

The bias to interpret ambiguous visual information in favor of a perspective from above

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In this paper, we studied the mechanism of processing bistable visual information by the brain. Images of Necker cubes were used as bistable visual stimuli. We used an extended experimental paradigm, which, in addition to the classical images of the Necker cube, included their mirror projection. Thus, the visual stimuli had a right and left orientation, as well as a perspective from above and from below. We showed a bias of perception relative to images with a perspective from above, which was confirmed by a shorter reaction time, as well as its disappearance with high ambiguity of sensory information. We also discovered a neurophysiological biomarker of bottom-up processing for data accumulation and image encoding with a perspective from below. The obtained results indicate the presence of a bias to the perspective of the image from above and a change in the strategy of processing a visual stimulus by the brain with a perspective from below for the accumulation of sensory data.