Supporting Information

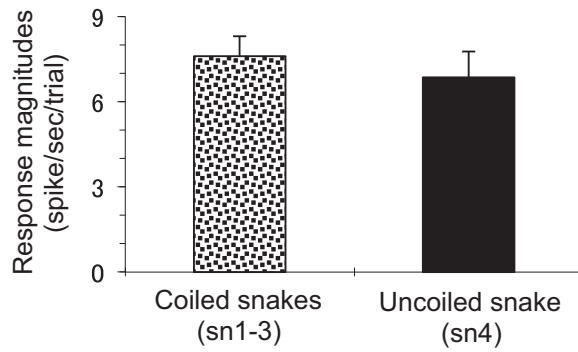## Van Le et al. 10.1073/pnas.1312648110

Fig. S1. Mean response magnitudes to the coiled and uncoiled snake photos. Statistical comparison indicated that there was no significant difference in response magnitudes (paired *t* test, *P* > 0.05).
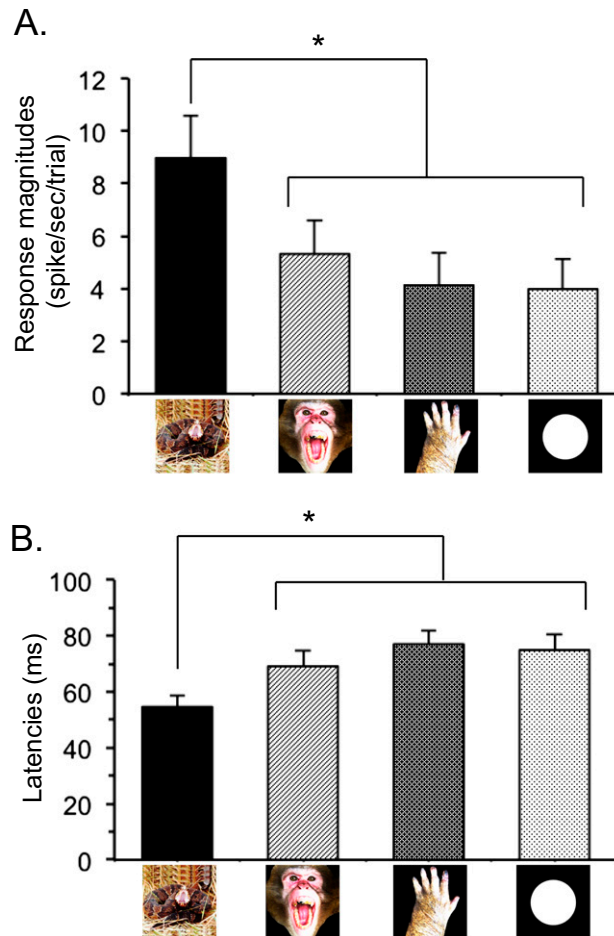

Fig. S2. Mean response magnitude (*A*) and latency (*B*) to each stimulus in each category presented in the first trial of the block. *P < 0.05, significant difference (Bonferroni test after repeated one-way ANOVA).

Fig. S3. Visual stimuli (*A* and *B*) and delayed nonmatching-to-sample (DMNS) task (*C*) used in the present study. (*A*) Sixteen photos of four categories of the stimuli including snakes photos (sn1–sn4) with different head directions (facing to monkeys and attacking toward the sides), faces of two monkeys (f1a, f1b, f2a, and f2b) with different emotional expressions (angry and neutral), monkey hands (monkey right and left prone or supine hands: h1–h4), and simple geometrical patterns (s1–s4) (circle, cross, square, and star). (*B*) Scrambling and filtering of visual stimuli. (*a*) An original snake photo; (*b*) scrambled image; (*c*) low-pass filtered (LSF) image; (*d*) high-pass filtered (HPF) images. (*C*) Stimulus sequence in the DMNS task in which stimuli were sequentially presented with a delay.
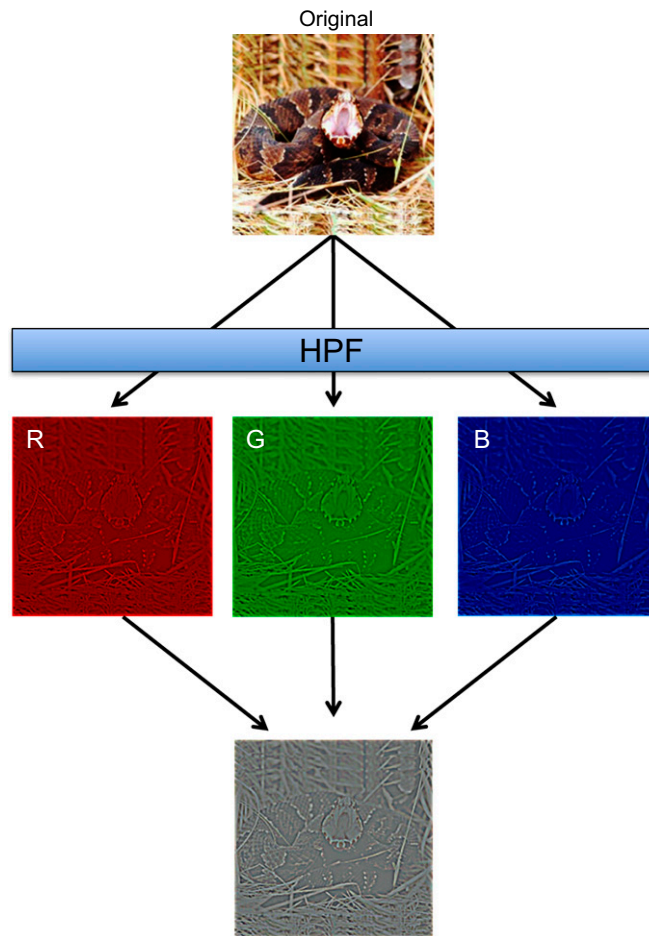
Original

HPF

R

G

B

Fig. S4. Schematic illustration of processes of HPF.

Table S1. Separation between the categories by discriminant analysis

Group	R^2	Correct ratio	P
Epoch 1	0.843 (MDS)		
Snakes			
Faces		87.5	0.096
Hands		100	0.014
Simple		87.5	0.06
Nonsnake		81.3	0.037
Faces			
Hands		62.5	0.852
Simple		87.5	0.451
Hands			
Simple		100	0.003
Epoch 2	0.938 (MDS)		
Snakes			
Faces		100	0.003
Hands		100	<0.001
Simple		100	0.002
Nonsnake		100	<0.001
Faces			
Hand		87.5	0.015
Simple		62.5	0.486
Hands			
Simple		100	0.007
Epoch 3	0.871 (MDS)		
Snakes			
Faces		100	0.06
Hands		100	0.003
Simple		100	0.04
Nonsnake		100	0.001
Faces			
Hands		100	0.005
Simple		87.5	0.19
Hands			
Simple		100	<0.001
Snakes: face+simple		100	0.004
Hands: face+simple		100	<0.001

Two-dimensional coordinates of the 16 visual stimuli in multidimensional scaling (MDS) were used for discriminant analysis. The first column indicates a pair of the stimulus categories that were tested by this analysis. Correct ratio, correct ratio of separation between the given categories; face+simple, visual stimuli including the faces and simple geometrical patterns; nonsnake, the visual stimuli except the snakes; P, P values in the discriminant analysis; Simple, simple geometrical patterns; R^2, R^2 value of MDS analysis.