

# PERCEPTION OF SYMMETRIC AND ASYMMETRIC METERS BY LISTENERS FAMILIAR AND UNFAMILIAR WITH ASYMMETRIC METERS

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## Background

Models of rhythm perception typically make reference to hierarchical frameworks in which time is divided into intervals nested in each other. It is required or preferred that time intervals at the same level are of equal durations and durations of intervals in neighboring levels are related by simple integer ratios. Both of these rules or preferences are violated in asymmetric meters that are used commonly in the music of certain geographic areas.

## Aims

The aim of the study is to determine whether listeners familiar with musical idioms that use asymmetric meters frequently perceive such meters by trying to fit them into symmetrical metric frameworks or have schematic representations for such asymmetric meters.

## Method

Melodies are presented twice, either keeping the meter same or changing it, in order to obtain same/different judgments from listeners. Changes

in meter include changing a symmetric meter into an asymmetric one, changing an asymmetric meter into a symmetric one, and changing both kinds of meters into rhythms that do not fit any metric organization. The logic of the design is that changes from temporal organizations that fit mental frameworks to those that are deviations should be more noticeable than changes in the opposite direction. The goal is to collect data with the same material from two populations, one familiar with asymmetric meters and one unfamiliar with them.

## Results

Data collection is in progress.

## Conclusions

Based on whether listeners familiar with asymmetric meters perceive changes from symmetric to asymmetric meters as deviations and changes in the opposite direction as resolutions into more coherent patterns, and whether the two groups of listeners show different patterns of performance we will be able to reach conclusions about universality of mental frameworks based on symmetric hierarchical divisions of time.