

IVES - 2nd piano sonata, Concord, Mass., 1840-60 - outline of transformations of 2 main themes:

R = "oracle"

> Beethoven Fifth Symphony
and Zeuner Missionary Chant.

F = "that human faith melody"

> what?

Emerson: second theme

Emerson: "Tolerance" theme

The Alcotts: "Scotch song"

Emerson: main first theme

Emerson: fugato theme

Emerson: variation theme

Hawthorne: one of the ragtime themes

Thoreau: 1st theme

Related Tunes:

Marsh Martyn ("Jesus, lover of my soul")

Related Tunes:

Shaw The Red, White and Blue ("O Columbia, the gem of the ocean")

cf. R cf. B

cf. R cf. F cf. E

Ives (1903) Country Band March

cf. R

Foster Massa's in de Cold Ground --
the "Down in the cornfield" phrase

Zeuner Missionary Chant ("Ye Christian
Heralds...")

cf. Beethoven

cf. F

Concord - Thruam

p. 63

First brace

base D 5-23: {2, 4, 5, 7, 9}

base E 5-27: {8, 11, 13, 4}

base pattern A-G-G

First 6-246: {3, 4, 5, 7, 9, 0} Same pattern as p. 62, brace 6-224!

Second 4-27: {7, 9, 0, 3}

Third

A-C 6-32: {0, 2, 4, 5, 7, 9}

G 7-23: {5, 7, 8, 9, 10, 0, 2}

Fourth 5-29: {7, 9, 0, 2, 3}

Second brace

A-C 7-35: {0, 2, 4, 5, 7, 9, 10}

base A^b(?) 6-244: {11, 2, 3, 6, 7, 8}

base A^a 4-19: {2, 6, 9, 10}

5-21: {9, 10, 1, 2, 5}

base A^b 6-244: {11, 2, 3, 6, 7, 8}

7-217: {11, 2, 3, 4, 6, 7, 8}

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

5-22: {1, 2, 5, 6, 9}

base A^b 6-244: {11, 2, 3, 6, 7, 8} on 6/4 m

7-217: {11, 2, 3, 4, 6, 7, 8}

base G 5-32: {1, 2, 5, 7, 10}

Third brace

Joe's favorite → 6-31: {1, 2, 5, 7, 9, 10} Same as 6/4th note chord on p. 52, 2nd brace (t=0)

6-244: {11, 2, 3, 6, 7, 8} as before (2nd brace)

with low A 7-218: {6, 7, 8, 9, 11, 2, 3} p. 60, 2nd brace - p. 61, 2nd brace

with high E 7-14: {0, 1, 2, 4, 5, 6, 7, 9}

R₂ (6-244, 6-31)

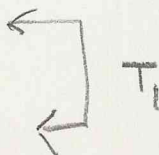
7-217: {11, 2, 3, 4, 6, 7, 8}

5-32: {1, 2, 5, 7, 10}

6-31: {1, 2, 5, 7, 9, 10}

7-218 - as before

6-31: {2, 3, 6, 8, 9, 11}



Concord - Thoreau

p. 63, 3rd brace, contd.

Suppose from F# to D# — 6-247: {0, 2, 5, 7, 8, 9} cf. previous occurrences of this and 6-225

? 3-#1: {5, 9, 0}

? 5-4: {6, 7, 8, 9, 0}

base E# 4-13: {9, 10, 0, 3} cf. previous occurrences

base F# 6-242: {0, 1, 2, 3, 6, 9} where? 6-213? — 5-31 plus pc2

base G# ? 6-2: {1, 2, 3, 4, 5, 7}

base E# 4-13: {9, 10, 0, 3} as before

base F# 5-31: {0, 1, 3, 6, 9} cf. previous occurrences of 7-31

base G# 5-6: {1, 3, 5, 6, 7}

upper voice from E to F# — 6-32: {0, 2, 4, 5, 7, 9}

4th brace

6-33: {2, 4, 5, 7, 9, 11}

? 5-29: {9, 11, 2, 4, 5}

Suppose G-F# - G#-F# ref. to motion at outset D-C#-E#-C#

4-13: {5, 6, 8, 11}

5th brace

base G# ? 5-13: {6, 7, 8, 10, 2}

? 6-18: {9, 10, 11, 2, 4, 5}

d G ? 6-211: {2, 4, 5, 7, 8, 9} 6-240 below

base E# 4-229: {10, 2, 4, 5}

7-6: {9, 10, 1, 2, 3, 4, 5}

base C#-D# 6-240: {7, 10, 0, 1, 2, 3}

base C ? 4-20 {11, 0, 4, 7}

base A-F#-G 8-21: {5, 6, 7, 8, 9, 11, 1, 3} cf. 8-21 on p. 59 and elsewhere (T1)

base F# 7-19: {2, 4, 5, 8, 9, 10, 11} } 9-7
? 4-22: {7, 10, 0, 2}

Concord-Thoreau

p. 64

First brace

5-27: {9, 10, 0, 2, 5}

bass E 8-20: {10, 0, 1, 3, 4, 6, 7, 8}

Soprano 4-11: {7, 8, 10, 6}

bass A 8-14: {5, 6, 7, 9, 10, 11, 0, 2}

bass A^b 6-24: {11, 2, 3, 6, 7, 8} } as on p. 63, second brace and fol.

bass B^b 4-19: {10, 11, 2, 6} } 7-21: {6, 7, 8, 10, 11, 2, 3}

NB

bass A^b 4-19: {2, 6, 9, 10} } IT₈

? 6-23: {6, 7, 8, 9, 10, 2} 6²⁴ doesn't occur

Second brace

bass G 8-22: {11, 0, 1, 2, 4, 5, 7, 9}

bass G ? 7-14: {11, 0, 1, 2, 4, 6, 7}

bass G 5-1

last beat 7-23: {11, 0, 1, 3, 4, 6, 7}

barline here!

bass F

6-32: {0, 2, 4, 5, 7, 9}

8-23: {9, 10, 11, 0, 2, 4, 5, 7} [4-23: {0, 2, 5, 7} in lower staff, 2nd brace - asterisks]

last beat 8-21: {4, 5, 6, 7, 8, 10, 0, 2} - as in refrain

Third brace

! 8-23: {9, 10, 11, 0, 2, 4, 5, 7} as before

! L.H. 6-32: {5, 7, 9, 10, 0, 2}

etc. soprano in 5-27: {2, 4, 5, 7, 9}

last chord on brace in 7-23: {5, 7, 9, 10, 11, 0, 2}

Concord-Thorson

p. 64

4th brace

L.H. contains: 6-225: {2,4,5,7,9,10} diatonic

R.H. brings in "chromaticism" - e.g. 5-217: {6,7,9,10,12}

below soprano B 5-13: {3,7,9,10,11}

then second chord in 4th (3-9)

Soprano is 7-3 from B to final C: {8,11,0,1,2,3,4}

last d

5th brace

this is variant on p. 62, 1st brace -

→ 8-21: {1,2,3,4,5,7,9,11} from key F to A

This is set used in "Impresso"

bass F# 7-237: {10,11,1,2,3,5,6}

bass G# 5-16: {0,1,3,4,7}

bass A# 5-24: {5,7,9,11,0}

bass B# 5-25: {11,2,4,5,7}

NB. bass A# 7-28: {9,10,0,2,3,4,6} same notes opening 6th-note passage II,

bass A# 4-229: {5,9,11,0}

2nd bass A 7-35: {11,0,2,4,5,9,9}

A 6-31: {9,10,0,2,5,6}

bass G 5-33: {3,5,7,9,11}

5-10: {1,2,4,5,7}

? 5-8: {6,8,9,10,0}

p. 65

First brass

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

6-213: {1, 2, 4, 5, 7, 8} (6-212) p. 63, 3rd brass

brass E^b 6-225: {7, 9, 10, 0, 2, 3}

brass G 6-21: {3, 5, 7, 8, 9, 11}

brass F# 8-5: {4, 5, 6, 8, 9, 10, 11, 0}

brass E^b without small notes 7-29: {7, 9, 10, 0, 2, 3, 4}

Second brass

brass C# 6-34: {7, 9, 11, 1, 3, 4} with A# in L.H. 7-28: {7, 9, 10, 11, 1, 3, 4} To opening chord, p. 59

64 notes figure 5-6: {10, 11, 0, 3, 4}

brass B^b E 7-22: {0, 1, 3, 4, 7, 8, 9}

brass D 4-26: {9, 0, 2, 5}

or with A# in L.H. 5-27: {9, 11, 0, 2, 5}

brass E 5-21: {4, 7, 8, 11, 0}

brass F# 5-21: {6, 9, 10, 1, 2}

brass G# 5-21: {0, 3, 4, 7, 8}

brass B^b 6-219: {10, 11, 2, 3, 5, 6} 6-214 elsewhere

brass C# 6-31: {4, 5, 7, 9, 0, 1}

brass D 6-229: {6, 7, 9, 0, 2, 3} 6-250 elsewhere?

brass E 5-22: {4, 5, 8, 11, 0}

brass F 7-5-20: {9, 10, 2, 4, 5}

upper voice of succession — 7-35: {0, 1, 3, 5, 7, 8, 10}

brass 4 succession — 6-35: {0, 2, 4, 6, 8, 10}

N.B.

} T₂ no inversions. } only 2 possibilities for complete variations under T
} T₆ no inversions.

p. 65

Third brace

↓ 6-33: {7, 9, 10, 0, 2, 4}

↓ 7-23: {0, 2, 3, 4, 5, 7, 9}

bass G# 8-12: {11, 1, 2, 3, 4, 5, 7, 8} 7-25: {11, 1, 2, 3, 5, 7, 8}

new section - variant on tune p. 62, first brace (and elsewhere)
with extracts A-C-b

- Soprano in 8-23 now on p. 62

↓ 4-215: {7, 9, 0, 1}

↓ 6-210: {3, 5, 6, 7, 9, 10}

6-32: {7, 9, 11, 0, 2, 4}

Soprano D^b 4-19: {5, 9, 0, 1}

4-13: {7, 10, 0, 1}

5-16: {5, 6, 8, 9, 0}

NS. 5-28: {5, 7, 10, 11, 1}

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

IT₁₀

Fourth brace

first 3 ↓ 8-13: {4, 6, 7, 9, 10, 11, 0, 1}

Complement set.

→ Soprano E^b 6-224: {9, 10, 0, 1, 3, 5}

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

4-13: {4, 5, 7, 10}

Soprano G^b ↓ 4-13: {6, 7, 9, 0}

T₂

4-13: {4, 5, 7, 10}

T₁₀

Concord - Thoman

p. 66

First brass

? 6-2: {2, 3, 4, 5, 6, 8}

Soprano from G# to A# 5-34: {5, 8, 10, 0, 2} y. 5-74 is vertical in "Refrain"

Complement

5-30: {8, 9, 0, 2, 4}

7-30: {8, 9, 10, 0, 2, 4, 5}

] Embedded complement

6-2: {2, 3, 4, 5, 6, 8} as before

5-30: {8, 9, 0, 2, 4} as before

7-30: {8, 9, 10, 0, 2, 4, 5} as before

5-35: {0, 2, 4, 7, 9}

Variant on p. 52, 2nd brass (repeated "refrain" of first part of movement)

8-21: {2, 3, 4, 5, 6, 8, 10, 0} T₁₀ (max. interval: — | 7-33 is interval subject)

Second brass

6-21: {0, 2, 3, 4, 6, 8}

6-239: {1, 2, 3, 4, 5, 7}

6-31: {8, 9, 0, 2, 4, 5}

8-21 again + pci and pci7

bars F# 7-35: {1, 0, 2, 4, 5, 7, 9}

Soprano from Bb to D# 7-34: {0, 2, 4, 6, 7, 9, 10}

bars F# 7-28: {2, 4, 5, 6, 8, 10, 11}

5-239: {1, 4, 5, 6, 9}

with sustained B# — 6-248: {4, 5, 8, 9, 11, 13}

6-210: {6, 7, 9, 10, 11, 13}

5-21: {0, 3, 4, 7, 8}

5-33: {0, 2, 4, 6, 8}

5-26: {4, 6, 8, 9, 0}

5-217: {4, 5, 7, 8, 0}

? 3-11: {7, 11, 2} — req. to p. 60 after double bar

Third brace - resembles p. 61, 5th brace, which is also a peculiar section

base E ? 7-236: {9, 11, 0, 2, 3, 4, 5} first occurrence - with pc? is 8-22: {6, 8, 10, 11}

base F 7-32: {11, 0, 2, 4, 5, 7, 8}

? 6-248: {0, 1, 2, 5, 7, 9} first occurrence - no 6-226

Fourth brace - resembles p. 62, 3rd brace - section of opening 16th-note motif

↓ 7-34: {4, 5, 7, 8, 10, 0, 2}

↓ 7-10: {10, 11, 0, 1, 2, 4, 7}

↓ 7-31: {2, 4, 5, 7, 8, 10, 11}

↓ ? 6-5: {6, 2, 3, 4, 7, 8} first occurrence

↓ 8-27: {0, 1, 2, 4, 5, 7, 8, 10}

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

p. 67 - last section with Flute - piano part w/o flute is analyzed here

First brace - Tune in 6-32: {10, 0, 2, 3, 5, 7}

5-9: {4, 5, 6, 8, 10}

→ 6-246: {10, 11, 0, 2, 4, 7}

? 8-11: {0, 2, 4, 5, 6, 7, 8, 9}

2 groups D ↓ 7-33: {10, 11, 0, 2, 4, 6, 8}

base F# ↓: 4-11: {3, 4, 6, 8}

? 4-17: {5, 7, 10, 11, 2} first occurrence

2nd base E (figure from p. 59, 2nd brace) - 8-21: {4, 5, 6, 7, 8, 10, 0, 2}

last 16th, base G# 6-224: {3, 5, 7, 8, 10, 11}

CONCORD-THREAV

p. 67
2nd
3rd brace

bass A 5-30: {3, 4, 7, 9, 11} } with soprano following — 7-24: {2, 9, 11, 1, 2, 3, 4}
 bass B 5-29: {3, 4, 6, 9, 11} } 7-238: {3, 4, 6, 7, 9, 10, 11}
 with A# 6-18: {3, 4, 6, 9, 10, 11} }

↓ bass A 7-34: {3, 4, 6, 7, 9, 10, 11}

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

7-5 } bass F 5-6: {5, 6, 9, 10, 11}

{0, 1, 2, 4, 5, 11} } bass E 4-19: {0, 1, 4, 5} with flute 5-213: {0, 1, 3, 4, 5}

bass D 4-21: {2, 4, 6, 10} with flute 5-26: {10, 1, 2, 4, 6}

bass C 5-9: {0, 1, 2, 4, 6}

6-14: {0, 3, 4, 5, 7, 8}

bass F# 7-6-212: {4, 5, 6, 8, 10, 11} } first occurrence
 5-28: {4, 6, 7, 10, 0} } 8-5: {4, 5, 6, 0, 8, 10, 11, 0}

bass (F) 5-14: {7, 9, 0, 1, 2} with flute 6-211: {7, 9, 10, 0, 1, 2}

3rd
4th brace

bass pattern 1 ~~6-9: {7, 9, 11, 0, 1, 2}~~ 7-24: {5, 7, 9, 11, 0, 1, 2} bass pattern done in 5-9: {7, 9, 11, 0, 1}

2 7-24 as before

3 8-21: {11, 0, 1, 2, 3, 5, 7, 9}

4 7-2: {7, 9, 10, 11, 0, 1, 2} first occurrence

5 7-2: as before

6 7-24: {5, 7, 9, 11, 0, 1, 2}

p. 68

First brace Variant on bass pattern (L.H.) is 5-9: {7, 9, 11, 0, 1}

- bass pattern 1
- 1 7-2: {9, 9, 10, 11, 0, 1, 2} as before
 - 2 7-9: {7, 9, 11, 0, 1, 2, 3} Complement of bass pattern alone
 - 3 7-2: {7, 9, 10, 11, 0, 1, 2}
 - 4 7-23: {7, 9, 11, 0, 1, 2, 4}
 - 5 7-23: as before
 - 6 7-2: {7, 9, 10, 11, 0, 1, 2, 3} first occurrence

Second brace - variant of theme on p. 62, first brace 5-29: {6, 7, 9, 0, 2}

bass pattern 1

EX.

- A-C 4-215: {7, 9, 0, 1}
- G 6-210: {3, 5, 6, 7, 9, 10}
- F 4-229: {7, 11, 1, 2}

bass pattern 2 4-26: {4, 7, 9, 0}

bass pattern 3

- A-C 4-215: {7, 9, 0, 1}
- G ~~8-27: {8, 10, 1, 4}~~

bass pattern 4 4-26: {4, 7, 9, 0}

bass pattern 5 7-27: {0, 2, 4, 5, 7, 8, 9}

3rd brace - same as p. 62, first brace A.

4th brace

bass pattern 2

- A-C 5-31: {6, 7, 9, 0, 3}
- 7-10: {0, 3, 5, 6, 7, 8, 9}

bass pattern 3

- A-C 5-30: {5, 7, 9, 0, 1}
 - G variants =
 - 4-22: {7, 5, 7, 10}
 - 5-28: {1, 3, 6, 7, 9}
 - 4-229: {7, 11, 1, 2}
- } 7-26: {1, 3, 5, 6, 7, 9, 10}
- } 7-30: {6, 7, 9, 11, 1, 2, 3}
- 4-26: {4, 7, 9, 0}

Concord Sonata

Compare Song No. 48 in 114 songs

①

IV - Thoreau - Kirkepatricke guess dates as 1911-15 certain

p. 59 opening 64th note passage (and chord) - 7-28: {7, 9, 10, 11, 1, 3, 4} - Complement of bass figures at opening of first int. with C# at end of 16ths - 8-12: {2, 5, 6, 8} {7, 9, 10, 11, 1, 3, 4}

beginning with bass F# 7-5: {0, 1, 2, 3, 5, 6, 7} no occurrences, except as bass imp. 67, 2nd bar

second 64th note passage (beginning with low C#) - 8-26: {3, 4, 6, 8, 9, 11, 0, 1} diatonic

sustained part in 5-27: {5, 8, 11, 1, 3, 4} diatonic - with F# in 6-24: {8, 11, 1, 3, 4, 5}

End of first brace: 7-23: {11, 1, 3, 4, 5, 6, 8} diatonic

2nd brace

first vertical 5-24: {8, 10, 0, 2, 3}

8-21: {4, 5, 6, 7, 8, 10, 0, 2} compare 3 beats from end of brace (repetition)

5-34: {8, 10, 0, 2, 5} - also at beginning of new section after fermata in 3rd brace - a "9th" chord

8th notes 6-31 - {1, 2, 5, 7, 9, 10} many other instances in IVES

(note peculiar slur at this point: A# shared over to same notehead as A#)

bass C# 6-24: {4, 5, 6, 8, 10, 1} - complement, 6-24, in arpegg. chord at end of 4th brace

with G - 7-21: {4, 5, 6, 7, 8, 10, 1}

Separate from Bb to A is

6-33: {7, 9, 10, 0, 2, 4}

4-21: {10, 11, 2, 4}

6-32: {2, 9, 11, 0, 2, 4}

8-21: {4, 5, 6, 7, 8, 10, 0, 2}

bass F# 6-21: {2, 4, 5, 6, 8, 10} } 8-19: {11, 0, 3, 7}

5-23: {1, 4, 5, 6, 9}

4-21: {10, 11, 2, 4} as after middle of bass

over Bb 5-32: {10, 11, 2, 4, 7}

3rd brace

8-21: {4, 5, 6, 7, 8, 10, 0, 2}

with PC9 9-6: {11, 1, 3}

7-9: {0, 2, 4, 5, 6, 7, 8}

8-21: {4, 5, 6, 7, 8, 10, 0, 2}

at ? 4-21: {0, 2, 5, 6}

except "infer" [excluding upper voices D#]

NB.*

good example of mixture of diatonic whole-tone interval

* Complement in new section, p. 62, 1st brace, D# in soprano

NOTE USE OF SHORT REPEATED (POSSIBLY TRANSFORMED) SECTIONS AT 14 SECTIONS OF 23 (and Stravinsky)

CONCORD - THOREAU

p. 68

5th brace - chord is 8-12: {7, 9, 10, 11, 0, 1, 3, 4} - Same as opening on p. 59

Subgroups
5-11: {9, 11, 0, 1, 4}
6-242: {1, 2, 3, 4, 7, 10}

4-215: {7, 9, 0, 1}

5-27: {6, 7, 9, 11, 2}

? 7-4: {7, 8, 9, 10, 11, 1, 2}

l.h. alone 6-213: {7, 8, 10, 11, 1, 2}

y. 6-213 & 6-242 previously

Ives, Concord Sonata, Thoreau
Tentative list of sets

9-6	?8-2	?7-2	?6-2
3-7	4-4	5-3/7-3	?6-5
3-9	8-5	?5-4	?6-8
3-11	8-11/4-11	7-5	6-Z10/39
	8-12	5-6	6-Z11/40
	4-13/8-13	?5-8	6-Z12
	?8-14	5-9/7-9	6-Z13/42
	4-Z15	5-10/7-10	6-14
?8-16		?5-11	6-Z17/43
?4-17		7-Z12	6-18
4-19		?5-13	6-Z19/44
4-20/8-20		?7-14/5-14	6-21
8-21		5-16	6-22
4-22/8-22		7-Z17	6-Z23
8-23		7-Z18	6-Z24/46
4-24		5-19/7-19	6-Z25/47
8-26/4-26		?5-20	6-27
4-27/8-27		5-21	6-Z29
8-Z29/4-Z29		7-22/5-22	6-31
		7-23/5-23	6-32
		7-24/5-24	6-33
		7-25/5-25	6-34
		7-26/5-26	6-35
		5-27/7-27	
		7-28/5-28	
		7-29/5-29	
		5-30/7-30	
		7-31/5-31	
		5-32	
		7-33	
		5-34/7-34	
		5-35/7-35	
		7-Z36	
		5-Z37/7-Z37	
		5-Z38/7-Z38	

(4)

(19)

(35) !

(23)

Sets to be discussed (and operations) in Thoreau

7-28

- opening 64th note passage, p.59 7,9,10,11,1,3,4
- p.60, 3rd brace, with G# on lower staff:
(subset of 8-229) 6,8,9,10,0,2,3 T₁₁
- p.61, 2nd brace, bass C-B:
(subset of 8-229) *with pc3* 9,11,0,1,3,5,6 T₂
- p.62, 1st brace, 7th pattern:
(subset of 8-27) *with pc10* 0,1,3,5,6,7,9 IT₄
- p.62, 3rd brace, soprano C#: 5-28 7,9,0,1,3
- ✓ p.64, 5th brace, bass A#
note position 9,10,0,2,3,4,6 IT₁
- ✓ p.65, 2nd brace, bass C#
3rd brace, bass G#
(subset of 8-12) *pc4* 7,9,10,11,1,3,4
11,1,2,3,5,7,8
- ✓ p.66, 2nd brace, bass F# 2,4,5,6,8,10,11 T₇
- p.67, 2nd brace, bass F# 5-28 4,6,7,10,0
- p.68, 4th brace, 2nd 8th over G 5-28
in third bass pattern 1,3,6,7,9

after ? in 3rd brace - new section

Complement relation $\left\{ \begin{array}{l} 5-34: \{4, 7, 9, 11, 1\} \text{ at d in second brace } T_{11} \text{ no invariants - unique} \\ 6-35: \{0, 2, 4, 6, 8, 10\} \\ (3x) \end{array} \right.$

bass D \flat \rightarrow 7-34: {4, 5, 7, 8, 10, 0, 2}
 bass A \flat \uparrow 4-19: {1, 2, 5, 9} - occur again, 1st brace p. 60
 7-26: {3, 4, 6, 7, 8, 10, 0}
 4-19: {1, 2, 5, 9}

Soprano after fermata

6-34: {4, 6, 8, 10, 0, 1}
 C# \uparrow 5-34: {4, 6, 8, 10, 1} cf. other occurrences

4th brace

bass A 6-242: {0, 1, 2, 3, 6, 9} 6-213 \blacklozenge absolute (at end)

bass G 5-27: {4, 5, 7, 9, 0}

including trichord over bass F 7-35: {4, 5, 7, 9, 10, 0, 2} [F-minor scale]

bass E \flat 6-27: {9, 0, 2, 3, 5, 6} \longrightarrow From E \flat bass descends whole-tone scale

bass C# 5-30: {7, 8, 11, 1, 3}

From F# soprano ascends 6-224: {6, 8, 10, 11, 1, 2}

bass B \flat 5-238: {3, 6, 9, 10, 11}

bass A \flat 7-24: {7, 9, 11, 1, 2, 3, 4}

bass B \flat 5-238: {3, 6, 9, 10, 11} as before

bass A \flat 6-34: {7, 9, 11, 1, 3, 4} - cf. soprano after fermata in 3rd brace T $_3$

bass B 6-249: {2, 3, 4, 6, 9, 11} 6-225 on p. 60, 1st brace

bass A 6-217: {3, 4, 7, 9, 10, 11}

bass B 5-32: {6, 9, 11, 2, 3}

NB. \rightarrow bass A with arpegg. 5-30: {3, 4, 7, 9, 11} occurred previously over C# in bass, this brace T $_8$ max invar.
 with pc 6 6-224: {3, 4, 6, 7, 9, 11} complement, 6-246 in arpegg. chord in 2nd brace

p. 60
1st braces Sopranos from F# to G# — 8-21: {10, 11, 0, 1, 2, 4, 6, 8}

Saw a repeated pattern first stated at beginning of second brace, p. 59 T₆

(bars is distance)

bars G 5-30: {6, 7, 10, 0, 2} T₃ of previous arpegg. chord
 with soprano G# — 6-22: {6, 7, 8, 10, 0, 2}

bars F 5-6: {5, 6, 9, 10, 11}

bars E 4-19: {0, 1, 4, 8} of 3rd brace p. 59

bars D 4-24: {2, 4, 6, 10}

bars C 4-215: {0, 1, 4, 6} of earlier occurrences
 with upper voice D — 5-9: {0, 1, 2, 4, 6} — 7-9 on 3rd brace of p. 59

? bars G 5-3: {3, 4, 5, 7, 8}

bars F# (?) 6-2: {4, 5, 6, 7, 8, 10} This passage almost duplicates the passage beginning with the arpeggio on the 2nd brace of p. 59

4-215: {10, 11, 2, 4}

with F# — 5-30: {10, 11, 2, 4, 6}

7-35: {2, 4, 6, 7, 9, 11, 0}

bars G# 6-225: {4, 6, 7, 9, 11, 0} — 6-247 on p. 59, 4th brace and p. 61 2nd brace

"Refrain" 8-21: {4, 5, 6, 7, 8, 10, 0, 2} as at beginning of 2nd brace, p. 59, and elsewhere
 H.B. L.H. alone in 5-9: {4, 5, 6, 8, 10}

bars F# 5-9: {4, 5, 6, 8, 10} duplicates immediately preceding L.H. part
 with soprano D — 6-21: {2, 4, 5, 6, 8, 10}

5-257: {1, 4, 5, 6, 9} as at end of 2nd brace, p. 59

2nd braces

7-218: {2, 3, 4, 5, 7, 10, 11} in place of previous 4-215

Reminded to double bar is a variant on the 8-21 "refrain" with addition of pc9, forming 9-6: (11, 1, 3)

Concord - Thorsen

p. 60, 2nd brace, contd.

after double bar:

question of tonality here — begins with 6 major triad

base C 7-35: {4,5,7,9,10,0,2} "F-minor scale"

3rd brace

NB. → derivation

beginning with base B^b and extending to point at which G^b introduced

F-12: {7,9,10,11,0,1,3,4}

includes opening form of 7-28: {7,9,10,11,1,3,4}

} same as beginning

Base B^b at point where G^b enters on lower staff

7-31: {4,6,7,9,10,0,1,3} p. 62 4th brace

Base B^b with G^b on lower staff

7-32: {6,7,9,10,0,2,3}

5-32 on 4th brace of p. 52

Base B^b with G[#] on lower staff

8-229: {6,8,9,10,0,1,2,3} 4-229 elsewhere

7-28: {6,8,9,10,0,2,3}

6-223: {6,8,9,11,0,2}

? 6-246

End of brace 7-3(?) : {6,9,10,11,0,1,2}

6-15: {6,9,10,0,1,2}

4th brace

base G

6-229: {11,0,2,5,7,8} 6-250?

base C

6-242: {3,4,5,6,9,0}

also on 4th brace, p. 59 T₃ max minor.

base G

7-236: {11,1,2,4,5,6,7}

5-236 is just 5-note subset of 7-28 at beginning

base C

5-21: {4,5,8,9,0}

Remainder of staff same as 3rd brace after double bar

7-35: {4,5,7,9,10,0,2}

Concord - Thoreau

p. 61 - new section - new sets

- First braces
- ↓ 6-210: {9, 10, 0, 1, 2, 4} - 6-239 on 4th brace, p. 62
 - ↓ ? 8-11: {0, 1, 2, 3, 4, 5, 7, 9}
 - ↓ 7-26: {9, 10, 0, 1, 2, 4, 6}
 - ♩ 5-10: {1, 1, 2, 4, 5}
 - ♩ 6-14: {10, 1, 2, 3, 5, 6}
 - ♩ 4-27: {0, 2, 5, 8}
 - ♩ 6-18: {0, 1, 2, 5, 7, 8}
- } combine

base E9 6-34: {11, 0, 2, 4, 6, 8}

important derivation on p. 62, 1st brace, D^b in soprano

base D9 & C [6-224: {8, 9, 11, 0, 2, 4} either occurrence of this set and its complement 6-246

base C & B 6-243: {5, 6, 7, 8, 11, 0, 2} 6-217 occurs on p. 59, 4th brace

base A 6-243: {7, 8, 9, 0, 1, 3} > T₁

with soprano? 7-22: {7, 8, 9, 0, 1, 3, 4}

Soprano of first brace, excluding last d in 7-31: {10, 11, 1, 2, 4, 5, 7}

base of first stem in 7-29: {9, 11, 0, 2, 4, 5, 6}

Second Braces

- ♩ 5-29: {1, 3, 6, 8, 9} - complement in preceding base line
- ♩ 4-4: {8, 9, 11, 1} - 6-247: {1, 3, 6, 8, 9, 10} previous occurrence of this and 6-225 - also 6-225 in upper part from last d on 1st stem; {1, 3, 4, 6, 8, 9}
- ♩ 5-237: {9, 0, 1, 2, 5}
- ♩ 4-229: {9, 1, 3, 4} ? 7-3: {9, 0, 1, 2, 3, 4, 5}

Inversion

- G ↓ 7-218: {7, 8, 11, 1, 2, 3, 4} also first chord, p. 60, 2nd brace IT₆
- base C & B > 8-229: {9, 11, 0, 1, 3, 4, 5, 6}
- 7-28: {9, 11, 0, 1, 3, 5, 6}
- 5-35: {6, 8, 11, 1, 3}

3rd brace

Repetition of p. 60, 2nd brace after double bar

7-35: {4, 5, 7, 9, 10, 0, 2}

p. 61
4th brace

(6)

low B^b 7-30: {1,2,4,6,8,9,10} several previous statements of 5-30

? 5-11: {7,9,10,11,2}

with C^b in soprano - 6-210: {7,9,10,11,1,2}

? 7-237: {9,10,0,1,2,4,5}

last but 6-22: {3,5,7,9,10,11}

5th brace

(?)

5-24: {0,2,4,6,7}

5-23: {0,2,4,5,7}

5-11: {7,10,11,0,2}

5-24: {0,2,4,6,7}

} ? 8-16: {10,11,0,2,4,5,6,7}

p. 62

1st brace - new section

b no figures 3-7 from where?

5-35: {0,2,5,7,9} up to 0^b in soprano

SEE p. 64, brace 5 - variant in 8-21

new theme - soprano from 0^b to C on 2nd staff - 8-23: {5,6,7,8,10,0,1,3}

8th pattern A-C-B in L.H. - 6-224: {5,7,9,10,0,1} = T₁₀(6-246) in first statement
subjects 4-19: {5,9,0,1} of 6-246, p. 59, 2nd brace, appx. check
4-13: {9,10,0,1}

6th pattern A-C-B 8-5: {5,6,7,8,9,11,0,1}

subjects 5-32: {0,3,5,8,9} previous occurrences of 5-32 & 7-32

5-28: {5,7,10,11,1} complement of opening appoggiatura

7th pattern A-C-B

over A-C 6-224: {9,10,0,1,3,5} = IT₁₀ of 6-224

all - 8-27: {5,6,7,9,10,0,1,3}

7-28: {0,1,3,5,6,7,9}

8th pattern A-C-B 5-9: {7,9,11,0,1} several previous occurrences of 5-9 and 7-9

p. 62

2nd brass

Soprano from E^b to C — ? 7-25: {0, 2, 3, 5, 6, 7, 9}

First A-C-G pattern

A-C — 6-224: {9, 10, 0, 1, 3, 5} as before } 8-27: {6, 8, 11, 2}
↳ ? 5-4: {4, 5, 6, 7, 10}

Second A-C-G pattern

A-C 4-13: {6, 7, 9, 0} } 7-236: {4, 5, 6, 7, 9, 10, 0}
↳ 4-13: {4, 5, 7, 10} > T₁₀

Third A-C-G pattern

A-C 4-215: {7, 9, 0, 1}
↳ 6-210: {3, 5, 6, 7, 9, 10} — 6-239 on 4th brass, p. 62
↳ 5-19: {7, 8, 11, 1, 2}

Fourth A-C-G pattern

Compl. rel. { 4-26: {4, 7, 9, 10}
8-26: {11, 0, 2, 4, 5, 7, 8, 9}

[Repetition of previous passage]

3rd brass — Soprano from E^b to A — 8-11: {1, 3, 5, 6, 7, 8, 9, 10} variant on phrase

Soprano A 5-238: {7, 8, 9, 0, 3}

Soprano B^b 4-229: {3, 7, 9, 10}

Soprano C[#] 5-28: {7, 9, 0, 1, 3} complement of opening chord

with small notes A[#] — ? 6-223: {7, 9, 10, 0, 1, 3} (6-245) ∈ K(7-28)

Last A-C-G pattern — 5-32: {4, 7, 9, 0, 1}

with all small notes 8-13: {7, 9, 10, 0, 1, 2, 3, 4} of previous occurrence of 4-13

~~4th brass~~

first bass pattern

6-239: {4, 7, 8, 9, 10, 0} 6-210 on p. 62 second brace

second bass pattern

? 6-8: {7, 9, 10, 11, 0, 2} 5-23: {7, 9, 11, 0, 2} without small notes A#

third bass pattern

? 7-26: {7, 9, 11, 0, 1, 3, 4}

fourth bass pattern

7-31: {7, 9, 10, 0, 1, 3, 4}

p. 60, second third brace T₂

5th brace

bass F# 4-229: {11, 3, 5, 6}

bass G 5-16: {0, 1, 3, 4, 7}

bass A 5-24: {5, 7, 9, 11, 0}

bass B 5-25: {11, 2, 4, 5, 7}

bass D & C 5-34: {0, 2, 4, 6, 9}

both 7-34 & 5-34 occur earlier

bass E 5-24: {4, 5, 7, 9, 11} IT4

bass G 5-10: {1, 2, 4, 5, 7}

bass F# 5-8: {6, 8, 9, 10, 0}

bass E^b 6-243: {7, 9, 10, 1, 2, 3}

bass C# 7-33: {3, 4, 5, 7, 9, 11, 1}

Soprano B at end of brace through C# on first brace of p. 63 - 6-34: {5, 7, 9, 11, 1}

~~p. 59, 2nd brace~~ } 8-5: {11, 0, 1, 3, 4, 5, 6, 7}