

How does the brain make up its mind?

Cool or uncool

A team at Caltech investigated how the brain responded to designer products and celebrity faces. Study participants were shown photographs and asked to rate their "coolness." Their brains were scanned as they viewed the images. These illustrations show active brain areas.*



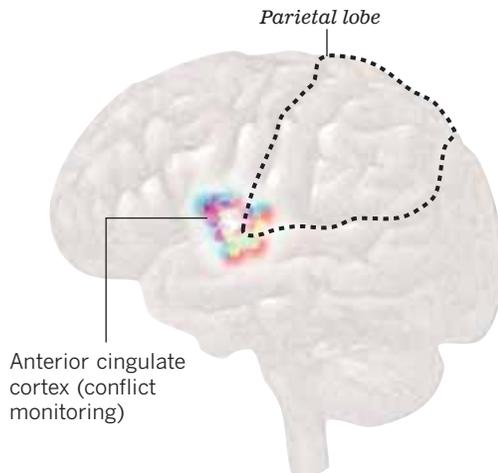
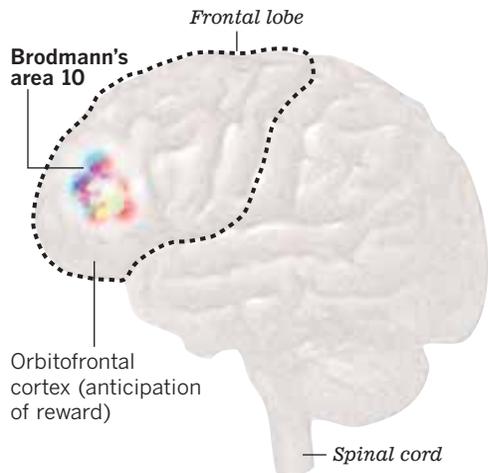
Cool images

Images deemed "cool" activated a brain area, Brodmann's area 10, associated with identity and social image.



Uncool images

Images judged "uncool" provoked activity nearer the center of the brain in an area involved in monitoring conflict.



Cool fools

These participants could be impulsive shoppers. Thinking about an object in terms of social identity may produce a powerful reward signal.

Uncool at any price

These participants may be experiencing distress as they envision themselves with the "uncool" object.

Politics on the brain

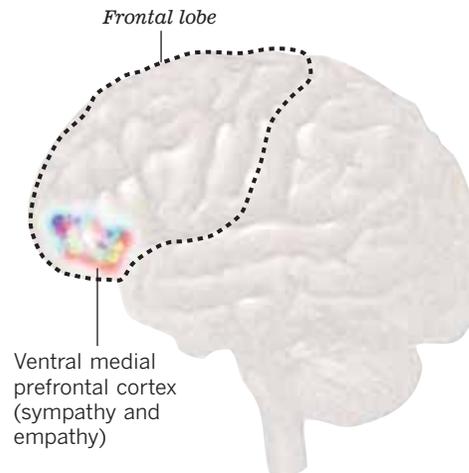
UCLA researchers tested how Democrats and Republicans responded to the faces of presidential candidates. The brains of Republicans and Democrats responded similarly in this part of the experiment. The illustrations show the typical Republican response.



George W. Bush

Republicans viewing their own candidate

Images of President Bush provoked activity in the middle of the front brain, an area that responds to reward.



Political bonding

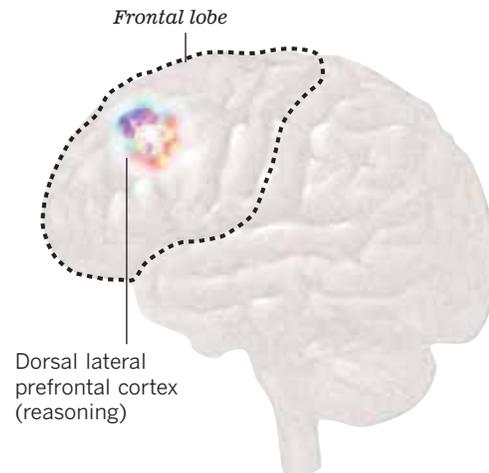
The participants' reactions may indicate a neural bonding with their preferred candidate.



John F. Kerry

Republicans viewing the opposing candidate

Images of the Democratic candidate provoked activity in the brain area associated with reasoning and emotional control.



Rational response

The participants' reactions may indicate negative emotions or a suppression of emotion.

*Although brain activity occurs on both sides of the brain, for simplicity, only the left side is shown.

Sources: Caltech, UCLA. Graphics reporting by ROBERT LEE HOTZ