

## **Scientists track effects of negative ads**

By SETH BORENSTEIN  
AP SCIENCE WRITER

WASHINGTON -- The grainy black-and-white images appear on television, while ominous music plays in the background. It's another in a blizzard of negative political ads and before you consciously know it, the message takes hold of your brain. You may not want it to, but it works just about instantly.

In fact, the ad's effects on the brain "are actually shocking," says UCLA psychiatry professor Dr. Marco Iacoboni.

Iacoboni's brain imaging research from the 2004 presidential campaign revealed that viewers lost empathy for their own candidate once he was attacked.

Scientists around the country are logging the emotional and physical effects of negative political ads. Iacoboni tracked parts of the middle brain that lit up in brain scans when people watched their favorite candidates get attacked. Other scientists hooked up wires to measure frowns and smiles before the meaning of the ads' words sunk in. Mostly, researchers found that negative ads tend to polarize and make it less likely that supporters of an attacked candidate will vote.

"Everyone says, 'We hate them, they're terrible,'" said psychology professor George Bizer of Union College in Schenectady, N.Y.

However, he added, "They seem to work."

And politicians know it because the latest figures show that by nearly a 10-to-1 ratio, political parties are spending more money on negative ads than positive ones.

Iacoboni's research usually has little to do with politics. At UCLA, he uses a functional magnetic resonance imaging machine to do brain mapping.

However, in 2004, he and a political scientist studied the brains of supporters of President Bush and Sen. John Kerry during the presidential campaign.

When the test subjects saw a picture of the candidate they supported, the medial orbital frontal cortex of the brain - the area behind the eyeballs associated with empathy - lit up.

When they were shown a picture or TV ad for the candidate they opposed, the island-shaped insula in the middle of the brain lit up along with other areas "associated with distaste," Iacoboni said. Then, other parts of the brain activated, as if the participants were "using their rational brain areas to get upset at the other guy; they were using it to find a reason" to dislike the candidate, Iacoboni said.

Repeating his original work later in the campaign after people had seen a flurry of negative ads on both sides, empathy for their own candidates just disappeared, indicating they no longer identified so much with their candidate.

"The more you are bombarded by ads, the more you are going to be affected by that," Iacoboni said. "It's even philosophical - how much of free will do we have?"

Negative ads make supporters of the attacker more likely to vote and followers of the victimized candidate depressed and less likely to vote, said Stanford University communications professor Shanto Iyengar, co-author of the book "Going Negative: How Political Advertisements Shrink and Polarize the Electorate."

But the attack ads don't do much to independents, said Iyengar, who is finishing a study on people's reactions to positive

and negative ads in seven close and nasty U.S. Senate races that will be decided on Tuesday. His online study measured "the basic gut feeling, the emotional reaction," of Democrats, Republicans and independents as they watched the ads, he said.

An attack ad of Democratic U.S. Senate candidate Harold Ford of Tennessee which featured a bare-shouldered blonde woman who spoke of meeting the African-American Ford at a Playboy party "is pulling people into separate camps," Iyengar said. Republicans reacted positively to the add, seeming energized to vote, he said, while Democrats reacted negatively, which could keep them from voting. Independents stayed near neutral.

These ads do not get people to switch sides, Iyengar said. "You can't get them to vote for you, but maybe you can get them to stay home."

What makes these ads work, Iyengar said, are "emotional triggers."

Those triggers reach into our brains faster than words, ideas and rational thought, said Williams College political science professor George Marcus. Marcus, president of the International Society of Political Psychology, has hooked people up to wires to measure frowns and smiles when they see campaign material and found that people respond to ads emotionally after about 80 milliseconds. It takes another 300 milliseconds before the words and issues hit the consciousness.

Bizer said his studies, which used fictional candidates, showed that when people form opinions based on negatives instead of positives, they are less likely to change their minds.

These ads allow people to take the easy way out, not studying issues and just relying on emotions, Iyengar said.

"If more people realized that this was all a question of pushing the right buttons ... I think there would be a realization that maybe I ought to sit down, take the time and study up on the issues," he said.

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On the Net:

The new Stanford study on negative and positive ads in close senate races:

<http://pcl-wp.stanford.edu/s7/>