Supplementary Tables

Supplementary Table 1. Activation peaks of the analysis correlating univariate brain activity with the slopes of multivariate competitor suppression and target enhancement. The table presents MNI xyz coordinates, t-values and the extent (size) k of each cluster showing a significant correlation.

	xyz	t-value	k
Correlation with competitor suppression			
inferior frontal gyrus (BA 11)	-39 32 -9	5.82	129
middle frontal gyrus (BA 46)	-42 32 21	5.70	45
inferior parietal lobe (BA 39)	42 -67 40	5.66	20
inferior frontal gyrus (BA 11)	45 17 10	5.66	85
postcentral gyrus (BA 2)	-48 -25 32	4.75	15
fusiform gyrus (BA 37)	36 -40 -12	4.74	16
parahippocampal gyrus (BA 30)	-15 -49 -5	4.70	31
parahippocampal gyrus (BA 19/36)	18 -43 -9	4.67	12
middle frontal gyrus (BA 46)	-45 44 6	4.19	10
precentral gyrus (BA 6)	-36 -1 36	4.05	12
Correlation with target enhancement			
middle frontal gyrus (BA 46)	-45 26 32	4.05	16

Supplementary Table 2. Results from a number of control analyses on the item-specific templates. The table presents t-values, p-values and the corresponding Bayes factors (Jeffrey-Zellner-Siow Prior) for the comparison between competitor templates and their corresponding baseline templates. Both regions of interest showed no evidence for a difference in signal-to-noise ratio, informational density as measured with Shannon's entropy, or in the average correlation between templates (see Online Methods). The corresponding Bayes factors are in the range of 3.5 – 6.5, which can be interpreted as strong evidence in favour of the null hypothesis that there is no difference between the templates.

	Signal-to-noise ratio		Shannon entropy		Average correlation	
	Target	Competitor	Target	Competitor	Target	Competitor
Ventral visual cortex						
t(23)	0.28	0.44	0.15	0.52	0.76	0.13
p-value	0.78	0.67	0.85	0.59	0.48	0.87
Bayes factor	6.14	5.82	6.31	5.61	4.83	6.32
Hippocampus						
t(23)	0.33	0.53	0.87	0.62	1.08	0.57
p-value	0.77	0.54	0.67	0.64	0.17	0.72
Bayes factor	6.05	5.57	4.44	5.30	3.67	5.45