

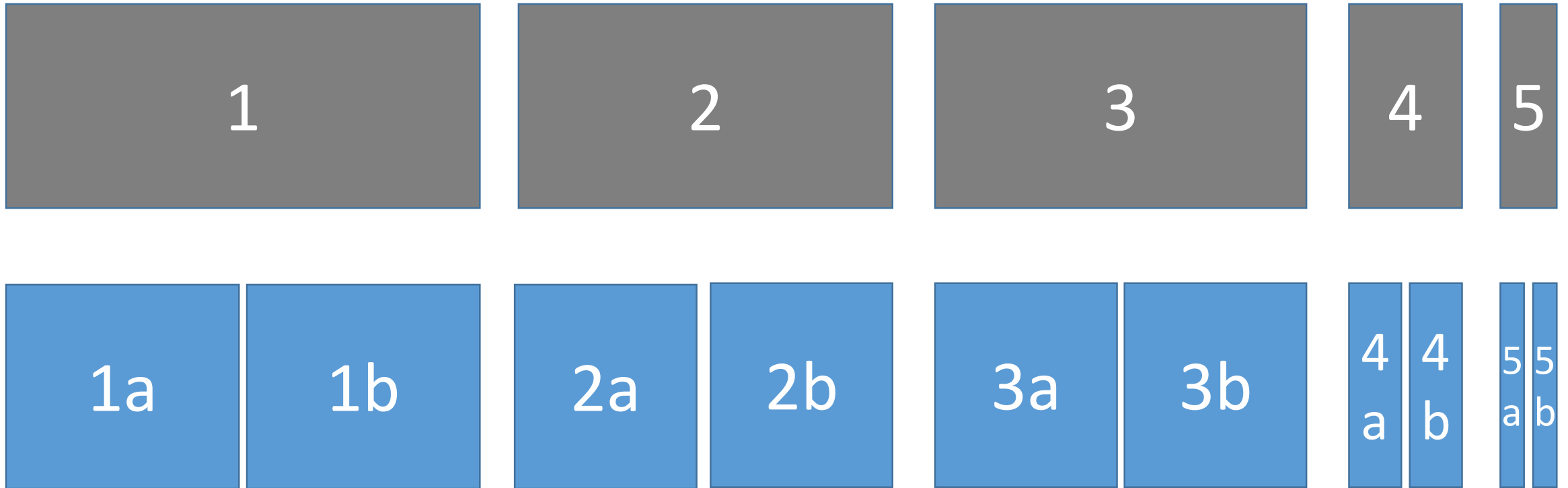
# Process and Projection in Abrahamsen's *Schnee*

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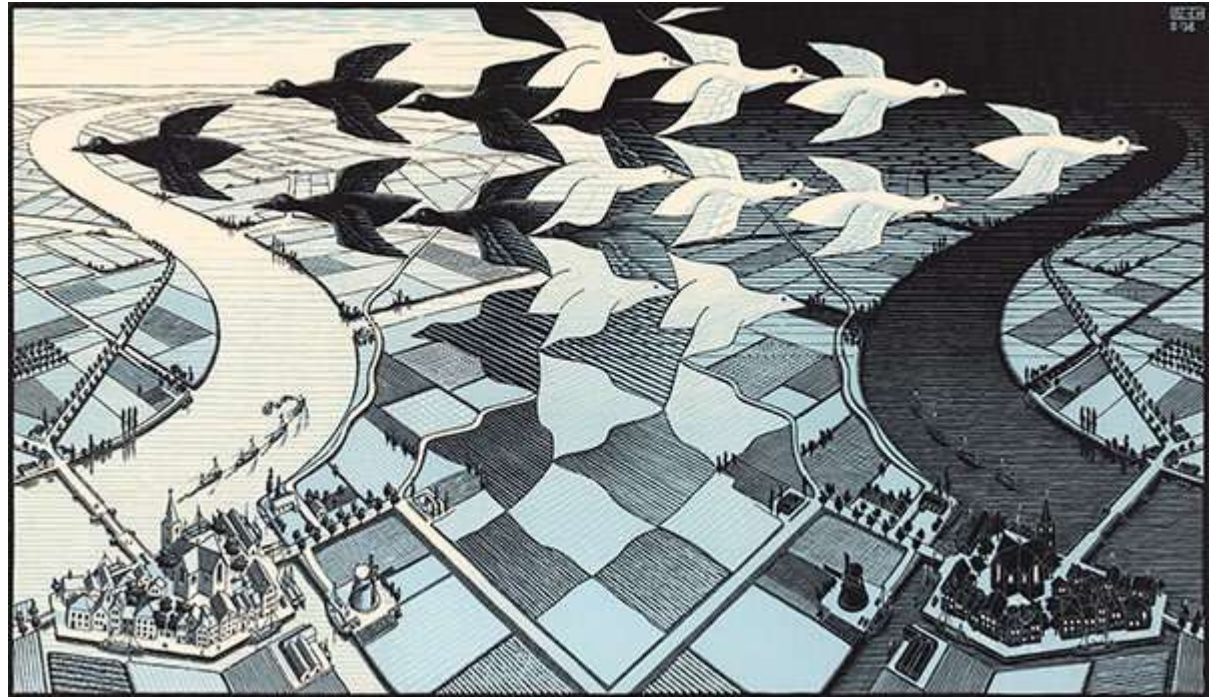




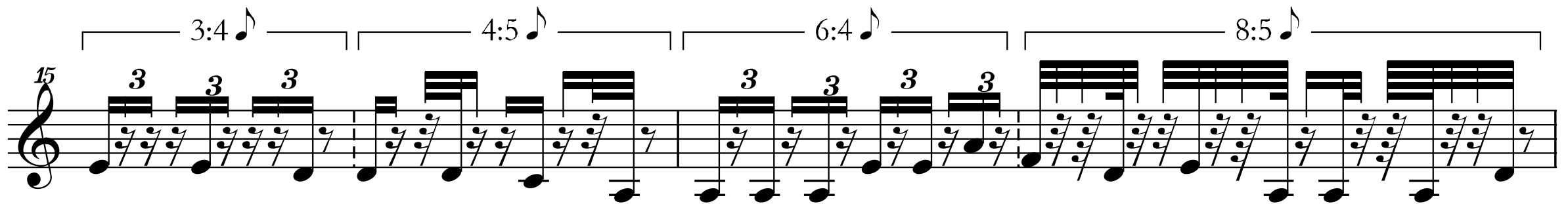
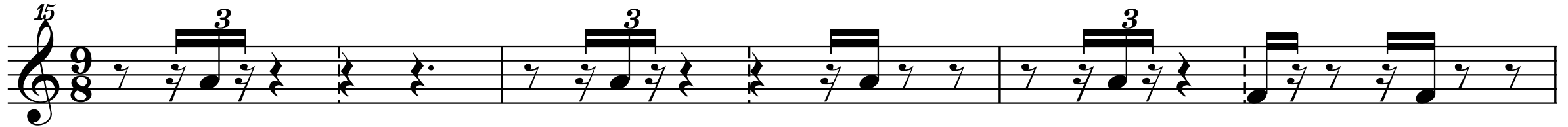


Outline of *Schnee's* large-scale form

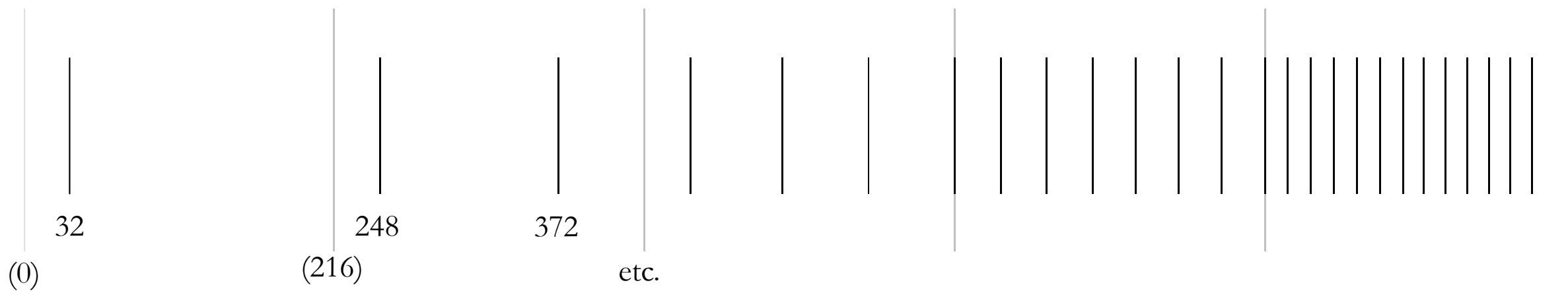
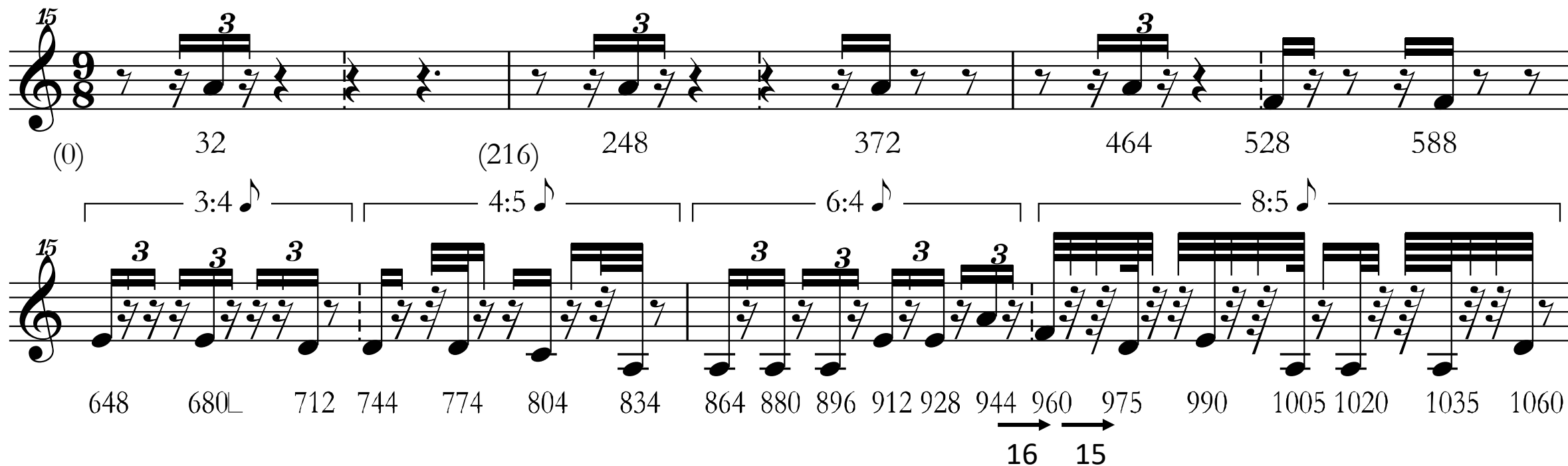
The initial phrase becomes the closing phrase, and vice versa—rather like the world of Escher's pictures, where a white foreground on a black background on one side of the picture becomes a black foreground on a white background on the other.



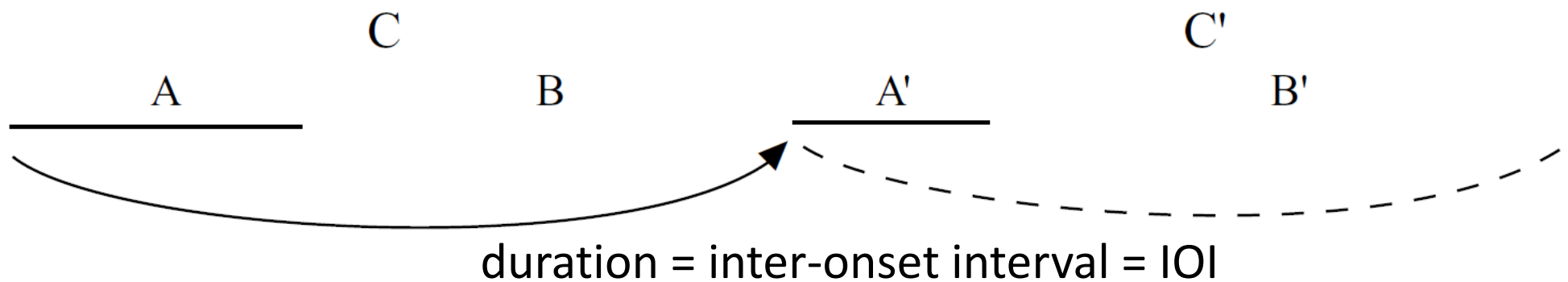
Quiet but mobile (♩ = 108)



Quiet but mobile (♩ = 108)



All onsets of theme, shown in proportional notation



from Hasty 1997

quasi-metric continuity (projective continuity)

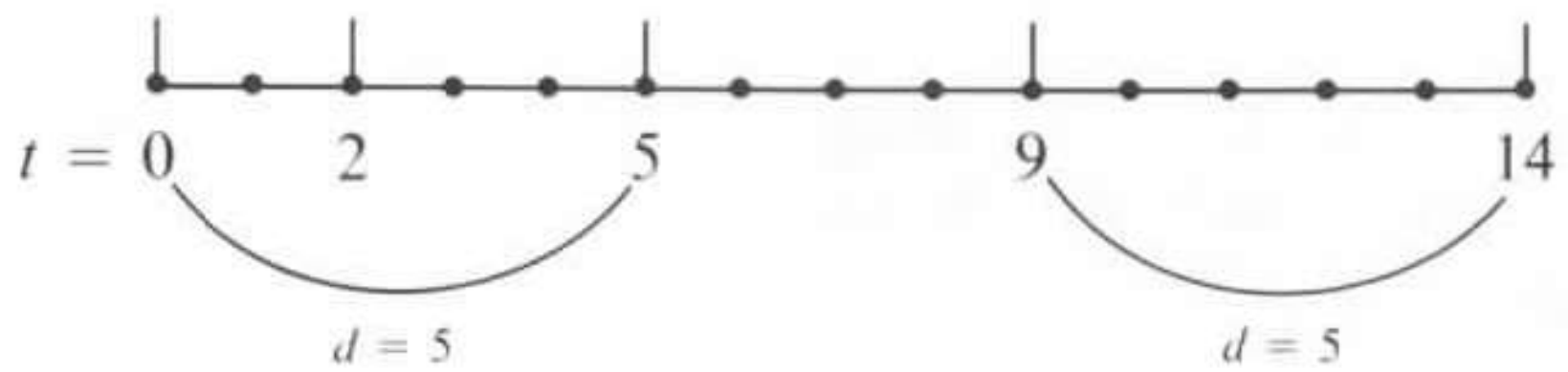
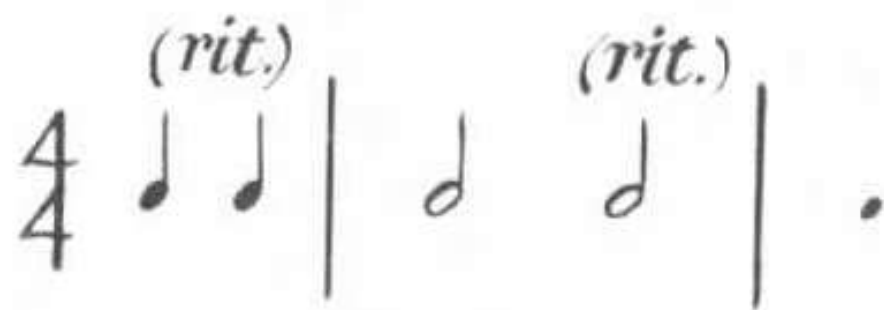
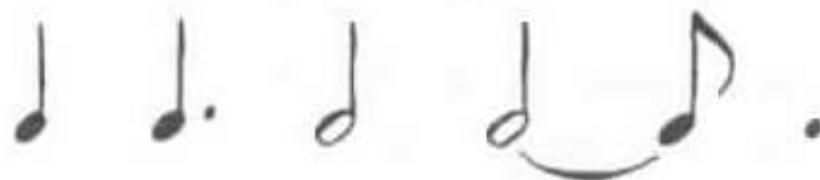
IOIs:

12 6 6 7 (for 6) 5 (for 6) 12 6 6 13 (for 12) 12

15 6 6 7 (for 6) 5 (for 6) 6 6 5 (for 6)

*pp* *p* *pp*

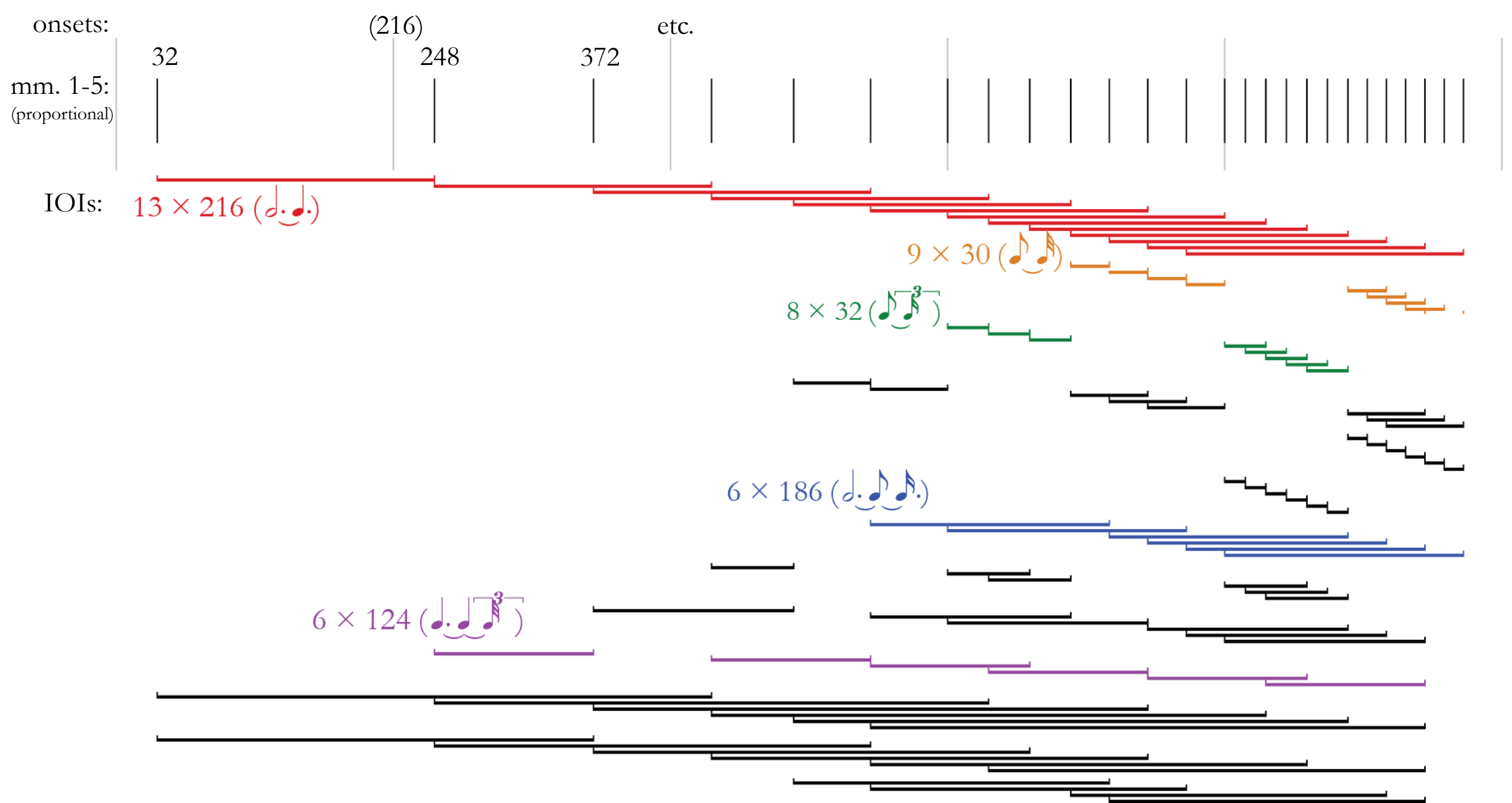
from Roeder 2006



$d = \text{duration} = \text{inter-onset interval} = \text{IOI}$

from Lewin 1981







# Outline

- The Problem and Potential Tools
- Canons 1 and 5
- Interpreting Orchestration and Process
- Close-Reading of Canon 1b
- Repetition and Hearing

Pianoforte 1

*pp* *leggiero e poco stacc.*

*sempre*

**9**  
**8** Einfach und kindlich ♩. = 42 (♩ = 126)

Pianoforte 2

*pp* *leggiero e poco stacc.*

*sempre*

opening of Canon 5b

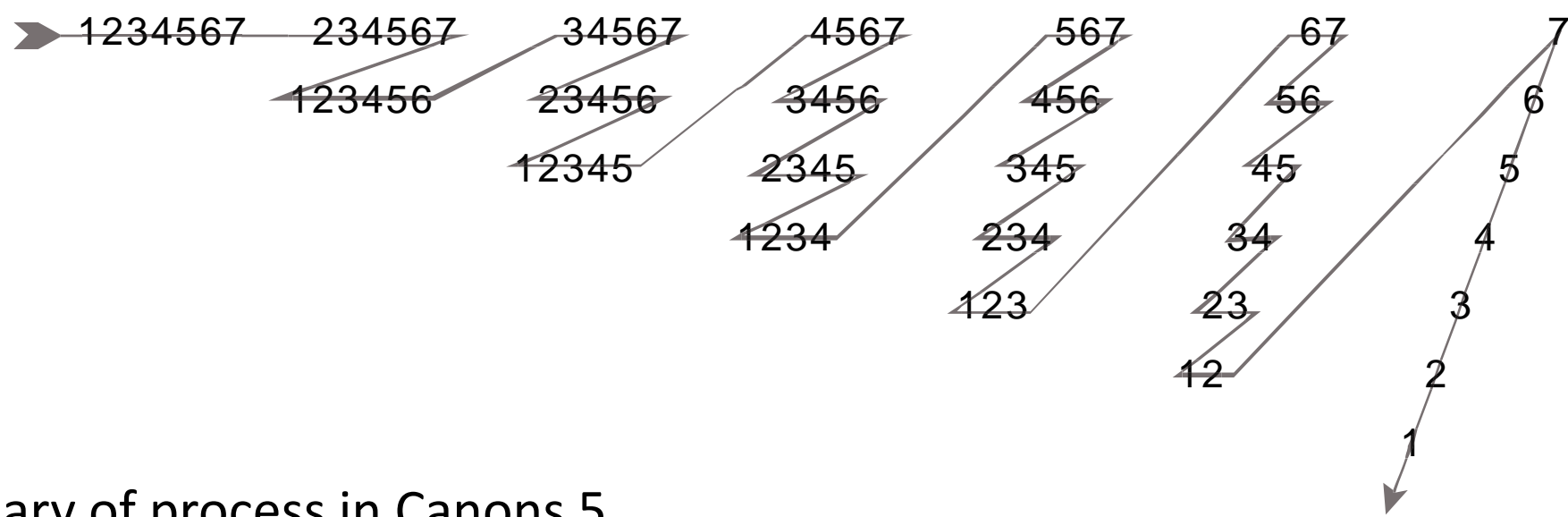
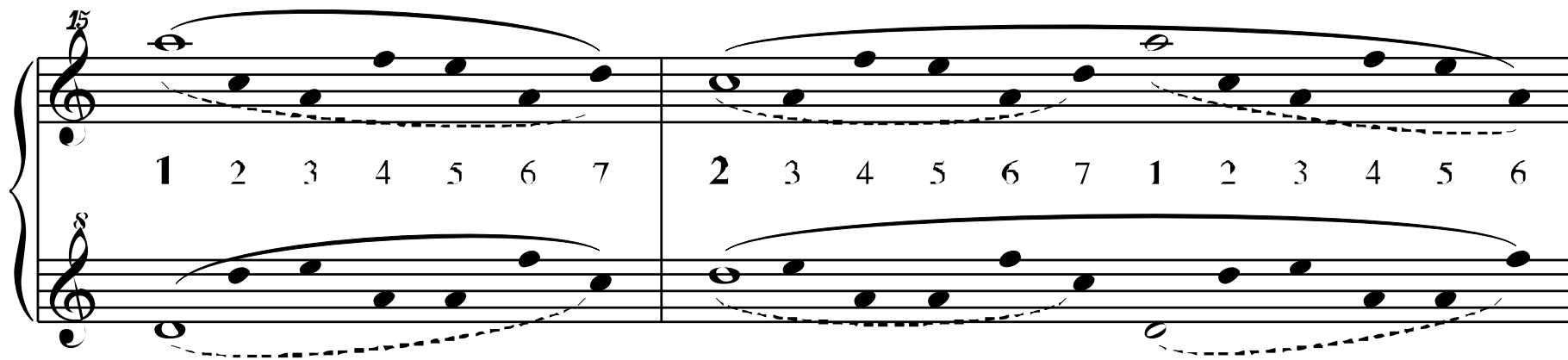


1ab

5ab

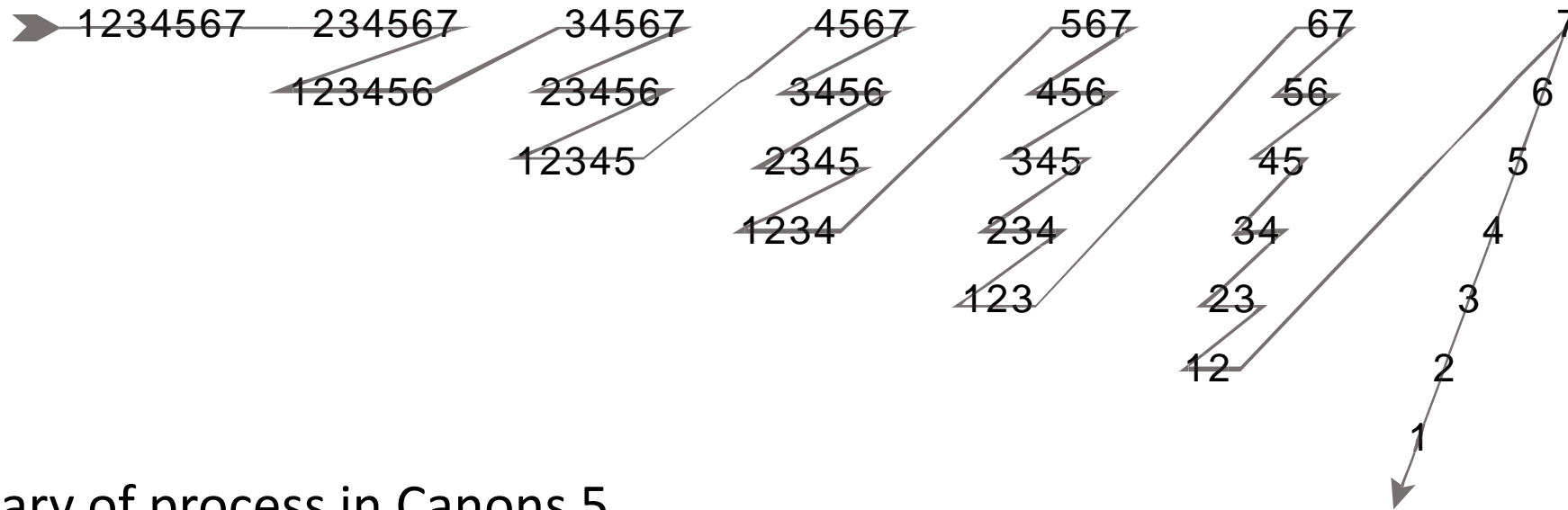
The image displays two musical staves, labeled '1ab' and '5ab', each beginning with a treble clef and a measure number '15'. The '1ab' staff contains a sequence of notes with a thick black line above the first four notes and a dashed line connecting the first and fourth notes. The '5ab' staff contains a sequence of notes with a thick black line above the first four notes and a dashed line connecting the first and fourth notes. The notation is in black ink on a white background.

motivic connections between Canons 1,5

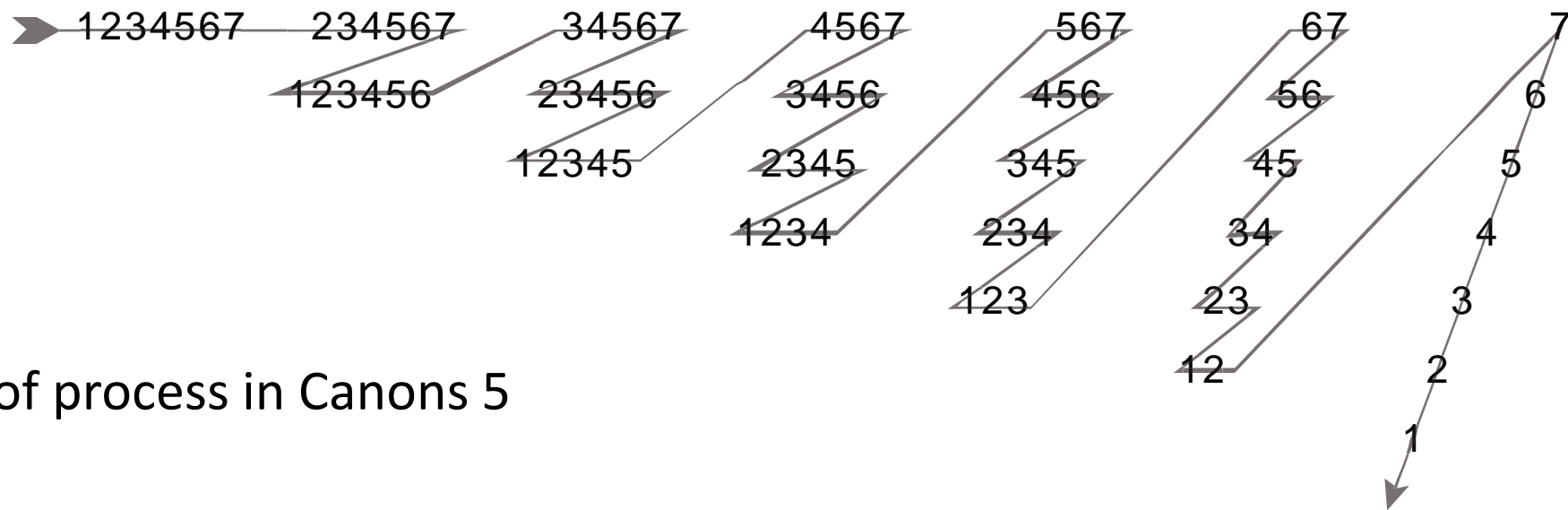


summary of process in Canons 5

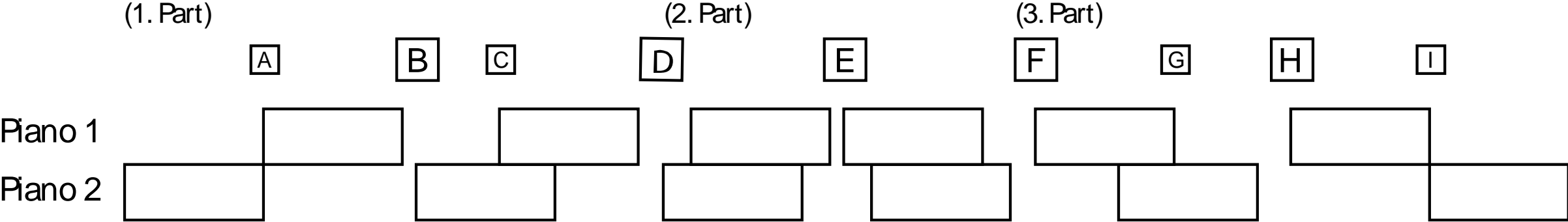
**Although the winds and strings could easily be dismissed as merely doubling the piano, their specific alignments clarify the process.**



summary of process in Canons 5



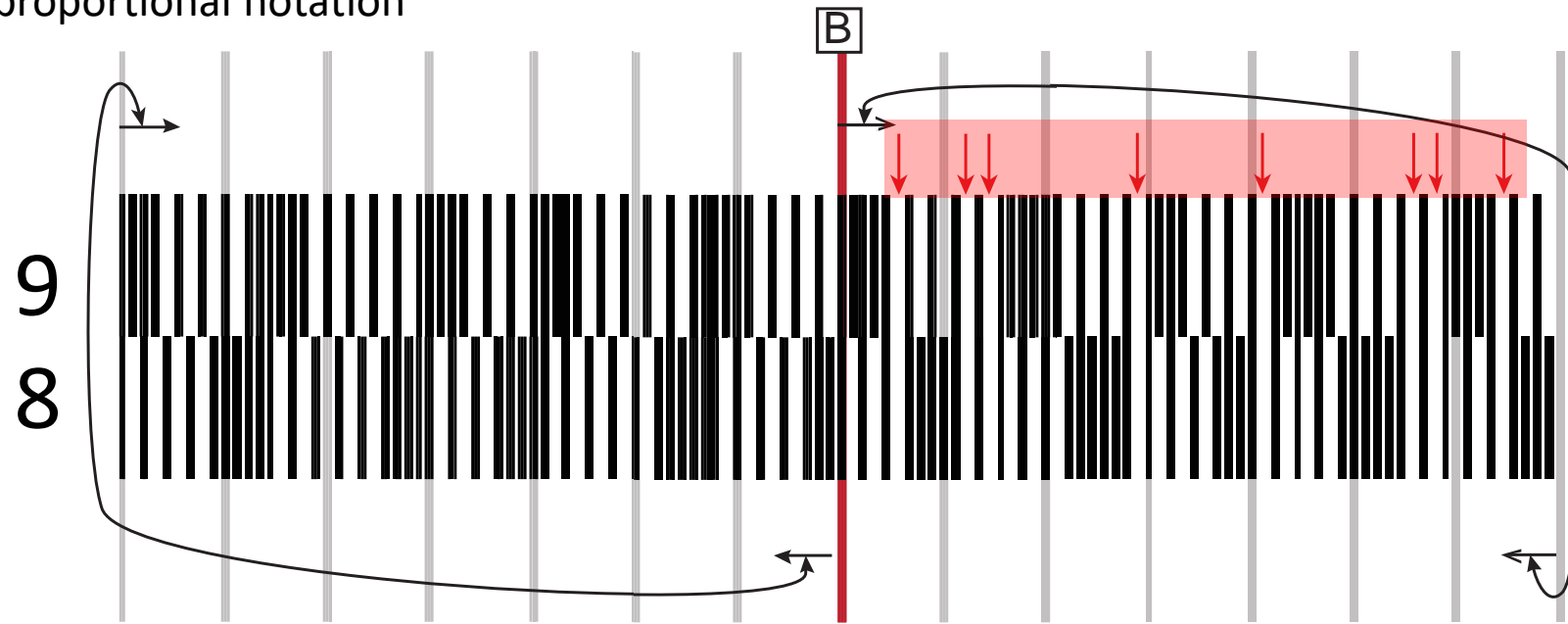
summary of process in Canons 5



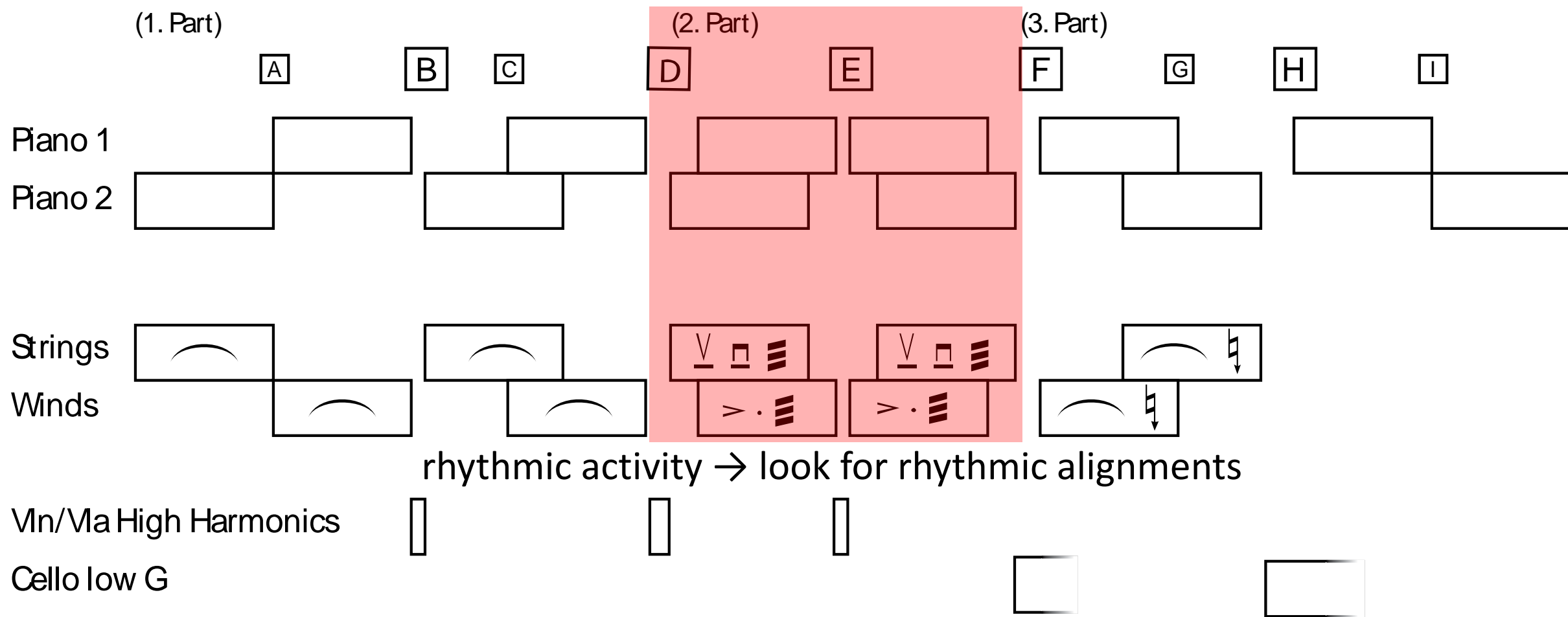
summary of process (“increasingly close stretto”) in Canons 1



Canons 5, proportional notation



**Rhythmic alignments, especially when marked by accents, structure our hearing.**



summary of process and orchestration in Canons 1

# Canon 1b, D:

**D (2. Part)**  
**Etwas unruhig und aufgeregt**  
(5+4)  
(4+5)

Pf. 1

"Guero"  
*p*  
*gliss.*  
*gliss.*  
*ff*  
Normale

Perc.

Paper (greaseproof paper)  
on table 3  
*mf*  
sempre sim.

Pf. 2

Normale  
*ff*

Picc.

*fpp*  
*fpp*  
*fpp*  
*fpp*

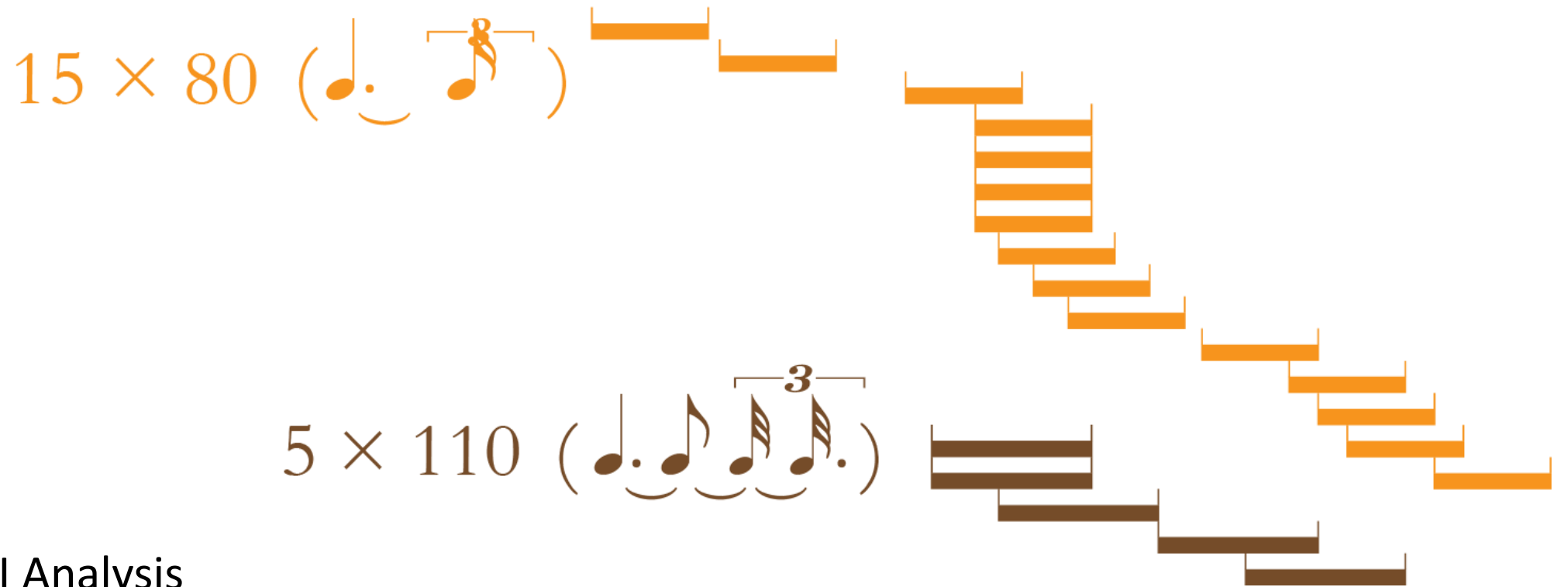
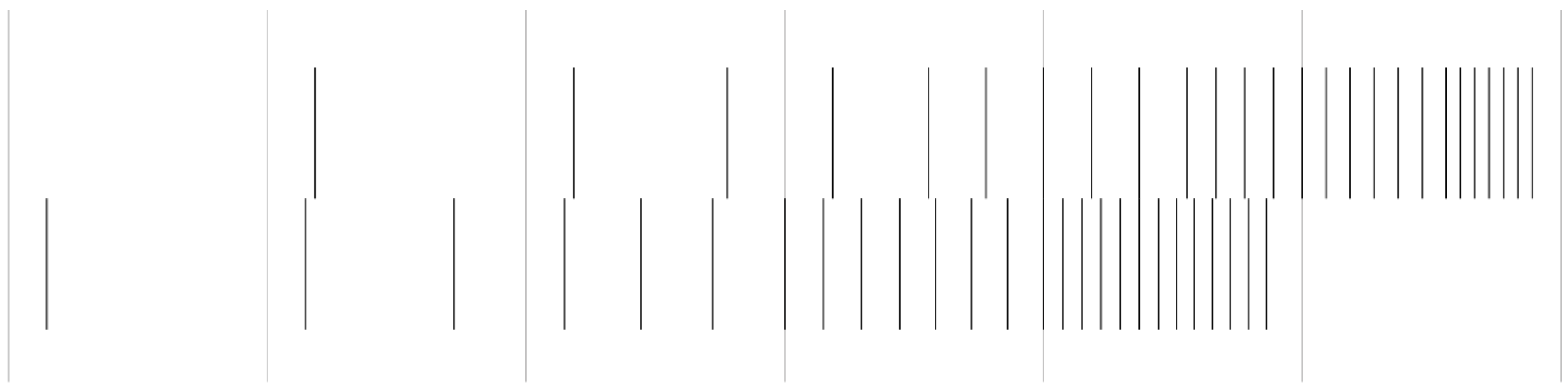
Ob.

*f*  
*ff*

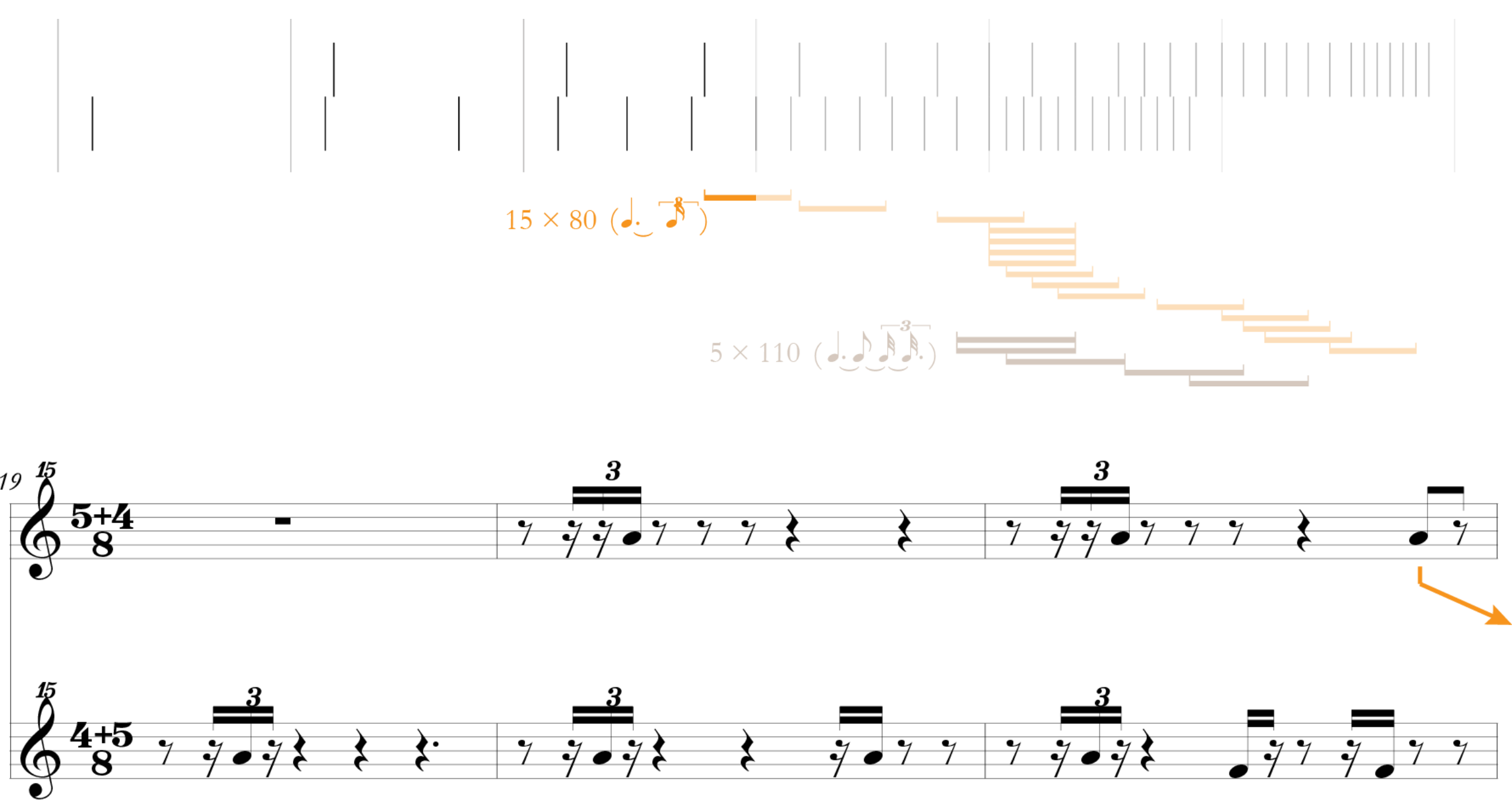
Canon 1b, D:

IOIs

The image displays a page of a musical score for 'Canon 1b, D'. The score includes staves for Violin (Vn.), Viola (Va.), Violoncello (Vc.), Piano (Pt. 1 and Pt. 2), Percussion (Perc.), Flute (Fl.), Oboe (Ob.), and Clarinet (Cl.). The score is marked with 'fpp' (fortissimo piano) and 'f' (forte). Two vertical red lines are drawn across the score, and orange arrows labeled 'IOIs' (Inter-Onset Intervals) point from the first line to the second line, indicating the time intervals between notes in different parts. The page number '22' is visible in the top left corner.



Canon 1b, **D**, IOI Analysis



Canon 1b, D, IOI Analysis



15 × 80 (♩. ♪)

5 × 110 (♩. ♪. ♪. ♪.)

24

15

3

3

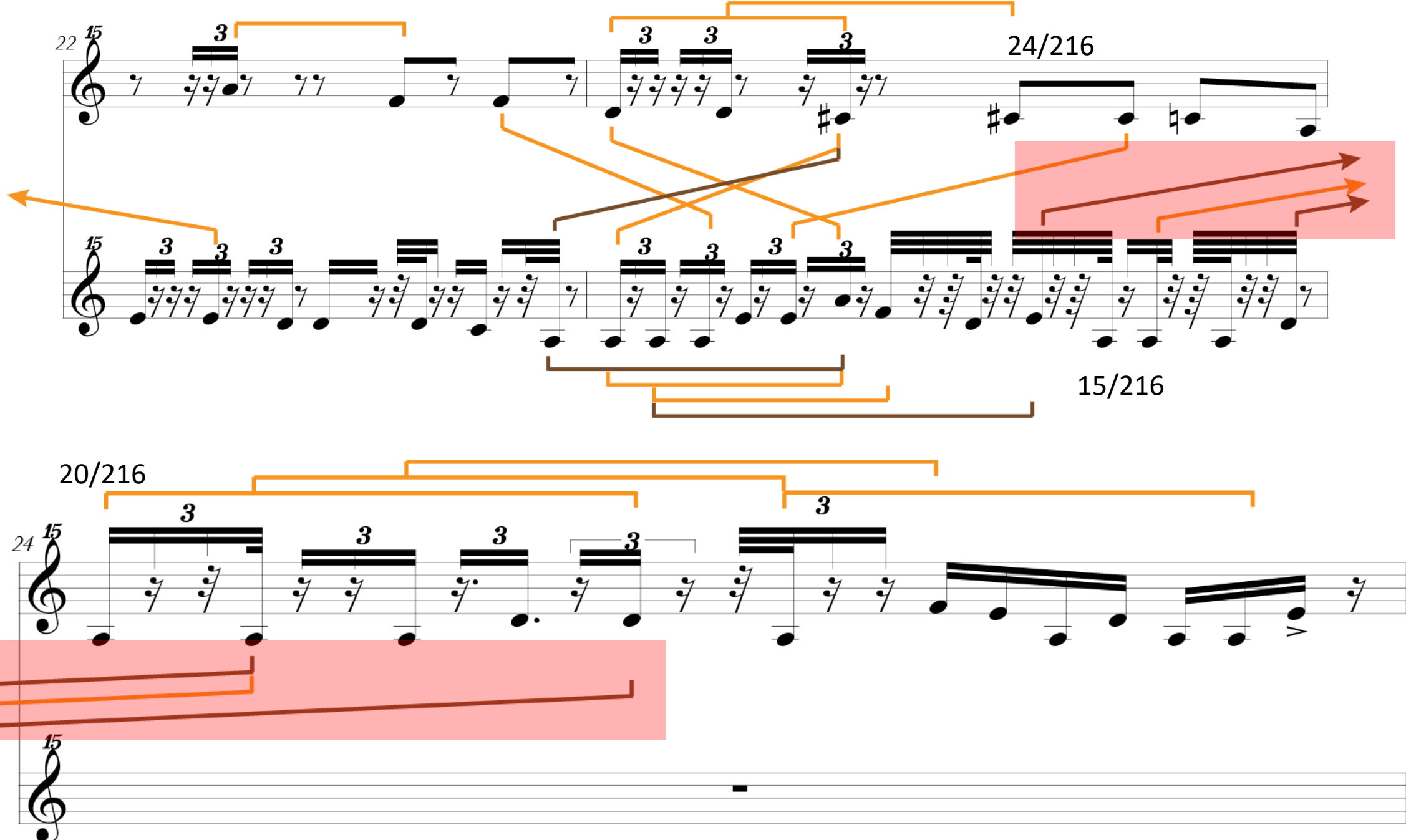
3

3

3

15





Canon 1b, D, IOI Analysis

15 × 80 (♩. ♪)

5 × 110 (♩. ♪. ♪. ♪.)



19 15

5+4  
8

3

3

15

4+5  
8

3

3

3

3

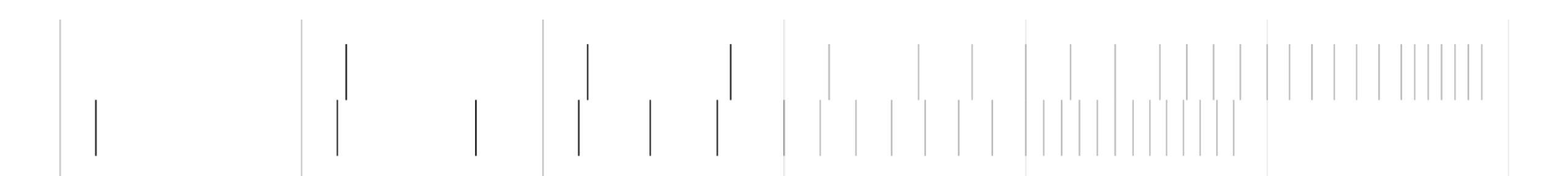
15 × 80 (♩. ♪)

5 × 110 (♩. ♪. ♪. ♪.)

The image displays a musical score for two staves, both in treble clef. The top staff begins with a measure number '22' and a tempo marking '15'. It contains a sequence of notes with various rests and triplet markings (indicated by a '3' over a bracket). The bottom staff also starts with a '15' tempo marking and features a more complex rhythmic pattern, including many triplet markings. Above the staves, there are two sets of horizontal lines representing a piano roll or a simplified staff representation. The first set is orange and corresponds to the tempo '15 × 80 (♩. ♪)'. The second set is brown and corresponds to the tempo '5 × 110 (♩. ♪. ♪. ♪.)'. Orange and brown arrows connect these tempo markings to specific measures in the musical score, indicating the timing and duration of the respective musical phrases.



The image shows a musical score for the song "The Rose Tree". It consists of two staves: a treble staff and a bass staff. The treble staff begins with a treble clef and a key signature of one flat (B-flat). The melody is written in 4/4 time. It starts with a quarter note G4, followed by a quarter note A4, and then a quarter note B4. The next measure contains a triplet of eighth notes: G4, A4, and B4. This is followed by a quarter note G4, a quarter note A4, and a quarter note B4. The melody then descends: a quarter note G4, a quarter note F4, and a quarter note E4. The final measure of the melody is a triplet of eighth notes: G4, A4, and B4. The bass staff begins with a bass clef and a key signature of one flat. It contains a simple accompaniment consisting of a quarter note G2, a quarter note A2, and a quarter note B2. The final measure of the bass staff is a triplet of eighth notes: G2, A2, and B2. Arrows indicate the flow of the music from the treble staff to the bass staff.



15 × 80 (♩. ♪)

5 × 110 (♩. ♪. ♪. ♪.)

19 15

5+4 8

3

3

15

4+5 8

3

3

3

3

15 × 80 (♩. ♪)

5 × 110 (♩. ♪. ♪. ♪.)

The image displays a musical score with two staves. The top staff begins with a treble clef and a '22' marking. It contains a sequence of notes, including triplets marked with a '3' and a bracket. The bottom staff also starts with a treble clef and a '15' marking, followed by a series of triplets and other rhythmic patterns. Above the staves, there are two sets of rhythmic notation: '15 × 80 (♩. ♪)' and '5 × 110 (♩. ♪. ♪. ♪.)'. Colored lines (orange and brown) connect these notations to specific parts of the musical score, indicating a mapping or analysis. An orange arrow points left from the bottom staff, and a brown arrow points right from the bottom staff.

15 × 80 (♩. ♪)

5 × 110 (♩. ♪. ♪. ♪.)

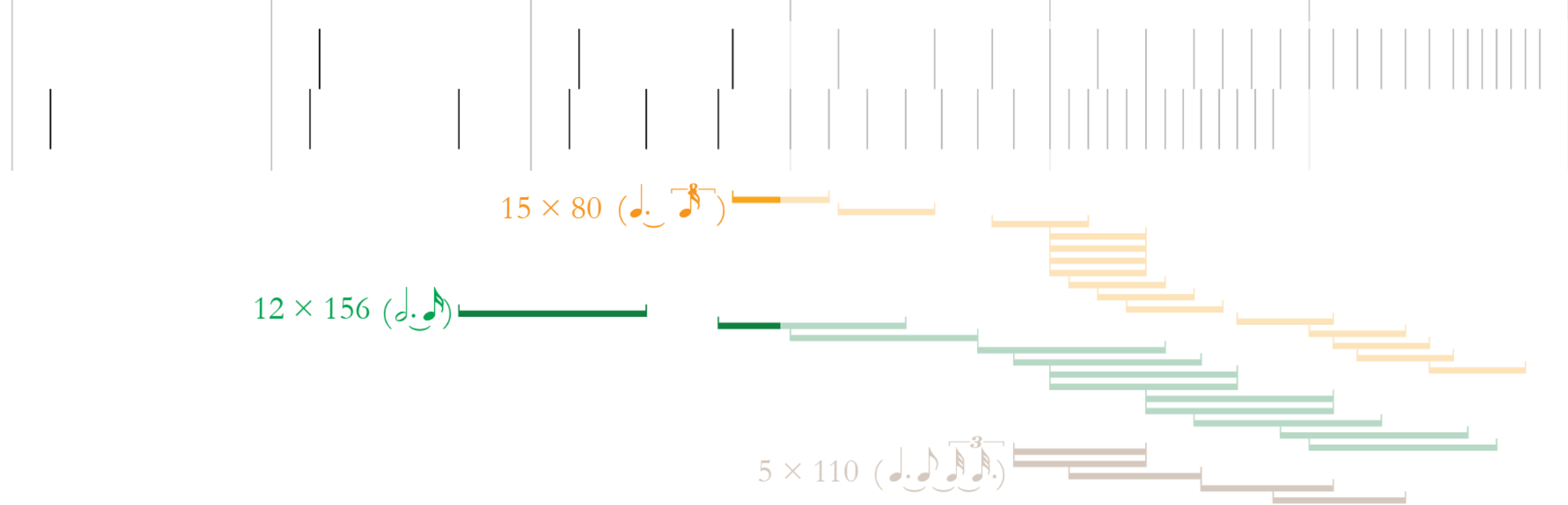
A musical score for a piano exercise, consisting of two staves. The top staff is in treble clef and contains a sequence of notes with various slurs and triplet markings. The bottom staff is also in treble clef and is mostly empty, with a few notes at the beginning. Arrows indicate fingerings or articulation for the notes in the top staff.

The top staff begins with a treble clef and a key signature of one flat (B-flat). The first measure contains a triplet of eighth notes, marked with a '3' and a slur. This is followed by a series of eighth notes, some of which are grouped in triplets. The staff ends with a double bar line. The bottom staff begins with a treble clef and a key signature of one flat (B-flat). It contains a few notes at the beginning, followed by a double bar line. Arrows indicate fingerings or articulation for the notes in the top staff.









15 19

5+4 8

3

3

3

3

4+5 8

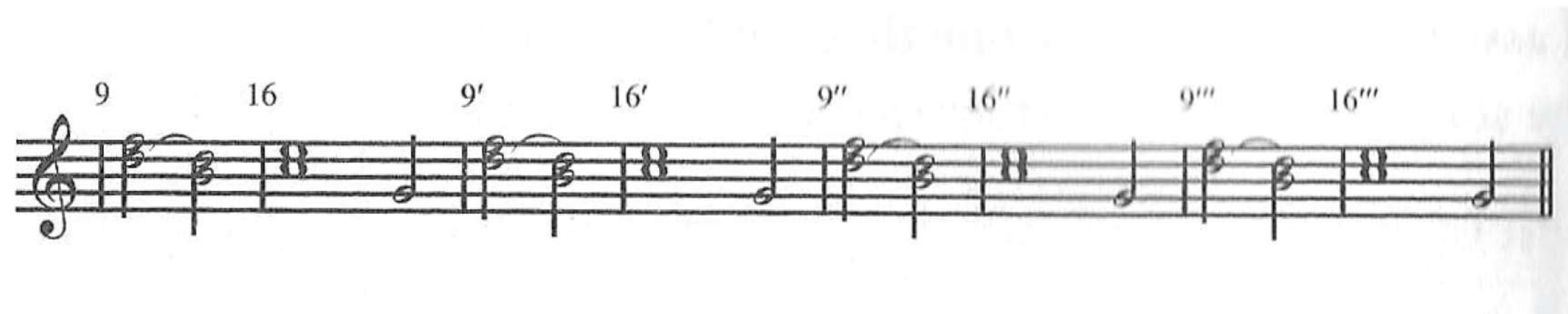
3

3

3

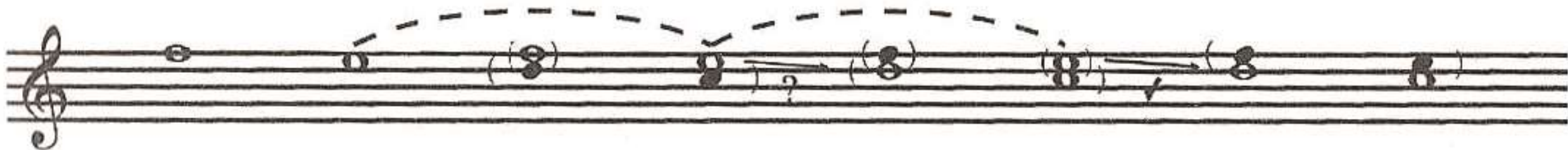
3

Canon 1b, D, alternate hearing



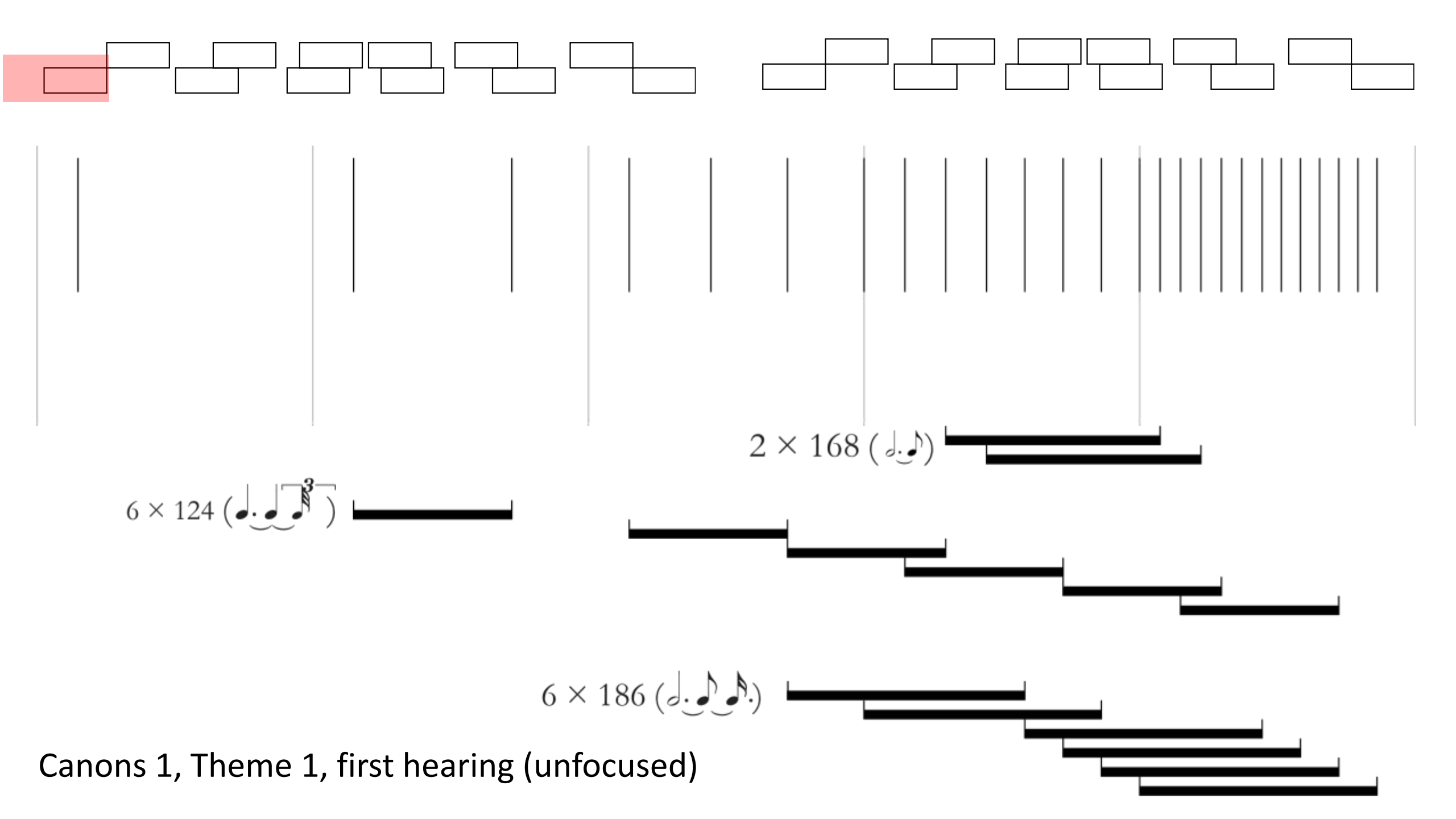
repetition and assimilation to structure

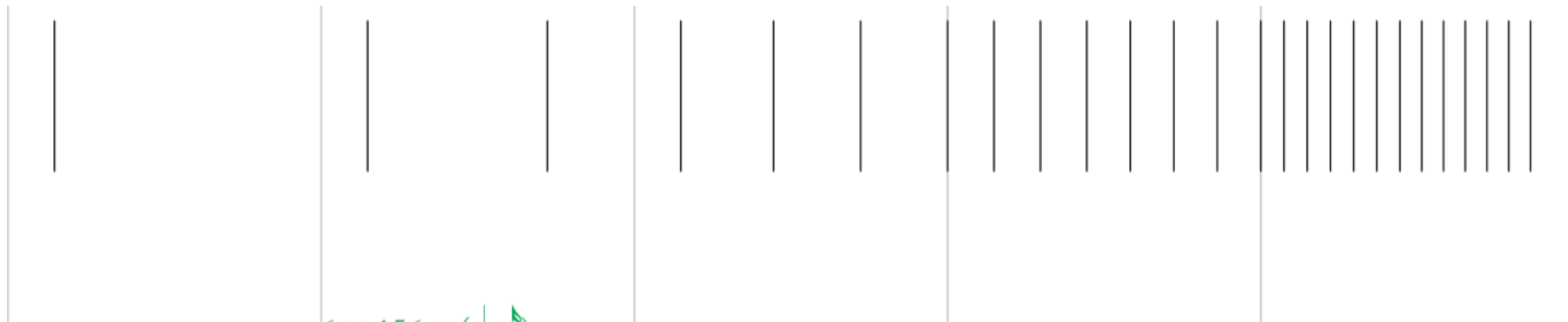
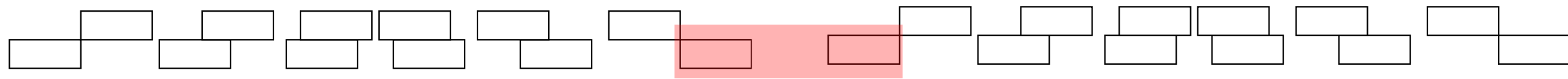
from Lewin, Bard-Schwartz, and Cohn 2005 ("Morgengruss" essay)



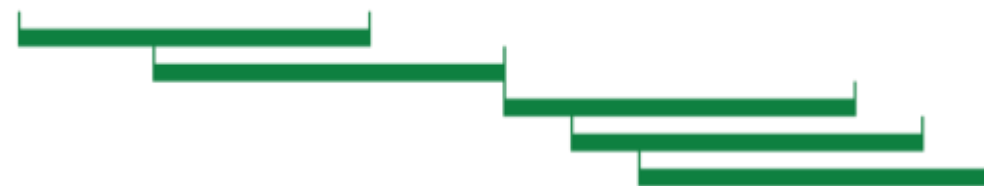
repetition and assimilation to structure

from Lewin, Bard-Schwartz, and Cohn 2005 ("Morgengruss" essay)





$6 \times 156$  (♩.♩)



$2 \times 80$  (♩.♩)



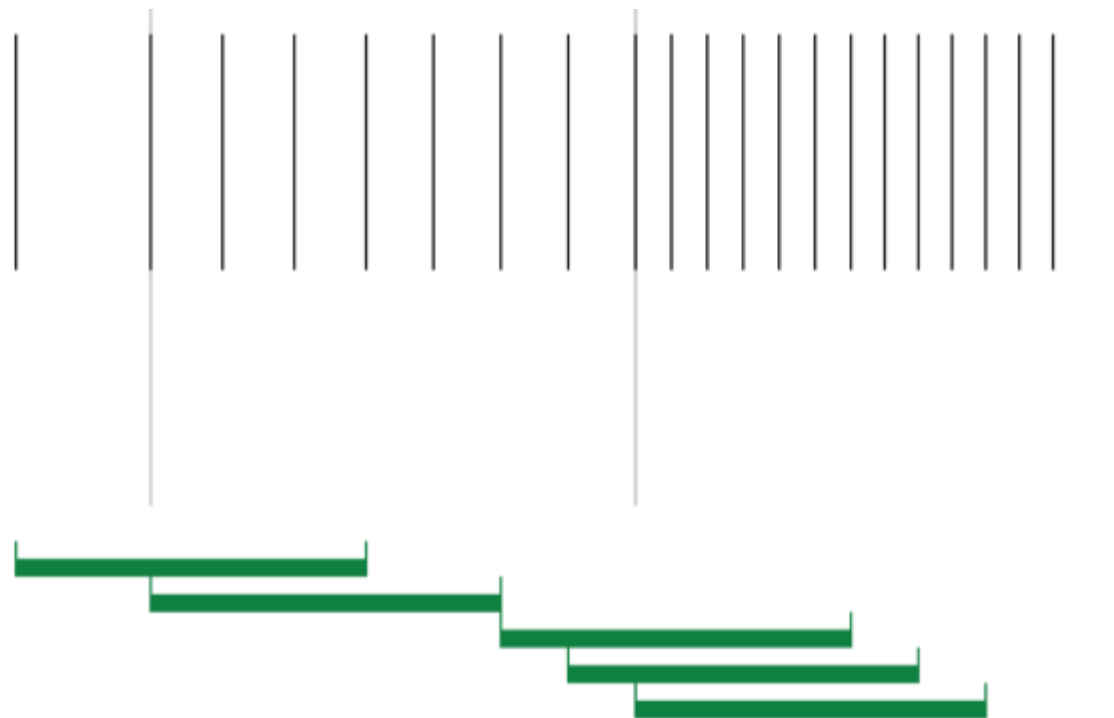
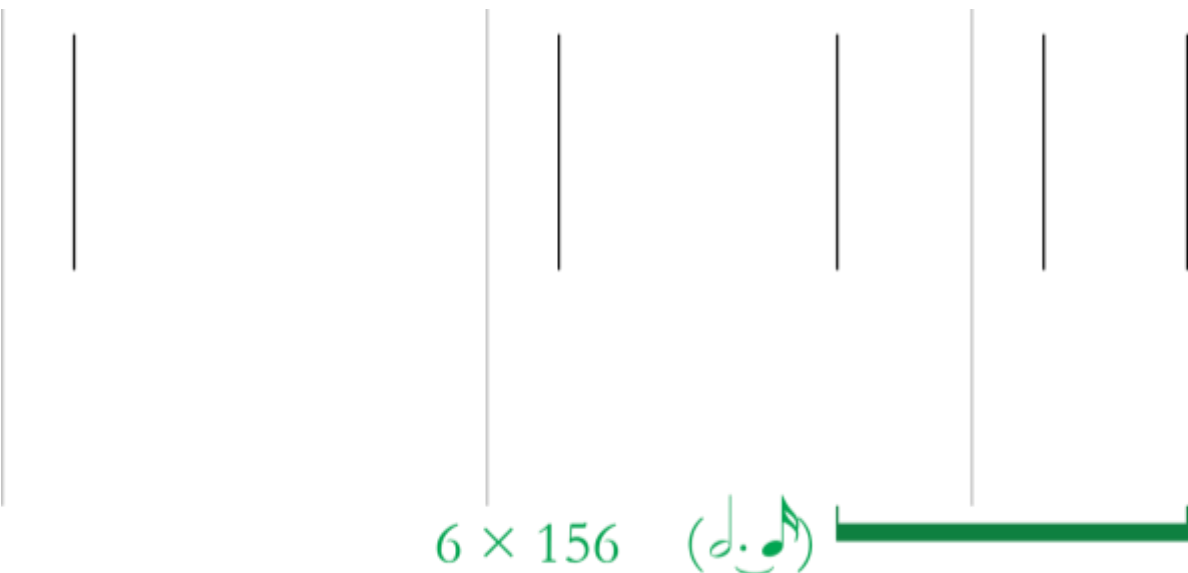
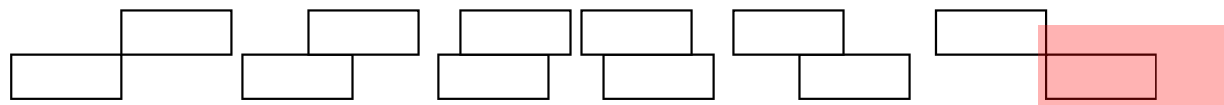
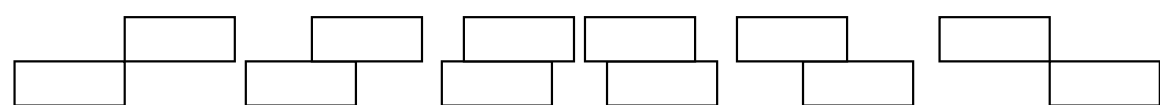
$2 \times 168$  (♩.♩)



$8 \times 124$  (♩.♩.♩)



Canons 1, Theme 1, midpoint hearing (half-focused)



Canons 1, Theme 1, final hearing (fully focused)

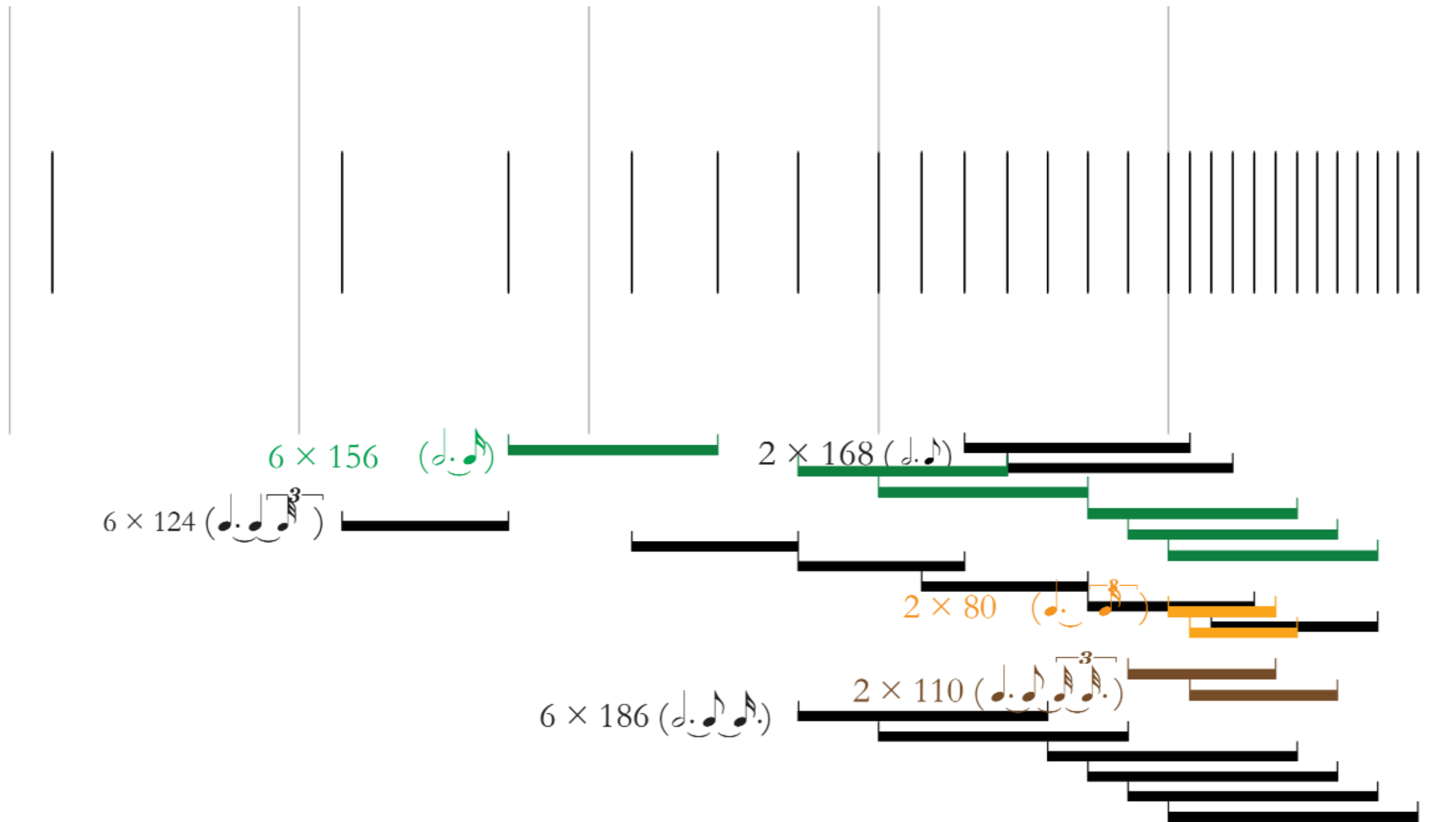
**When I saw these novel, quasi three-dimensional pictures at the start of the nineties, I was very interested**, and especially by the old stereoscopic technique from the late 19th century, where two almost identical pictures, photographed with just a small spatial displacement between them (like two stereo microphones), are placed next to one another. **If one looks at them in an unfocussed way, one sees a magical three-dimensional picture in the middle, as the sum of the other two.**

[...]

At any rate, that's what I attempt here, partly on a small scale, as in the repetitions of Canon 1a, and partly on a large one, since Canon 1b is a 'double' of 1a (which is for Group 1), but this time for all nine instruments. **It is basically the same music, but with many more canonic levels superimposed. So the two form a pair, and should be heard as such. They are like two big musical pictures which, heard with distant, unfocussed ears, may produce a third, three-dimensional picture.**









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