The Role of Tempo in the Perception of Musical Grouping

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Abstract : Tempo plays a significant role in the perception of metrical groupings, with faster tempi tending to increase the number of beats in a given metrical unit. Previous research has shown a correlation between the perception of metric grouping and native language, but little is currently known about other possible musical factors that contribute to metric grouping tendencies. This study aims to find the tempo boundaries at which the perceptual groupings of a melodic pattern changes and to correlate these regions with self-reported musical experience. Participants were presented with looping melodies (divided between major and minor keys). Using a slider bar that controlled the tempo, subjects were asked to locate the point at which they heard the metric grouping doubled or halved. This region was shown to primarily be affected by the mode and time signature of the stimulus. The results also suggest a correlation between the level of musical training and the region of perceived grouping change.

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