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

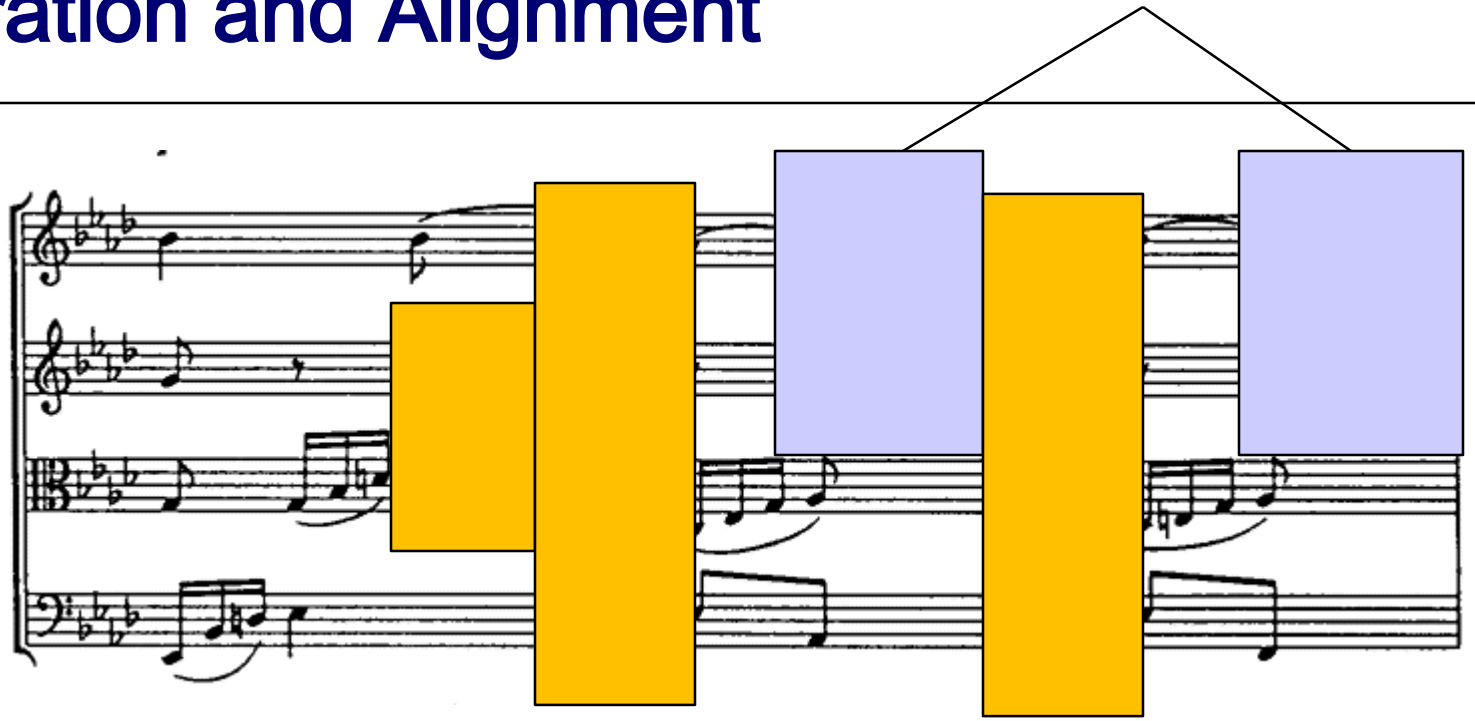
- Durations (monophonic)
  - Tuplets
  - Dots not WYSIWYG

Durations (polyphonic)

Large number of
complex situations

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

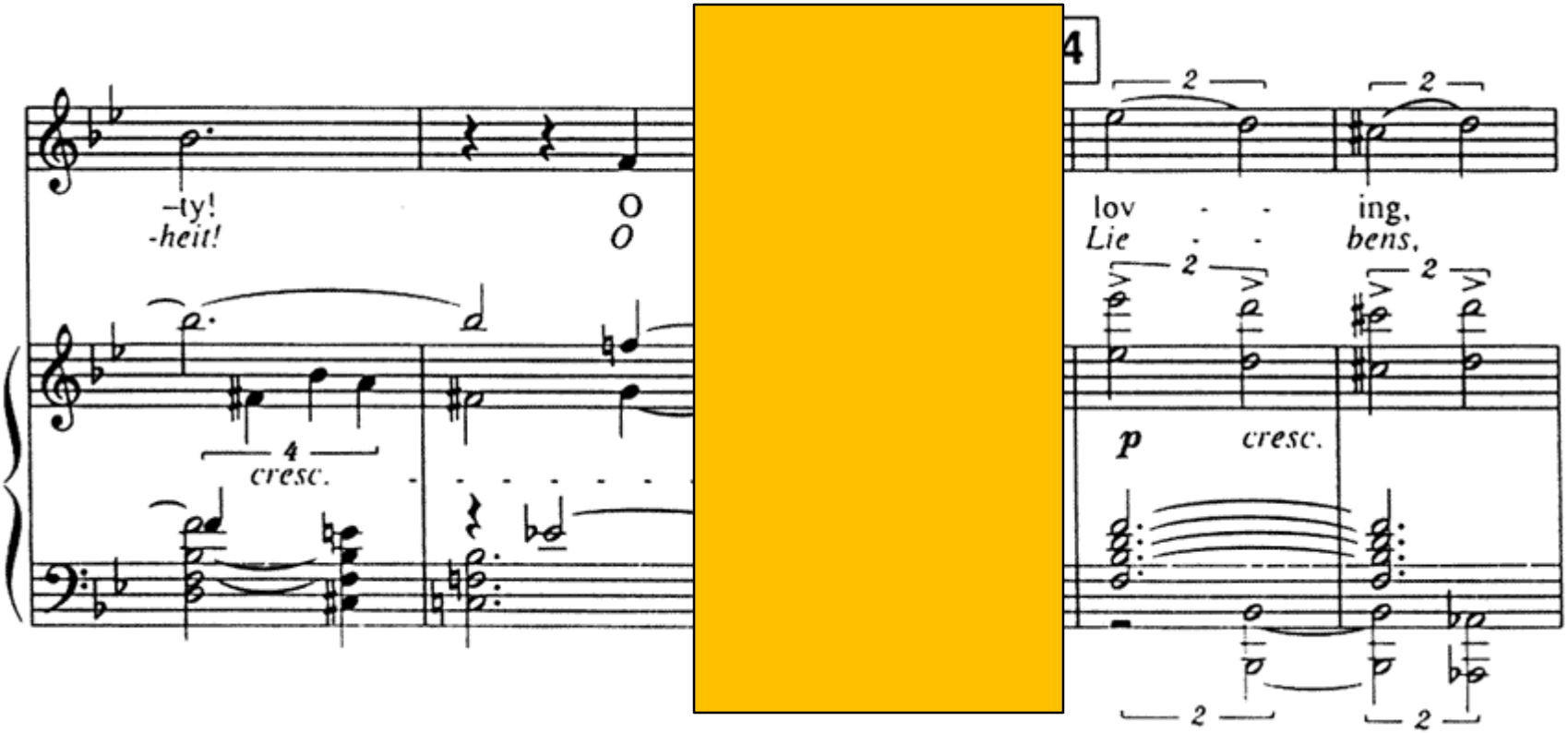
Duration and Alignment



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

Beethoven: “Harp” Quartet

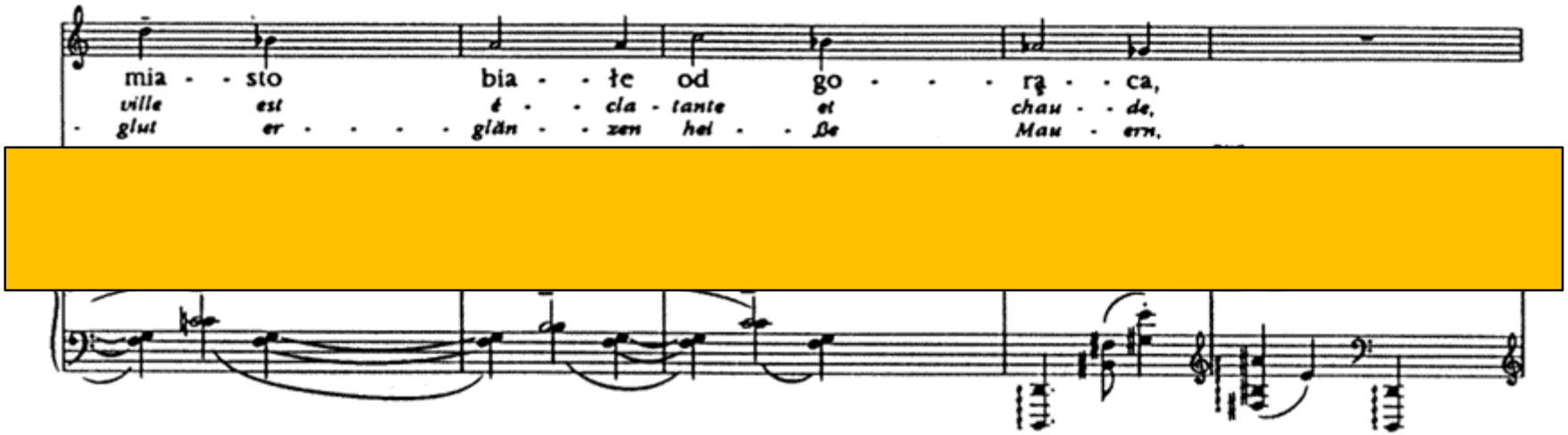
Duration and alignment



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

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

Duration and Alignment



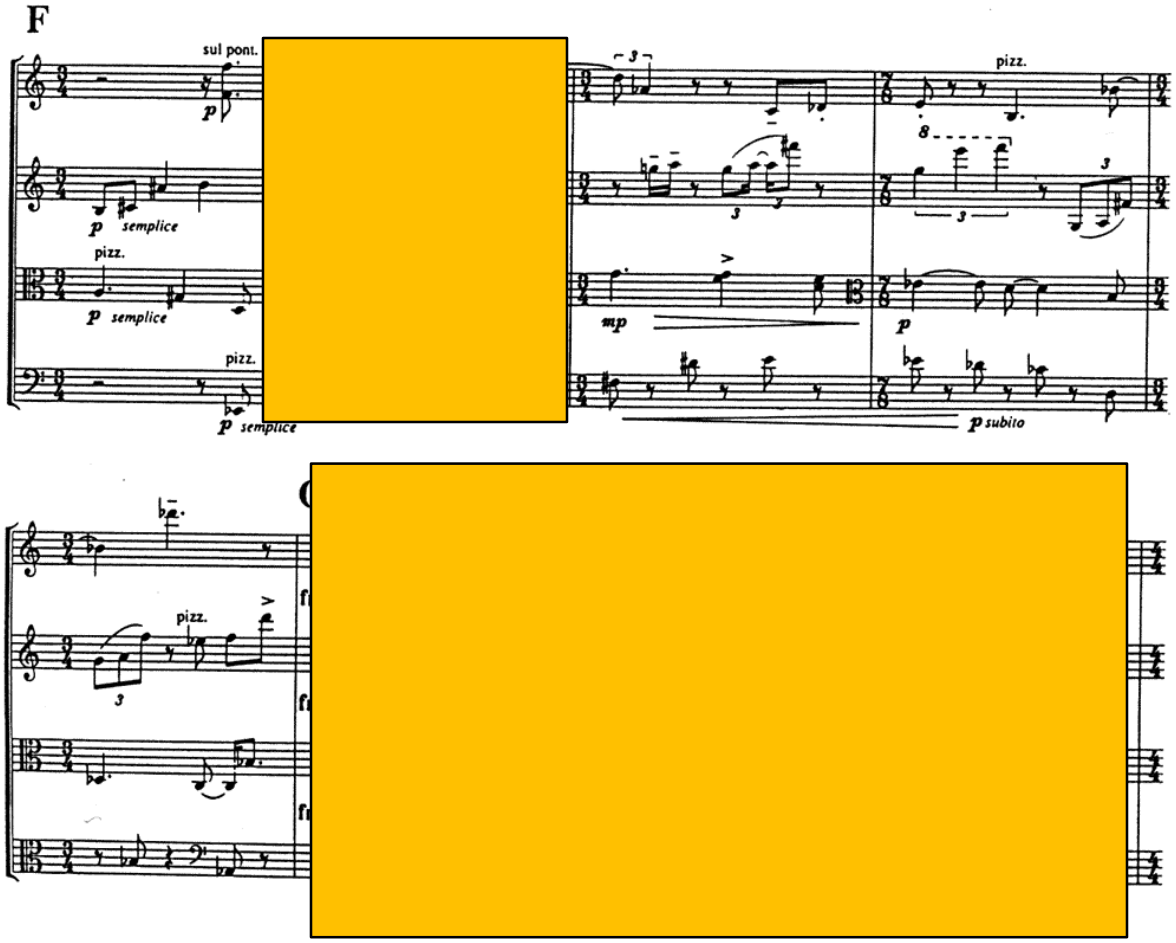
Szymanowski: *Songs of the Infatuated Muezzin*, No. 4

Lyrics=Polish, French, German

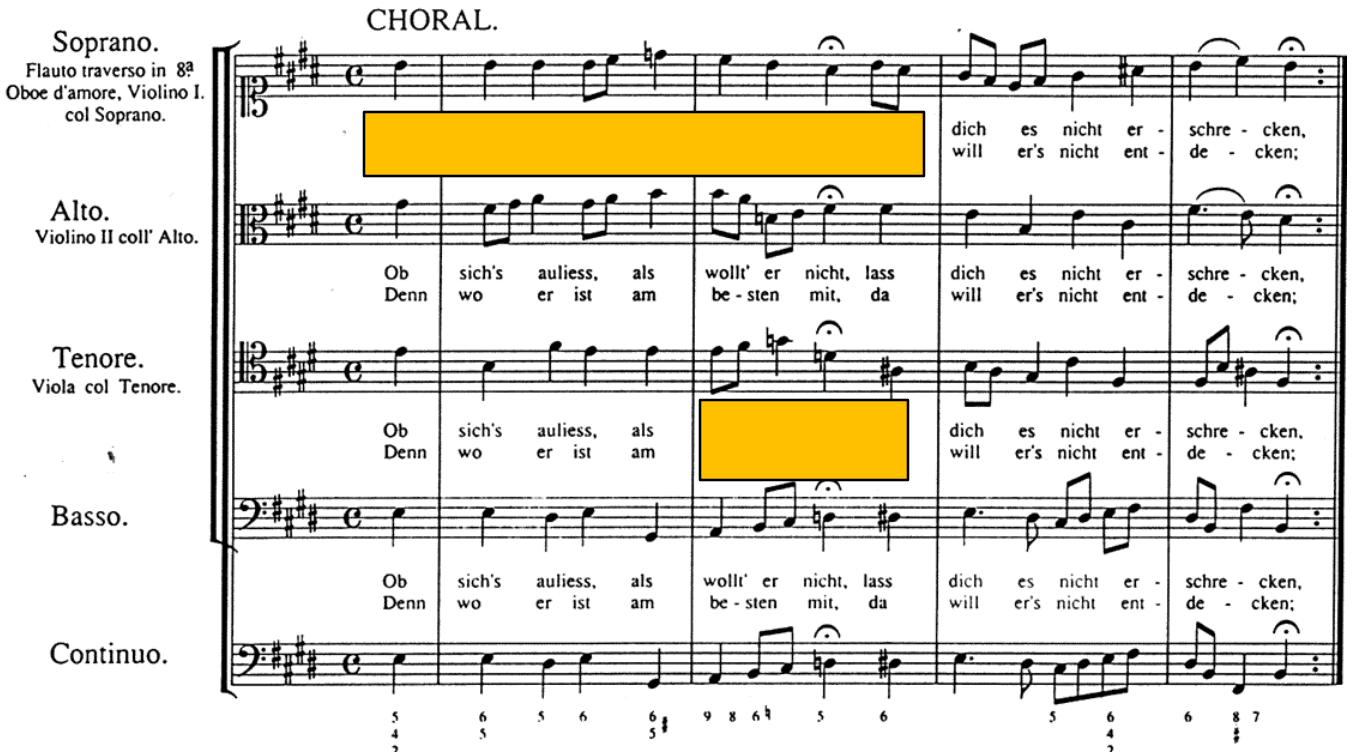
7:1, 6:1, 5:1 (horizontal)

Aleatoric contexts

Irregular meters
Irregular subdivisions
Ad libitum passages

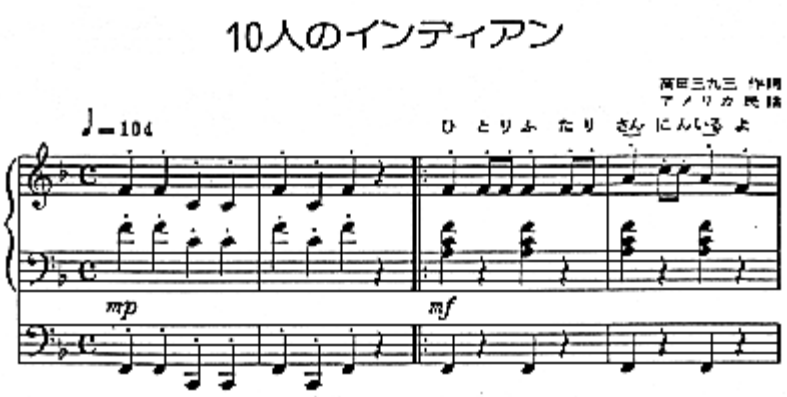


Text underlay: alignment

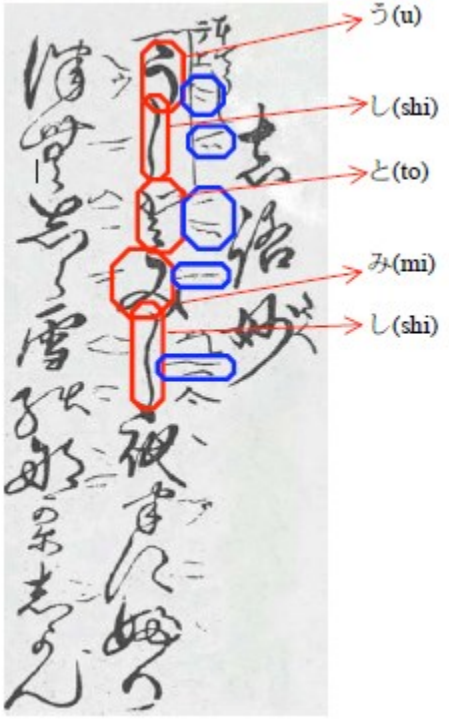


Bach chorale

Lyrics (and text) in non-Roman scripts

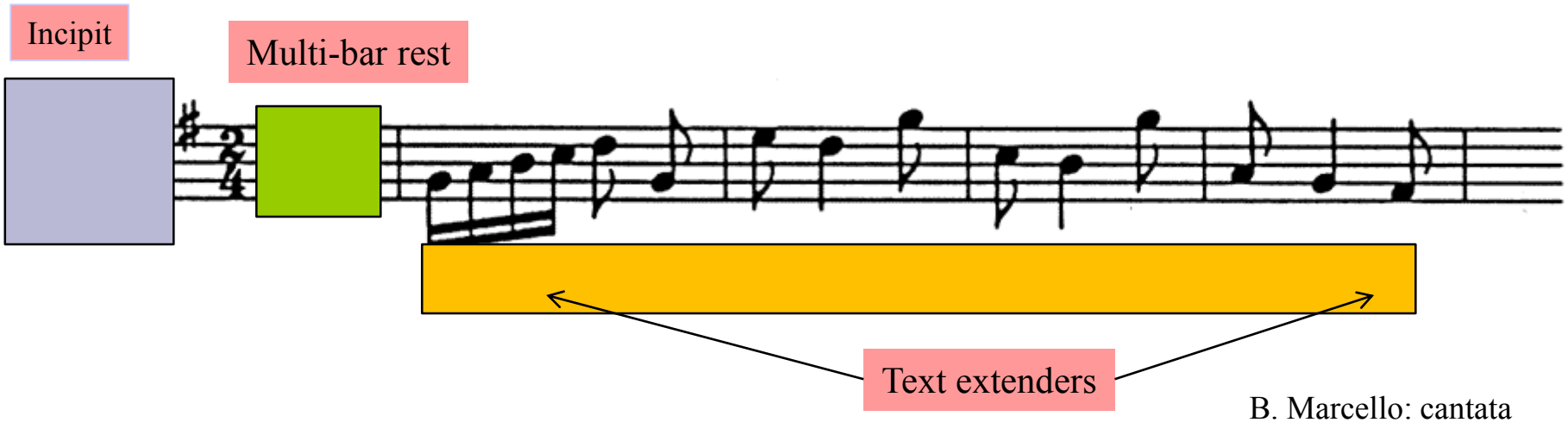


Shamisen neumes:
Shape: presence/absence of pitch or vocal quality
Direction of curvature: pitch variation
Angle between neumes: pitch change
Length of neume: duration
Thickness: voice intensity, tone



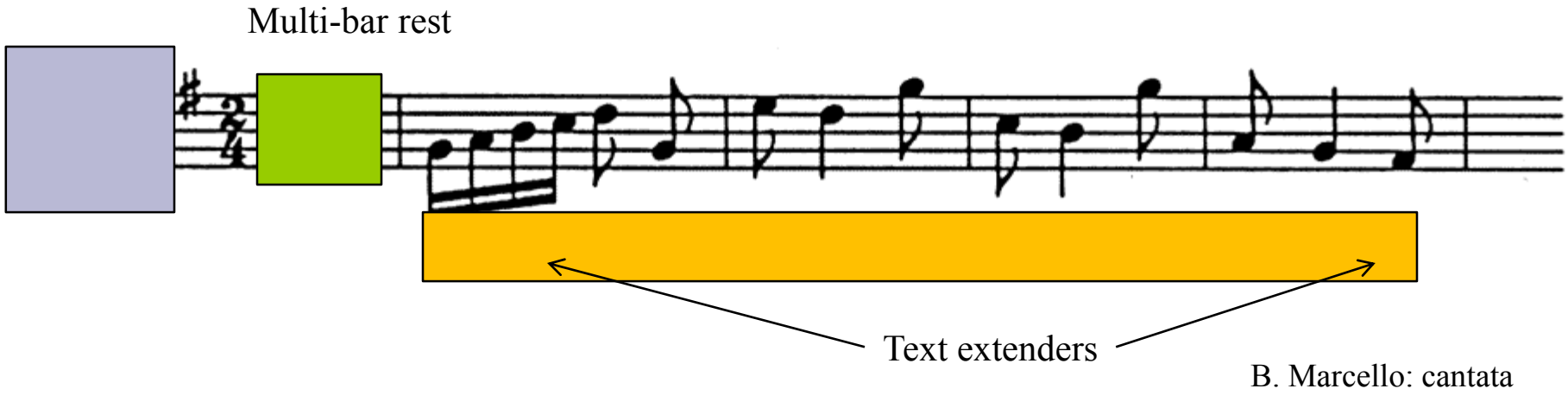
Masato Yako (1998): Shamisen intro for nagauta play

Grammar of vocal and instrumental parts



B. Marcello: cantata

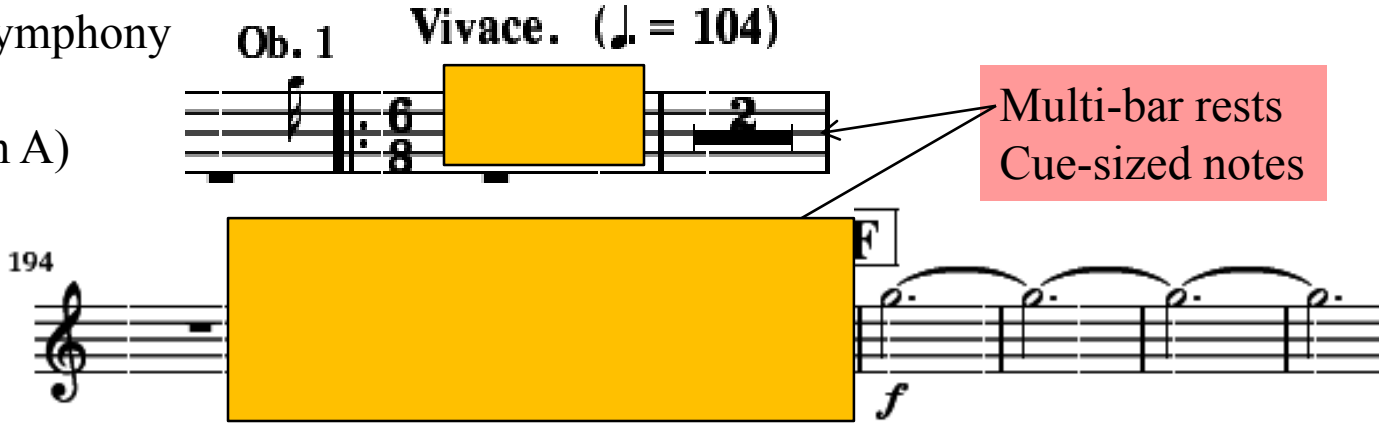
Grammar of vocal and instrumental parts



B. Marcello: cantata

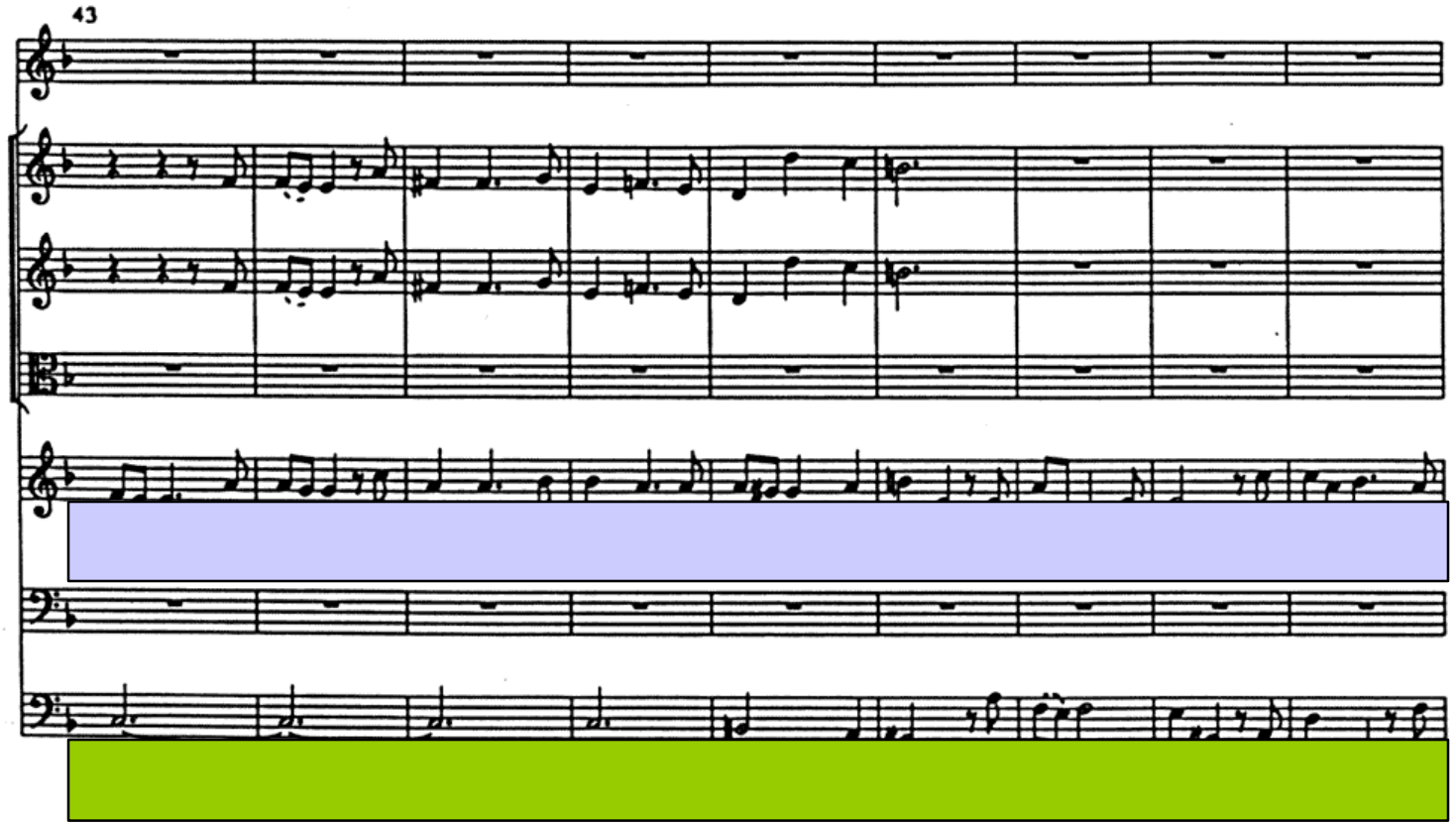
Beethoven: 7th Symphony

Clarinet No. 1 (in A)



Numerical shorthand for harmonization

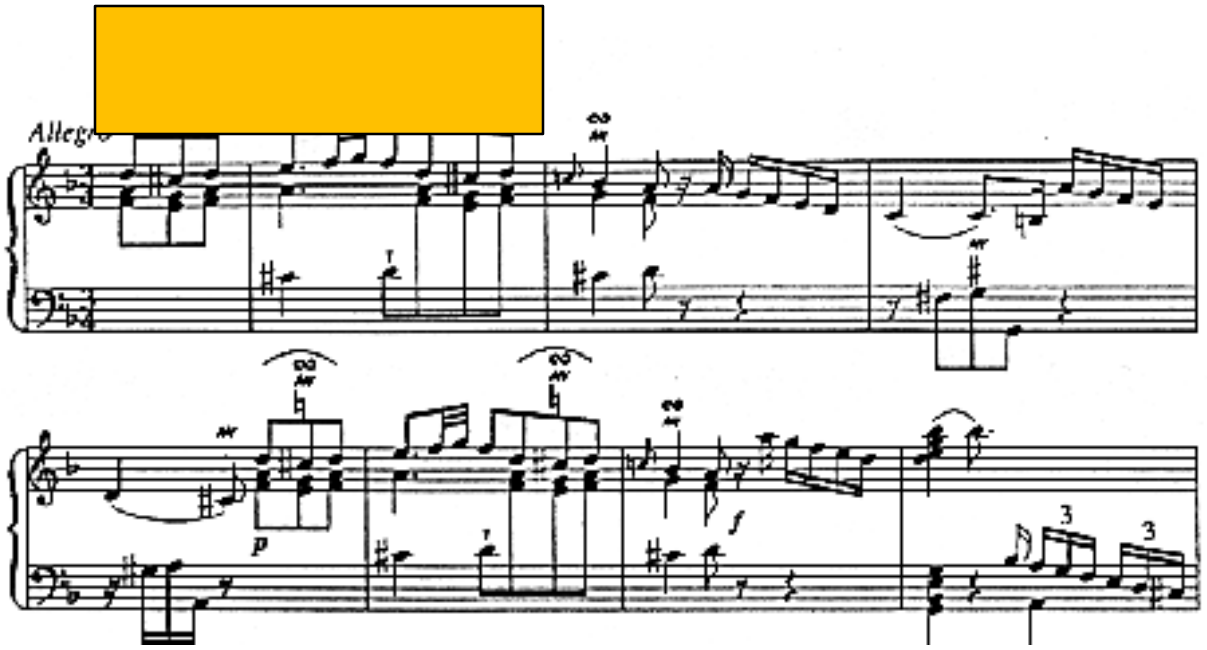
Vertical spacing extras (basso continuo)



Basso continuo figuration

Handel: *Ottone*, "Bel labbro formato

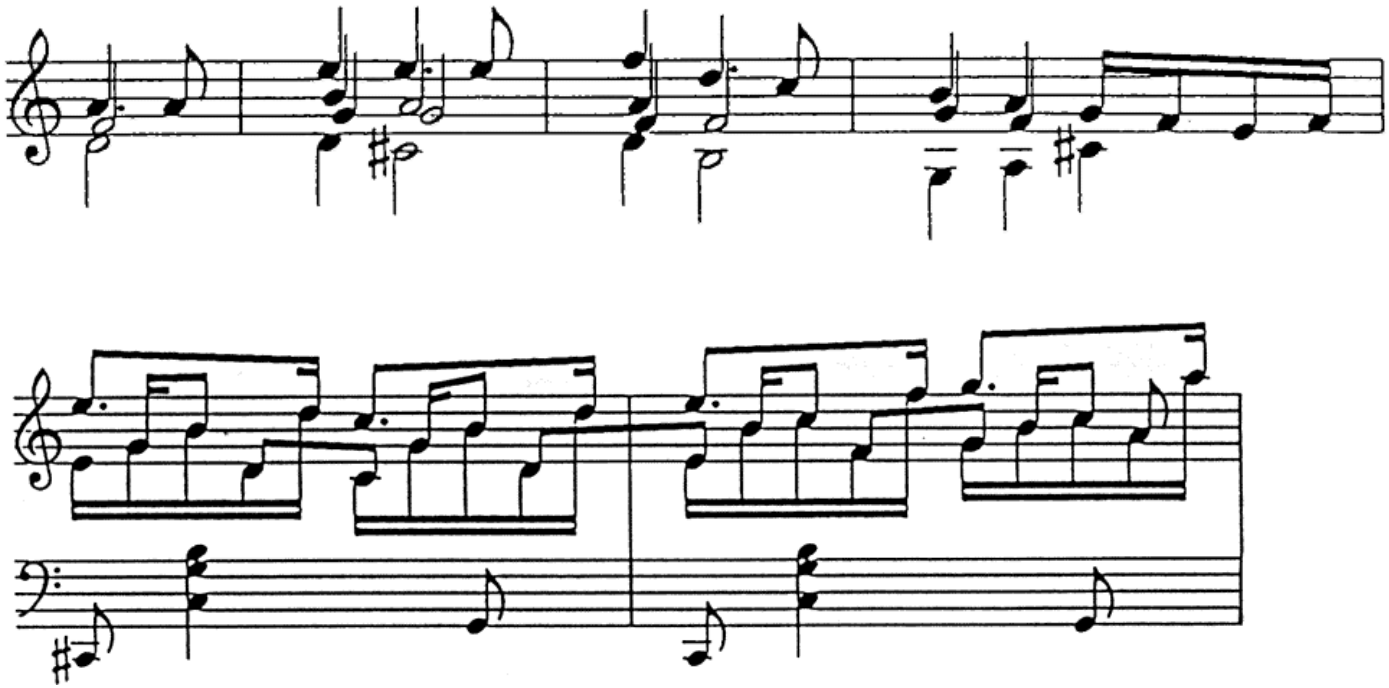
Vertical spacing extras (ornamentation)



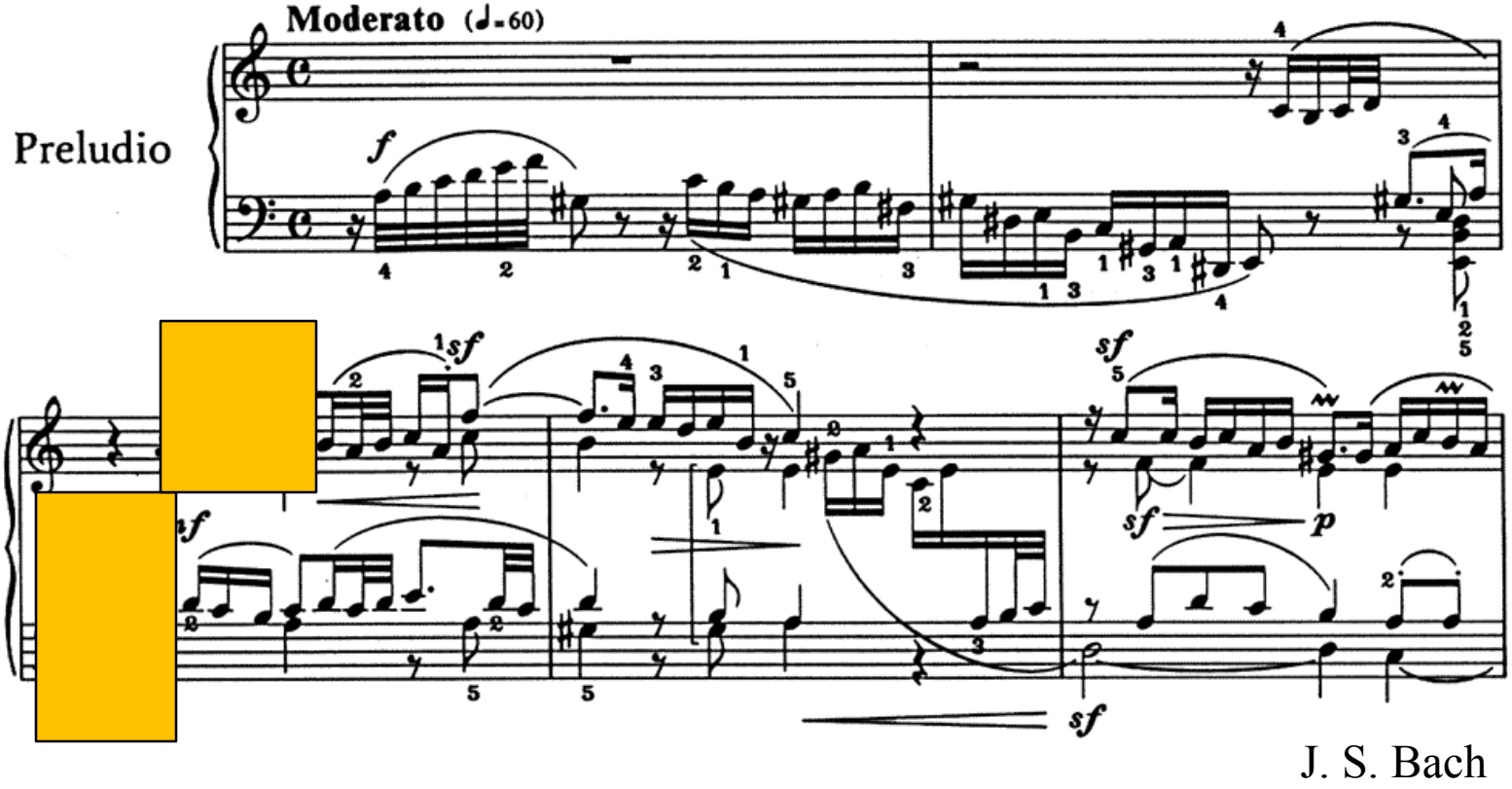
C. Ph. E. Bach

Problems of simultaneity (affecting vertical space)

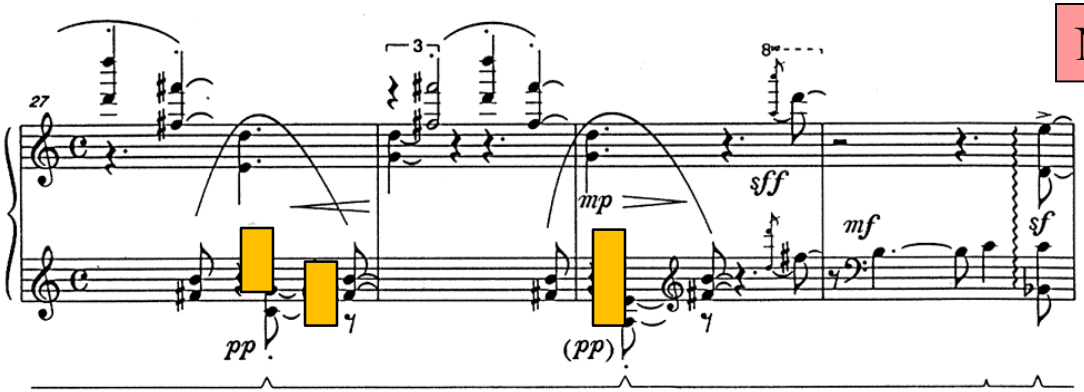
Stems and beams (non-coincident)



Slurs (collisions)

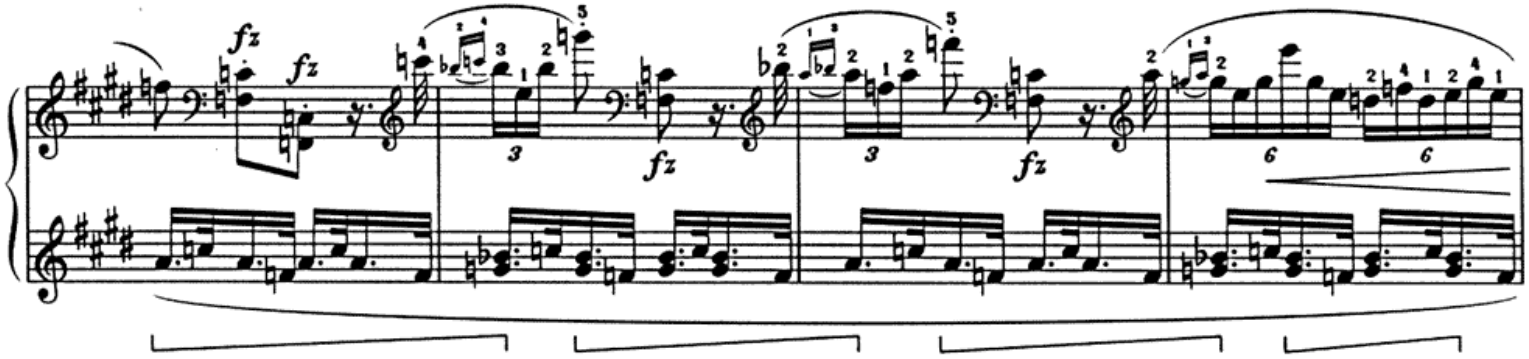


Slur and beam extremes

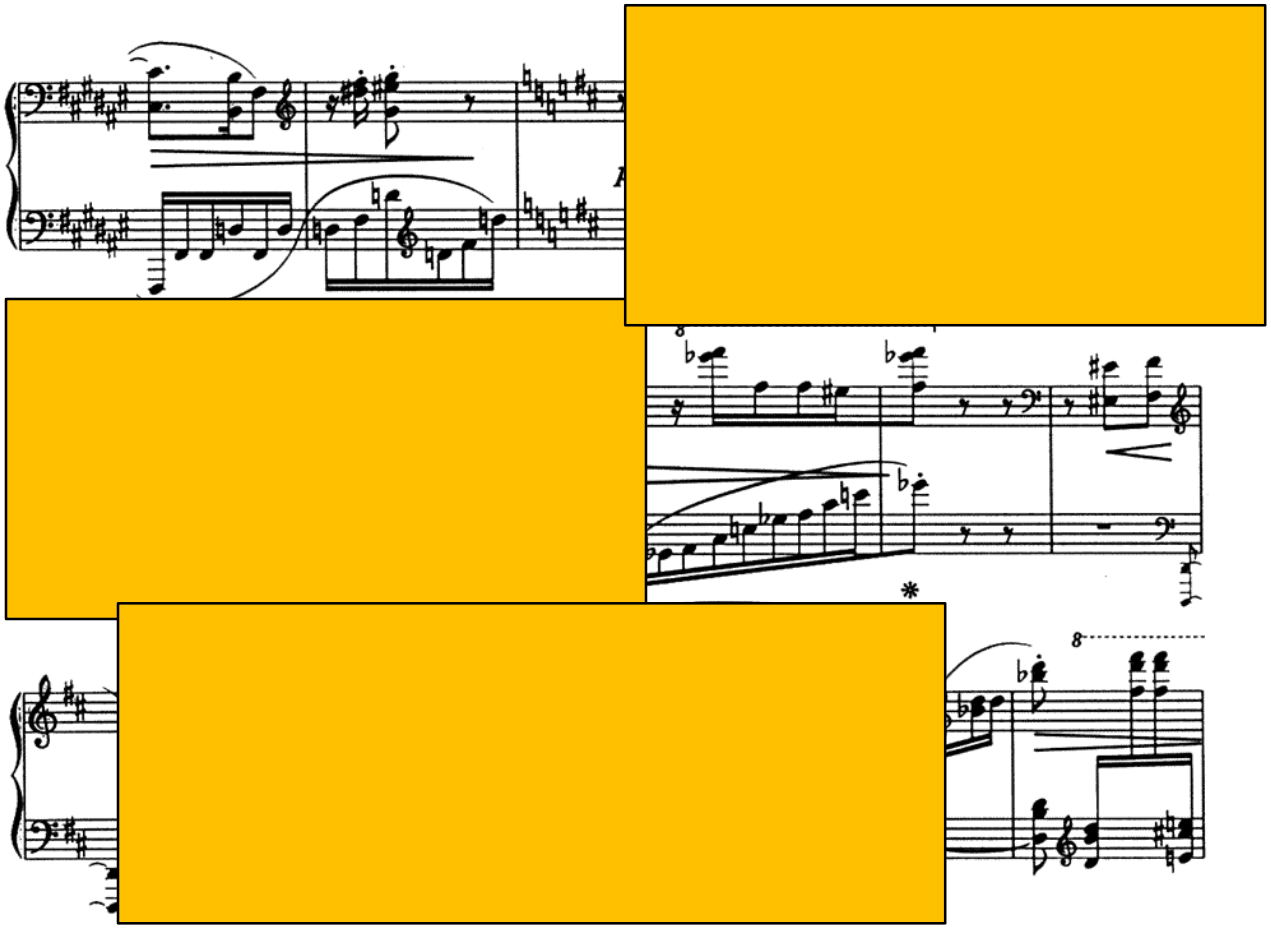


Note the clef changes!

Left: very high slurs
Below: very long slur



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



Ravel: “Gaspard de la nuit”