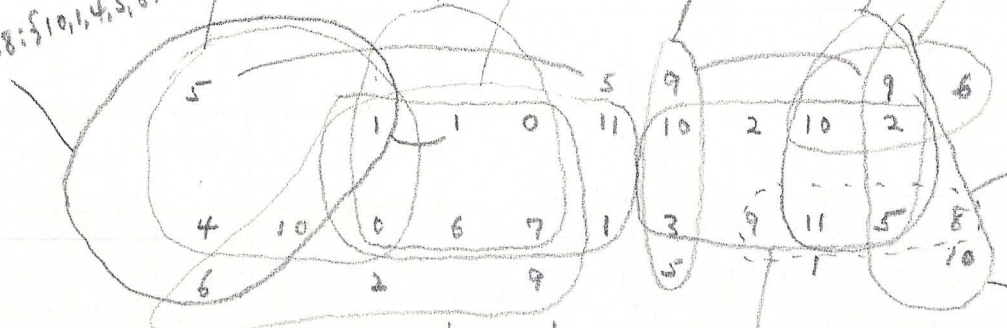
5-7: {0,1,5,6,7}

5-7: {6,7,11,0,1}

4-16: {3,5,9,10}

5-238: {9,10,11,2,5}

4-19: {2,6,9,10}



7-238: {6,7,9,10,0,1,2,3}

④

4-229: {6,10,0,1,3}

6-217: {5,6,7,9,0,1}

⑦

4-229: {2,3,5,9}

③

? 4-12: {11,1,2,5}

⑧

4-19: {1,2,5,9}

4-12: {2,5,6,8}

5-238: {2,5,8,9,10}

4-18: {2,4,8,9}

4-16: {1,0,0,4,5}

and others - see table

8-16: {3,4,8,10}

7-7: {5,6,7,10,11,0,1}

7-238: {1,0,11,0,1,3,6,7}

4-215: {6,7,10,0}

4-215: {1,3,6,7}

4-16: {1,0,11,3,5}

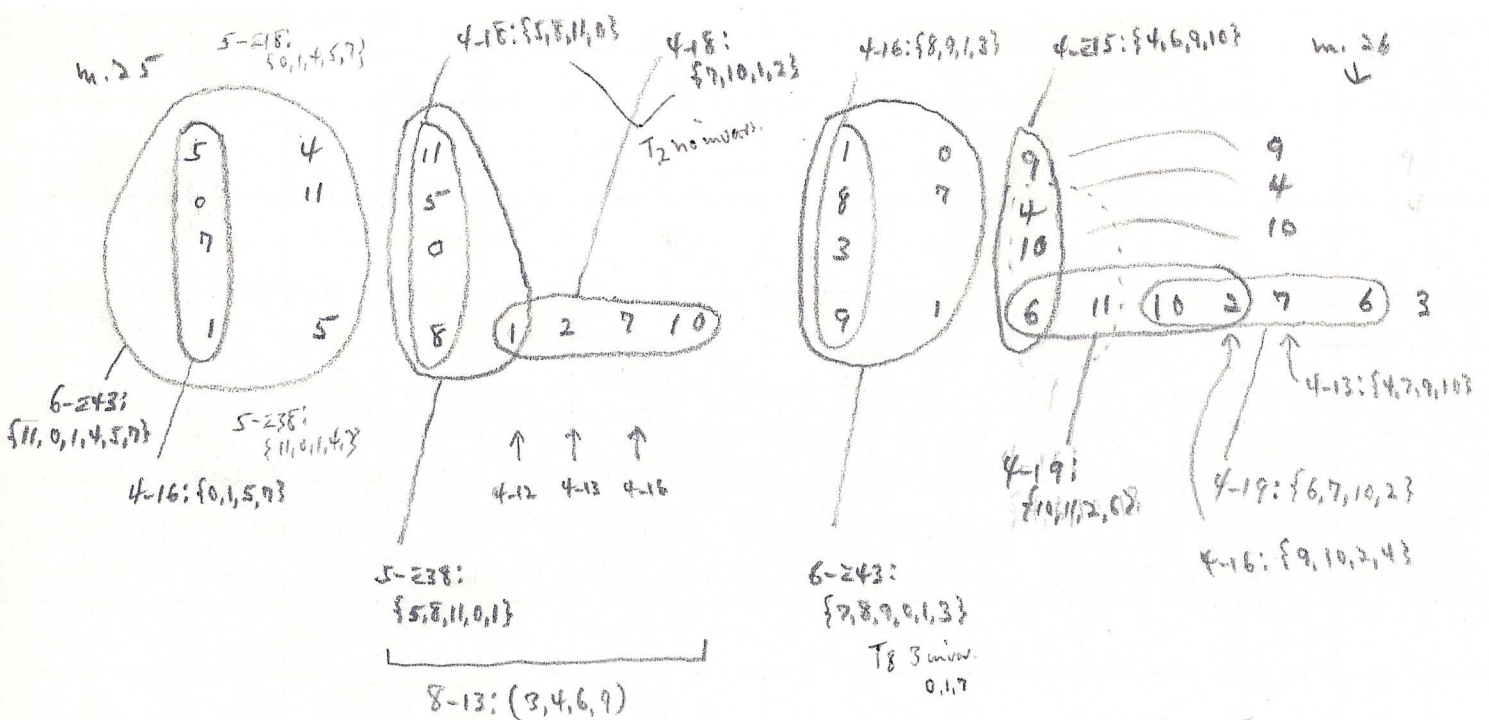
6-243: {9,10,11,2,3,5}

5-218: {1,0,11,2,3,5}

4-18: {1,0,11,2,5}

8-243: {2,4,5,8,9,10}

4-18: {1,2,5,8}



No PC3  
 PC6  
 PC9

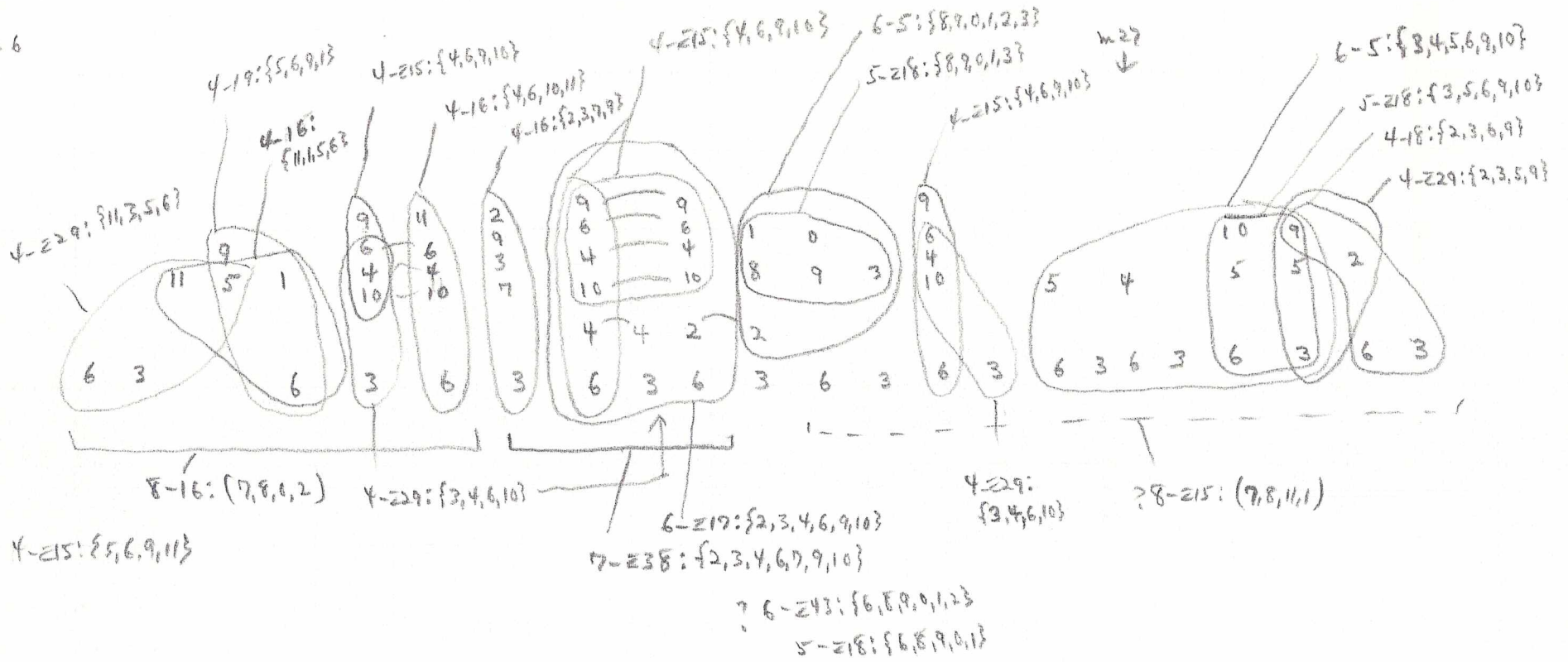
7-218:  
 {11,0,1,2,4,7,8}

5-218: {0,1,4,5,7}  
 5-238: {0,1,2,5,8}

⑧  
 ⑦

No PC5  
 ⑪      ②      ③

m. 26



? 6-34: {9, 11, 1, 3, 5, 6}

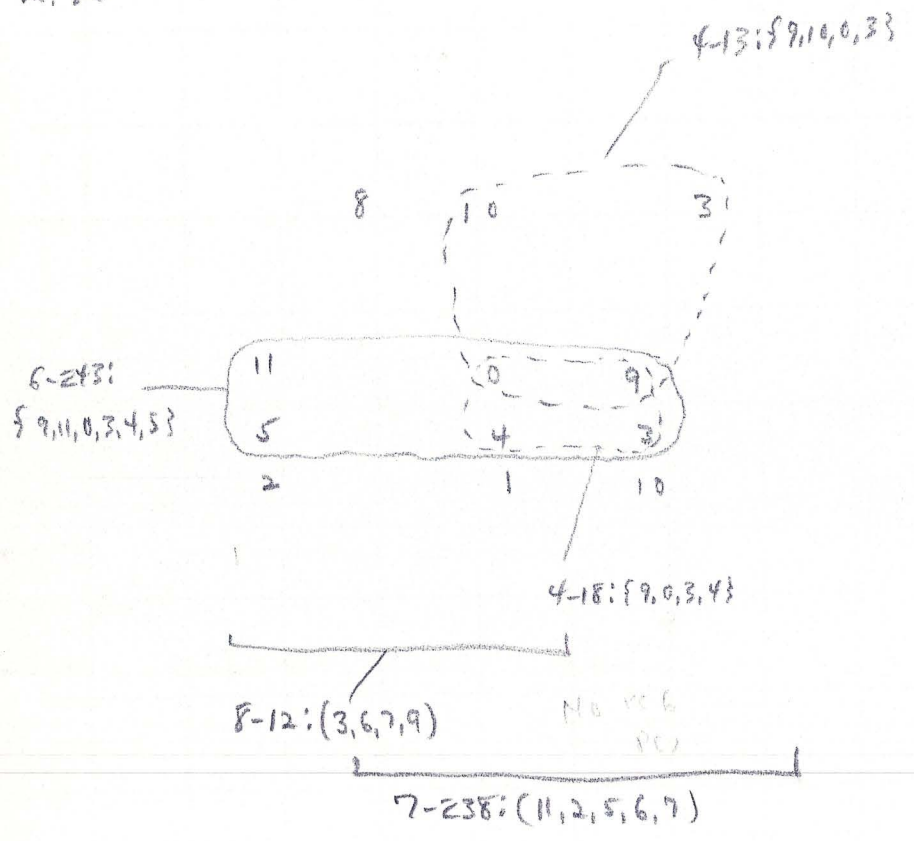
? 4-13: {3, 6, 8, 8}

? 4-18: {2, 3, 6, 9}

{8, 9, 0, 2}

? 4-315: {2, 3, 6, 8}

W. 30



? 7-7: {3, 4, 5, 8, 9, 10, 11}

NO PCB  
PC?

6-217: {8, 9, 10, 0, 3, 4}  
{4, 5, 8, 10, 11, 0}



m. 32

5-218: {1,3,4,7,8}

4-19: {7,8,11,3}

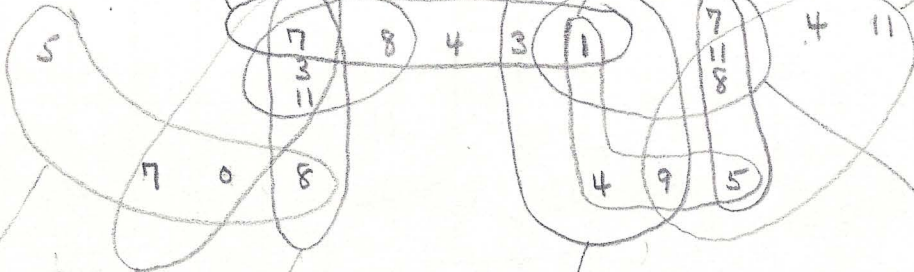
4-19: {9,11,4,5}

4-12: {5,8,11}

5-218: {4,5,8,9,11}

4-18: {4,5,8,11}

4-12: {5,8,9,11}



4-19: {11,0,3,7}

~~4-12: {5,8,9,11}~~

4-215: {7,8,11,1}

4-229: {5,7,8,0}

4-19: {7,8,11,3}

4-229: {9,11,3,4}

~~? 4-18: {4,5,8,11}~~

\_\_\_\_\_ |

8-19: (2,6,9,10)

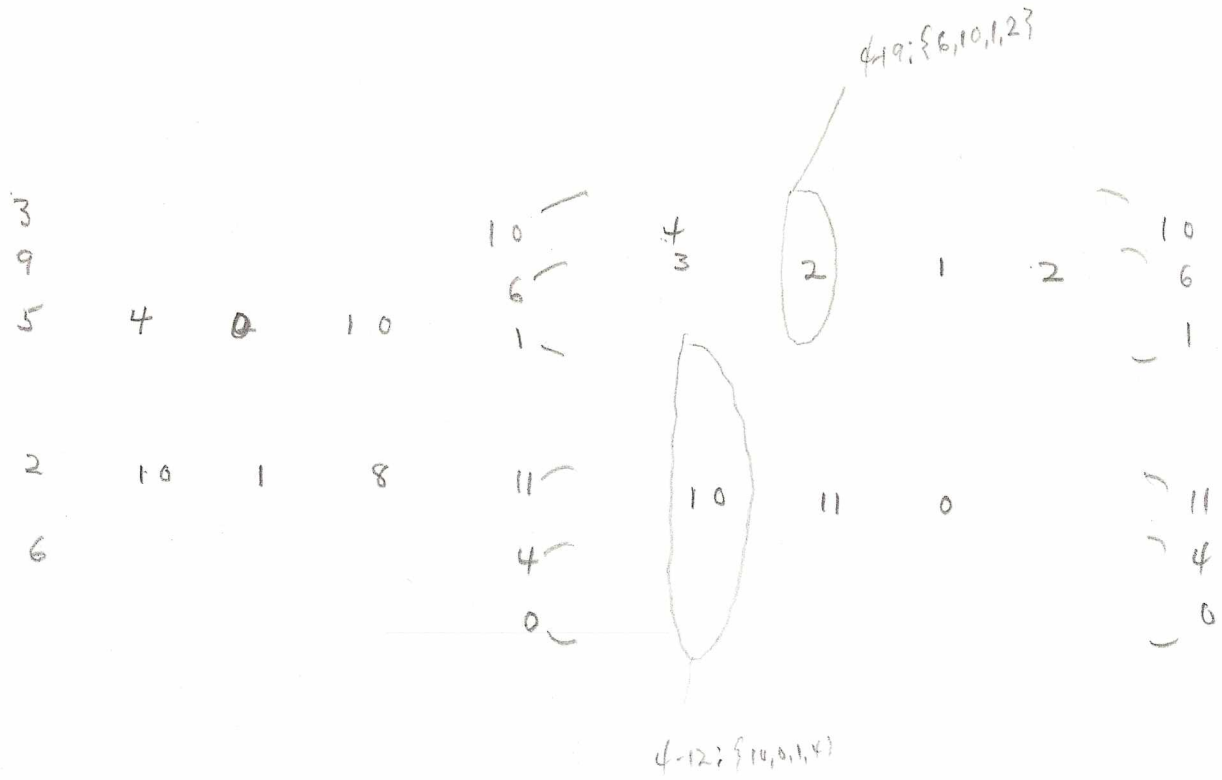
? 6-243: {1,3,4,7,8,9}

0

9

No PC2  
PC6  
PC10

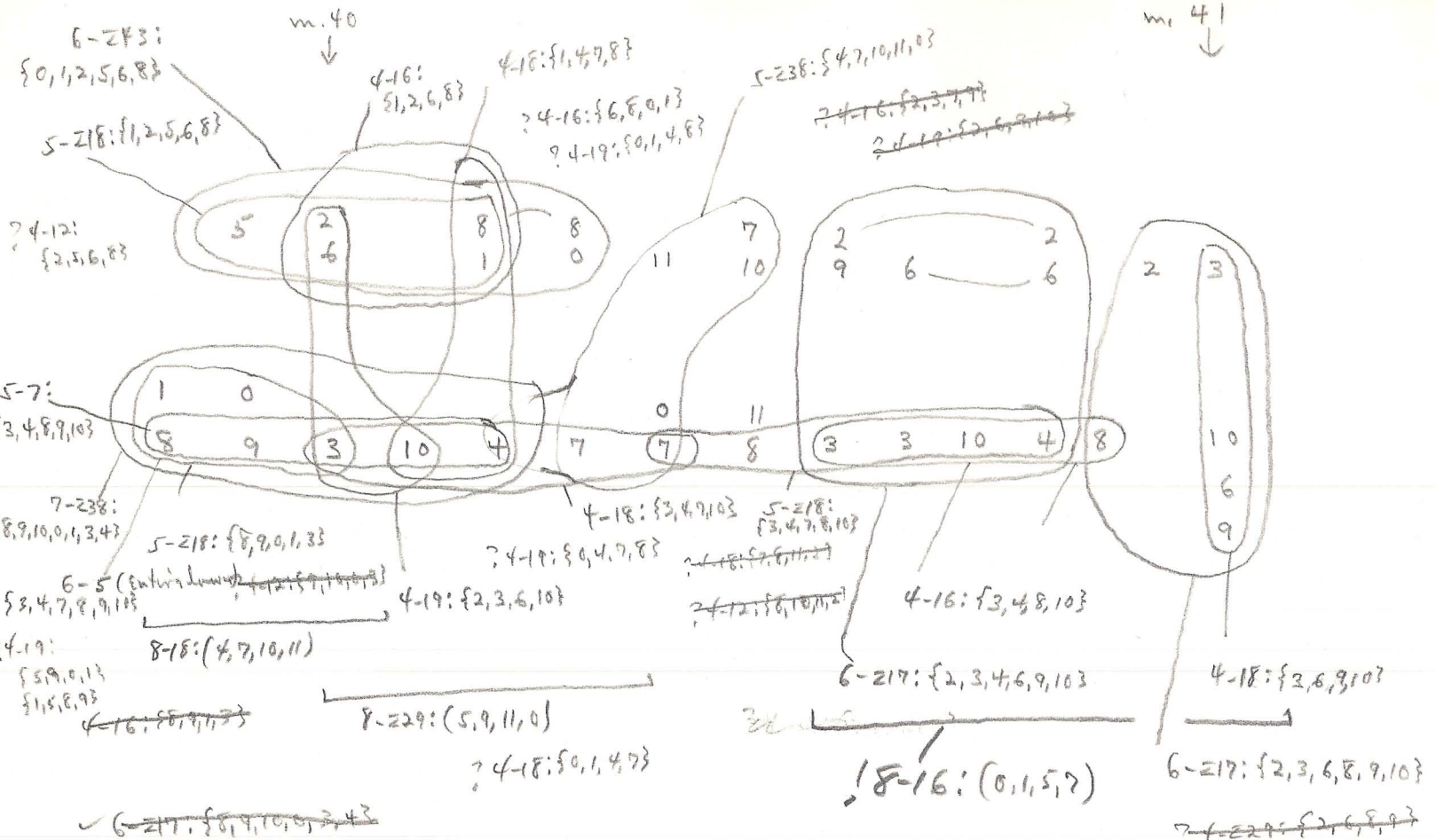
m.39



NG PC 5  
 7  
 8  
 9

6-243: {10, 11, 0, 3, 4, 6}

↑   ↑   ↑   ↑  
 5-236   5-8   6-241   5-8



- ~~6-217: {0, 9, 10, 0, 2, 4, 3}~~
- ~~4-12: {0, 1, 3, 6}~~
- ~~6-5: {0, 9, 0, 1, 2, 3, 8}~~
- ~~{6, 7, 10, 11, 0, 1}~~
- ~~{11, 0, 1, 2, 5, 8}~~
- ~~6-213: {6, 8, 9, 0, 1, 2}~~
- ✓ 5-218: {3, 4, 7, 8, 10}
- ~~5-238: {4, 7, 10, 11, 0}~~
- ~~6-217: {7, 8, 9, 11, 2, 3}~~
- ~~5-218: {2, 3, 6, 7, 9}~~
- ~~5-218: {7, 8, 11, 0, 2}~~
- ~~7-238: {2, 3, 4, 6, 7, 9, 10}~~
- ? 7-218: {2, 3, 6, 8, 9, 10, 11}
- 7-238: {1, 2, 3, 5, 6, 8, 9}
- {2, 3, 5, 6, 8, 9, 10}
- 5-238: {0, 1, 4, 8}

m. 41

T2 of first statement  
in rows. a. d. 2, 3  
6-5: {10, 11, 2, 3, 4, 5}

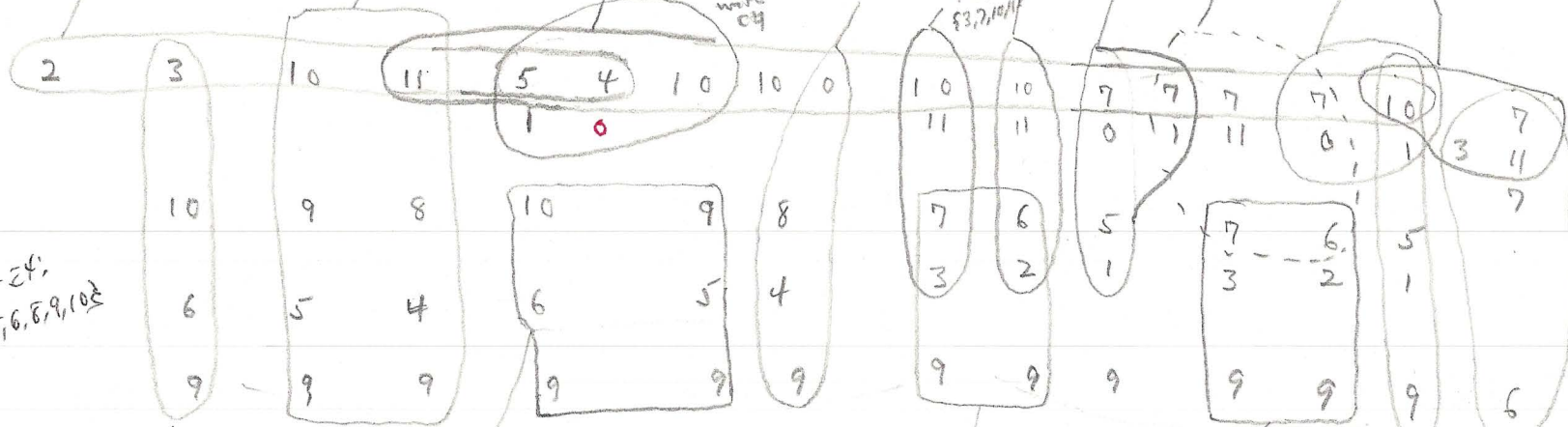
6-5: {4, 5, 8, 9, 10, 11}  
T6 - in rows a. d. 4, 5, 10, 11

0 added to corresponding  
m. 17 in collected numbers

m. 42



not 6-24:  
{4, 5, 6, 8, 9, 10}



4-18: {3, 5, 9, 10}

4-18: {5, 6, 9, 10}

? 4-18: {9, 10, 1, 4}

8-19: (7, 11, 2, 3)

6-5: {3, 4, 7, 8, 10}

5-218: {2, 3, 6, 7, 9}

5-218:  
{2, 3, 6, 7, 9}

4-19: {9, 10, 1, 5} 4-19: {11, 3, 6, 7}

? 6-219:  
{2, 3, 5, 6, 9, 10}

? 5-218: {4, 5, 8, 11}

? 5-218: {3, 4, 7, 8, 10}

? 4-19: {5, 6, 9, 11}

? 5-218: {6, 7, 2, 3, 8, 9}

? 5-218: {5, 6, 9, 10, 0}

? 5-218: {0, 2, 3, 6, 7}

? 4-18: {11, 2, 5, 6}

4-18: {2, 3, 6, 9}

? 5-218: {5, 6, 7, 11, 0}

7-7: {5, 6, 7, 10, 11, 0, 13}

"Composing with Tonos"  
Op. 23

2.



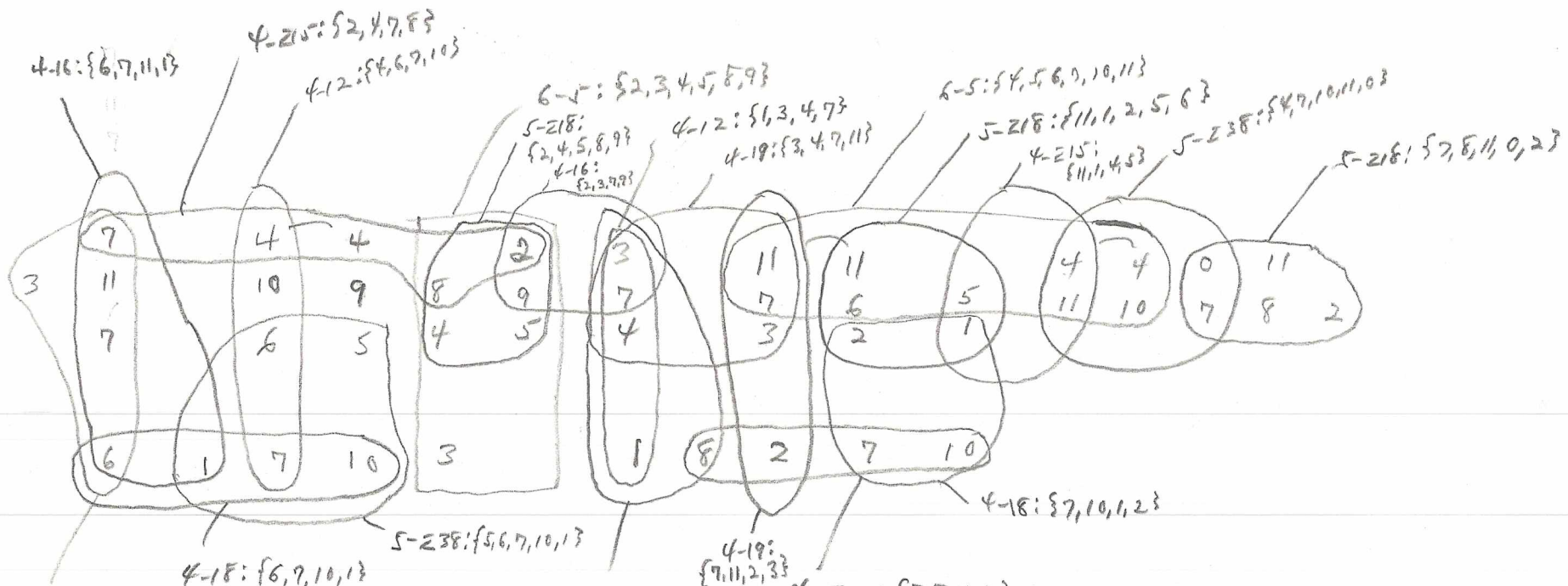
4-16: [0, 1, 5, 7]  
[110121]  
↑  
A.B.

4-16: [8, 9, 1, 3] Thematic tetrachord  
- 3-8+3-8

Arnold Schoenberg, Op. 11 Nr. 2  
4-29: [2, 3, 5, 9] T<sub>5</sub>I

MäBige

4-16: [2, 3, 7, 9] T<sub>5</sub>I  
3-8: [9, 3, 0] CIII  
3-8: [3, 4, 9] ↑  
4-17 CII  
6-5-3-8+3-8  
4-19: [1, 2, 5, 9] with tet in piece  
4-21: [2, 5, 8, 0]  
5-21: [2, 9, 10, 11]  
6-29: [1, 5, 7, 8, 10, 0, 11] - A<sup>b</sup> m. scale 5<sup>th</sup> part  
4-16: [0, 1, 5, 0]



$4-19: \{11,3,6,7\}$

$8-229: \{8,0,2,3\}$

$5-218: \{1,3,4,7,8\}$

$4-229: \{7,8,10,2\}$

$6-243: \{11,1,2,5,6,7\}$

$6-243: \{2,4,5,8,9,10\}$

?  $5-238: \{11,2,5,6,7\}$

?  $7-238: \{4,5,7,8,10,11,0\}$

$6-243: \{5,6,7,10,11,13\}$

$5-17: \{2,3,7,8,9\}$

m. 45

$\psi-13: \{4, 9, 9, 10\}$

46

$\psi-13: \{3, 6, 8, 9\}$

$\psi-18: \{0, 1, 4, 7\}$

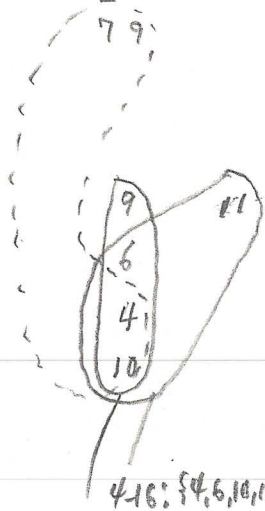
$6-5: \{0, 1, 4, 5, 6, 7\}$

$8-19: \{10, 11, 2, 6\}$

$8-229: \{4, 8, 10, 11\}$

$\psi-12: \{9, 0, 1, 3\}$

$5-7: \{0, 1, 2, 6, 7\}$



$\psi-16: \{4, 6, 10, 11\}$

$\psi-16: \{9, 11, 3, 4\}$

$\psi-215: \{9, 11, 2, 3\}$

$\psi-215: \{2, 4, 7, 8\}$

$\psi-19: \{0, 1, 4, 8\}$

$\psi-16: \{0, 1, 5, 7\}$

$\psi-16: \{0, 1, 5, 7\}$

$\psi-16: \{0, 2, 6, 7\}$

$\psi-215: \{4, 6, 9, 10\}$

$\psi-16: \{2, 3, 7, 9\}$

$\psi-16: \{7, 8, 0, 2\}$

contains sequences ( $\psi=11$ )

$\psi-13: \{1, 4, 6, 7\}$	$\psi-13: \{0, 3, 5, 6\}$
---------------------------	---------------------------

$5-218: \{0, 1, 4, 5, 7\}$

10

11

11

0

1

5

W. 50

7-238: {2, 3, 4, 6, 7, 9, 10}

6-243: {1, 1, 2, 5, 6, 7} also 9, 10

4-18: {9, 10, 2, 4}

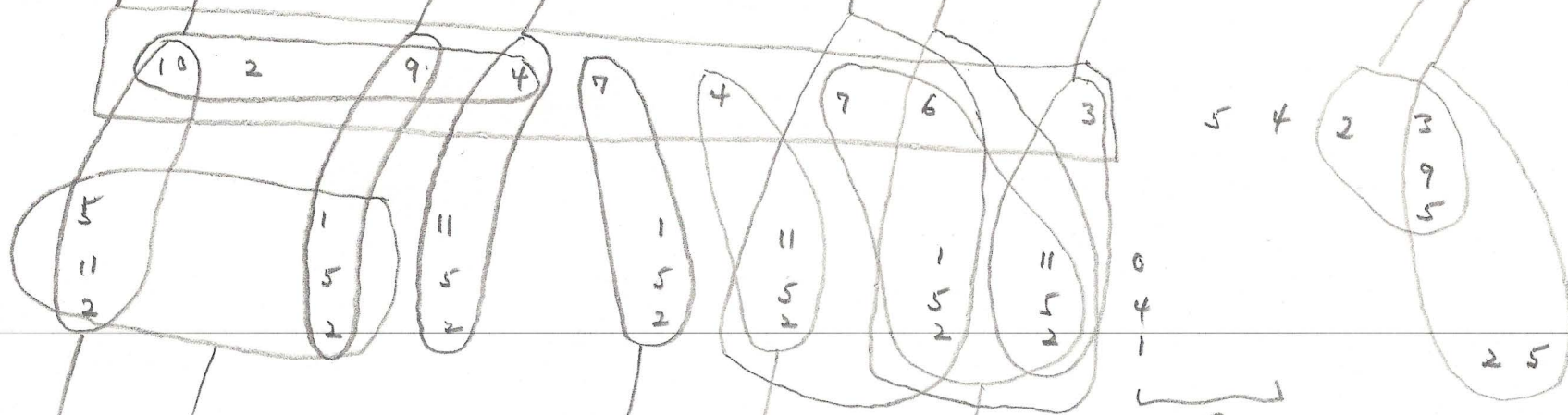
4-19: {1, 2, 5, 9}

5-218: {1, 1, 2, 5, 6}

4-13: {1, 2, 4, 5}

4-12: {1, 2, 3, 5}

4-229: {2, 3, 5, 9}



4-12: {1, 1, 2, 5}

? 4-16: {4, 5, 9, 11}

4-18: {10, 11, 2, 5}

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

4-13: {1, 2, 4, 5}

4-215: {1, 0, 3, 5}

6-243:

? 4-16: {6, 7, 11, 12} {1, 1, 2, 5, 6, 7}

? 4-18: {1, 1, 5, 6}

7-238: {9, 10, 11, 1, 2, 4, 5}

? 5-238: {9, 10, 11, 2, 5}

5-238: {1, 2, 5, 6, 7}

? 6-5: {1, 0, 3, 4, 5, 6}

? 6-217: {1, 0, 3, 5, 6, 7}

10

9

6

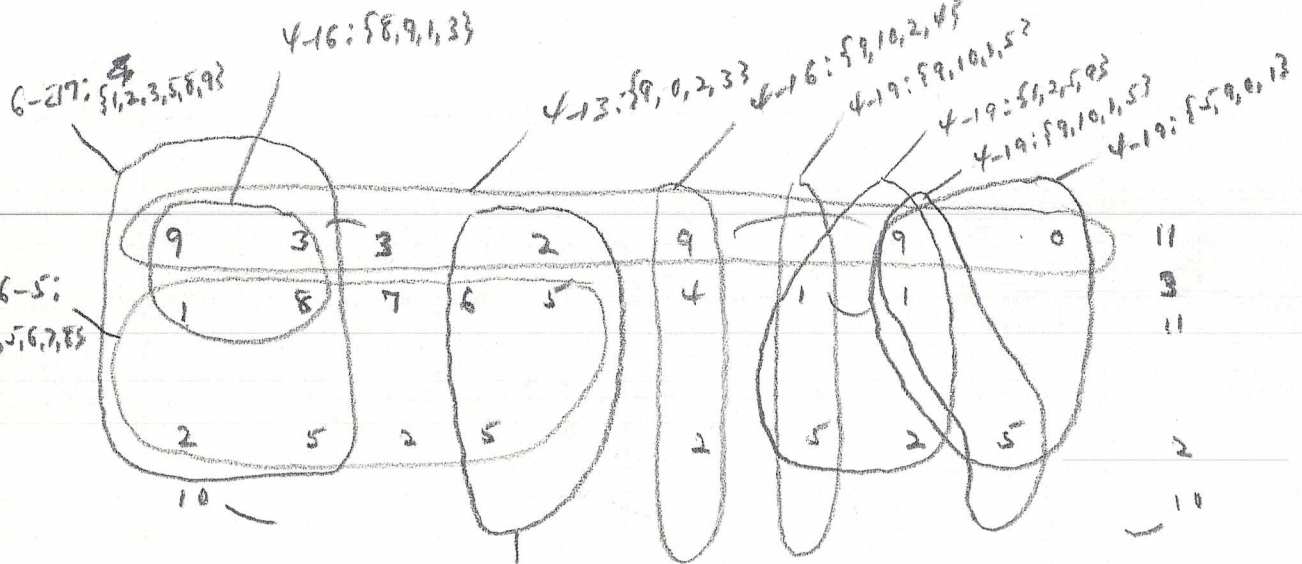
3 0

no pc 8

? 4-19: 5



m. 59



8-16: {11,0,4,6}

4-19: {10,2,5,6}

4-19: {9,1,4,5}

4-12: {9,11,0,3}

③

⑥

④

⑦

⑪

m. 60

m. 61

m. 62



5-218: {10, 11, 2, 3, 5}

5-218: {8, 10, 11, 2, 3}

4-19: {1, 5, 8, 9}

4-18: {1, 4, 7, 8}

4-13: {1, 4, 6, 7}

5-218: {1, 3, 4, 7, 8}

4-18: {6, 7, 10, 1}

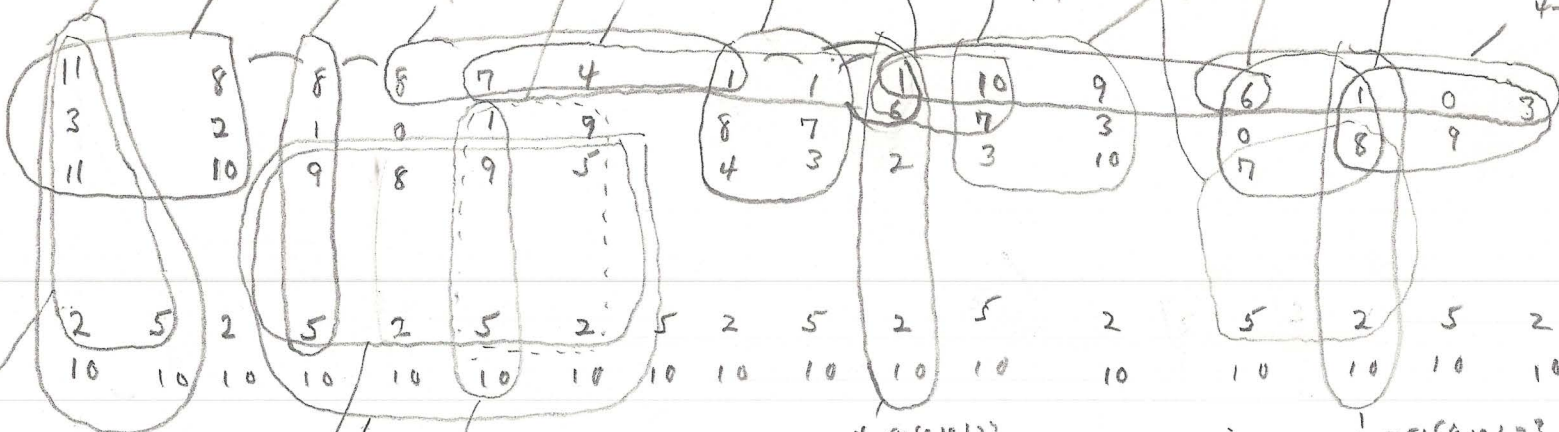
4-18: {6, 9, 10, 1}

4-13: {2, 5, 7, 8}

5-7: {6, 7, 8, 1, 3}

5-218: {8, 9, 0, 1, 3}

4-13: {0, 1, 2, 6}



4-12: {11, 2, 3, 5}

5-238: {2, 5, 8, 9, 10}

4-18: {2, 5, 8, 9}

4-19: {9, 10, 1, 5}

? 5-218: {7, 9, 10, 1, 2}

4-18: {6, 10, 1, 2}

8-13: {6, 9, 11, 0}

8-19: {4, 8, 11, 0}

8-16: {9, 11, 3, 4}

4-215: {8, 10, 1, 2}

4-19: {10, 2, 5, 6}

? 4-215: {6, 7, 10, 0}

8-229: {0, 4, 6, 7}

? 4-12: {2, 4, 5, 8}

? 5-218: {6, 8, 9, 0, 1, 3}

11

10

4 — 4

6

? 5-238: {2, 5, 8, 9, 10}

? 5-7: {7, 8, 0, 1, 2}

? 4-16: {7, 8, 0, 2, 3}

? 4-16: {3, 5, 9, 10}

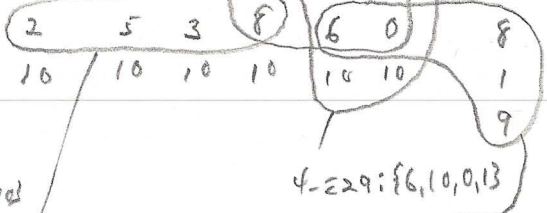
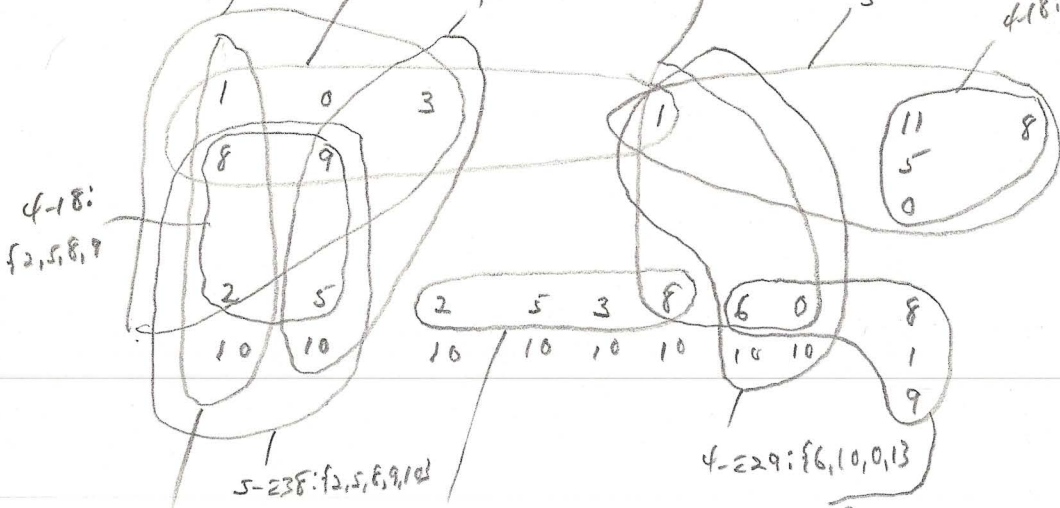
? 5-7: {0, 1, 5, 6, 7}

? 4-16: {6, 8, 0, 1}

{0, 2, 6, 9}

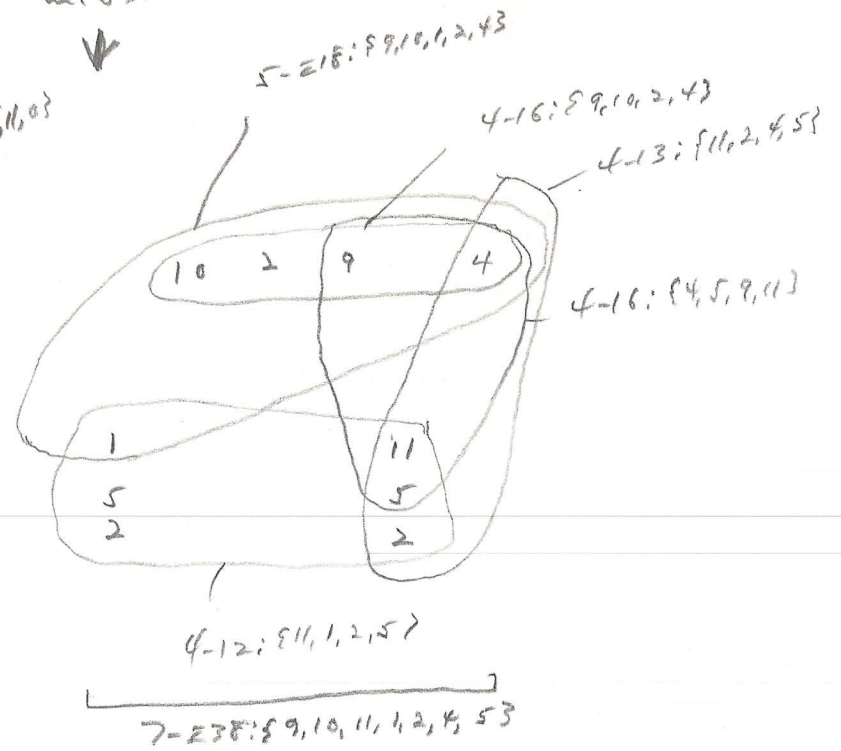
m. 61  
cf. m. 1

6-5: {8, 9, 0, 1, 2, 33}  
4-12: {9, 0, 1, 33}  
5-218: {8, 9, 0, 1, 33}



4-215: {8, 10, 1, 2?}  
74-229: {2, 3, 5, 9}

m. 63  
↓



↑  
NOT 6-15: {5, 6, 9, 11, 0, 13}

as a opening ↙  
6-217: {1, 2, 3, 5, 8, 93}  
7-218: {0, 1, 2, 3, 5, 8, 93}

⑥ ⑪

⑪ ④

way 7

Schoenberg, Op. 11/2  
Octa-hexa Nocturn

Highly Chromatic  
Tightly knit

Th. I.1      Des A Es      Des      Th. I.2      4-12 CIII (ar in w. 3-4)

5-19 CII [8, 9, 0, 2, 3]      3-3 CI      A Es 4-12 CIII [9, 0, 1, 3]      5-25 CII      4-18 CIII      3-3 CI

CI: [6, 8, 9, 11, 2] + [9, 0, 2, 3, 5] = [5, 6, 8, 9, 11, 0, 2, 3] 8-28

bas 4: invos

A      B

4-215 4-13 4-10      5-19: [2, 3, 5, 8, 9] CII      TSI of 5-19 in R.H. (sum = 6-30)      invos: [2, 3, 5, 9]      4-9

4-215 4-16      CII (A Es)      B = T<sub>11</sub>I(A)      9 2 invos

A D!

Handwritten musical notation with notes and stems on a grand staff.

4-12: [9, 0, 1, 3] CIII

Handwritten musical notation with notes and stems on a grand staff.

3-8 CI (Th. I.1)      5-31 CIII      6-27 CIII [0, 1, 3, 4, 6, 9]      6-223: [5, 9, 11, 10, 11, 17] CI      6-22: [4, 5, 6, 8, 10, 0]\*      7-31 CI (#)      5-32: [1, 2, 5, 9, 10] CI

3-8 CII      4-19      4-7 CI      4-16      4-215 (A)      4-17      4-13      4-12      4-19      5-21      5-25

(Es)      CII      CII      H1      H2      CI

\* > 4-16: [10, 0, 4, 5]

7-31 CII (w/o 1\*)

(-5 >

1 Mäßige  $\text{♩}^*$ )

5-4, 5, 6, 7, 18, 19

\*) Vgl. Kritischen Bericht

## Schoenberg, Op. 11/2

### Introduction

In a number of respects, most apparent of which are tempo and length, the second of Schoenberg's *Drei Klavierstücke*, Opus 11 is a continuation of the first, so that the first two movements culminate in the extraordinary keyboard display of the third movement, notated on three staves—an unusual notational format for that time (1909). As I have mentioned earlier (Forte 1981), the Opus 11 pieces comprise Schoenberg's first completed atonal masterwork, written while he was still composing *The Book of the Hanging Gardens*, Opus 15 and *Erwartung*, Opus 17. (CHECK DATES).

A somewhat remote, but nonetheless interesting connection joins the incipits of the first and second movements: both begin with the same type of trichord. That is, F-d-db at the onset of the second movement is an ordered transposition (by tritone) of b-g#-g in the first movement; both are instances of set-class 3-3. In addition, these trichords sum to a form of octatonic hexachord 6-30 from CI, which serves as a reminder of the important role the octatonic plays as a pitch resource for the two movements (and in the third movement, as well). Example here.

### Theme I, part 1 (bars 1-4)

Since this music, unlike much of Schoenberg's later music, is lucidly thematic in the traditional way, I will begin by offering an explanation of part 1 of the first theme, the full notation of which is given by Ex. op11-2.1a, while Ex. op11-2b identifies its salient features. A traditional ostinato figure, consisting of the two notes f and d, initiates the movement, establishing its metrical template, the six-eight pattern, while the low F sets the lower registral boundary of the music, to be superseded by eb a whole-step below it only at the very end of bar 66 at the conclusion of the movement. Above this lugubrious ostinato figure, but still in the lower register of the instrument, the right-hand begins to delineate the first melodic theme, a succession of eight pitches laid out in the irregular rhythmic pattern, measured in eighth notes: 3 3 6 1 2 2 2 4. In this series of notes, the first grouping will no doubt be perceived as 3 3 6, corresponding to db-a-eb, with eb receiving the sum of the durations of the two preceding notes.

Looking ahead on Example op11-2a we see that the headnote of the melody, db, is also the tailnote, positions that suggest a role of special importance. This evaluation is supported by the second and third notes, a and eb, the latter the longest note, as remarked above, while a is the highest note in the theme. Based upon these observations, we have little difficulty in concluding that a and eb are yet another instance of the composer's initials A.S. Db is also an autobiographic pitch symbol, albeit one that is not so familiar, even to connoisseurs of musical symbolism in the music of Schoenberg. Specifically, its symbolic reference derives from the German letter-name Des, that is D as in Arnold and Es or S as in Schoenberg, the last letter of the first name and the first letter of the last name, an autobiographical reference that occurs elsewhere in his music. (Note on Webern book) Throughout this movement, Db and its enharmonic partner C# often occupy strategic locations. (examples?)

The pc set structure of the theme—at least at the surface level—is easily describable in terms of the two successive forms of trichord 3-8, as shown in Ex. op11-2b, where the second is a transposition of the first, followed by the dyad eb-db. A more informative analysis is shown below the upper staff of Ex. Op11-2b, which is an octatonic reading of the entire theme that brings into focus all its components as they interlock to form an octatonic complex. In this reading, the largest segment, namely the central portion of the theme, excluding the dbs on either end, forms octatonic pentad 5-19 from CII. At yet another level of structure, the union of the first three notes and the last three form tetrachord 4-13 from CIII, a symmetrical arrangement that further segments the theme, placing tetrachord 4-12 in the center, within the 5-19 pentad.

How do the ostinato pitches f-d fit into the pitch-complex created by the melodic theme? In an octatonic field, this dyad enjoys affiliations with both CI and CII. In this instance, since CII is the source of a major portion of the melody, it merges with that segment to form octatonic hexachord 6-z50. Remarkably, this octatonically cohesive unit excludes the autobiographical note Db, further strengthening its special presence in the theme, in addition to its placement at beginning and end, which creates the symmetrical pattern described above.

Theme I, part 2 (bars 4-5)

In this “consequent” portion of the theme we hear a strongly contrasting melody that consists of two figures, distinguished by contour and rhythm. As shown in Ex. op11-2, the first of these consists of the ascending trichord 3-7, which I have attributed to CII, while the second delineates a descending contour that moves from c#2 to db, thus repeating the pitch-class boundaries of Theme I, part 1. Remarkably, this second figure embeds the pitch-class form of 4-12 as it occurred in Theme I, part 1: [9, 0, 1, 3]. See Ex. .

Ex. op11-2 displays the octatonic reading of bars 4-5 as a complex of components of CII and CIII, in which the CII elements comprise two forms of the same pentad, 5-25 (specify relation), while the CIII elements form 4-18 and 4-12, the latter the repeated segment of Theme I, part 1, as explained above.

#### MORE OR SUMMARIZE DEVELOPMENT OF SECOND PART

Note?

The introduction of the new version of the ostinato figure in bar 20 presents a beautiful example of a long range connection. The new 3-3 trichord is bb-a-gb, an ordered transposition of the retrograde inversion of the original f-d-db form.



3-3 cI A Es 5-19 cII

PC1-special

DES #

ARNOLD SCHWABER

①	②	③	④
1	9 3	3 8 2 0 3 1	1 4
5	5	5	5 4
2	2	2	2 4
5			

3-8 cII, 4-12 cII, 3-2 cII, 4-19 H2?, 6-250: [8,9,0,2,7,8] cI, H2?

2 interlocking 6-27

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

6-27 cII, 4-8 cII, 6-213: [2,7,5,6,8,9] cII, 3-3 cI

6-27 cII  
0,1,3,4,7,4-215 cII  
9

4-28 "wedge" hexa

6-213: [1,2,4,5,7,8] cI

hexa stand 5-21 H4

6-20 w/pc?

4-19! H3

⑦	⑧	⑨
1 0 6 7 8	1 4 8 7 5 1 2	8 11 8 11
8 9 3 2 1	8 5 10 11 5 1	3 6 4 17 3
2 5 8 7 6 2 5 2	5 2	5 2

4-9 cII, 4-9 cII, 5-25 cII, 4-12 cII, 4-13 cII, 4-3: [2,4,6,7] cII

⑩	⑪	⑫	⑬	⑭	⑮
9 11 2	2 4 8	6 3 4 9	6 3 4 9	0	
6 9	11 0	7 11 8 5	7 11 8 5	5	
4 3	9 5	4 5 0 1 10	4 5 0 1 10	10	
10 7	3 9	2 5 6	2 5 6	8	
				1	
				7	

3-7 cII, 4-13 cII, 5-28 cII, 6-213 cII, 3-8 cI, 5-31 cII, 4-13 cII, 4-12 cII, 4-19 H1, 5-21 H2, 5-25: [5,7,8,10,11] cI

⑯	⑰	⑱	⑲	⑳
9 3 8 2 0	0 3 1	1 3	2 9	9 9
5 2	5 2	1 8 7 6 5 4 1	5 4 1	1 1
		10 5 11 2 7	10 5 11	3

Response of Thomas, 5-72 cI, 5-15 cI, 8-28!

Op. 11/2 contd.

typical 4-16 (W/sum)  
HEXA

Arnold Schönberg

4-16: [2, 3, 7, 9]

17 Develop. 1

4-9 CII

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

base 4-16  
4-16 CII

18 3-2 CII

3-7 CIII: [4, 6, 9]

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

4-16 CII

10	5	11	2	7	9	9	9	3
10								

A-ES

19

4-215 + 3-7 = 6-213 CIII

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

4-215 CII

5-28 CII

6-213: [5, 6, 8, 9, 11, 0] CII

20

3-3 CIII

10	9	10	6
----	---	----	---

6 10

5 9 5

4

4-16 TII

7	2	3	9	8	2	4
4-16						



2 8 9 4

26-27

Musical score for measures 26-27. The piece is in 12/8 time. The right hand features a complex, rapid melodic line with many accidentals and slurs. The left hand plays a steady eighth-note accompaniment. Dynamic markings include *pppp*, *pp*, *ddd*, *ppsf*, and *ppp*.

28-30

Musical score for measures 28-30. The right hand has a more melodic line with some slurs. The left hand continues with eighth-note accompaniment. A *rit.* marking is present in measure 28, followed by a *pp* dynamic in measure 29. The system ends with a double bar line and a 12/8 time signature.

31-32

Musical score for measures 31-32. The right hand has a melodic line with slurs. The left hand has eighth-note accompaniment. The dynamic marking is *pp* *etwas flüchtiger*. The system ends with a double bar line and a 4/4 time signature.

33-36

Musical score for measures 33-36. The right hand has a melodic line with slurs. The left hand has eighth-note accompaniment. Dynamic markings include *pp* and *p* *espress.*. The system ends with a double bar line and a 4/4 time signature.

37-39

Musical score for measures 37-39. The right hand has a melodic line with slurs and a triplet in measure 38. The left hand has eighth-note accompaniment. Dynamic markings include *rit.*, *pppp*, and *p*. The system ends with a double bar line and a 4/4 time signature.

40-41

Musical score for measures 40-41. The piece is in G major (one sharp). The tempo is marked *p* (piano). The music features a complex texture with many beamed sixteenth and thirty-second notes in both hands, creating a shimmering effect. The bass line has a steady eighth-note accompaniment.

42-43

Musical score for measures 42-43. The dynamics are marked *f* (forte), *p* (piano), *f* (forte), *pp* (pianissimo), *pp* (pianissimo), and *cresc.* (crescendo). The texture continues with intricate sixteenth-note passages. A fermata is placed over a chord in the right hand at the end of measure 43.

*rit.*

44-45

Musical score for measures 44-45. The tempo is marked *rit.* (ritardando). The dynamics are marked *ff* (fortissimo). The music features a dense texture of sixteenth notes and a prominent trill in the right hand. A fermata is placed over a chord in the right hand at the end of measure 45.

so in  
Giswart  
ausgibt

46-47

Musical score for measures 46-47. The dynamics are marked *ff* (fortissimo) and *non legato*. The music features a series of trills in the right hand and a complex sixteenth-note texture in the left hand. The tempo is marked *rit.* (ritardando).

48-51

Musical score for measures 48-51. The dynamics are marked *ppp* (pianississimo), *pp* (pianissimo), and *p* (piano). The music features a complex texture with many beamed sixteenth and thirty-second notes. A fermata is placed over a chord in the right hand at the end of measure 51.

6-15:  
5, 6, 8, 9, 10, 3  
9, 10, 11, 1, 2, 5

SEE NUMERICAL NOTATION

25  
SEE NUMERICAL NOTATION

4-18: {5, 5, 11, 0?}

same as opening + extended

6-243: {7, 8, 9, 0, 1, 3}

SEE NUMERICAL NOTATION

4-215: {4, 6, 9, 10}

4-215: {4, 6, 9, 10}

4-16: {9, 10, 2, 4}

4-19: {1, 2, 5, 9}

4-13: {11, 2, 4, 5, 3}

4-12: {10, 0, 1, 4}

4-18: {10, 11, 2, 5}

SEE NUMERICAL NOTATION ALSO

8-13: {3, 4, 6, 9}

4-16: {0, 1, 5, 7}

4-12: {4, 3, 4, 6}

4-16: {8, 9, 11, 3}

4-215: {4, 6, 9, 10}

4-16: {4, 7, 9, 10}

4-16: {9, 10, 2, 4}

3-3

6-217: {2, 3, 4, 6, 9, 10}

4-12: {11, 2, 5}

7-238: {9, 10, 11, 2, 4, 5}

8-12: {3, 6, 7, 9}

24 m. = 34

SEE NUMERICAL NOTATION

31

SEE NUMERICAL NOTATION

4-215: {9, 9, 0, 1}

5-238: {5, 8, 11, 9, 1}

4-13: {6, 7, 9, 0}

4-19: {7, 8, 11, 3}

4-19: {9, 11, 4, 5}

4-12: {6, 9, 10, 0}

4-16: {9, 10, 2, 4}

4-16: {1, 2, 6, 8}

4-229: {11, 0, 2, 6}

4-215: {10, 0, 3, 4}

4-16: {10, 0, 4, 5}

4-220: {3, 4, 6, 10}

4-19: {6, 10, 1, 2}

SEE NUMERICAL NOTATION

4-19: {0, 1, 4, 8}

6-243: {8, 9, 0, 1, 4}

4-16: {0, 1, 5, 7}

4-19: {0, 4, 7, 8}

4-19: {5, 6, 8, 9}

4-18: {0, 11, 4, 7}

4-229: {5, 9, 8, 0}

4-12: {5, 7, 8, 11}

4-13: {9, 0, 2, 3}

4-13: {9, 10, 0, 3}

4-215: {4, 6, 9, 10}

4-16: {9, 10, 2, 4}

4-18: {9, 10, 1, 4}

4-229: {9, 10, 0, 4}

4-229: {11, 2, 4, 5}

4-19: {6, 10, 1, 2}

4-215: {8, 10, 1, 2}

4-19: {4, 8, 11, 0}

4-13: {10, 11, 1, 4}

8-19: {2, 6, 9, 10}

7-238 (rebuttal)

8-12: {5, 7, 8, 11}

4-229: {9, 10, 0, 4}

4-229: {11, 2, 4, 5}

5-238: {9, 0, 3, 4, 1}

4-12: {10, 0, 1, 4}

5-218: {10, 0, 1, 4, 5}

4-229: {2, 3, 5, 9}

4-19: {0, 1, 4, 8}

5-238: {1, 4, 7, 8, 9}

SEE NUMERICAL NOTATION

41

SEE NUMERICAL NOTATION

SEE NUMERICAL NOTATION

SEE NUMERICAL NOTATION

4-215: {1, 2, 5, 6, 8}

6-243: {0, 1, 2, 5, 6, 8}

4-18: {1, 4, 7, 8}

add ch

4-18: {3, 6, 9, 10}

SEE NUMERICAL NOTATION

SEE NUMERICAL NOTATION

SEE NUMERICAL NOTATION

5-218: {8, 9, 0, 1, 3}

m. 5

8-16: {4, 7, 10, 1}

4-19: {2, 3, 6, 10}

4-16: {3, 4, 8, 10}

8-229: {5, 9, 11, 0}

5-218: {8, 9, 0, 1, 3}

4-19: {2, 3, 6, 10}

4-16: {3, 4, 8, 10}

8-229: {5, 9, 11, 0}

(43)  $\{7,8,11,0,2\}$   $t=1$   $\{8,9,0,1,2\}$   $t=1$   $\{9,10,1,2,4\}$   $t=2$   $\{11,0,3,4,6\}$   $t=1$   $\{0,1,4,5,7\}$   $\{11,1,2,5,6\}$   $6-16: \{11,1,2,5,6,7\}$

Canon m. 5-218

change in BA

6-5:  $\{0,1,4,5,6,7\}$

SEE NUMERICAL NOTATION

4-13:  $\{7,8,10,11\}$  4-13:  $\{8,9,11,2\}$  5-218:  $\{9,11,0,3,4\}$  4-229:  $\{4,5,7,11\}$  4-229:  $\{0,4,6,7\}$  6-5:  $\{11,0,3,4,5,6\}$  4-215:  $\{4,6,9,10\}$  4-16 4-16:  $\{7,8,0,2,3\}$  4-16:  $\{0,1,5,7\}$  4-16:  $\{0,1,5,7\}$  4-16:  $\{0,2,6,7\}$

HB: 2 overlapping  $5-7: \{0,1,5,6,7\}$

EX. 46 in bot

SEE NUMERICAL NOTATION

7-238:  $\{2,3,4,6,7,9,10\}$  4-16:  $\{9,10,2,4\}$  53 4-13:  $\{11,0,3,4,6\}$  55 m. 1 6-5:  $\{8,9,0,1,2,3\}$  4-215:  $\{1,2,5,7\}$  4-215:  $\{7,8,11\}$  59 m. 16 4-16:  $\{7,9,11,3\}$  m. 18 60 5-218:  $\{10,11,2,3,5\}$  5-218:  $\{8,10,11,2,3\}$  m. to motif of first piece?

SEE NUMERICAL NOTATION

7-238:  $\{9,10,11,12,4,5\}$  ? 6-23:  $\{11,0,2,4,5\}$  4-229:  $\{2,3,5,9\}$  8-13:  $\{3,4,6,9\}$  8-16:  $\{11,0,4,6\}$  4-19:  $\{1,5,8,9\}$

61 62 63 65

SEE NUMERICAL NOTATION

5-218:  $\{8,9,0,1,3\}$  4-16:  $\{5,6,8,0,1\}$  4-16:  $\{9,10,2,4\}$  4-16:  $\{2,4,8,9\}$  7-7:  $\{7,8,9,0,1,2,3\}$

SEE NUMERICAL NOTATION

4-13:  $\{11,0,2,3\}$  4-12:  $\{11,1,2,5\}$  4-12:  $\{11,1,2,5\}$  4-12:  $\{11,1,2,5\}$  4-12:  $\{10,0,1,4\}$  7-238:  $\{9,10,11,12,4,5\}$  4-13:  $\{2,3,5,8\}$  ref. to first piece? 4-13:  $\{0,3,5,6\}$  5-218:  $\{8,9,0,1,3\}$  8-13:  $\{10,11,1,4\}$