

Date: Thu, 17 Apr 2003 14:06:45 -0400
From: Kevin Holm-Hudson <kjholm2@pop.uky.edu>
To: allen.forte@yale.edu
Subject: [iso-8859-1] HerzgewΣchse set structure question

[The following text is in the "iso-8859-1" character set.]
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Dear Professor Forte,

In your article "Sets and nonsets...", you note that Schoenberg's "HerzgewΣchse" is made up of exactly nineteen structural sets and their complements. In the article, however, I believe you cite only twelve, as follows:

4-7
4-8
4-12
4-13
4-19
4-Z15
4-Z29

5-16
5-21
5-32

6-Z3
6-Z19

Would you happen to have the other seven sets among your notes on the piece? I have also studied Bonny Hough's dissertation on HerzgewΣchse, and she also found nineteen sets, though they are different from yours.

My reason for asking is this: I am researching singer errors in recorded versions of "HerzgewΣchse," and so far am finding that the mistakes performers make (often singing "off" by as much as a whole step) usually result in configurations that are among the structural sets. Some of the sets referred to are among those cited by Hough but not mentioned in your article; my hope is that some of the seven "missing" sets might be the same as the ones Hough found, which would help cinch my argument.

Any help you can provide would be greatly appreciated. Thank you in advance for your time.

Very best regards,

Kevin Holm-Hudson

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4-Z15

m.1: 8,9,0,2

2,4,7,8

m.2: 2,3,6,8

m.4: 1,3,6,7

m.8: 9,10,1,3

m.10: 4,6,9,10

m.12: 7,9,0,1

m.17: 6,7,10,0

9,11,2,3

6,8,11,0

m.18: 3,4,7,9 (2x)

1,2,5,7

m.20: 4,8,9,10

5,6,10,11

m.21: 1,2,5,7

m.22: 3,5,8,9 (2x)

6,8,11,0

11,1,4,5

4,6,9,0

0,2,5,6

3,4,7,9

8,11,2,3

m.23: 6,8,11,0

m.24: 9,11,2,3

m.28: 0,2,5,6

3,5,8,9

11,0,3,6

2,3,6,8

m.29: 6,7,10,0

m.30: 11,1,4,2 last melodic set
of the piece

8-Z15

m.17: 3,5,8,9

m. 5: 1, 0, 3, 6

0, 3, 6, 7

1, 2, 5, 6

4-18

m. 6: 5, 6, 9, 0

m. 9: 11, 0, 4, 5 / 4, 7, 10, 11 / 9, 0, 2, 4

m. 10: 2, 3, 6, 9

8, 11, 2, 3

m. 11: 11, 0, 3, 6

1, 2, 5, 8

7, 8, 11, 2

m. 12: 6, 9, 0, 1

0, 1, 4, 7

7, 8, 11, 2

m. 14: 9, 0, 3, 4

m. 16: 2, 3, 6, 9

2, 5, 8, 9

4, 5, 8, 11

9, 10, 1, 5

m. 17: 5, 6, 9, 0

0, 3, 6, 7

7, 10, 1, 2

m. 18: 1, 2, 5, 8

4, 5, 8, 11

3, 4, 7, 10

m. 19: 6, 7, 1, 10

5, 8, 11, 0

m. 20: 9, 0, 3, 4

m. 21: 9, 10, 1, 4

9, 10, 1, 6

m. 22: 7, 8, 11, 2

8, 11, 1, 2

m. 23: 6, 9, 0, 1

8, 11, 2, 3

m. 24: 7, 11, 1, 2

m. 25: 8, 9, 0, 3

m. 27: 9, 10, 1, 4

4, 5, 8, 11

8, 11, 2, 3

m. 28: 0, 1, 4, 7

9, 10, 1, 4

m. 30: 4, 5, 8, 11

8-18

m. 7: 3, 6, 9, 10

m. 9: 2, 3, 6, 9

m. 14: 6, 7, 10, 1

m. 18: (3, 6, 9, 10)

m. 15: 2, 5, 8, 9

7, 10, 1, 2

5, 6, 9, 0

6, 9, 0, 1

5, 6, 9, 0

4, 5, 8, 11

5, 6, 9, 10

8, 9, 0, 3

0, 3, 6, 7

4-19

m.3: 5,6,9,1

m.4: 0,1,4,8
5,9,0,1

m.5: 3,7,10,11
8,0,3,4

m.6: 11,0,3,7

m.8: 1,2,5,9

4,5,8,0

m.9: 4,8,11,0

7,8,11,3

11,0,3,7

m.12: 9,0,1,5 ← m.11: 3,7,10,11 (2x)

m.14: 8,9,0,4

10,2,5,6

7,11,2,3

m.16: 7,8,11,3 ← 5,9,0,2
0,1,4,8
1,2,5,9

m.17: 10,11,2,6

4,5,8,0

0,4,7,8

5,9,0,1

7,11,2,3

m.18: 1,2,5,9

4,9,8,0

4,5,8,0

5,9,0,1

m.19: 6,9,10,2 ← 4,8,11,0
1,2,5,9

m.20: 5,9,0,1

0,1,4,8 (2x)

m.22: 8,9,0,4

11,3,6,7

m.23: 2,10,2,3

10,11,2,6

7,9,0,1

m.25: 4,5,8,0

8,0,3,4

m.26: 6,10,1,2
3,4,7,11

m.27: 8,9,0,4
8,0,3,4

m.29: 2,6,9,10

m.30: 8,0,3,4

8-19

m.18: 4,5,6,7,9,10,0,13

m.23: 7,11,2,3

m.30: 9,1,4,5

8,9,0,4 last large set in pieces

m.15:
4,8,11,0
3,4,7,11

m.13: 4,8,11,0
3,7,10,11
3,4,7,11

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

1,0,11,2,6 (2x)
1,2,5,9
11,3,6,7
6,7,10,2

w.4: 4,5,7,11

5: 11,3,5,6

7: 7,11,1,2

4-229

m.9: 1,2,4,8

5,6,11,0

m*x@

m.10: 5,9,11,0

9,10,0,4

m.11: 0,4,6,7

4,8,10,11

m.14: 8,11,2,3

m.16: 4,5,7,11

2,6,8,9

m.17: 2,3,5,9

w.18: 5,6,8,10

w.19: 7,11,2,3

w.20: 1,2,4,8

w.21: 11,0,2,6

w.22: 4,5,7,11

w.23: 6,10,0,1

w.25: 7,8,10,2

w.27: 4,5,7,11

w.30: 5,6,8,0

w.21: 11,0,2,6

w.22: 4,5,7,11

w.23: 6,10,0,1

w.25: 7,8,10,2

w.27: 4,5,7,11

w.30: 5,6,8,0

w.21: 11,0,2,6

w.22: 4,5,7,11

w.23: 6,10,0,1

w.25: 7,8,10,2

w.27: 4,5,7,11

w.30: 5,6,8,0

8-229

m.22: 0,4,6,7 (from w.21)

7,10,12

5-16

m. 6: 7, 8, 10, 11, 2
7: 10, 1, 2, 4, 5

m. 1: 8, 11, 0, 2, 3

m. 10: 2, 3, 5, 6, 9

m. 12: 0, 1, 3, 4, 7

m. 17: 5, 6, 8, 9, 0

8, 9, 11, 0, 3

m. 18: 6, 9, 10, 0, 1

m. 19: 5, 6, 8, 9, 0

m. 20: 4, 5, 7, 8, 11

m. 23: 6, 9, 10, 0, 1

8, 11, 0, 2, 3

m. 28: 1, 2, 4, 5, 8

7-16

m. 3: 8, 11, 0, 2, 3, 4, 5

m. 17: 0, 1, 2, 3, 5, 6, 9

9, 10, 11, 0, 2, 3, 6

m. 19: 10, 1, 2, 4, 5, 6, 7

5-217

m.15: 0,1,3,4,8

w.17: 7,11,0,2,3

7-217

m.3: 9,10,11,1,2,3,6

m.8: 8,9,10,0,1,2,5

m.9: 7,8,9,11,0,1,4

? 5-218

m. 19: 0, 2, 3, 6, 7

? 7-218

m. 21: 1, 2, 3, 4, 6, 9, 10

m. 22: 5, 6, 9, 11, 0, 1, 2

m. 23: 3, 4, 5, 6, 8, 11, 0

Check for examples of unique tips

5-21

m.3: 8, 11, 0, 3, 4

10, 11, 2, 3, 6

m.5: 0, 3, 4, 7, 8

3, 6, 7, 10, 11

3, 4, 7, 8, 11

m.6:
4, 7, 8, 11, 0



m.16: 4, 7, 8, 11, 0

2, 5, 6, 9, 10

0, 1, 4, 5, 8

m.17: 10, 11, 2, 3, 6

2, 3, 6, 7, 10

2, 5, 6, 9, 10

4, 7, 8, 11, 0

9, 10, 1, 2, 5

m.18: 4, 5, 8, 9, 0

9, 0, 1, 4, 5

9, 10, 1, 2, 4

10, 11, 2, 3, 6

4, 7, 8, 11, 0

m.21: 7, 9, 11, 2, 3

m.23: 1, 4, 5, 8, 9

0, 1, 4, 5, 8

m.24: 9, 10, 1, 2, 5

1, 2, 5, 6, 9

11, 2, 3, 6, 7

m.25: 0, 1, 4, 5, 8

10, 11, 2, 3, 6

m.27: 9, 10, 1, 2, 5

7-21

m.1: 11, 0, 2, 3, 4, 7, 8

m.8: 0, 1, 2, 4, 5, 8, 9

m.9: 7, 8, 11, 0, 2, 3, 4

m.15: 3, 4, 7, 8, 11, 0, 1

m.18: 7, 8, 11, 0, 2, 3, 4

0, 1, 4, 5, 6, 8, 9

m.20: 0, 1, 4, 5, 7, 8, 9

m.21: 3, 4, 5, 7, 8, 11, 0

m.23: 8, 9, 0, 1, 3, 4, 5

m.30: 10, 11, 2, 3, 5, 6, 7

5-32

m.1: 8,9,0,2,5

m.5: 8,11,1,4,5

m.10: 2,3,6,8,11

m.11: 5,8,10,1,2

m.15: 9,0,2,5,6

m.18: 3,4,7,9,0

m.19: 0,1,3,6,7

m.22: 2,3,6,8,11

m.29: 2,5,7,10,11

7-32

m.17: 10,11,1,2,4,6,7

9,10,0,1,3,5,6

m.25: 0,1,3,4,6,8,9

m.26: 2,3,5,6,8,10,11

? - 7-217

5-237

m.3: 1,4,5,6,9

↪ m.14: 2,5,6,7,10

m.5: 0,3,4,5,8

7-237

m.21: 9,10,0,1,2,4,5

m.29: 4,5,8,9,11,0

6-244 5, 8, 9, 0, 1, 2

6-219 0, 1, 4, 5, 7, 8

4-7 8, 9, 0, 1

4-7 0, 1, 4, 5

4-8 8, 9, 1, 2

4-8 7, 8, 0, 1

4-215 8, 9, 0, 2

4-18 (2x) { 1, 2, 5, 8
2, 5, 8, 9

4-12 1, 4, 5, 7

4-19 (3x) { 1, 2, 5, 9
5, 9, 0, 1
1, 5, 8, 9

4-18 (2x) { 0, 1, 4, 7
1, 4, 7, 8

4-19 (3x) { 0, 1, 4, 8
0, 4, 7, 8
4, 5, 8, 0

5-21 5, 8, 9, 0, 1

4-229 1, 5, 7, 8

5-32 8, 9, 0, 2, 5

5-16 1, 4, 5, 7, 8

5-237 9, 0, 1, 2, 5

5-219 4, 5, 7, 8, 0

5-238 0, 1, 2, 5, 8

5-218 0, 1, 4, 5, 7

5-21 0, 1, 4, 5, 8

TREE

6-244

6-219

5-21

5-32

5-21

5-16

5-237

5-238

5-217

5-218

d. 5-216

5-Z38

m. 4: 2, 5, 8, 9, 10

m. 11: 10, 11, 0, 3, 6

0, 1, 2, 5, 8

m. 12: 6, 7, 8, 11, 2

m. 15: 6, 9, 0, 1, 2

7-Z38

m. 9: 4, 5, 7, 8, 10, 11, 0

m. 17: 7, 8, 9, 11, 0, 2, 3

m. 18: 0, 1, 2, 4, 5, 7, 8, 3

m. 22: 11, 0, 2, 3, 5, 6, 7

6-23

m.2: 2,3,5,6,7,8

m.4: 1,2,3,4,6,7

w.9: 9,10,11,0,2,3

m.12: 8,9,11,0,1,2

Note gap >

5,6,7,8,10,11

m.20: 5,6,7,8,10,11

~~m.20~~

m.21: 6,8,9,10,11,0

m.22: 0,1,2,3,5,6

m.28: 8,10,11,0,1,2

m.29: 0,1,3,4,5,6

6-236

m.5: 0,1,2,3,4,7

m.10: 2,3,4,5,6,9

m.14: 0,1,2,3,4,7

w.20: 9,0,1,2,3,4

0,3,4,5,6,7

w.21: 11,0,1,2,3,6

m.23: 7,8,9,10,11,2

6-217

m.5: 10,11,2,4,5,6

11,0,3,5,6,7

m.6: 11,0,3,5,6,7

m.16: 1,2,3,5,6,9

m.20: 11,0,3,5,6,7

m.29: 8,9,0,2,3,4

6-243

m.12: 3,5,6,9,10,11

m.19: 1,2,3,6,7,9

m.27: 8,9,10,11,14

6-219

m.2: 0,1,4,5,7,8

m.5: 3,4,7,8,10,11

m.9: 4,5,7,8,11,0

m.11: 11,0,3,4,6,7

m.14: 7,8,10,11,2,3

m.15: 5,6,8,9,0,1

m.16: 2,3,5,6,9,10

0,1,3,4,7,8

m.17: 7,8,11,0,2,3

m.19: 8,9,11,0,3,4

6,8,9,0,1,2

m.23: 0,1,4,5,7,8 ←

7,9,10,11,2,3

12 forms

6-244

m.1: 5,8,9,0,1,2

m.5: 8,9,10,11,2,5

m.8: 5,8,9,0,1,2

m.14 ~~m.16~~: 0,3,4,7,8,9

m15: 5,8,9,0,1,2

m.17: 9,10,11,2,3,6

4,7,8,11,0,1

m.18: 4,5,8,9,11,0

m.20: 5,8,9,0,1,2

m.21: 0,1,2,5,6,9

m.22: 3,4,5,8,9,0

m.24: 11,2,3,6,7,8

m.27: 5,9,10,11,2,5

m.28: 8,11,0,3,4,5

76-20

~~m.8: 3,6,7,10,11~~

~~m.13: 11,0,3,4,7,8~~

~~m.14: 11,0,3,4,7,8~~

?

6-228 6-228

m. 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

m. 11: 8, 9, 11, 1, 2, 5

m. 17: 1, 2, 4, 6, 7, 10

m. 21: 3, 4, 6, 8, 9, 0

m. 25: 3, 4, 6, 8, 9, 0

6-249 6-249

m. 10: 11, 0, 2, 3, 6, 8

m. 19: 8, 9, 11, 0, 3, 5 (2x)

m. 26: 4, 5, 7, 8, 11

m. 27: 5, 7, 10, 11, 1, 2

6x8

6-31

m.1: 11,0,2,4,7,8

m.12: 3,4,6,8,11,0

m.16: 4,5,8,10,0,1

m.18: 11,0,2,4,7,8

? 6-34

~~m.5: 10,11,1,3,5,7~~

~~m.7: 9,10,0,2,4,6~~

~~m.16: 9,11,1,3,5,6~~

~~m.22: 9,10,0,2,4,6~~

Op. 20, Herzgewächse 1911 (9/12.1911 on the fair copy at UE

text by M. Maeterlinck
for high soprano, celesta, harmonium, and harp

arranged for ~~na~~ piano and voice by F. Greissle, 1925

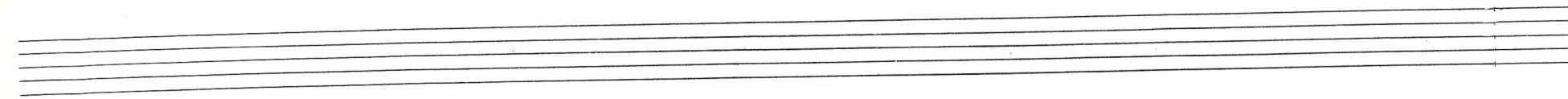
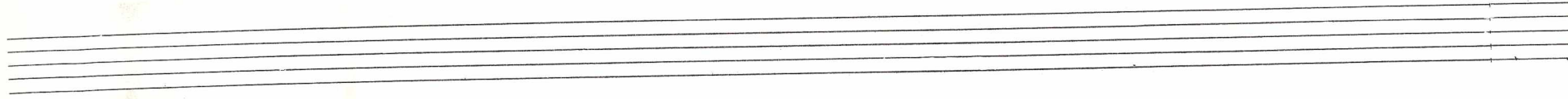
The Partitur, published in 1920, has many instrument indications--
e.g., Vcl. in m. 4. All these are in the Harmonium part.
This suggests that S. had in mind a version for chamber
orchestra. Certainly these are not indications as to
register, as suggested by Reich (p. 73).

SCHOENBERG, HERZGEWAECHSE, OP.20

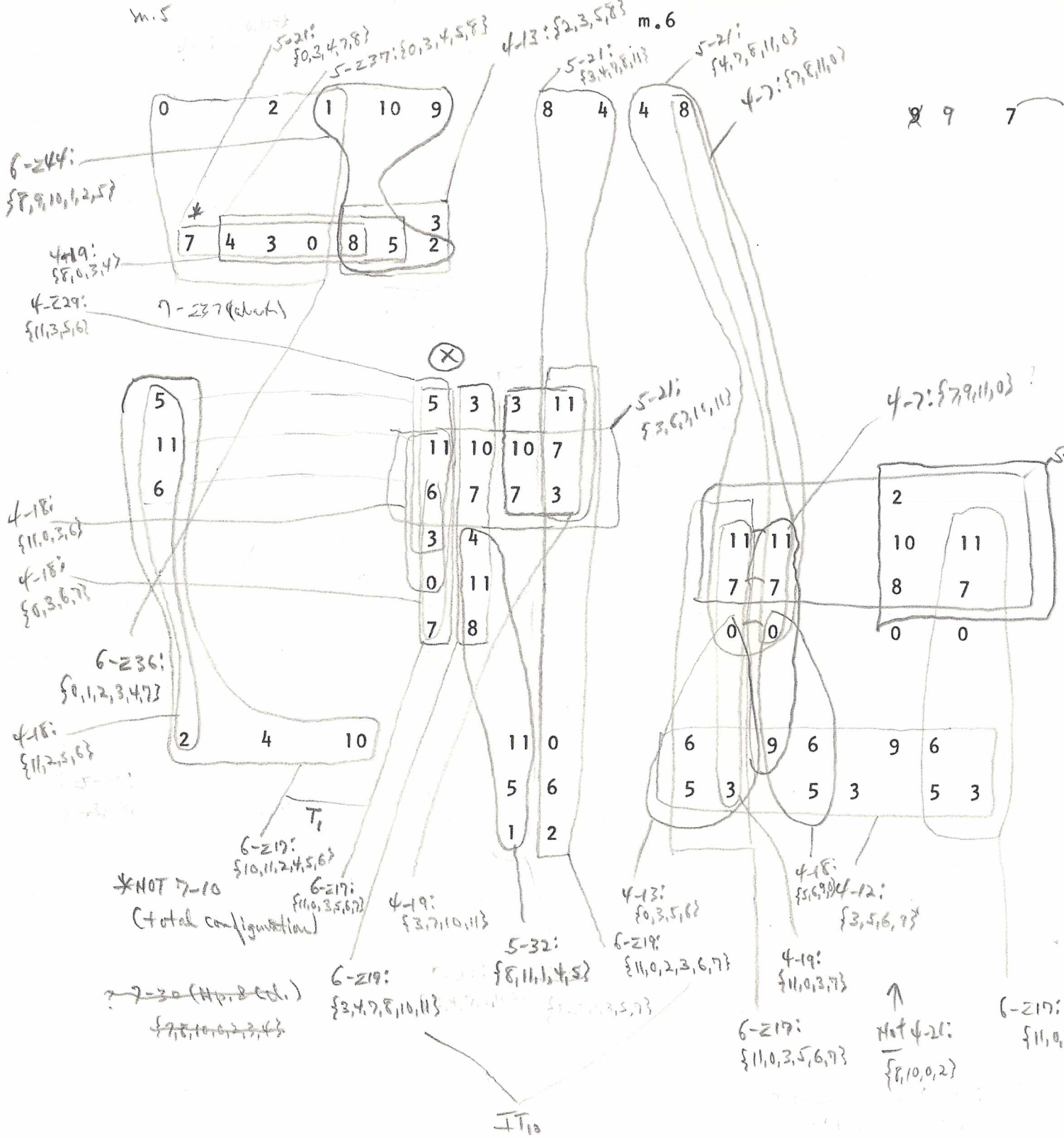
	4-7	4-8	4-12	4-13	4-Z15	4-18	4-19	4-Z29							
5-16	K	K	KH	K	K	KH	K	KH							
5-Z17	K	K			K	K	KH								
5-Z18	KH	K	KH	K	K	KH	K	K							
5-21	KH	K	K		K	K	KH	K							
5-32	K	K	K	K	KH	KH	K	K							
5-Z37	K	K	K			K	KH	K							
5-Z38	K	K	K	K	K	KH	K	K	5-16	5-Z17	5-Z18	5-21	5-32	5-Z37	5-Z38
6-Z3/36	K	K	KH	KH	K	K		K	K						
6-Z17/43	K	KH	K	K	KH	KH	K	KH			K				K
6-Z19/44	KH	KH	K		K	KH	KH	K	K	K	K	KH	K	K	K
6-Z28/49		K	KH	K	K	KH	K	K	K				K		
6-31	KH		KH		KH	KH	KH				KH	KH	KH		

Handwritten musical notation on a single staff. It begins with a treble clef and a 3/4 time signature. The first measure contains a quarter note G. The second measure is a whole rest. The third measure contains a quarter note G. The fourth measure contains a quarter note A. The fifth measure contains a quarter note B. The sixth measure contains a quarter note C. The seventh measure contains a quarter note D. The eighth measure contains a quarter note E. The ninth measure contains a quarter note F. The tenth measure contains a quarter note G. The eleventh measure contains a quarter note A. The twelfth measure contains a quarter note B. The thirteenth measure contains a quarter note C. The fourteenth measure contains a quarter note D. The fifteenth measure contains a quarter note E. The sixteenth measure contains a quarter note F. The seventeenth measure contains a quarter note G. The eighteenth measure contains a quarter note A. The nineteenth measure contains a quarter note B. The twentieth measure contains a quarter note C. The twenty-first measure contains a quarter note D. The twenty-second measure contains a quarter note E. The twenty-third measure contains a quarter note F. The twenty-fourth measure contains a quarter note G. The twenty-fifth measure contains a quarter note A. The twenty-sixth measure contains a quarter note B. The twenty-seventh measure contains a quarter note C. The twenty-eighth measure contains a quarter note D. The twenty-ninth measure contains a quarter note E. The thirtieth measure contains a quarter note F. The thirty-first measure contains a quarter note G. The thirty-second measure contains a quarter note A. The thirty-third measure contains a quarter note B. The thirty-fourth measure contains a quarter note C. The thirty-fifth measure contains a quarter note D. The thirty-sixth measure contains a quarter note E. The thirty-seventh measure contains a quarter note F. The thirty-eighth measure contains a quarter note G. The thirty-ninth measure contains a quarter note A. The fortieth measure contains a quarter note B. The forty-first measure contains a quarter note C. The forty-second measure contains a quarter note D. The forty-third measure contains a quarter note E. The forty-fourth measure contains a quarter note F. The forty-fifth measure contains a quarter note G. The forty-sixth measure contains a quarter note A. The forty-seventh measure contains a quarter note B. The forty-eighth measure contains a quarter note C. The forty-ninth measure contains a quarter note D. The fiftieth measure contains a quarter note E. The fifty-first measure contains a quarter note F. The fifty-second measure contains a quarter note G. The fifty-third measure contains a quarter note A. The fifty-fourth measure contains a quarter note B. The fifty-fifth measure contains a quarter note C. The fifty-sixth measure contains a quarter note D. The fifty-seventh measure contains a quarter note E. The fifty-eighth measure contains a quarter note F. The fifty-ninth measure contains a quarter note G. The sixtieth measure contains a quarter note A. The sixty-first measure contains a quarter note B. The sixty-second measure contains a quarter note C. The sixty-third measure contains a quarter note D. The sixty-fourth measure contains a quarter note E. The sixty-fifth measure contains a quarter note F. The sixty-sixth measure contains a quarter note G. The sixty-seventh measure contains a quarter note A. The sixty-eighth measure contains a quarter note B. The sixty-ninth measure contains a quarter note C. The seventieth measure contains a quarter note D. The seventy-first measure contains a quarter note E. The seventy-second measure contains a quarter note F. The seventy-third measure contains a quarter note G. The seventy-fourth measure contains a quarter note A. The seventy-fifth measure contains a quarter note B. The seventy-sixth measure contains a quarter note C. The seventy-seventh measure contains a quarter note D. The seventy-eighth measure contains a quarter note E. The seventy-ninth measure contains a quarter note F. The eightieth measure contains a quarter note G. The eighty-first measure contains a quarter note A. The eighty-second measure contains a quarter note B. The eighty-third measure contains a quarter note C. The eighty-fourth measure contains a quarter note D. The eighty-fifth measure contains a quarter note E. The eighty-sixth measure contains a quarter note F. The eighty-seventh measure contains a quarter note G. The eighty-eighth measure contains a quarter note A. The eighty-ninth measure contains a quarter note B. The ninetieth measure contains a quarter note C. The ninety-first measure contains a quarter note D. The ninety-second measure contains a quarter note E. The ninety-third measure contains a quarter note F. The ninety-fourth measure contains a quarter note G. The ninety-fifth measure contains a quarter note A. The ninety-sixth measure contains a quarter note B. The ninety-seventh measure contains a quarter note C. The ninety-eighth measure contains a quarter note D. The ninety-ninth measure contains a quarter note E. The hundredth measure contains a quarter note F.

Handwritten musical notation on two staves. The top staff is in treble clef with a 3/4 time signature. It features a melodic line with various notes, including a triplet of eighth notes. The bottom staff is in bass clef with a 3/4 time signature. It features a bass line with various notes, including a triplet of eighth notes. The two staves are connected by a brace on the left side. The notation is dense and includes many accidentals and dynamic markings.



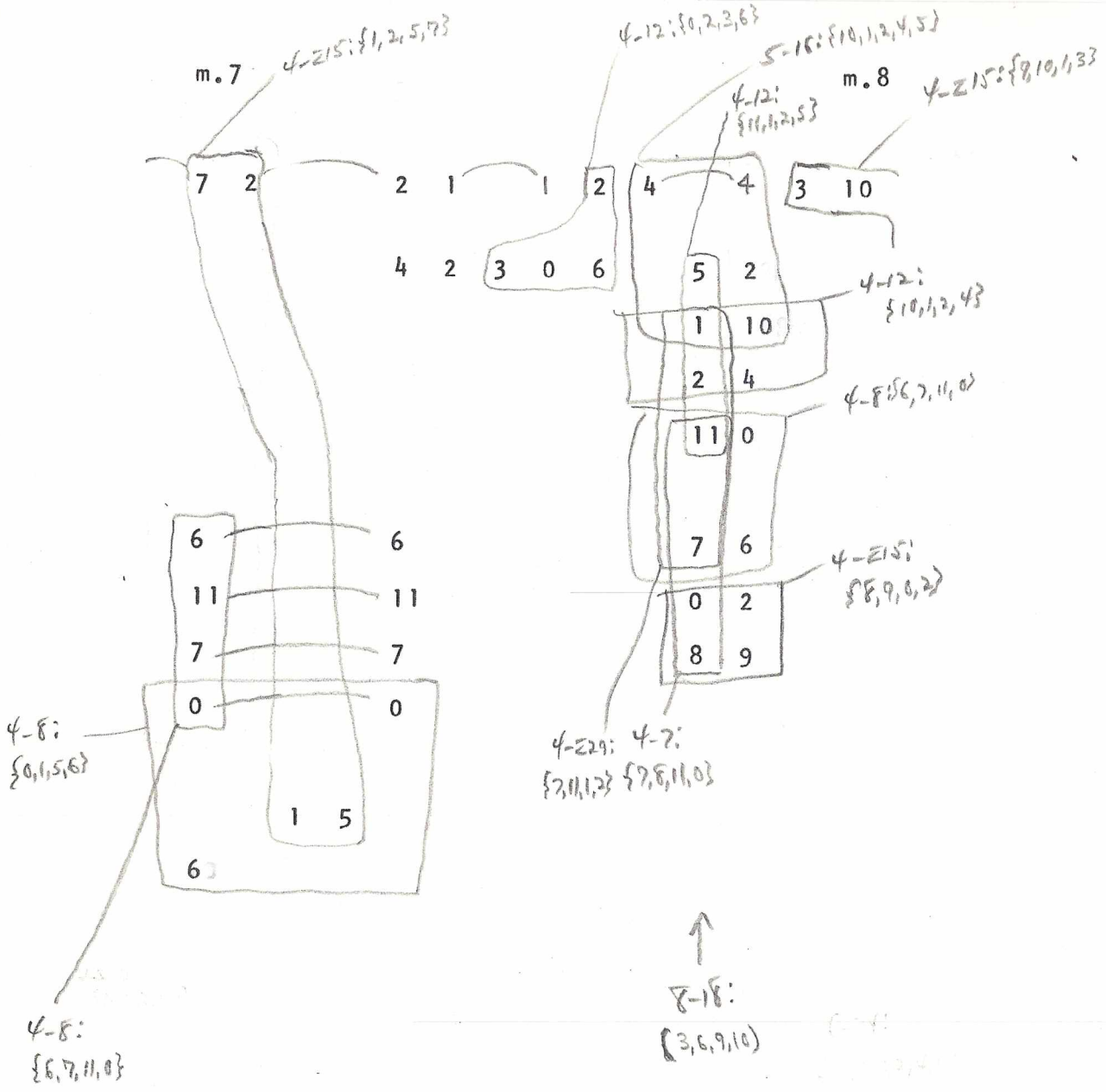
Here (m.5) the more complex lateral segmentation is used



(X) Forms of 4-7 (lateral) not shown:
 6, 7, 10, 11
 11, 0, 3, 4
 7, 8, 10, 11

NOT COMPLETE

2 1
4 2



EXAMPLE
TETRACHORDS

m. 10 ψ -229: {5, 9, 11, 0}

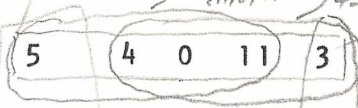
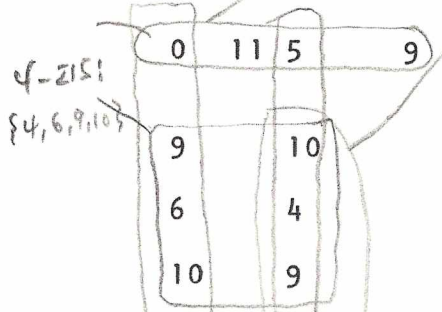
ψ -229: {5, 9, 10, 0}

m. 11 ψ -7: {11, 0, 3, 4}

ψ -5: {9, 10, 2, 3}

ψ -18: {1, 2, 5, 8}

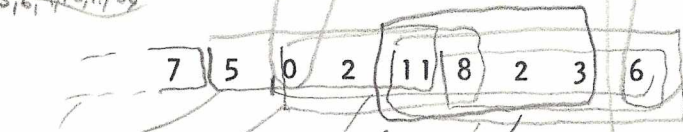
ψ -7: {6, 7, 10, 11}



ψ -12: {6, 9, 10, 0}

ψ -8: {4, 5, 9, 10}

ψ -7: {4, 5, 6, 9, 10, 11, 0}



(+13) ψ -13: {11, 0, 2, 5}

ψ -12: {8, 11, 0, 2}

ψ -18: {8, 11, 2, 3}

ψ -215: {2, 3, 6, 8}

6-228 in m. 11

5-32: {2, 3, 6, 8, 11}

6-226: {2, 3, 4, 5, 6, 9}

8-13: {7, 8, 10, 11}

ψ -12: {1, 4, 5, 8}

ψ -8: {0, 1, 5, 6}

ψ -13: {4, 5, 7, 10}

5-16: {2, 3, 5, 6, 9}

ψ -18: {11, 0, 3, 6}

ψ -18: {2, 3, 6, 9}

ψ -229: {0, 4, 6, 7}

6-212? ψ -11, 0, 1, 2, 5, 6

6-219: {11, 0, 3, 4, 6, 7}

5-238: {5, 8, 10, 1, 2}

5-238: {10, 11, 0, 3, 6}

5-238: {9, 1, 2, 5, 8}

ψ -13: {9, 10, 0, 3}

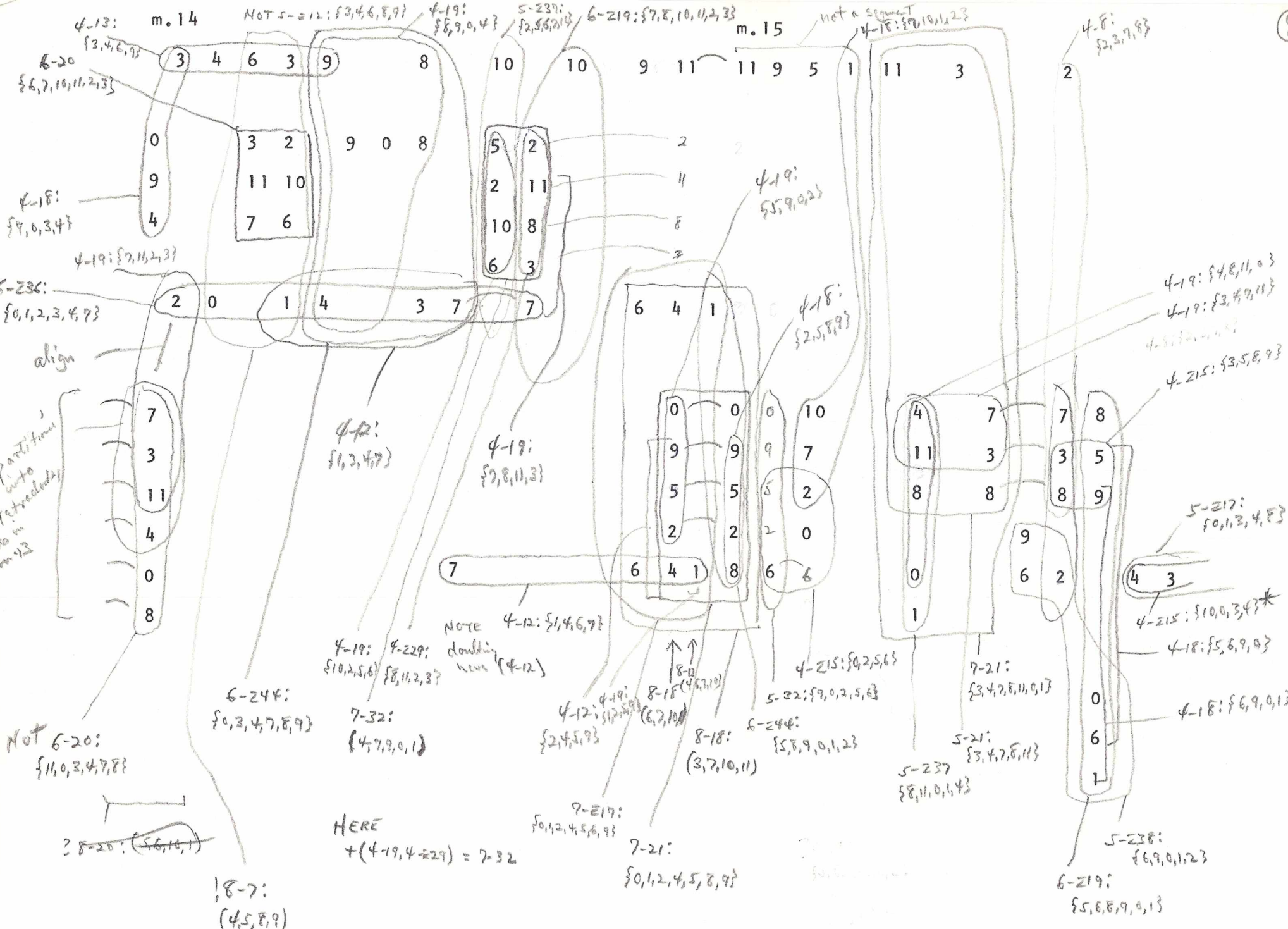
ψ -215: {4, 8, 9, 10}

? 6-228: {8, 9, 11, 1, 2, 5}

6-249 in m. 10

EXAMPLE:

2 from ψ -18



phi-13: m. 14
 {3,4,6,9}
 phi-18: {4,0,3,4}
 phi-19: {7,16,2,3}
 6-20: {6,7,10,11,2,3}

align
 partition into tetradity
 7
 3
 11
 4
 0
 8

NOT 6-20: {1,0,3,4,7,8}

NOT 5-12: {3,4,6,8,9}
 phi-19: {8,9,0,4}
 5-237: {2,5,6,7,10}
 6-219: {7,8,10,11,4,33}

phi-12: {6,3,4,7}

6-244: {0,3,4,7,8,9}

phi-19: {5,9,9,2}

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

NOTE phi-12: {1,4,6,7}

not a segment
 phi-18: {9,10,1,2}

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

phi-215: {0,2,5,6}

phi-8: {2,3,7,9}

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

phi-18: {5,8,9,9}

HERE
 + (phi-19, 4-229) = 7-32

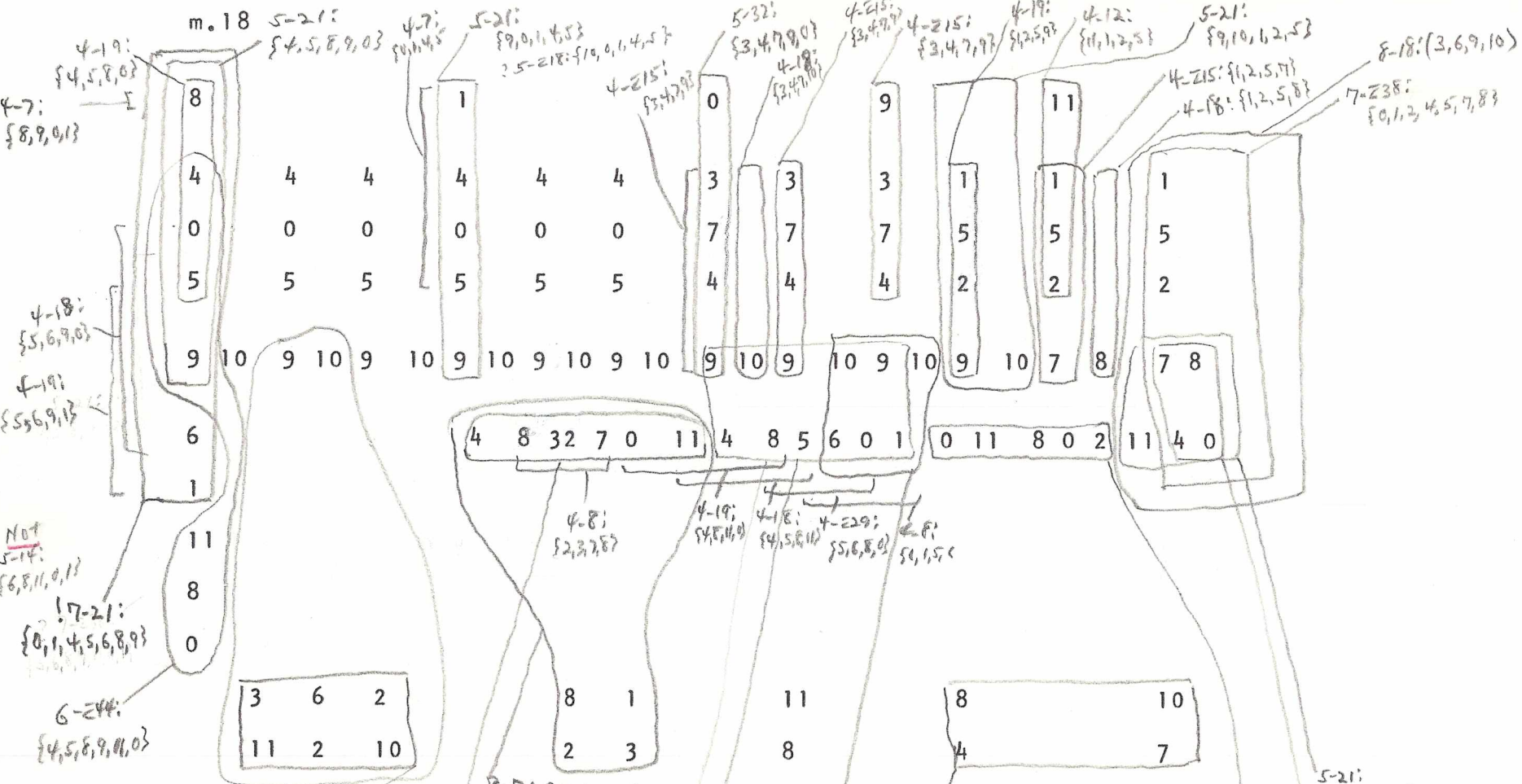
EXAMPLE:
 LARGE SETS

NOT 6-5:
 {2,3,6,7,8,9}

* Most important, bring in previous

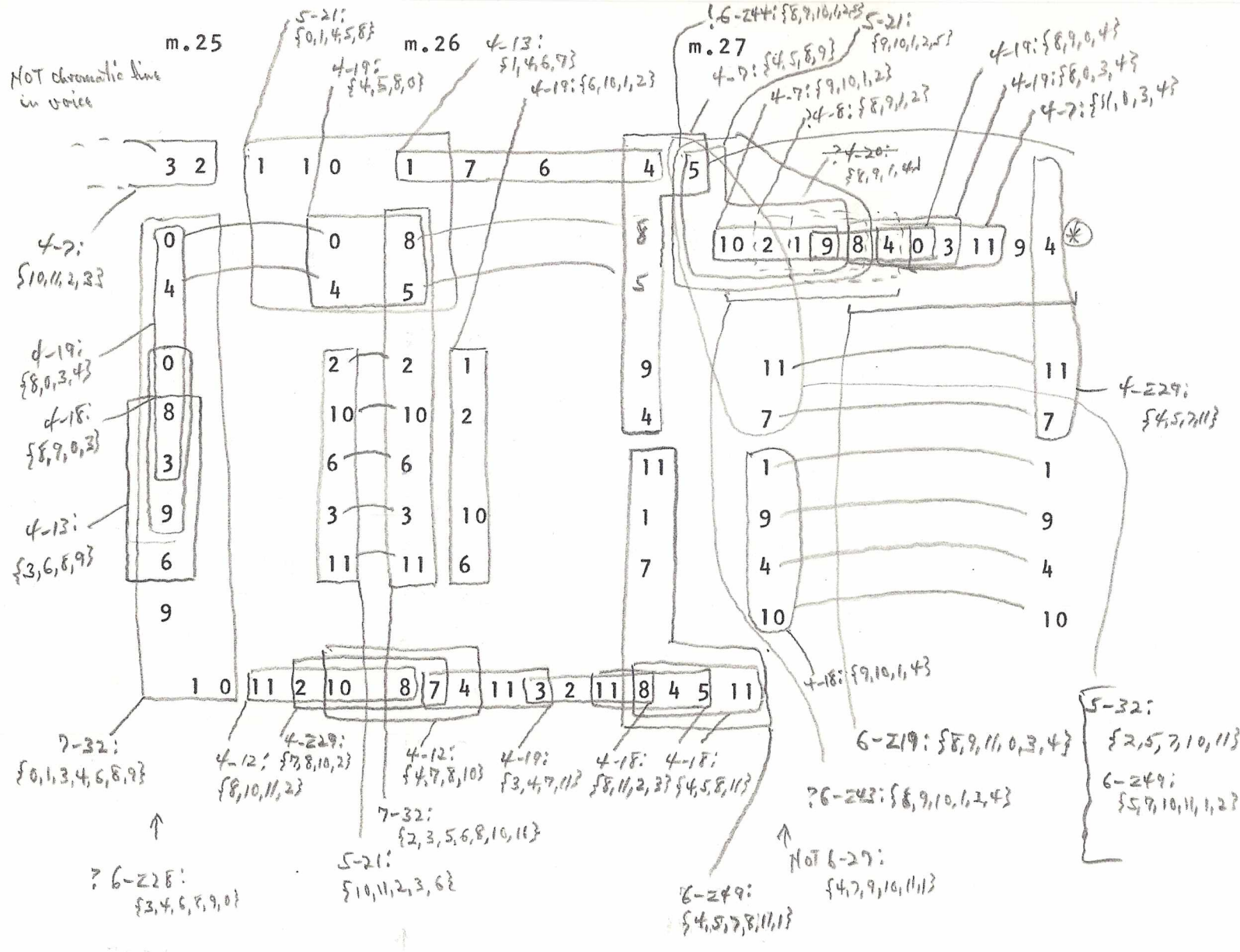
Handwritten musical notation on two staves. The top staff contains five notes: a flat sign, a quarter note on the second line, a quarter note on the third space, a quarter note on the fourth space, a quarter note on the first space, and a quarter note on the second line. The bottom staff contains a sequence of notes and chords, including a complex initial chord with flats and sharps, followed by a series of quarter notes and chords with various accidentals.

Four empty musical staves.



NOT 5-14: {6,8,11,0,13}
 !7-21: {0,1,4,5,6,8,9}
 6-244: {4,5,8,9,11,0}
 NOT ? 5-20: (2,3,7,10)
 5-21: {10,11,2,3,6}
 7-21: {7,8,11,0,2,3,4}
 6-244: {9,10,11,2,3,6}
 NOT ? 5-30: {4,5,8,10,0}
 NOT ? 6-16: {4,5,8,9,10,0}
 NOT ? 5-20: {9,10,0,4,5}
 NOT 4-6: {1,2,3,8}
 ? 4-18: {4,5,8,11}
 ? 6-20: {3,4,7,8,11,0}
 NOT ? 6-16: {0,2,3,4,7,8} ~ Harmonium
 NOT ? 6-16: {0,1,4,5,6,8}
 ? 4-18: {4,5,8,11}
 ? 6-20: {3,4,7,8,11,0}
 NOT 5-26: {8,11,0,2,4} Harmonium
 ? 6-31: {11,0,2,4,7,8} Harmonium
 5-21: {4,7,8,11,0}

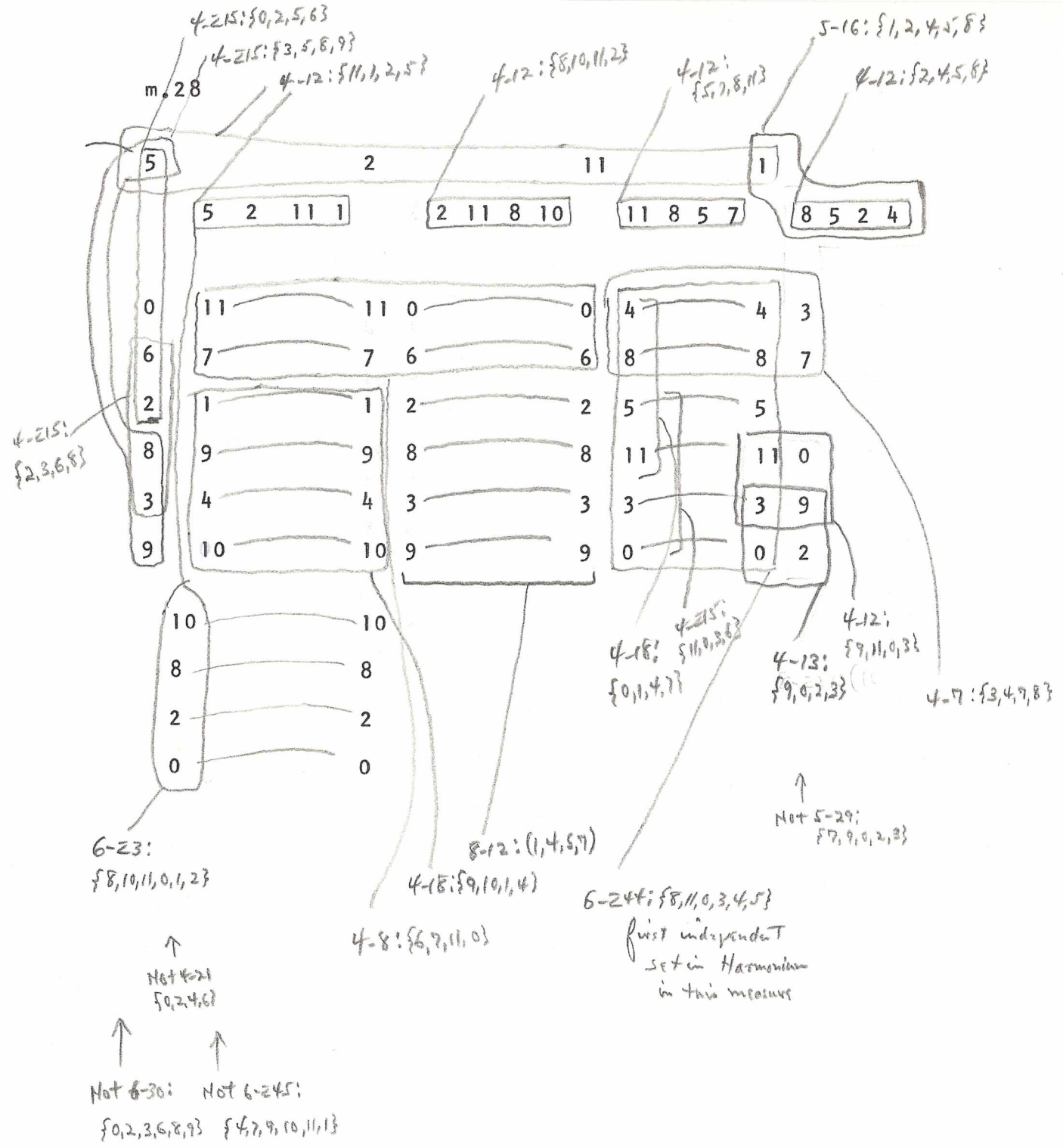
Problem here is
 accounting for p10 in
 Cal. - It links with
 harp to form 6-244



NB. This segmentation into 4-7 and 6-249 is not consistent with previous texture, and is somewhat unusual in the piece as a whole

NB. Retention of 4-19 in celesta

⊛
 Voice (pc 5) and celesta far successively:
 5-21
 6-244
 then 6-243: {3,4,5,8,9,11}



1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

Herzgrüß

m. 29

Net 5-2
{1, 3, 4, 5, 6}
following
permutation
of previous
numbers

4-13:
{6, 9, 11, 0}

* 6-217:
{8, 9, 0, 2, 3, 4}

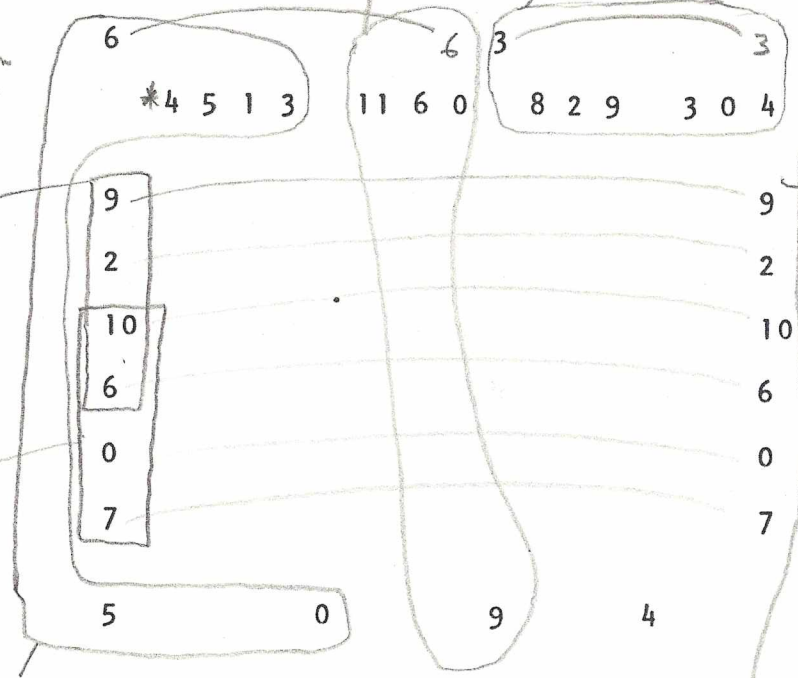
m. 30

5-238: {3, 4, 5, 8, 11}

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

8-19: {8, 9, 0, 4}

7-21:
{10, 11, 2, 3, 5, 6, 9}



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

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

6-23:
{0, 1, 3, 4, 5, 6}

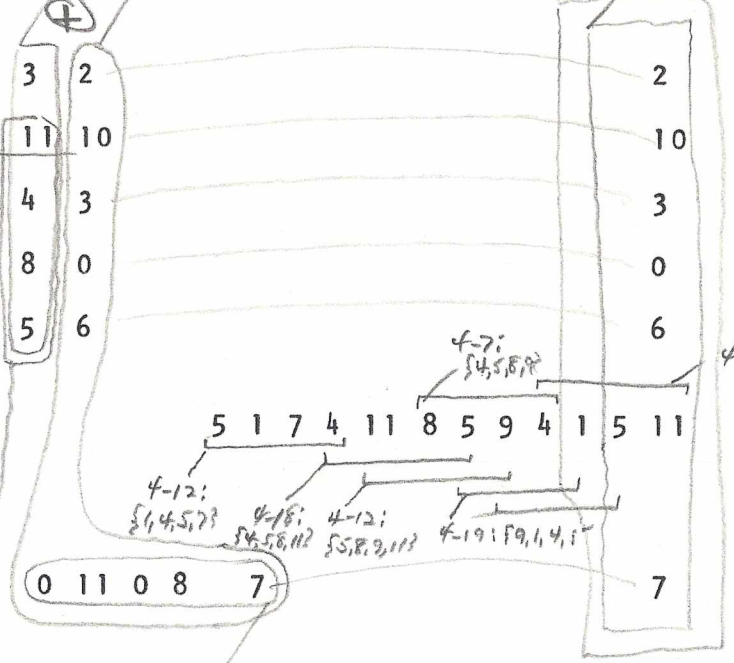
? 4-20:
{4, 5, 9, 0}

Net 6-224:
{6, 7, 9, 10, 0, 2}

7-237:
{4, 5, 7, 8, 9, 11, 0}
Harpy in m. 12 9830

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

4-7:
{7, 8, 11, 0}



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

4-215: {11, 1, 4, 5}

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

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

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

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

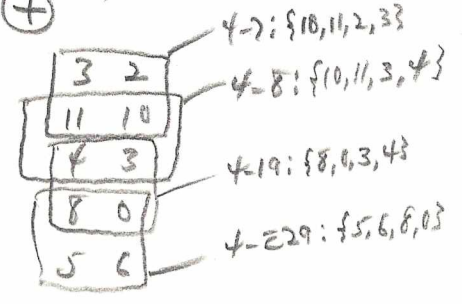
? 6-20: {6, 7, 10, 11, 2, 3}

? 6-31: {6, 7, 10, 0, 2, 3}

* Have a departure from
m. 28: The 4-note figure
ceases to be an independent
set.

5-238, but Not 5-26:
{10, 0, 2, 3, 6}

become d
+



4-7: {10, 11, 2, 3}

4-8: {10, 11, 3, 4}

4-19: {8, 0, 3, 4}

4-229: {5, 6, 8, 0}

Also if combined
with pc 9 and pc 4
in Harp

? USE semi-colon to indicate immediately following next

e.g.

5 6 8 9;

4-7

m.

4:1,2,5,6

5:6,7,10,11
11,0,3,4
7,8,10,11

6:4,7,11,0
7,9,11,0

7:6,7,11,0
7,8,11,0

8:8,9,0,1

9:8,9,0,1

10:11,0,3,4

11:6,7,10,11

12:6,7,10,11
11,0,3,4

17:4,5,8,9
3,4,7,8
2,3,6,7
1,2,5,6
0,1,4,5
6,7,10,11 (2x)

18:0,1,4,5

19:11,0,3,4

20:8,9,0,1
0,1,4,5

22:0,1,4,5

23:11,0,3,4

24:2,3,6,7 (2x)
10,11,2,3
9,10,1,2

25:10,11,2,3

27:4,5,8,9
9,10,1,2
11,0,3,4

8-7

m

1:5,6,9,10

13:5,6,9,10

18:5,6,9,10

19:4,5,8,9

23:6,7,10,11

4-8

m.

1:7,8,0,1

7:6,7,11,0
0,1,5,6
6,7,11,0

10:11,0,4,5

11:9,10,2,3

12:8,9,1,2

13:4,5,9,10
5,6,9,10

15:2,3,7,8

16:8,9,1,2
3,4,7,8

17:5,6,9,10

18:2,3,7,8
0,1,5,6

20:6,7,11,0

27:8,9,1,2

28:6,7,11,0

30:10,11,3,4

Schoenberg, Op.20

4-12

m.1: 8,11,0,2

m.2: 1,4,5,7

m.3: 11,2,3,5

m.6: 3,5,6,7

m.7: 0,2,3,6

11,1,2,5

m.9: 8,11,0,2

m.10: 6,9,10,0

8,11,0,2

m.11: 1,4,5,7

m.12: 4,7,8,10

1,3,4,7

m.14: 1,4,6,7

2,3,4,7

m.17: 6,8,9,0

0,2,3,6

m.18: 4,7,8,10

8,11,0,2

11,1,2,5

m.19: 0,2,3,6

3,6,7,9

7,9,10,1

m.21: 0,3,4,6

m.23: 2,3,5,8

5,7,8,11

m.24: 1,3,4,7

m.26: 4,7,8,10

8,10,11,2

m.28: 11,1,2,5

8,10,11,2

5,7,8,11

2,4,5,8

9,11,0,3

m.30: 1,4,5,7

5,8,9,11

8-12

m.1: 4,6,7,10

m.14: 4,6,7,10

m.17: 4,7,8,10

m.19: 10,1,2,4

4,6,7,10

9,11,4,3

m.22: 4,7,8,10

m.24: 5,8,9,11

m.28: 1,4,5,7

m.16: 5,8,9,11
2,4,5,8
9,10,1,5

m.20: 6,9,10,0

m.22: 6,8,9,0

4-13

m.1: 8,9,11,2

m.3: 0,3,5,6

m.5: 2,3,5,8

m.6: 0,3,5,6

m.9: 10,1,3,4

7,8,10,11

m.10: 11,0,2,5

m.11: 4,5,7,10

9,14,0,3

m.12: 1,4,6,7

m.16: 3,6,8,9

m.22: 8,11,1,2

3,5,6,9

7,11,0,2,5

m.25: 3,6,8,9

m.26: 1,4,6,7

m.28: 9,0,2,3

m.29: 6,9,11,0

8-13