Extremes within CMN

MUSIC 253/CS 275A

STANFORD UNIVERSITY

Common Music Notation (CMN)

Pitch

- 8va indicators
- *Ossia* readings (ed.)
- Ornaments
- Articulation marks
- Finger numbers
- Lyrics

Simple within one program;
often omitted in data translation

Durations (monophonic)

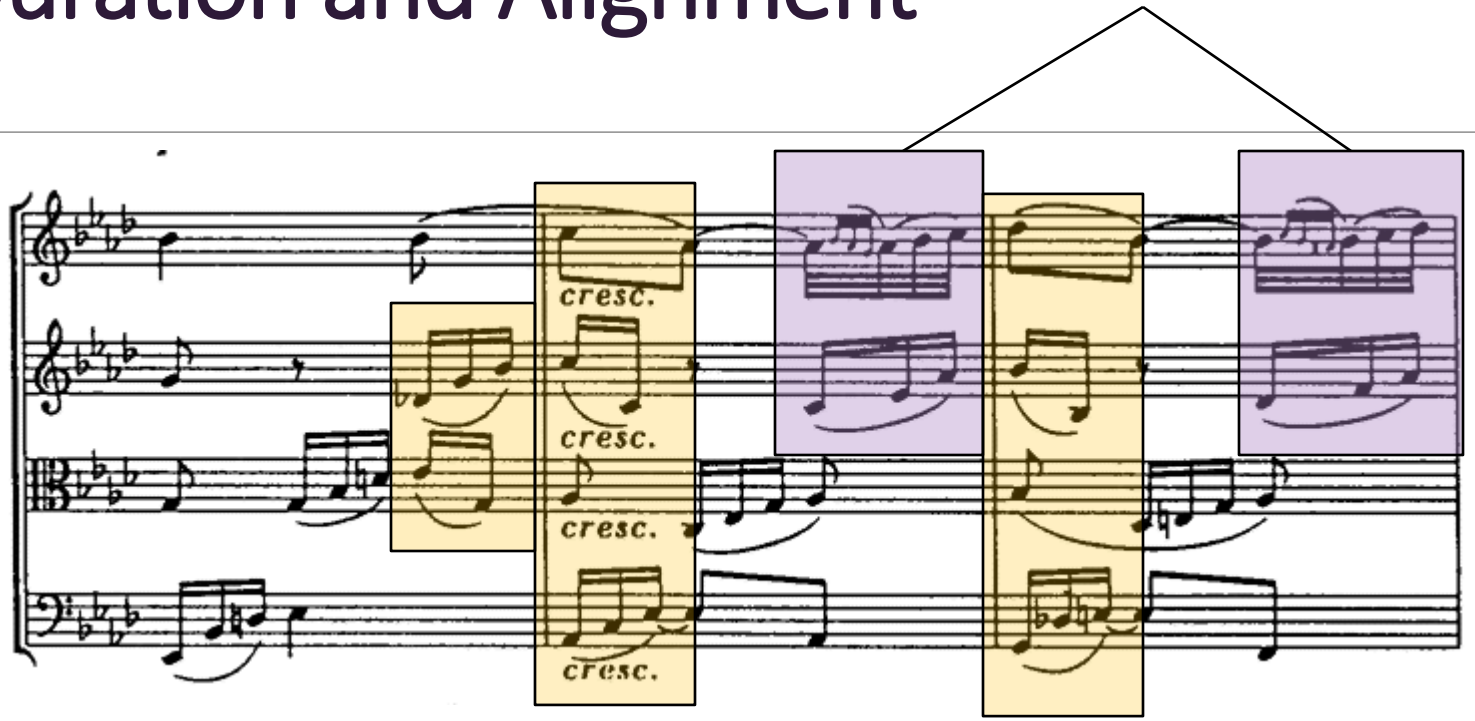
- Tuplets
- Dots not WYSIWYG

Durations (polyphonic)

Large number of
complex situations

http://www.ccarh.org/publications/reprints/ieee/

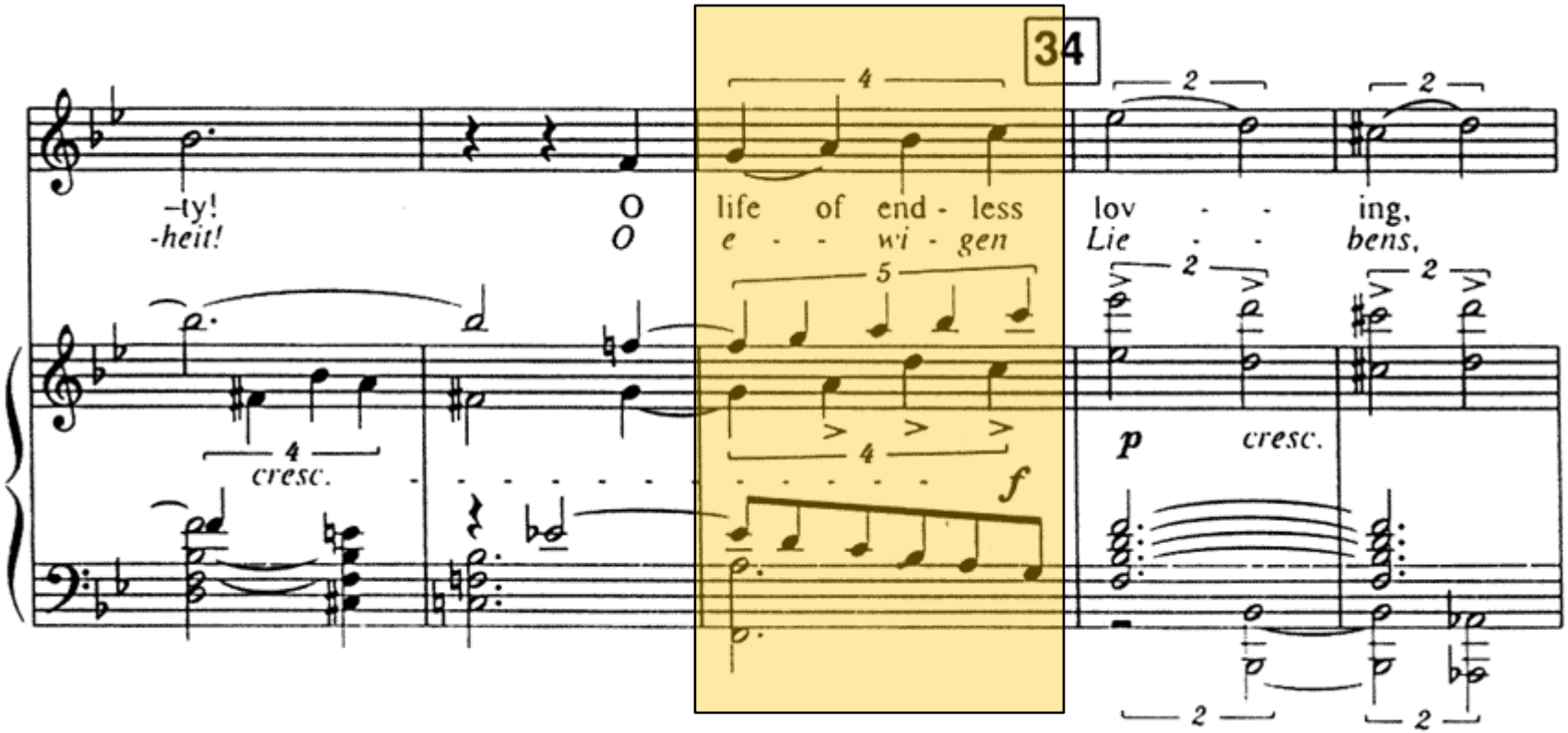
Duration and Alignment



Poly-sub-meters: 2:3, 3:4

Beethoven: “Harp” Quartet

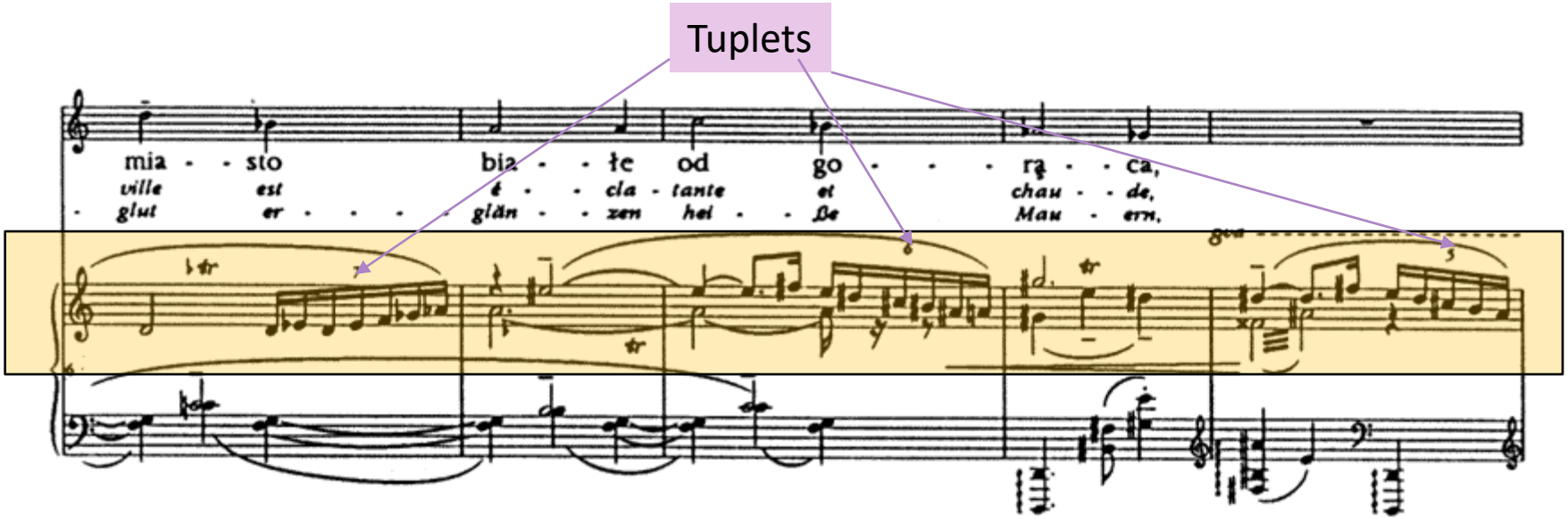
Duration and alignment



4:5:6 (vertical) in 3/4 (triple meter)

Mahler: *Das Lied von der Erde*: "Die Abschied"

Duration and Alignment



Szymanowski: *Songs of the Infatuated Muezzin*, No. 4

Lyrics=Polish, French, German

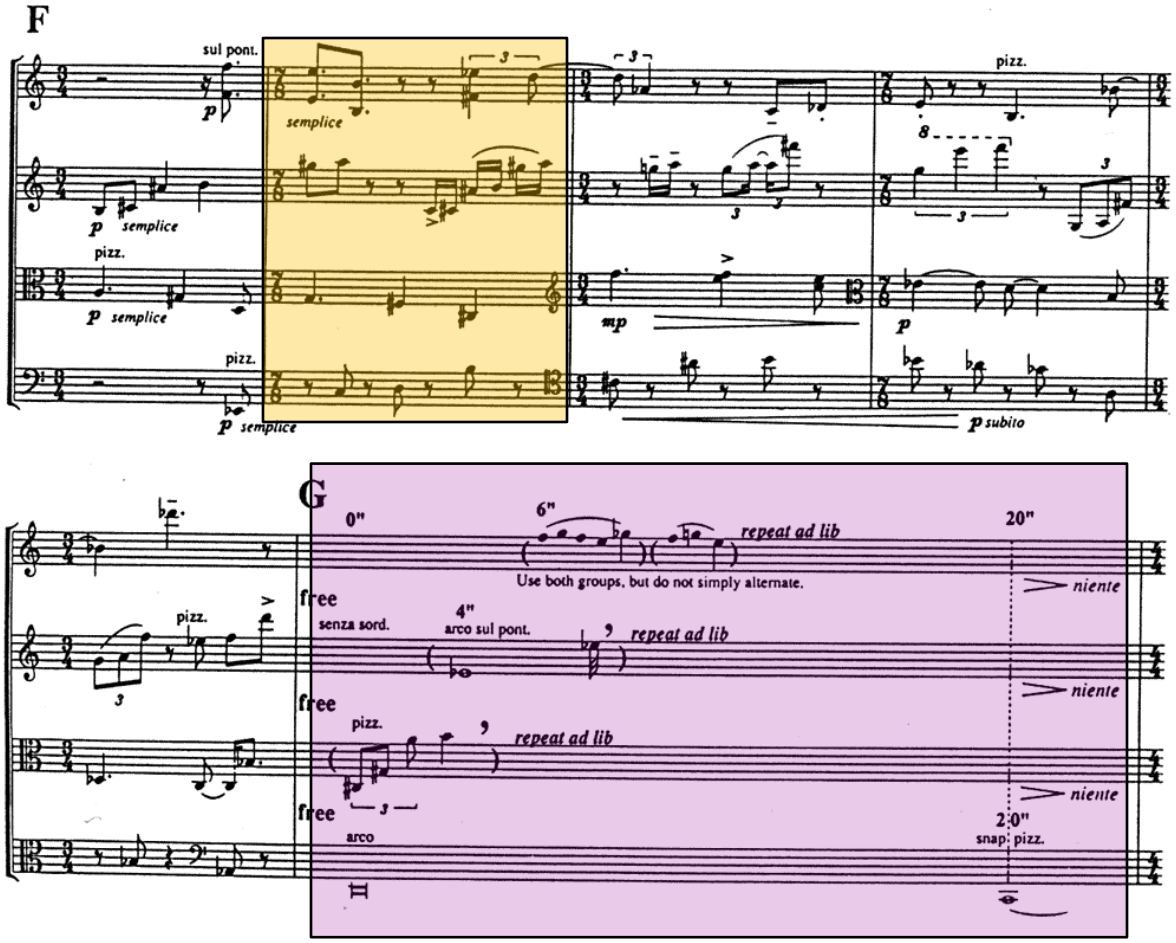
7:1, 6:1, 5:1 (horizontal)

Accepted irregularities

Irregular meters

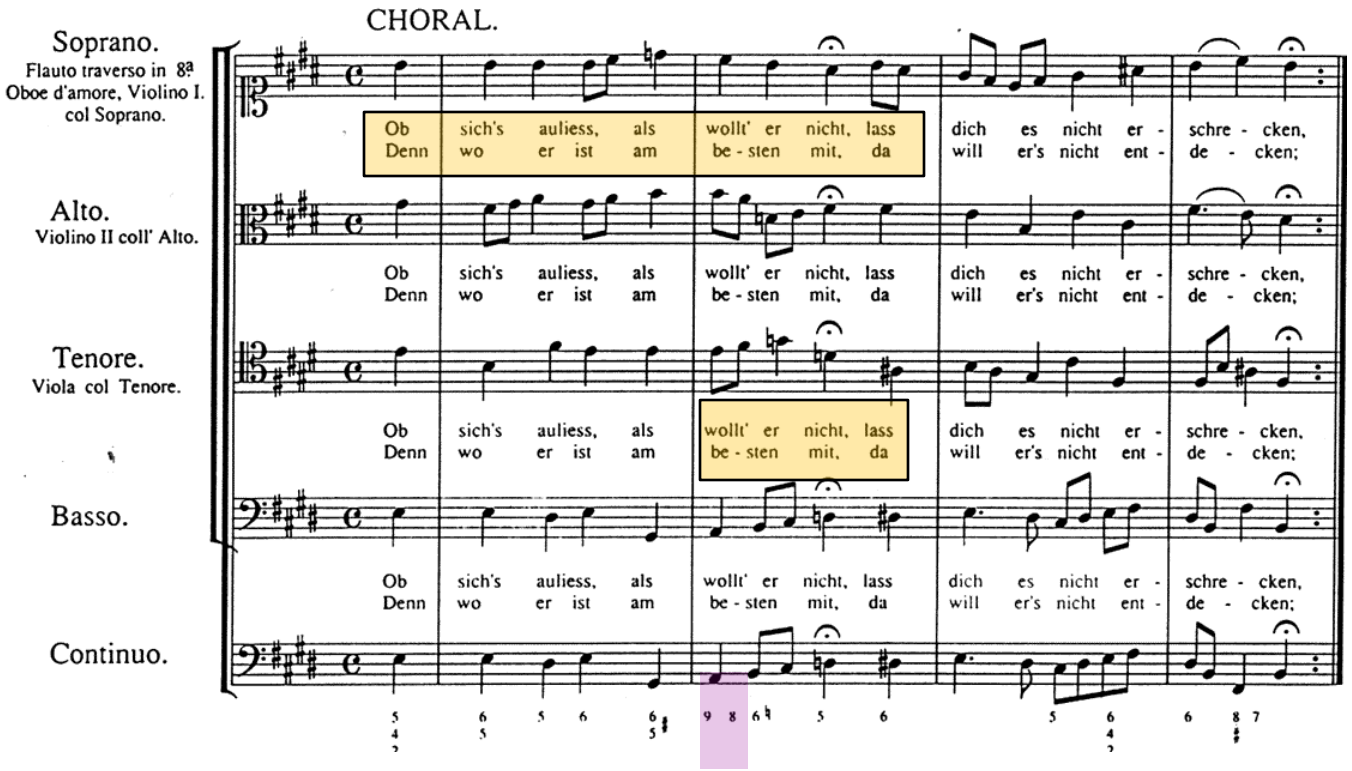
Irregular subdivisions

Ad libitum passages



Bartok

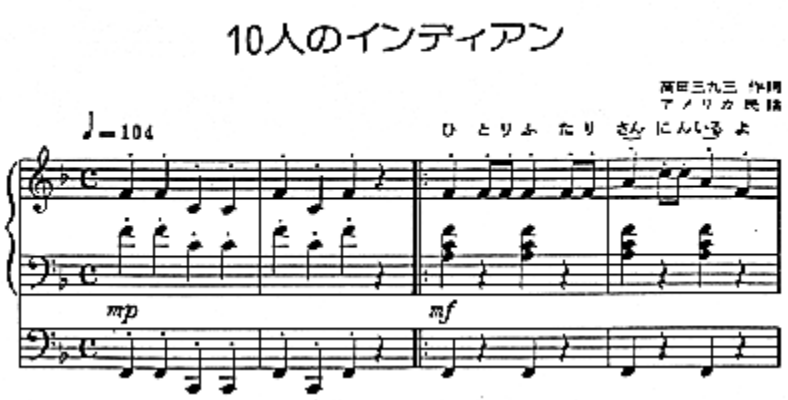
Lyrics alignment

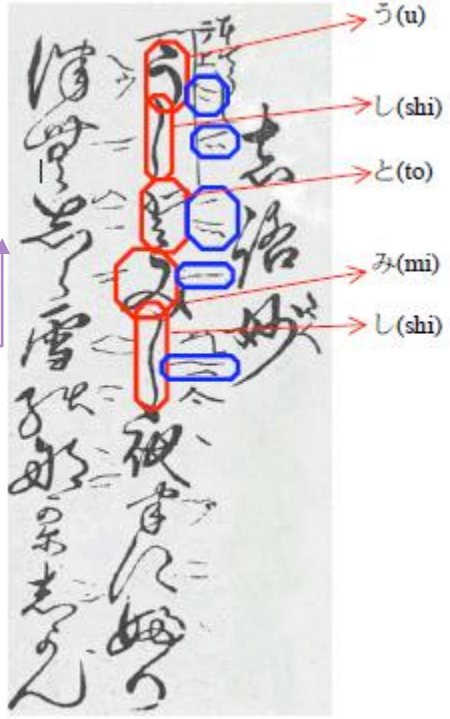


Basso continuo alignment

Bach chorale

Lyrics in non-Roman scripts

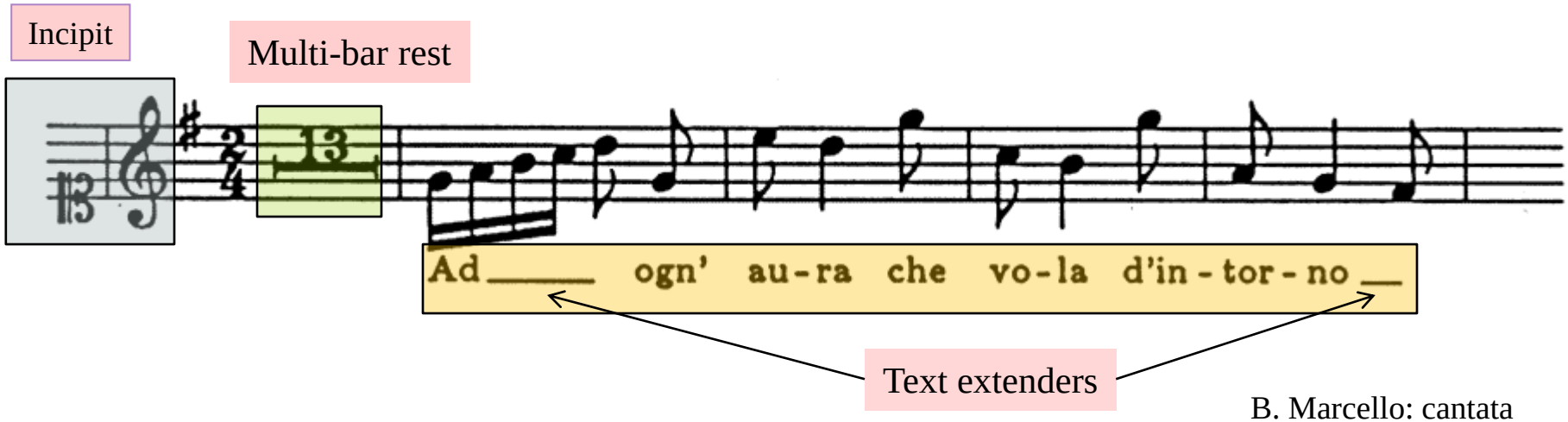




Shamisen neumes (and analogous problems):
Shape: presence/absence of pitch or vocal quality
Direction of curvature: pitch variation
Angle between neumes: pitch change
Length of neume: duration
Thickness: voice intensity, tone

Masato Yako (1998): Shamisen intro for nagauta play

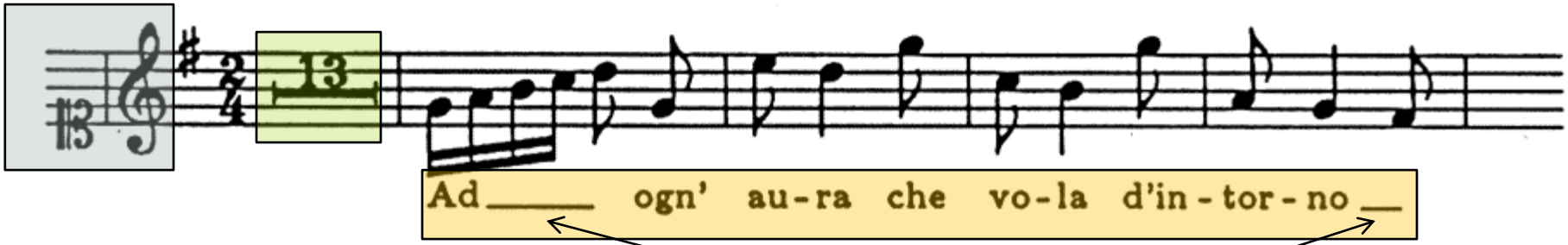
Grammar of vocal and instrumental parts



B. Marcello: cantata

Grammar of vocal and instrumental parts

Multi-bar rest

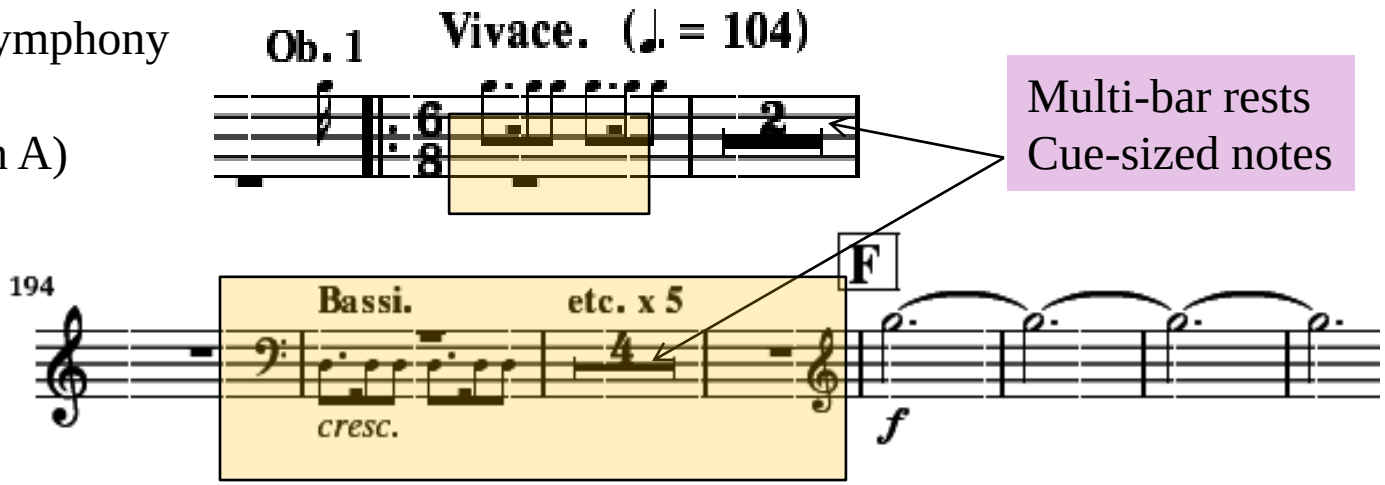


Text extenders

B. Marcello: cantata

Beethoven: 7th Symphony

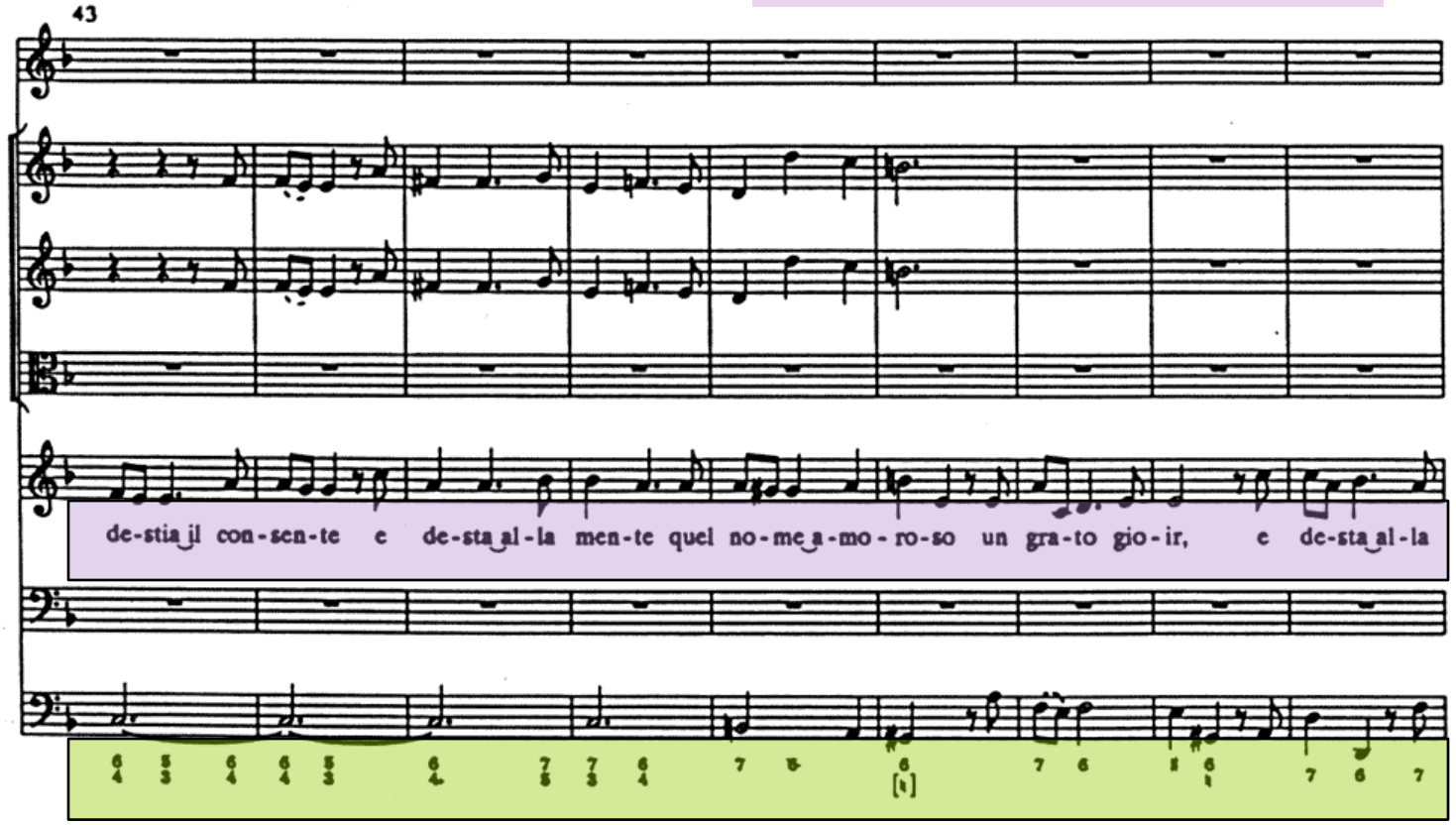
Clarinet No. 1 (in A)



Multi-bar rests
Cue-sized notes

Vertical spacing extras (*basso continuo*)

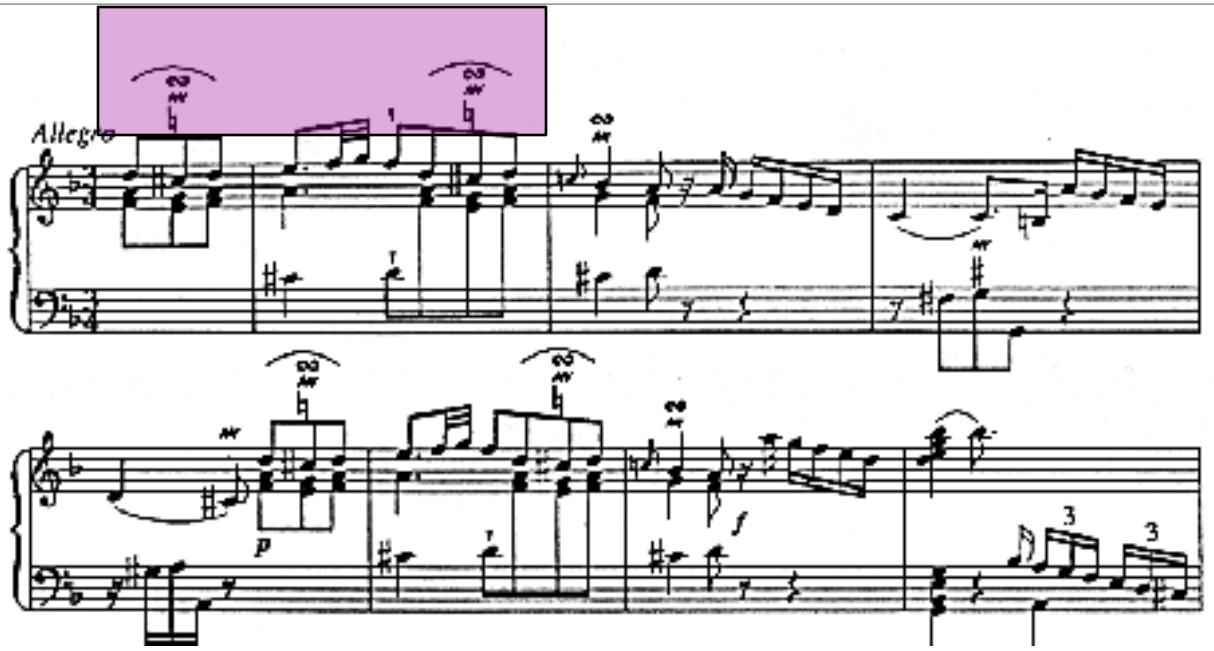
Numerical shorthand for harmonization



Basso continuo figuration

Handel: *Ottone*, "Bel labbro formato

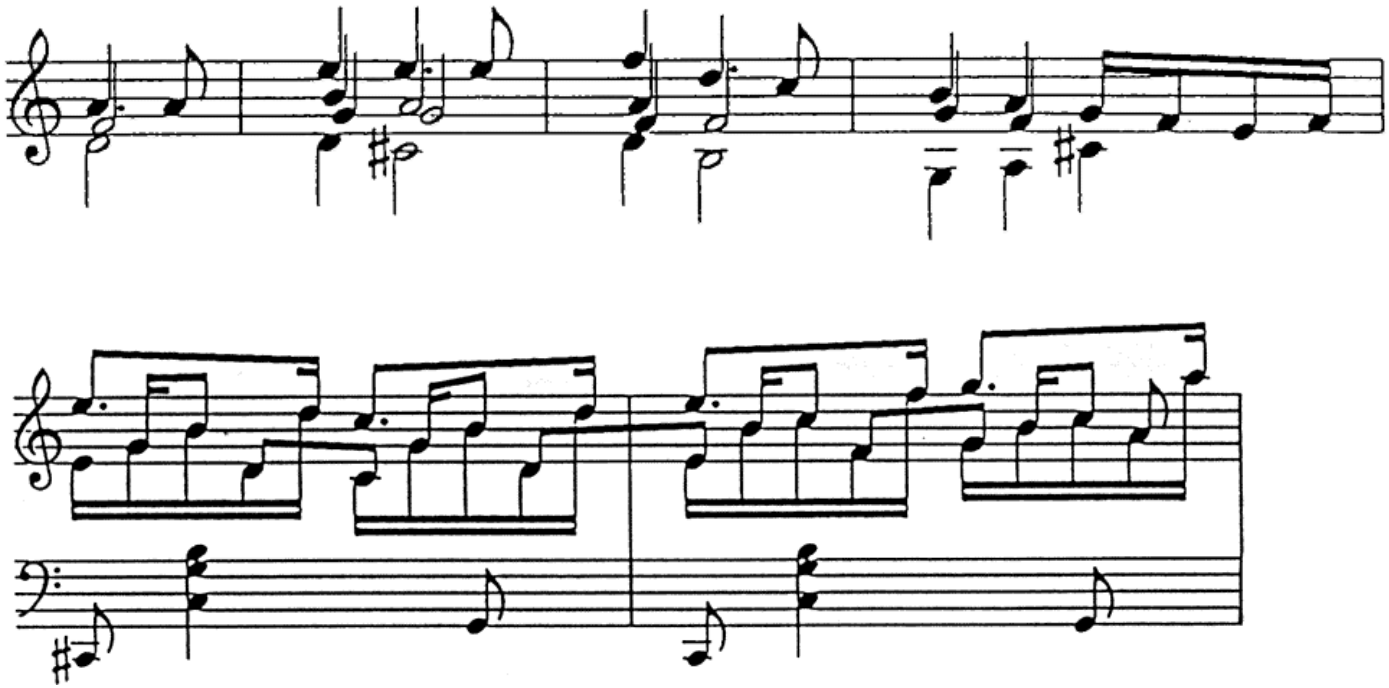
Vertical spacing extras (ornamentation)



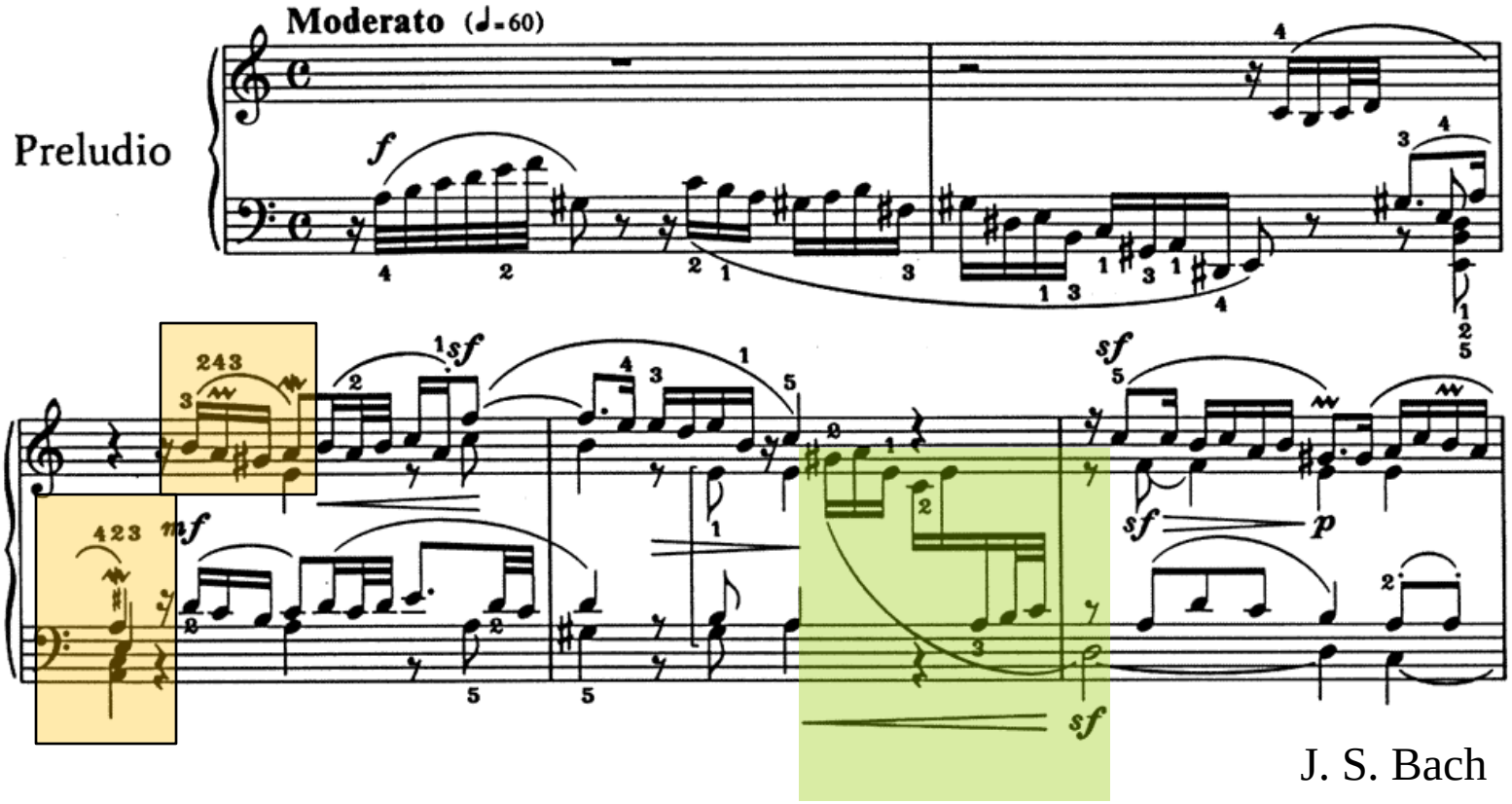
C. Ph. E. Bach

Problems of simultaneity (affecting vertical space)

Stems and beams, non-coincident (~French)

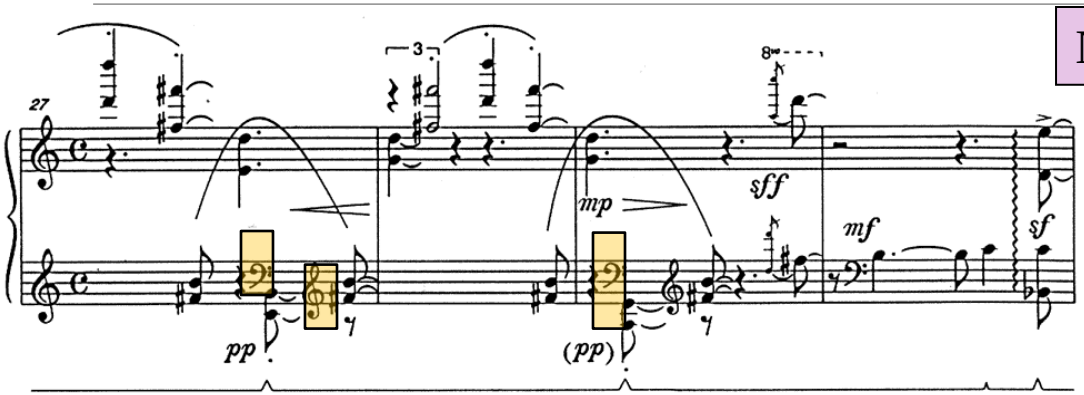


Collisions



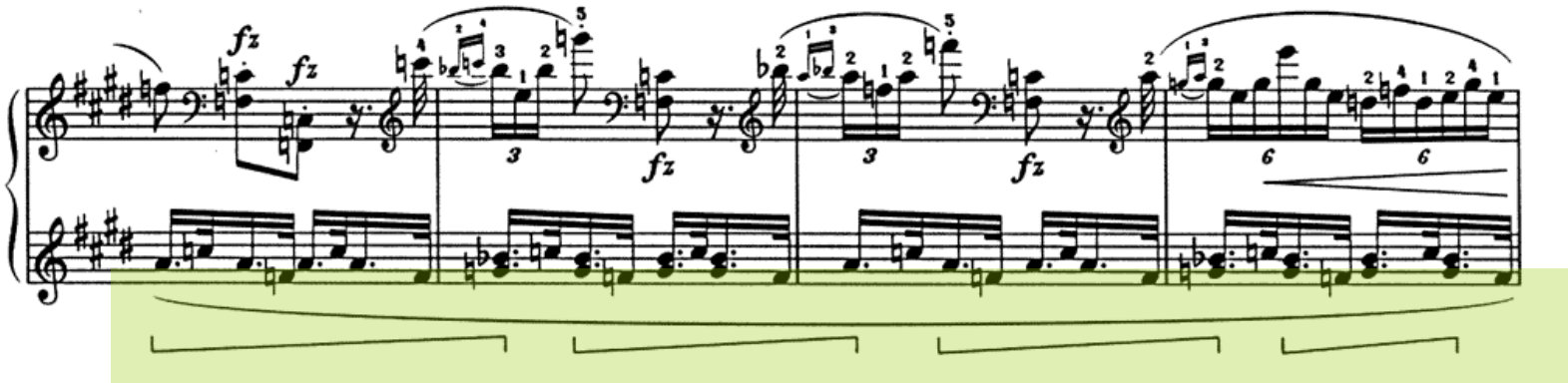
J. S. Bach

Slur and beam extremes

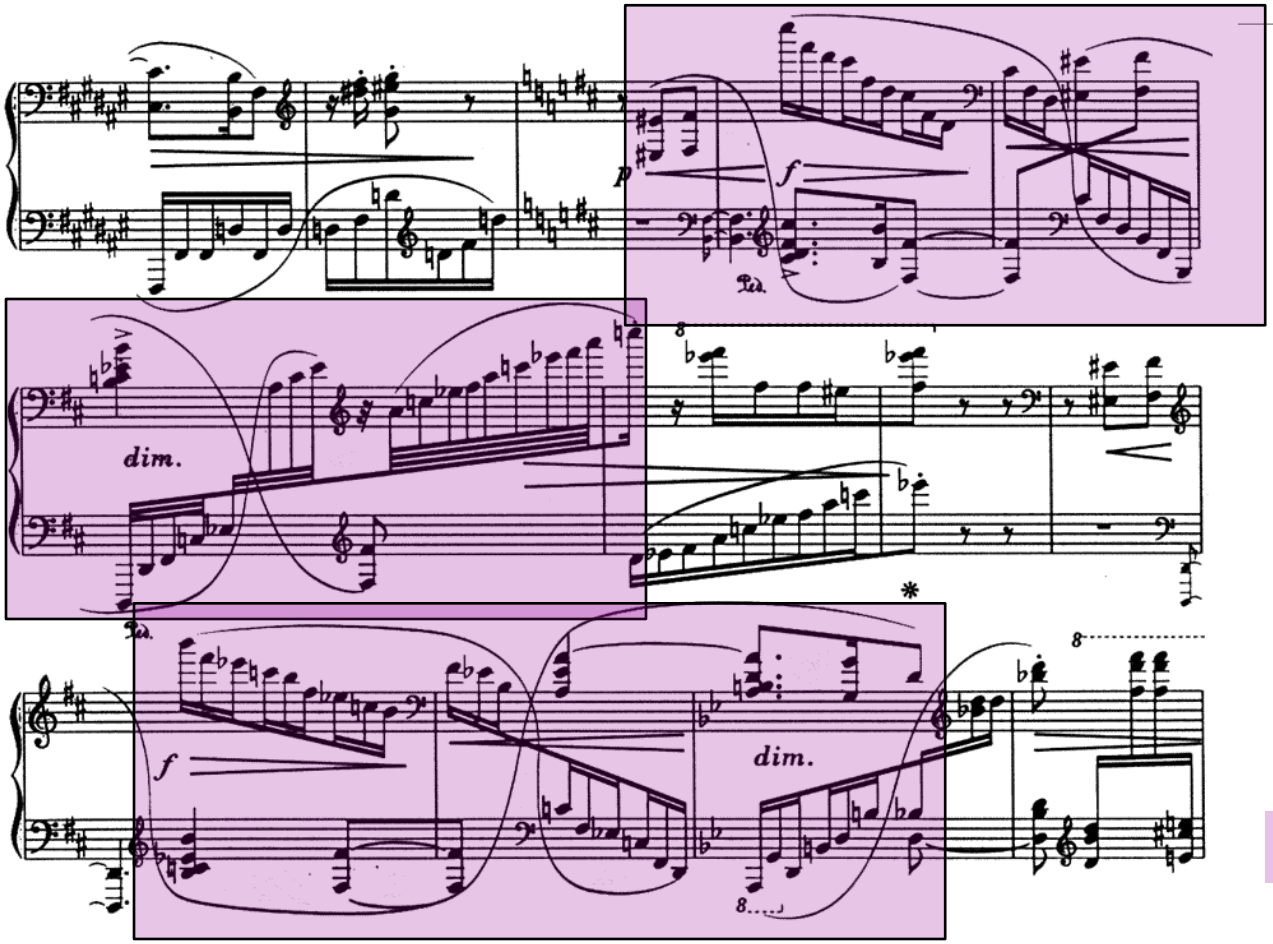


Note the clef changes!

Left: very high slurs
Below: very long slur



Slurs (multi-octave, inverted, et al.)



Ravel: “Gaspard de la nuit”