



A JOURNAL OF THE SOCIETY FOR MUSIC THEORY

## MTO 31.4 Examples: Chung, Mixed Rhythms in Chopin's Ballades and Scherzos

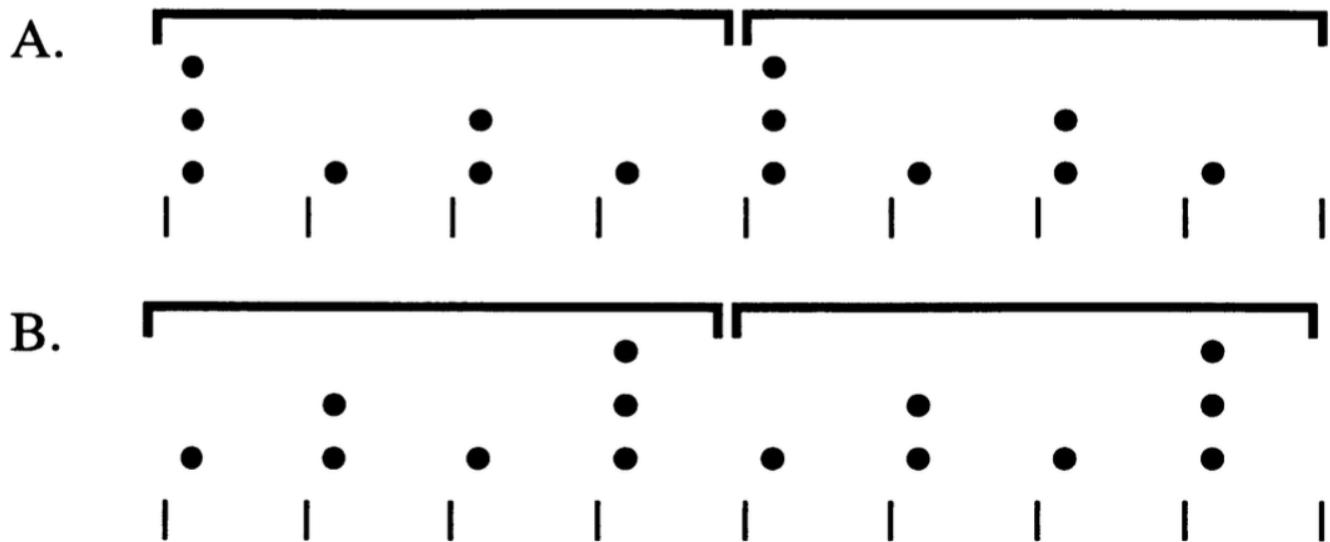
(Note: audio, video, and other interactive examples are only available online)

<https://www.mtosmt.org/issues/mto.25.31.4/mto.25.31.4.chung.html>

Example 1. Chopin's Scherzo no. 2, op. 31 (one hyperbeat = one measure)

The musical score consists of three staves of piano music. The top staff starts with a dynamic of **Presto**. The first measure (measures 1-4) features a basso continuo line with a bass clef and a treble line with a treble clef, both in 3/4 time. The bass line has a '3' under it, indicating a triplets grouping. The treble line has a '3' under it, indicating a triplets grouping. The second staff (measures 9-12) continues the basso continuo line with a bass clef and a treble line with a treble clef, both in 3/4 time. The bass line has a '3' under it, indicating a triplets grouping. The treble line has a '3' under it, indicating a triplets grouping. The third staff (measures 17-20) continues the basso continuo line with a bass clef and a treble line with a treble clef, both in 3/4 time. The bass line has a '3' under it, indicating a triplets grouping. The treble line has a '3' under it, indicating a triplets grouping. The score includes various dynamics such as **sotto voce**, **ff**, **pp**, **8va**, **ff**, **fz**, and **ff**. The basso continuo line includes markings like **ped.** and **\* ped.**. Measures are numbered 1 through 4 above the top staff, 1 through 4 above the middle staff, and 1 through 4 above the bottom staff. Measure 17 is the start of a new section, indicated by a question mark above the top staff.

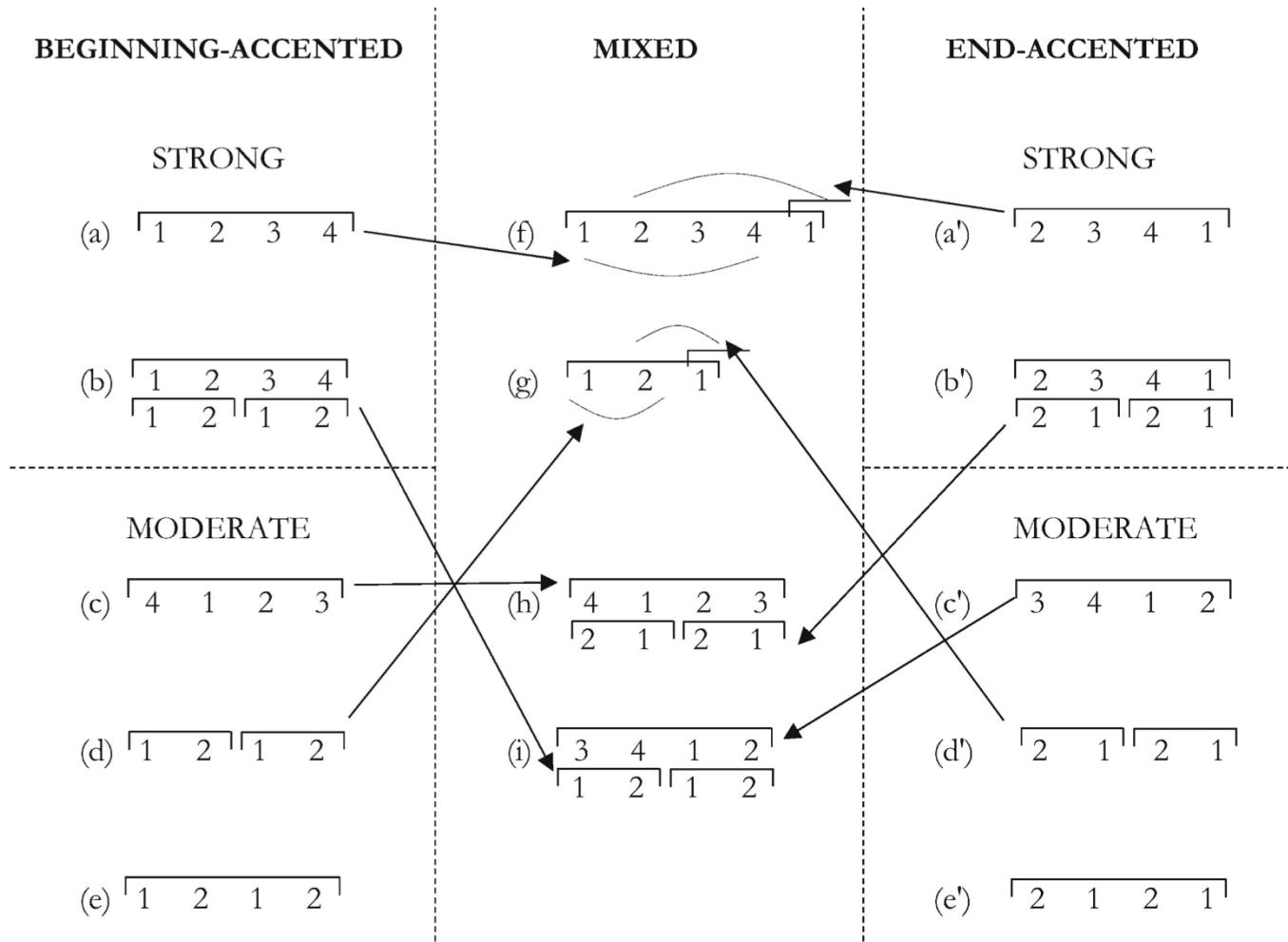
Example 2. Unproblematic cases of beginning- and end-accented structures (from Temperley's Example 4 [2003])



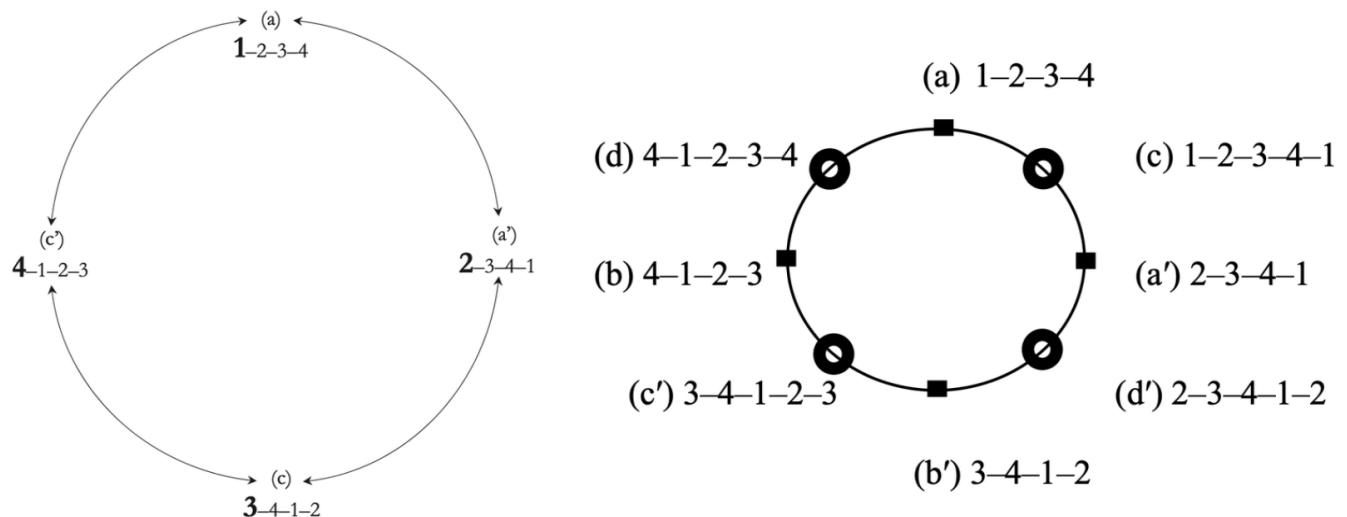
Example 3. Phrase-rhythmic notation in recent music-theoretical literature

	Beginning-accented group	End-accented group		
Rothstein (1989)	1 2 3 4			4 1 2 3 (e.g., Danube)
McKee (2004)	[1234]	[2341]	[3412]	[4123]
Rothstein (2011)	1–2–3–4 (German Hypermeter)	2–3–4–1 (Franco-Italian Hypermeter)		
Ito (2013)	the 1–2–3–4 schema	the 2–3–4–1 schema		

Example 4. Ng's tripartite taxonomy of phrase-rhythmic types (from Ng's Example 1 [2021])



Example 5. Ng's cyclic space (left side) and my Charm Bracelet Space (right side)



Example 6. Group (c) 1–2–3–4–1 delineating the final structural cadence in Chopin's Ballade No. 1, op. 23 (one hyperbeat = half measure)

(a)

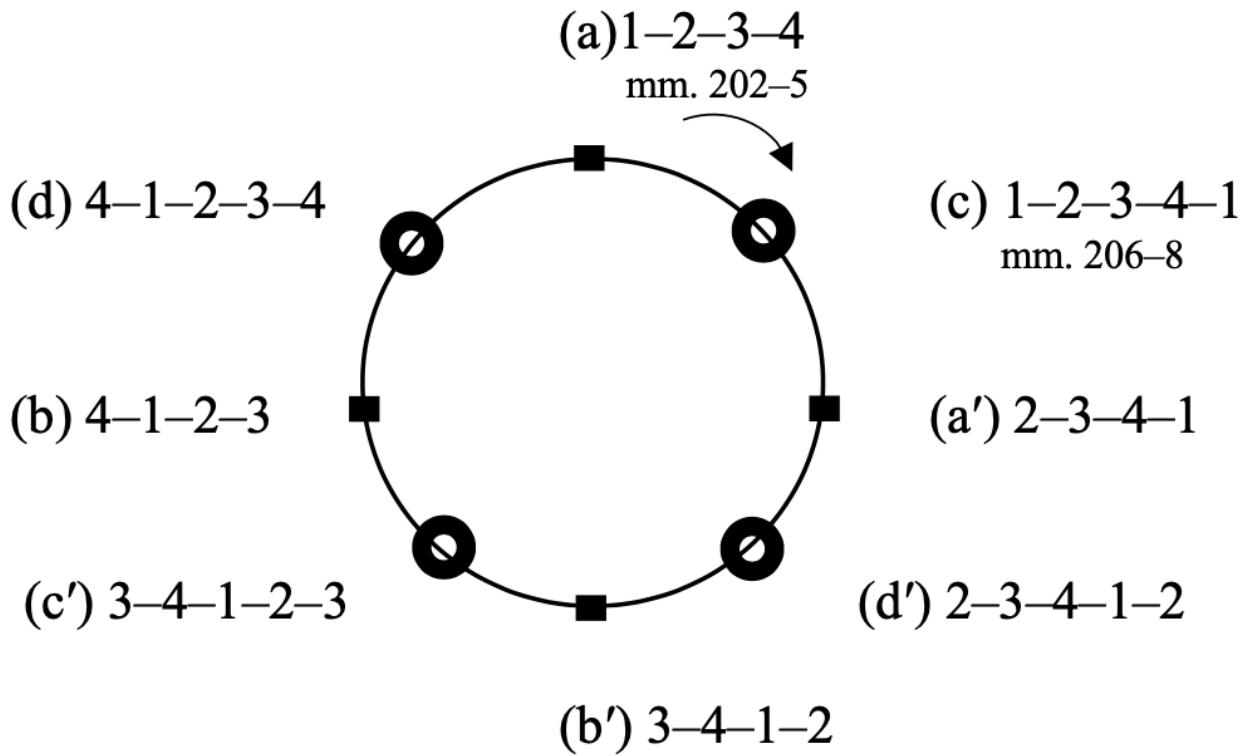
202

(c)

205

207

Example 7. Phrase-rhythmic progression in Chopin's Ballade no. 1, mm. 202–8, illustrated with the Charm Bracelet Space



Example 8. Group (d) 4–1–2–3–4 delineating the HC in Chopin's Ballade no. 4, op. 52 (one hyperbeat = half measure)

Principal theme

(a) 1 2 3 4 (b) 1 2 3 4 (c) 1 2 3 4 (d) 1 2 3 4

17

1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

17 Variation I (a)

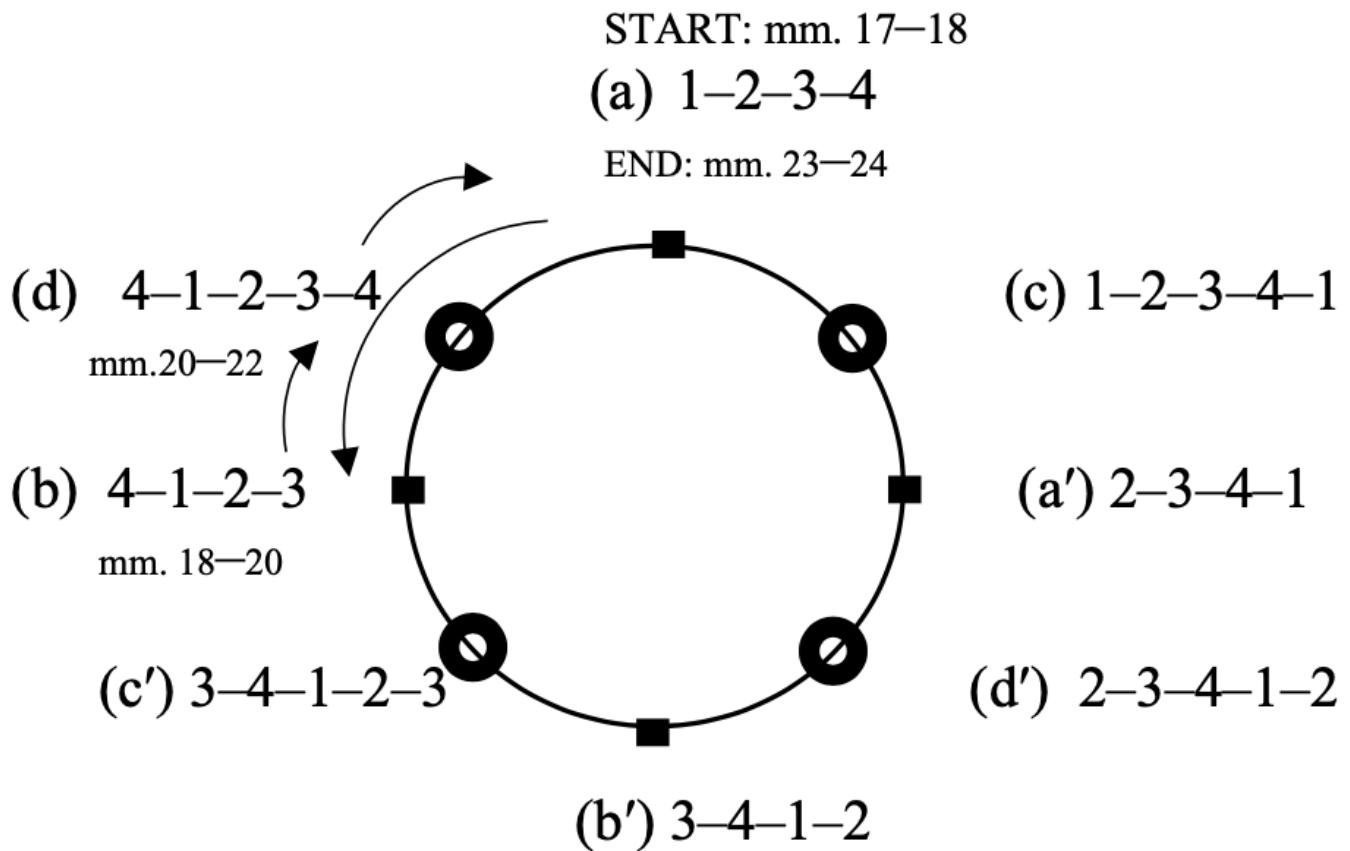
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1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

17 Variation I (b)

iv: PAC? i: HC

Example 9. Phrase-rhythmic progression in mm. 17–24 of Chopin’s Ballade no. 4 illustrated with the Charm Bracelet Space



Example 10. Chopin's Scherzo no. 1, op. 20; group (d) 4–1–2–3–4 punctuating first HC, then PAC at the end of the first theme (one hyperbeat = one measure)

(b)

56

ritenuto.

4 1 2 3 4 1 2 3

Ped. Ped. \*

Ped. \*

(d)

64

4 1 2 3 4

1. 2.

i: HC i: PAC

(d)

1 2 3 4

(a)

73

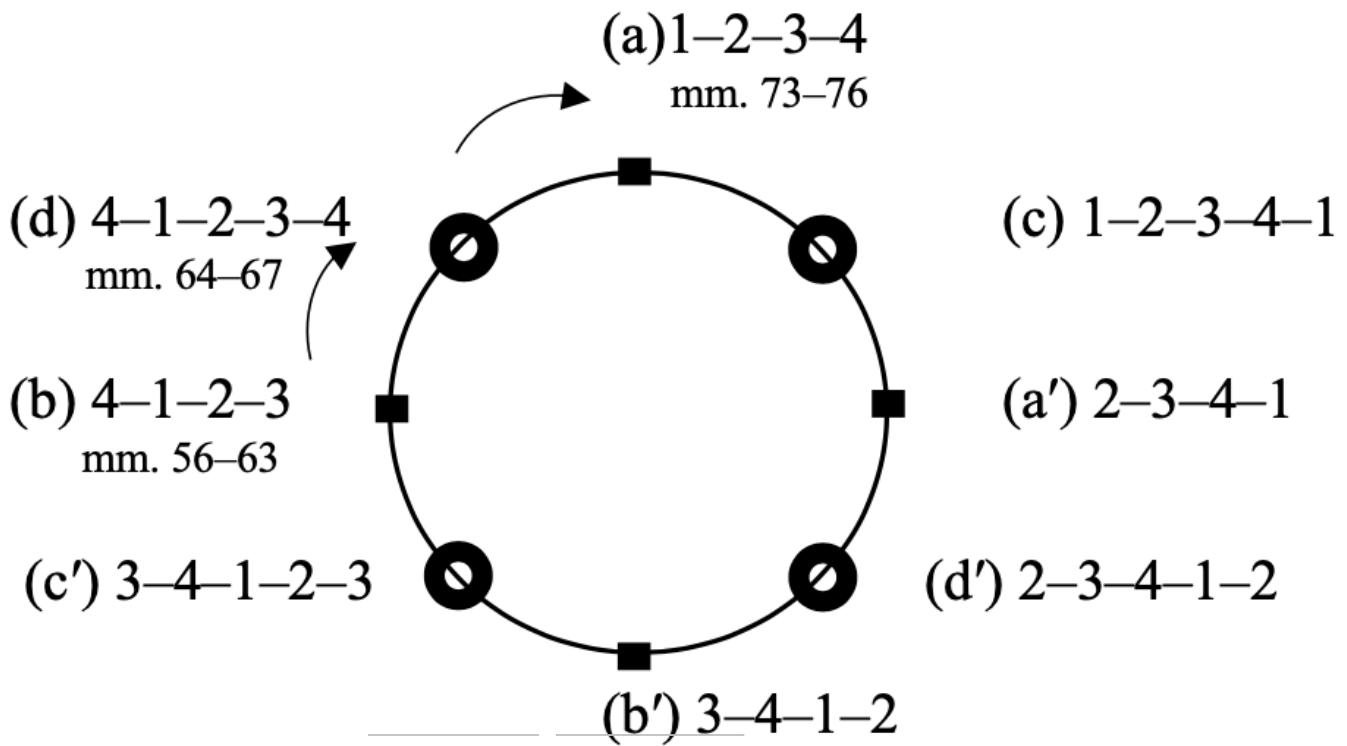
1 agitato 2 sotto voce

3 4

1 2 3 4

cresc.

Example 11. Phrase-rhythmic progression in mm. 56–76 of Chopin’s First Scherzo illustrated with the Charm Bracelet Space



Example 12. Three possible phrase-rhythmic progressions following a mixed rhythm

Mixed Rhythm	Four-hyperbeat group	Three-hyperbeat group	Mixed Rhythm (five-hyperbeat group)
1-2-3-4-1	2-3-4-1/ 1-2-3-4	2-3-4	2-3-4-1-2
2-3-4-1-2	3-4-1-2	3-4-1	3-4-1-2-3
3-4-1-2-3	4-1-2-3	4-1-2	4-1-2-3-4
4-1-2-3-4	1-2-3-4	1-2-3	1-2-3-4-1

Arrows above the table indicate possible phrase-rhythmic progressions from a mixed rhythm to the four groups:

- From Mixed Rhythm to Four-hyperbeat group: (5+4)
- From Mixed Rhythm to Three-hyperbeat group: (5+3)
- From Mixed Rhythm to Mixed Rhythm (five-hyperbeat group): (5+5)

Example 13. (5+4) group: (d) to (a) in Chopin's Second Ballade, op. 38 (one hyperbeat = half measure)

5

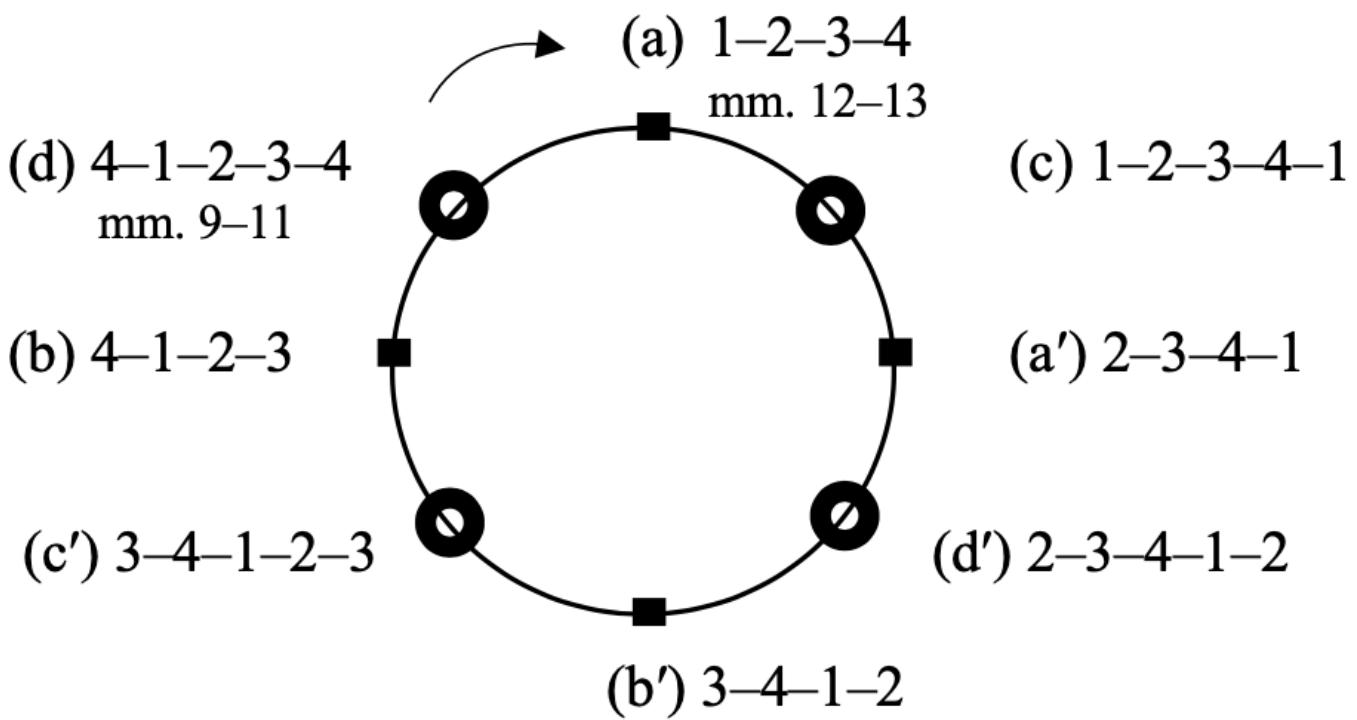
(a) 1 2 3 4 | incomplete (a) 1 2 3 | (d) 4

I: PAC

10

(a) 1 2 3 4 | 1 2 3 4 |

Example 14. Chopin's Ballade no. 2 op. 38, phrase-rhythmic progression (d) to (a) illustrated with the Charm Bracelet Space



Example 15. Phrase-rhythmic progression (d) to (a) in Chopin's *Fantaisie-Impromptu*, op. 66 (one hyperbeat = half measure)

**Antecedent phrase**

(a)

43 1 2 *tr* 3 4 >

*sotto voce* Ped. \* Ped. \* Ped. \* Ped. \*

incomplete (a)

1 2

46 3 4 1 2 *tr* 3 4

Ped. (HC) \* Ped. \* Ped. \* Ped. \* Ped. \* Ped. \*

(d)

49 (a) 1 2 3 4 1 2 *tr* 3 4 >

rit. a tempo

Ped. \* Ped. \* Ped. \* Ped. \* Ped. \*

I: PAC? HC

**Consequent phrase**

Example 16. (5+3) group in Chopin's Scherzo no. 4, op. 54 (one hyperbeat = one measure)

Example 17. (5+3) group in Chopin's Etude op. 10, no. 3 (one hyperbeat= one measure)

Lento ma non troppo. ( $\text{♩} = 100$ )  
(c)

The musical score consists of two staves of piano music. The top staff is in treble clef and the bottom staff is in bass clef. Both staves are in 2/4 time with a key signature of four sharps. The music is labeled 'Lento ma non troppo. ( $\text{♩} = 100$ )' and '(c)'. The score is divided into measures by vertical bar lines and grouped into hypermeasures by brackets above the staff. Measure 1 (hypermeasure 1) starts with a dynamic 'p' and a 'legato.' instruction. Measure 2 (hypermeasure 2) begins with a dynamic 'v'. Measure 3 (hypermeasure 3) begins with a dynamic 'cresc.'. Measure 4 (hypermeasure 4) begins with a dynamic 'stretto.'. Measure 5 (hypermeasure 5) begins with a dynamic 'ritenuto.'. Measure 6 (hypermeasure 6) begins with a dynamic 'ten.'. Various slurs, grace notes, and dynamic markings are present throughout the score.

Example 18. One possible interpretation in Chopin's Scherzo no. 2, op. 31

**Presto**

1 2 3 4 1 2 3 4

*sotto voce*

ff *Ped.*

8va 8: 8:

1 2 3 4

9 1 2 3 4 1 2 3 4

(8) 1 pp *Ped.* ff *Ped.*

1 2 3 4 1 2 3 4

17 1 2 3 4 1 2 3 4=1 2

(8) 1 2 3 4 1 2 3 4=1 2

*Ped.* fz 2 pp *Ped.*

27 3 4 1

3 4 1

Example 19. (5+5) group: (c) to (d') in Chopin's Scherzo no. 2, op. 31 (one hyperbeat = one measure)

**Presto**

(a) 1 2 3 4

(c) 1 2 3 4

*sotto voce*

1 ***ff***

*ped.* (c)

9 1 2 3 4

(8) 1 ***pp***

1 ***ff***

2 3 4

(d') 1 2 3 4 1 2 3 4 1 2

17 (8) 1 2 3 4 1 2 3 4 1 2

*ped.*

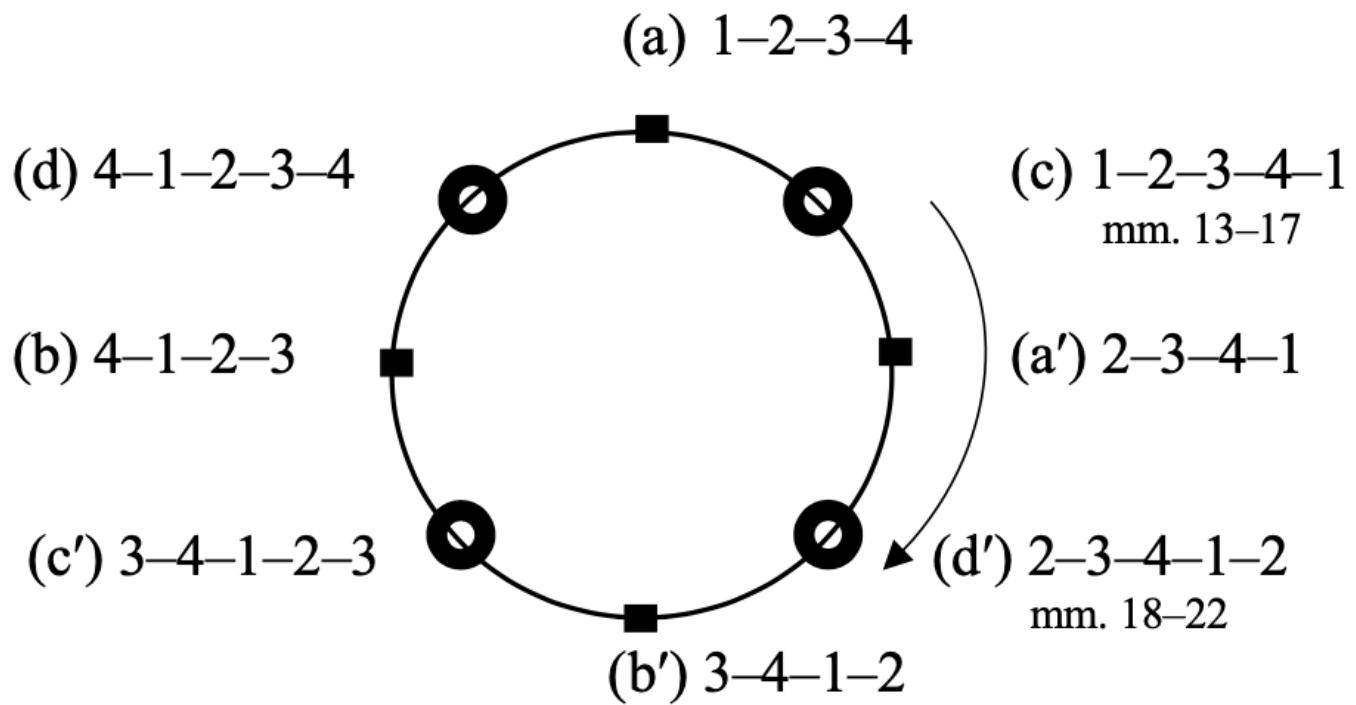
*fz* 2

*pp*

27 3 4

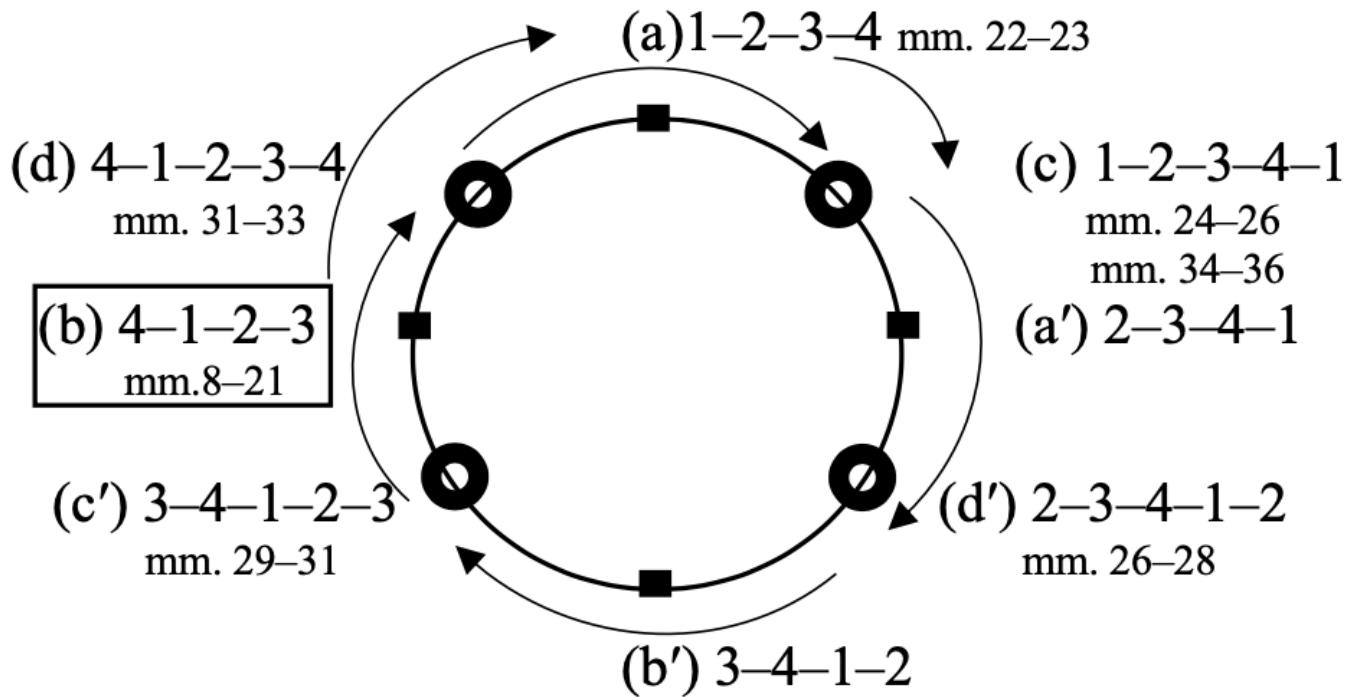
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Example 20. Chopin's Scherzo no. 2, op. 31, phrase-rhythmic progression (c) to (d') illustrated with the Charm Bracelet Space



Example 21. A full rotation of mixed rhythms in Chopin's Ballade no. 1, op. 23 (one hyperbeat = half measure)

Example 22. Chopin's Ballade no. 1, op. 23, phrase-rhythmic progression in mm. 8–36, illustrated with the Charm Bracelet Space (with a "conservative" interpretation of the phrase expansion)



Example 23. Chopin's Ballade no. 1, op. 23, phrase-rhythmic progression in mm. 8–36 illustrated with the Charm Bracelet Space (with a "radical" interpretation of the phrase expansion)

