Supplementary Table 1: Comparison between rivalry and physical alternation								
Subject	ROI Size (Voxels)		LGN Modulation (% signal change)		V1 Modulation (% signal change)		Rivalry Index	
	LGN	V1	Rivalry	Alternation	Rivalry	Alternation	LGN	V1
S1	21	40	.59	.52	1.13	.93	1.1	1.2
S2	12	50	.47	.37	.88	.66	1.3	1.3
S3	15	48	.39	.62	.38	.75	.63	.51
S4	13	44	.17	.31	.22	.47	.55	.47
S5	9	52	.20	.23	.31	.29	.87	1.1

The ROI size, signal modulation following perceptual switches in the rivalry and physical alternation scans, and the rivalry index are shown for each individual subject in the LGN and V1. ROI sizes are combined over both hemispheres and were identical in the rivalry and physical alternation scans. The signal modulations were defined as the sum of the magnitudes of the high- and low-contrast responses. The rivalry index was defined as the ratio of the response for the rivalrous stimuli to the response for the physical alternation stimulus (see Methods).