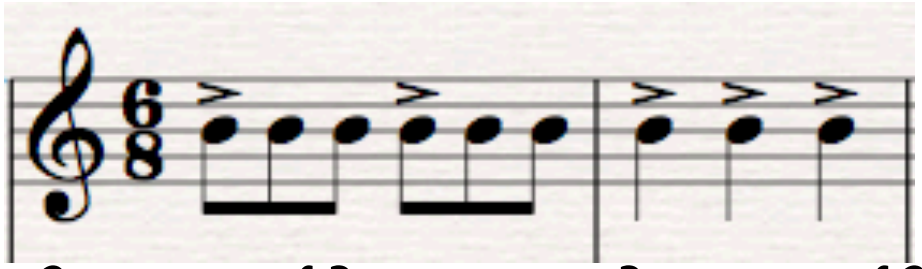
RHYTHM AND METER

- Time values can be expressed in ratios
  - 2:1 = eighth:quarter
  - 3:1 = triplet-eighth:quarter
  - Etc……
- When you encounter 3:2 = **HEMIOLA**
  - (**I** want to **LIVE** in A- | **MER-I-CA**)



  - 2 groups of 3 …o … 3 groups of 2

**Disrupts the sense of meter

Symmetrical Meters

- Regular, recurring pulses based on subdivions of 2 or 3 (simple and compound meters)

Asymmetrical Meters

- 5/8 = subdivided 2+3 or 3+2 = 5
- 7/8 = 2+2+3 or 3+2+2 or 2+3+2 = 7
- Also 11/4, 13/16 — whatever variation is not symmetrical is possible
- Sometimes you use a **dotted bar line** to show subdivisions of bar

Composite Meters

- Actually indicates the specific subdivision
- 3+3+2 which could be 4/4, but isn't
  8

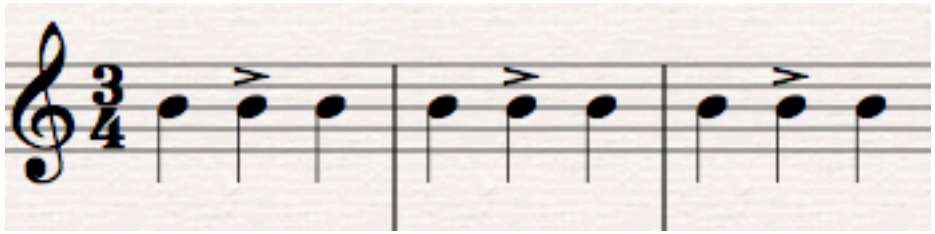
Accent pattern creates a feel of strong and weak beats, which is what should determine meter the composer chooses

Mixed Meter

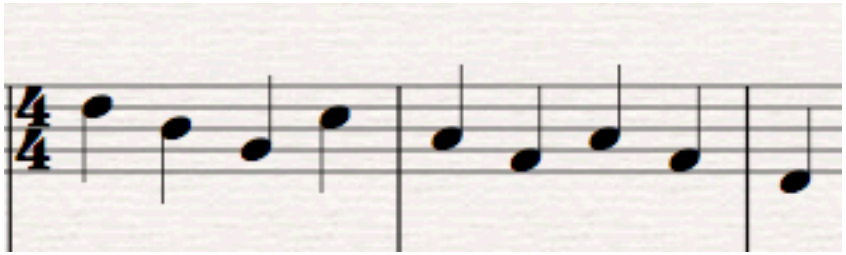
3/4 | 5/8 | 4/4 | <— they change within a phrase or musical idea (before they might have changed at big sections only)

Displaced Accent

- The accent pattern obscures the downbeat (not sensed as strong beat anymore)



- Can be melodic shape that creates accent

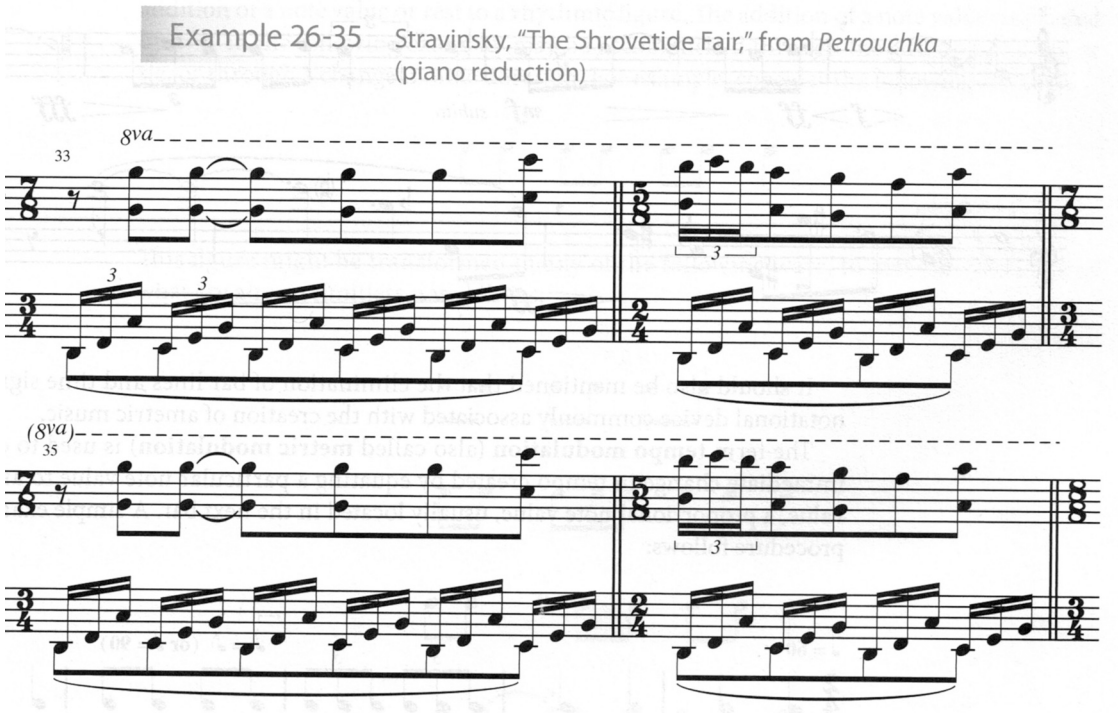


Cross Rhythm / Polyrhythm

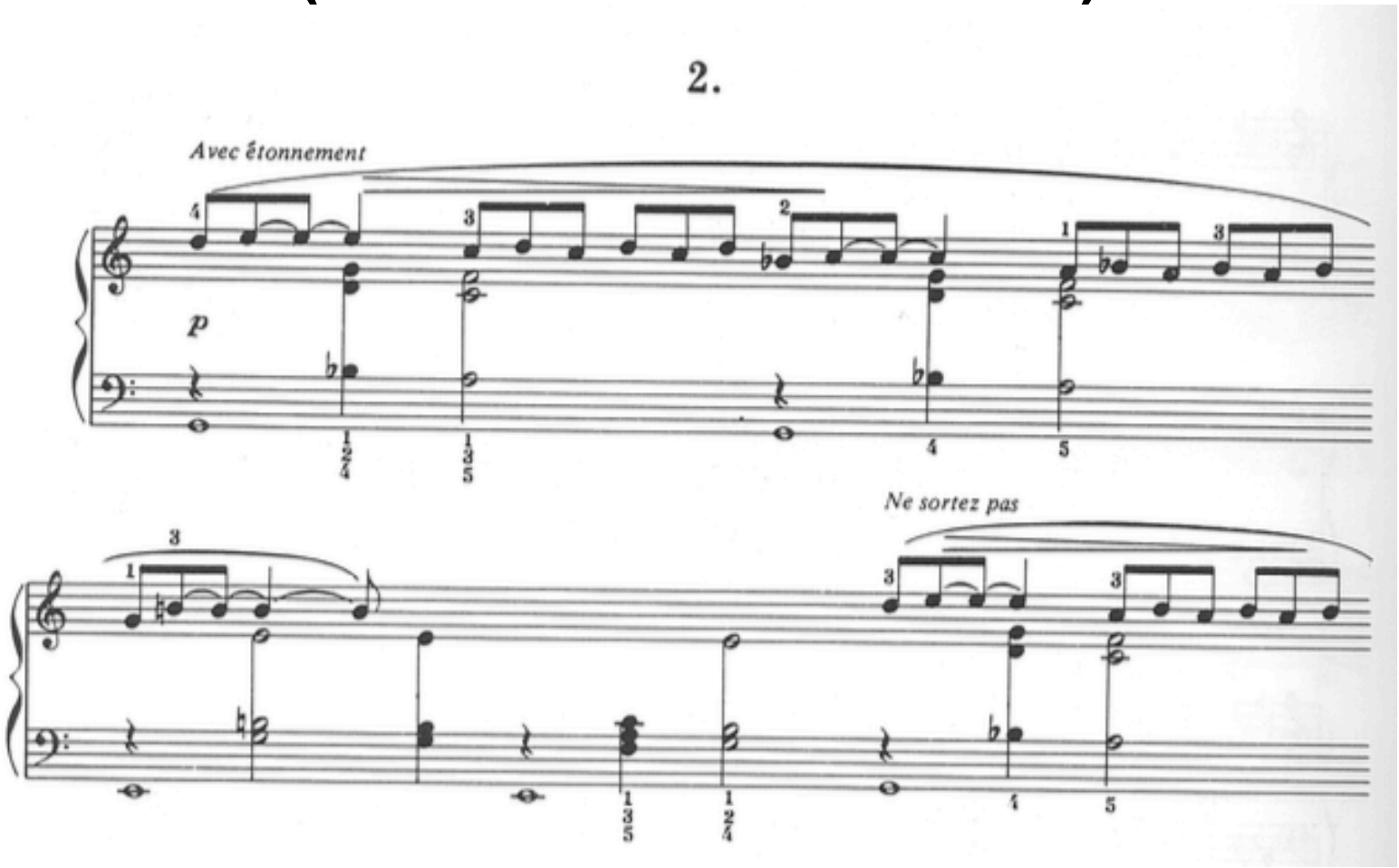
- Two simultaneous contrasting rhythmic streams
  - Barber, *Excursions, Op. 20,* III. Allegretto

Polymeter

- When music is happening in two completely different meters at the same time

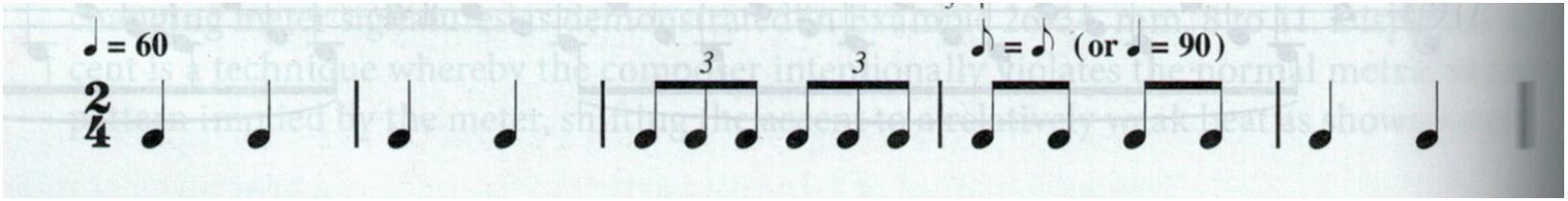


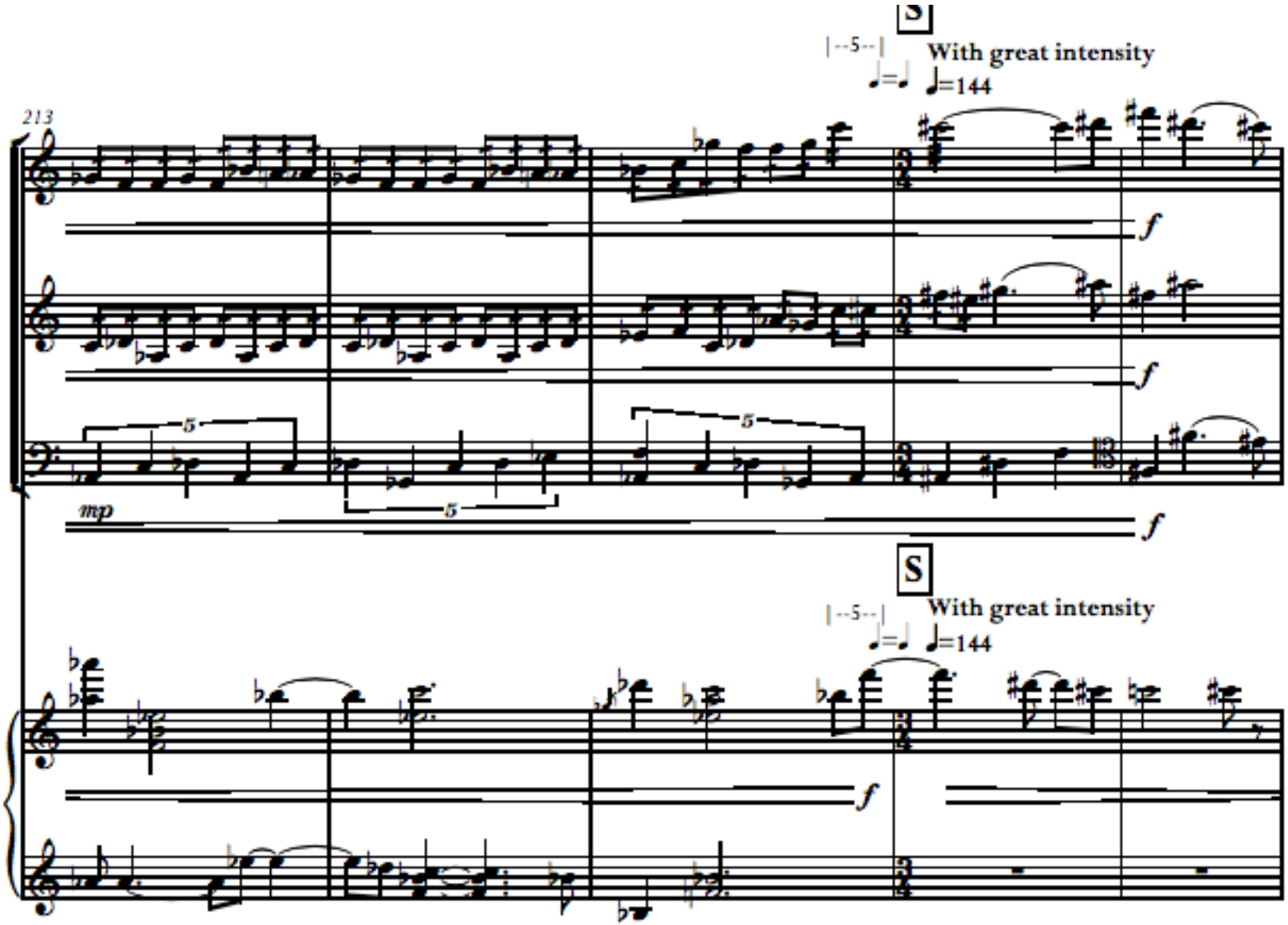
Ametric Music
(Satie's *Gnossienne* 2)



Metric Modulation
(tempo modulation)

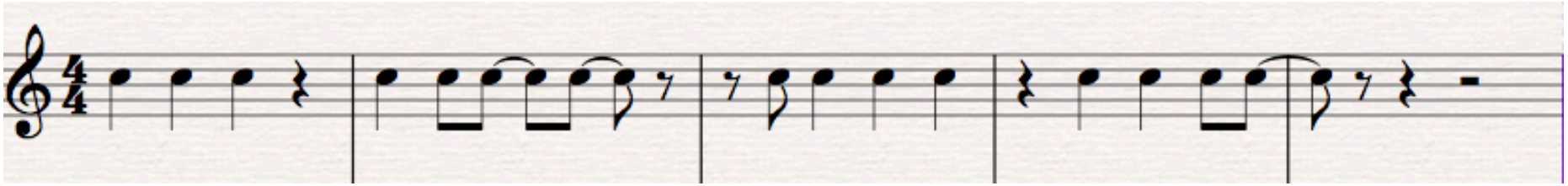
- When you redifine the subdivision of the new meter by another rhythm in the old meter
- You will almost always see a marking "x = y" when it happens




213
S
With great intensity
♩=144
mp
f
S
With great intensity
♩=144
f

Added Value Rhythm

- Adding an extra note value to a given pattern — obscures meter



x x x

Nonretrogradeable Rhythms

- They are symmetrical (palindrome)

Fibonacci Sequence

- 1, 1, 2, 3, 5, 8, 13… to ∞
- This pattern appears in nature in fractals
- Golden ratio (1.618:1)
- Bartok *Music for Strings, Percussion, and Celesta*

Polytempo

- When music has two tempos happening at the same time

Polytempic Figures

for mixed quintet or double quintet*

Glasson 2017

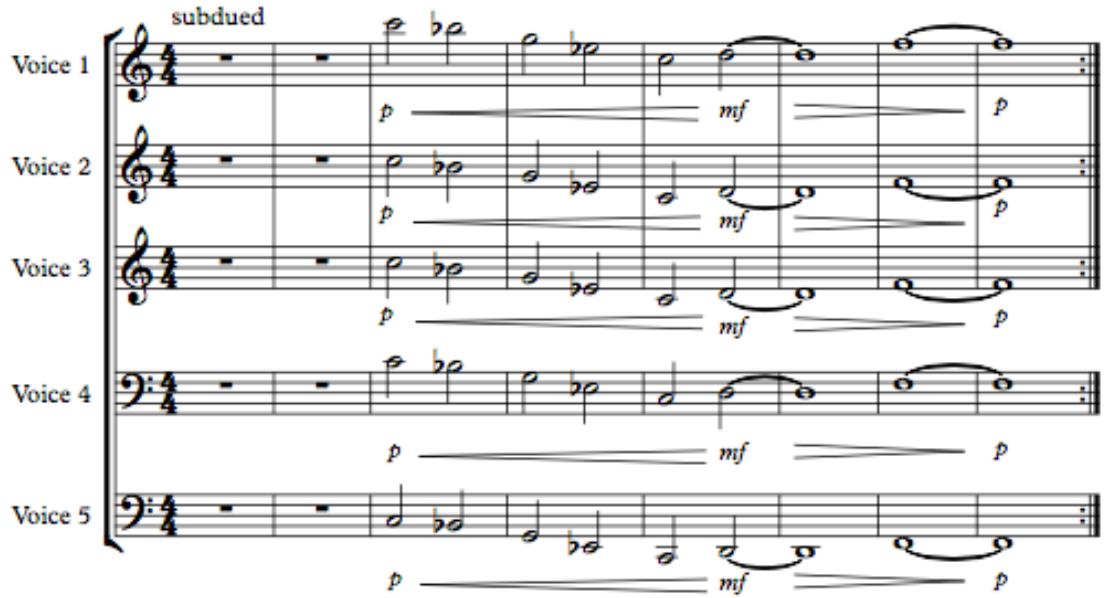
Voice 1 - 90 bpm
Voice 2 - 80 bpm
Voice 3 - 70 bpm
Voice 4 - 60 bpm
Voice 5 - 50 bpm

TO BEGIN, performers wear earphones connected to individual metronomes. The metronomes should be started synchronously by the performers. The first click of the metronome is the first quarter note of measure 1.

TO END, play the last line repeatedly until Voice 5 has repeated it 4 times. At this point Voice 5 ends, gives a visual cue to the other players, and each finishes the line and ends individually.

N.B. sounds are asynchronous. Bar lines do not align as written.

*Open instrumentation. If a double wind quintet is to be performed, the second quintet performers should add two measures of rest to the begining of their parts.



Terms

- **Ostinato**: a musical pattern that is repeated many times in succession
- **Isorhythm**: from Medieval motets and masses = repeated rhythmic figure (**talea**) in combination with a repeated pitch sequence of a different length (**color**)

Tempo Canons

- Nancarrow Player Piano Studies
- Mechanical Rhythm — something like this that cannot be accomplished by a human