Perceptual Organization within Temporal Displacement

Authors: Michele Sinico

Abstract : The psychological present has an actual extension. When a sequence of instantaneous stimuli falls in this short interval of time, observers perceive a compresence of events in succession and the temporal order depends on the qualitative relationships between the perceptual properties of the events. Two experiments were carried out to study the influence of perceptual grouping, with and without temporal displacement, on the duration of auditory sequences. The psychophysical method of adjustment was adopted. The first experiment investigated the effect of temporal displacement of a white noise on sequence duration. The second experiment investigated the effect of temporal displacement, along the pitch dimension, on temporal shortening of sequence. The results suggest that the temporal order of sounds, in the case of temporal displacement, is organized along the pitch dimension.

Keywords: time perception, perceptual present, temporal displacement, Gestalt laws of perceptual organization

Conference Title: ICPTCS 2018: International Conference on Perception of Time in Cognitive Science

Conference Location: New York, United States

Conference Dates: April 19-20, 2018