

Supplementary Material

A Deep-Dream Virtual Reality Platform for Studying Altered Perceptual Phenomenology

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Video S1

The video was generated by selecting a higher DCNN layer that responds selectively to higher-level categorical features (layers = 'inception_4d/pool', octaves = 3, octave scale = 1.8, iterations = 32, jitter = 32, zoom = 1, step size = 1.5, blending ratio for optical flow = 0.9, blending ratio for background = 0.1). For more detail of the algorithm see our GitHub repository ¹.



Video S2

The video was generated by fixing the activity of a lower DCNN layer that responds selectively to geometric image features (layer='conv2/3x3', octaves = 3, octave scale = 1.8, iterations = 32, jitter = 32, zoom = 1, step size = 1.5, blending ratio for optical flow = 0.9, blending ratio for background = 0.1). For more detail of the algorithm see our GitHub repository ¹.



Video S3

The video was generated by selecting a middle DCNN layer responding selectively to parts of objects (layers = "inception_3b/output", octaves = 3, octave scale = 1.8, iterations = 32, jitter = 32, zoom = 1, step size = 1.5, blending ratio for optical flow = 0.9, blending ratio for background = 0.1). For more detail of the algorithm see our GitHub repository ¹.



1. Ksk-S. DeepDreamVideoOpticalFlow (ksk-S/DeepDreamVideoOpticalFlow). *GitHub repository* (2017). Available at: <https://github.com/ksk-S/DeepDreamVideoOpticalFlow>.