

**WHAT IS MUSICAL RHYTHM?**  
(August 28, 2014)

I. DEFINING MUSICAL RHYTHM

Write a definition of musical rhythm as you understand it.

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II. DIFFERENT VIEWS ON MUSICAL RHYTHM

Consider the following quotes on temporality. How do these different conceptions of musical temporality compare to one another?

1. "An essential human musical behavior is coordinated movement to music. Across cultures, music enables group dancing, singing, marching, and performing in synchrony (McNeill, 1995; Wallin, Merker, & Brown, 2000). Such behaviors depend on perception of both the rhythm, which is the patterning of event onsets and the resulting temporal intervals (such as long-short-short) as well as the meter, the regular underlying pulse containing alternating patterns of strong and weak beats." (Hannon & al., 2012).
2. "The continuity of musical rhythm might be understood as a unified, perceptual flux ["a stream of varying tensions"] which is analyzed by the mind as a series of events, or as arising from the activity of the mind by which separate events are related and grouped." (H.E. Smither, 1964)
3. Musical structures are "the punctuated shaping of time and space into lines of growth, decline, and stasis, hierarchically ordered." (W. Berry, 1976)
4. "... the dialectical harmonies and contradictions of musical sound... modify the emotive, cognitive, and intellectual dimensions of our experience of passing time; they articulate and vary inner tensions; they give an audible shape to time's flow." (J.T. Fraser, 1985)
5. "Music is pure temporality—abstract sonorous shapes moving through and creating time... time is both the essential component of musical meaning and the vehicle by which music makes its deepest contact with the human spirit. " (J. Kramer, 1985)

### III. GLOSSARY

Here is a list of terms from contemporary music theory. How is each of these rhythmic elements expressed musically and how is it made perceptible?

1. Pulse, pulse stream
2. Time-point, time-span
3. Beat, sub-beat, hyper-beat
4. Measure, hyper-measure
5. Grouping, beginning, continuation
6. Rhythm, polyrhythm
7. Meter, hypermeter (metric re-interpretation), polymeter
8. Diminution, augmentation, subdivision
9. Additive and multiplicative rhythm or meter
10. Speed, pacing, tempo, tactus
11. Polyrhythm, polymeter, polytempo
12. Foreground, middleground, and background rhythm
13. Accent (phenomenal, grouping, metric, agogic, dynamic/stress)
14. Syncopation (displacement), cross-accentuation, cross-pulse
15. Metric dissonance (grouping/displacement)
16. Isochronicity, synchronicity, periodicity, density
17. Free, speech, complex, and a-metric rhythm
18. Duration, repetition, alignment

### IV. LISTENING EXERCISE

You will hear three contrasting pieces of music. While you listen to these, keep the following questions in mind (you may want to focus on a single question at a time):

- a. How is *musical temporality* embodied in each work? What is the first rhythmic sensation that manifests itself?
- b. What are the different temporal elements? What terms/concepts apply here?
- c. How do these elements affect your listening behavior?
- d. Which rhythmic component is most prominent?
- e. How closely does the experience of time in this piece matches your conception of what constitute musical rhythm? Does the experience of rhythm in this piece stretch the concept of rhythm as you understand it?

List of pieces:

1. Mozart, Overture, *Le Nozze di Figaro* (1786)

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2. Xenakis, *Concret PH* (1958)

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3. Aka Pygmies, *Zoboko* (traditional)

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Observe this transcription of the polyrhythmic framework of this piece.

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$\downarrow = 156$  (one *mokongo* player plays the *diketo* pattern)

*mokongo* (wood) (tree trunk, several players)  
 (the *mokongo* pattern mixes patterns **b** and **c** from Arom 1991, p. 252, Ex. 49)

*diketo* (metal) (machete blades, 1 player)

*mok.* (wood)

*diketo* (metal) (Clap enters last x)

*mok.* (wood)

Clap 19x

*diketo* (metal)

*mok.* (wood)

8 8 8  
 'regular asymmetry' (Arom p. 245)

Clap 28

*diketo* (metal)

*mok.* (wood)

Figure 13 Transcription of *Zoboko*, from the 2003 recording *Ligeti/Reich—African Rhythms*—Pierre-Laurent Aimard/Aka Pygmies.

- Which terms from the glossary apply here? How would you describe the temporal organization?
- Listen to the piece again using *global attention* (lusening to all the parts together). Which line is most prominent? Is it always the same or does it fluctuate as you listen to the piece?
- This time, listen to the piece again, this time using *selective attention* (focusing on one part at a time). Can you reproduce each rhythm as you listen? Are there moments when the other parts seem to align with the part you are performing? Are there moments when one or both of the other have a *distractor effect*?