How to create meter and why (for beginning students)
School of Music: performance oriented
Pedagogical context

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- Many skilled in pitch structures
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... they need an approach that will
- Teach concepts of immediate practical benefit
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... they need an approach that will
- Teach concepts of immediate practical benefit
- Be fresh for experienced students but accessible to all
“First Principles of Musical Form”
- Analogous to 1st semester history survey as prep for era study
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- Develops students’ ability to recognize, describe, and create musical form:
  - Key concept: segments – beginning, ending, continuity
- All standard first-year topics introduced in this context
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- Develops students’ ability to recognize, describe, and create musical form:
  - Key concept: segments – beginning, ending, continuity
- All standard first-year topics introduced in this context
- Survey of how segments are created in variety of styles (progressively more complex textures: melodic, contrapuntal, harmonic); medieval, Renaissance (etc...), post-tonal, pop
Learning goals

Analog to a language course:
- Creative: be able to fashion clear sentences and paragraphs
- Analytical: be able to recognize and appreciate larger design (argument, narrative arc, etc.)

In music:
- Creative: be able to fashion a melody with a clear meter
- Analytical: recognize and appreciate how meter contributes to form (beginnings, endings and continuity of segments)
Learning goals

- How to determine the meter(s) of a rhythm aurally, or using only a score (without signature/bar lines)
- How to write an unaccompanied melodic phrase with a clear meter
- How to analyze the grouping structure of a monophonic passage and recognize its form
- How to justify an analysis of grouping structure and meter
- Explain how continuity, substance and closure are created in phrases
Conceptual obstacles

- Conflation of time signature and meter
  - Meter as static, unvarying in depth and strength
  - Unaware of “hypermetric” organization
  - Insensitive to contrametric pulse and its possible continuity e.g. hemiola
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- Conflation of meter and grouping
  - Confusing segment beginnings with downbeats
  - Confusing measures with segments
Conceptual obstacles
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Q: Write a rhythm that clearly creates a 4/4 meter, and that includes an anacrusis, a syncopation, and a cadence

A:

\[ \text{Rhythm notation goes here.} \]
Q: Write a rhythm that clearly creates a 4/4 meter, and that includes an anacrusis, a syncopation, and a cadence.

A:

(no tactus, no regular accent, no repeated motives -> no meter -> no syncopation or cadence formula possible)
Approach (1): Theory

- Concept of pulse stream
  - A series of (perceived) equal durations
  - May be experienced at different tempos
  - Tactus (not always as written)
  - Provides special kind of continuity
Approach (1): Theory

- **Concept of pulse (stream)**
  - A series of (perceived) equal durations
  - May be experienced at different tempos
  - Tactus (not always as written)
  - Provides special kind of continuity

- **How it is created**
  - Regular change or phenomenal accent
  - May vary in strength/salience
  - Not present right away -- gradually develops
Approach (2): analyze/verbalize

(Beethoven, Bagatelle)
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Approach (3): definition

We hear “meter” when we can hear/beat two or more different synchronized pulse streams...

• Not what meter is but when we hear it
• Sidesteps issues of competing conceptions (strong/weak, pulse hierarchy, single pulse as meter, projection, waves of attention)
• Keeps focus on pulse-stream continuity
Approach (4): spiral up analytically

Schubert, “Great” Symphony

Andante

Schubert, “Great” Symphony
Approach (4): spiral up analytically

Andante

\[ \text{L} \quad \text{D} \quad \text{L} \quad \text{D} \quad \text{C} \quad \text{L} \quad \text{D} \quad \text{D} \quad \text{D} \quad \text{D} \]
Approach (4): spiral up analytically

Andante
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Andante

\[
\begin{align*}
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&L \quad D \\
&L \quad D \\
&C \\
&L \quad D \\
&D \quad D \\
&D \quad D \\
&D \\
\end{align*}
\]
Approach (4): spiral up analytically

B&H edition ca. 1854

B&H 1885, ed. Brahms
Q: Write a rhythm that clearly creates a 4/4 meter, by establishing a tactus and a slower synchronized pulse stream by regular accent and by repetition of motives and that includes an anacrusis, a syncopation, and a cadence formula remembering that syncopation and cadence formulas are only possible after the meter is clear.
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A:
How do pulse and meter contribute to form?

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How do pulse and meter contribute to form?

- By creating continuity across musical segments
- Halting a established pulse creates articulation
- By marking special moments at which occurs, e.g., formulaic closure ("rhythmic cadence formula")
- By bringing out framework pitches (pitch hierarchy)
How do pulse and meter contribute to form?

- (in polyphony) Cross pulses contribute to tension shapes of larger segments

(Machaut, "Plus dure")
Summary: “practical benefit”?

- Promotes clear composition/improvisation
- Cultivates awareness of how performance (articulation, timing, and phenomenal accent) affect phrasing and form
- Orientation towards very basic formal processes opens ears to less familiar styles
- Gives students the terminology and concepts to discuss some of their most powerful modes of engagement with music