

Supplementary Notes

Relationship of Pulsation Threshold to Continuity

A stimulus paradigm called pulsation threshold has been used to study the continuity effect. In pulsation threshold experiments, a ‘masker’ is alternated with a test tone. The test tone can be heard as continuous depending on the ‘masker’ parameters: louder and shorter maskers increase the likelihood of perceiving the test tone as continuous. While alternating two sounds sequentially is reminiscent of streaming there is an important difference between pulsation threshold and streaming. Unlike streaming, the continuity resulting from pulsation threshold stimuli requires that the sound alternating with the tone have relatively high energy levels near the tone’s frequency (Thurlow 1957; Thurlow and Elfner 1959).

The supplementary .mp3 file is the stimulus used in Schreiner 1980 to study the relationship between single unit responses in the auditory thalamus and continuity via pulsation threshold. In supplementary Figure 1 we show a spectrogram of three cycles of the stimulus.

Thurlow, W., 1957. An auditory figure-ground effect. *Am. J. Psychol.* 70, 653–654.

Thurlow, W.R., Elfner, L.F., 1959. Continuity effect with alternately sounding tones.

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