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

Grammar of vocal and instrumental parts

Incipit

Multi-bar rest

Ad___ ogn’ au-ra che vo-la d’in-tor-no___

Text extenders

B. Marcello: cantata
Grammar of vocal and instrumental parts

Multi-bar rest

Text extenders

B. Marcello: cantata

Beethoven: 7\textsuperscript{th} 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)

Problems of simultaneity (affecting vertical space)

C. Ph. E. Bach
Stems and beams, non-coincident (~French)
Collisions

Preludio

Moderato (d.60)

J. S. Bach
Slur and beam extremes

Left: very high slurs
Below: very long slur

Note the clef changes!
Slurs (multi-octave, inverted, et al.)

Ravel: “Gaspard de la nuit”