

Top-Down Influences to Multistable Perception: Evidence from Temporal Dynamics

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Abstract : We have studied the temporal characteristics of bistable perception of the stimuli of two types: one involves alterations in a perceived depth and another one has an ambiguous content. We used the Necker lattice and lines of shadowed circles ambiguously perceived either as spheres or holes as stimuli of the first type. The Winson figure (the Eskimo/Indian picture) was a stimulus of the second type. We have analyzed how often the reversals occurred (reversal rate) and for how long each of the two interpretations, or percepts, was observed during one presentation (stability durations). For all three ambiguous images the reversal rate and the stability durations had similar values, which provide another evidence for a significant role of top-down processes in multistable perception.

Keywords : multistable perception, perceived depth, reversal rate, top-down processes

Conference Title : ICCS 2015 : International Conference on Cognitive Science

Conference Location : Venice, Italy

Conference Dates : November 09-10, 2015