

Vonage
A Better Way to Phone for Less™

Save **\$300 a Year***
On Your Phone Bill!

\$24.99 / mo
UNLIMITED Local & Long Distance Calling

Get 1 Month FREE!
+ FREE Adapter (pick here) >>>

LAT Home | My LATimes | Print Edition | All Sections

Jobs | Cars.com | Real Estate | More Classifieds

Los Angeles Times | National

You are here: [LAT Home](#) > [National News](#)



Peeking inside voters' minds

Email | Print | Text

National

[» Washington](#)

News

- California | Local
- National
- World
- Entertainment
- Business
- Sports
- Campaign '08
- Science
- Environment
- Opinion
- Columnists
- Print Edition
- Readers' Rep
- Corrections

- Calendarlive
- The Guide beta
- The Envelope
- Travel
- Magazine
- Home & Garden
- Health
- Food
- Autos
- Books
- Image
- Arts & Culture
- Photography
- Obituaries
- Crossword, Sudoku
- Your Scene
- Blogs
- All Sections

Buy, Sell & More

- Jobs
- Cars
- Real Estate
- Apartments
- Personals
- Deals at Local Stores
- Coupons
- Newspaper Ads

Place an Ad

[In the Newspaper](#)
[Online](#)

Settings & Services

- Log Out
- Update Profile
- E-mail Newsletters
- Personalized News



Dave Getzschman / For The Times

REACTION: Jeremy Vilela watches political ads while an EEG device measures his brain waves in a study by EmSense Corp.

With neurologists' help, political consultants can track exactly what audiences will respond to, and how. But it's far from an exact science.

By Denise Gellene, Los Angeles Times Staff Writer
February 10, 2008

SAN FRANCISCO -- Wearing electrode-studded headbands to track their brain waves, two subjects watched the campaign commercial on a monitor in front of them.

Presidential candidate Hillary Rodham Clinton, clutching a microphone as she spoke to an approving crowd, promised that people in need would never be "invisible" to her.

Related Stories

- Previous **TOP OF THE TICKET** Blog Excerpts
- More delegates for Obama, Huckabee
- Youngsters goo-goo for campaign '08
- Presidential candidates set sights on weekend contests
- Romney ends campaign for president
- McCain's next contest: unifying the GOP

FOR THE RECORD:

Voters' minds: A headline with an article in Sunday's Section A about technologies designed to examine the subconscious of the electorate said that neurologists were involved in the pursuit. It is neuroscientists who are employing the technologies. —

When the volunteers heard "invisible," the equipment registered a jolt of electricity in their frontal lobes.

"It got their attention," said Brad D. Feldman, an analyst for EmSense Corp., which conducted the test at its

headquarters in a converted warehouse here.

Campaigns have always wanted to look inside voters' heads. This election season, neuroscience is making that possible.

Arguing that the brain reveals more than spoken answers to questions, a new breed of campaign consultants known as neuromarketers is hawking cutting-edge technologies that they believe can peer into the subconscious of the electorate.

The companies have already used their technologies to test commercials for beverages, video games, software, cellphones and other consumer items. Advertising Age, the marketing bible, has identified neuromarketing as one of the year's top industry trends.

"People are always searching for better ways to test advertising," said veteran Democratic consultant Bill Carrick, who helped run Rep. Richard A. Gephardt's 1988

PUT YOUR BUSINESS ONLINE.

DOMAINS & HOSTING

NetworkSolutions.com **GET YOUR SOLUTION »**
SOLUTIONS ARE POWER.™

TOP OF THE TICKET POLITICS BLOG

[Politics, coast to coast, with the L.A. Times](#)

Veteran political writers Don Frederick and Andrew Malcolm offer irreverent takes on the 2008 campaign.

- Bill Clinton's vanishing act
- Good news for Huckabee in Virginia

CAMPAIGN '08 NEWSLETTER

Keep up with The Times. [Subscribe to Campaign '08](#), a free daily e-mail newsletter featuring complete coverage of the presidential campaign from coast to coast.

TOP OF THE TICKET

[Politics, coast to coast, with the Times](#)

"He's not really quitting. He's not really suspending his campaign for the Republican presidential nomination. He's not promising victory, just to keep on keeping on. But, in effect, Rep. Ron Paul, at 72 the oldest candidate for president and the only GOP candidate to oppose the Iraq war, is facing reality. ..."

— Andrew Malcolm on Ron Paul scaling back his effort

LIVE POLITICS CHAT

Join us **every Wednesday at 11 a.m.** in our chat forum to discuss the candidates, the horserace and the meaning of it all.

Top of the Ticket bloggers **Andrew Malcolm** and **Don Frederick** discussed the winners and losers of Super Tuesday on Feb. 6. [Read the transcript.](#)

 [RSS Feeds](#)

[Help](#)

[Contact Us](#)

[L.A. Times Archives](#)

[Reprint Requests](#)

[Work for Us](#)

Home Delivery

[Customer Support](#)

[Subscribe](#)



presidential campaign. "The truth is that it is very difficult sometimes to gauge the effectiveness of political advertising before it goes on the air."

Each of the companies employs different technologies, largely adapted from medical research -- pupil dilation, eye gaze and brain activity using a functional MRI scanner. EmSense's device tracks changes in brain waves, blinking, breathing and body temperature -- reactions that might indicate attention, boredom or emotional arousal. The headband transmits its information to a computer that uses a mathematical formula to determine whether the viewer's subconscious response was positive or negative. None of the companies has landed a job with a presidential candidate, and some experts question whether the technology is any better than the usual political crystal-ball gazing.

But given the high stakes of the campaign, experts say that even a slim possibility of tapping voters' inner thoughts may be too tantalizing to pass up.

"At the end of the day, consumer goods and candidates are both products," said EmSense cofounder Tim Hong.

Manipulating image

The idea that candidates can be promoted like mouthwash -- and that voters can be manipulated like shoppers -- dates back at least to Richard Nixon's successful campaign, detailed in Joe McGinnis' book "The Selling of the President 1968."

In steps that seem elementary now, Nixon's handlers shot separate ads for Southern districts and Northeastern cities, and figured out how to make their candidate appear more relaxed in front of the camera. Since then, research techniques such as focus groups, scripted surveys and data mining have become standard campaign tools.

But the problem with opinion research is that some voters say what they think interviewers want to hear.

Alex Lundry, senior research director with the Virginia-based market research company TargetPoint Consulting Inc., noted that the failure of several key polls to project Clinton's victory over Barack Obama in the New Hampshire primary shows current methods aren't adequately capturing what's on voters' minds.

Neuroscience might help uncover deep-seated attitudes about race and gender that voters might not otherwise reveal -- information that would be especially relevant in the current presidential campaign whose contestants include a woman and an African American, he said.

"It's like a focus group of the mind," Lundry said.

Recent research suggests a role for the subconscious in political decisions. In December, scientists from the University of Washington and Harvard University reported that many people who said they favored Obama in an informal Internet survey preferred Clinton when subconscious reactions were taken into account.

Although some analysts disagree, University of Washington professor Anthony Greenwald said the results seemed to confirm an ongoing "Bradley effect," the phenomenon named after former Los Angeles Mayor Tom Bradley, a black Democrat, who narrowly lost the 1982 California governor's race to George Deukmejian, a white Republican, even though polls put Bradley up to 22 points ahead. The theory is that some voters will tell pollsters they intend to vote for a black candidate, then vote for a white candidate.

EmSense was founded by former MIT students who initially wanted to use brain waves to control video games. Instead, they started using their device, which is based on electroencephalography, or EEG, to help game developers modulate emotional responses to twists and turns in the action.

After that, the company turned its attention to testing commercials.

The goal is to stir up emotion. "I like to think of it as the reason [composer] John Williams is so successful," Hong said. "How can we create what he does naturally? What are the key messages that resonate with people?"

The theory is that electrical activity in the brain changes when emotion is experienced. The device picks up second-by-second fluctuations in the brain -- those in the right prefrontal cortex indicate anger or sadness while changes in the left prefrontal cortex signal enthusiasm. This information is processed with other physiological signals that measure emotional and cognitive reactions -- producing fever charts that track the intensity of "like" and "thought." Exactly what these changes reveal about specific advertising is a matter of interpretation.

What fires up circuits

Follow the presidential nominating season with our interactive map and timeline

More Nation News

- 9/11 suspects may face death penalty
- Obama favored in Potomac primaries
- Orange County man is accused of being a spy

Subscribe
to Section

[+ MyLATimes](#)

More RSS
Readers >

[Most Viewed](#) [Most E-mailed](#) [Related News](#)

- Clinton turns her attention to Texas, other key primaries
- Lakers are on road to history
- Doctors balk at request for data
- Bruins' opponent took 'in your face' too literally
- 25 'Thriller' facts

[All most viewed >](#)

THE PALAZZO LAS VEGAS

SUITES FROM
\$199
PER NIGHT

DISCOVER THE
NEW HEIGHT
OF LAS VEGAS LUXURY

[RESERVE NOW](#)

EmSense has so far measured the reactions of more than 100 test subjects to campaign ads that have run in Iowa and New Hampshire.

When Bill Richardson, who has dropped out of the race, listed his accomplishments in one TV ad, viewers' brain waves flattened, indicating a lack of interest. When an Obama ad cataloged his newspaper endorsements, it also failed to generate much electricity.

By contrast, Clinton's use of the word "invisible" caused viewers' brain circuits to fire. Feldman surmised that the commercial tapped into subconscious fears and "created a need for the candidate."

After capturing subjects' brain waves, EmSense asked viewers to choose a few words to describe the ads. Although they called the Clinton ad "caring" and "strong," their description of the Obama spot as "hopeful" and "inspirational" showed they weren't completely in touch with their inner responses.

"They definitely weren't inspired," Feldman said.

TargetPoint, which worked with the Mitt Romney campaign, has taken a different approach, using an Internet survey that captures not only the answers to political questions, but also how quickly voters entered them; faster responses meant stronger convictions.

The results of the survey, which Lundry said was conducted as an experiment last summer, revealed a deep commitment among Mike Huckabee backers at a time when most national polls counted him out. That dedicated support might help explain why Huckabee was able to leverage a small base to become a serious contender, he said.

For all the high-tech sheen of the neuromarketers, skeptics say there is a limit to brain-tracking technologies.

Darren Schreiber, an assistant professor of political science at UC San Diego, who has used brain scanners in his research, said the devices can't predict how people will vote. "People don't necessarily act on their subconscious thoughts," he said.

Hong, from EmSense, agreed that there was a degree of uncertainty in interpreting results. "There's no vote button in the brain," he said.

Several prominent researchers last year criticized the scientific validity of a study by Washington-based neuromarketers FKF Applied Research Inc. that used brain images from an MRI scanner to measure the emotional responses of undecided voters.

Pictures of Clinton activated the anterior cingulate cortex, an area that deals with emotional conflict. UCLA psychiatrist Joshua Freedman, who cofounded FKF, and William Knapp, both Democratic strategists, said the scan revealed an ambivalence about Clinton that could explain why voters snubbed her when she was ahead in Iowa but then rallied behind her in New Hampshire.

But University of Pennsylvania neuroscientist Martha J. Farah says the brain is complex and scans interpreted to indicate anxiety, for example, could have signaled happiness because particular brain areas process many emotions. "The scattered spots of activation in a brain image can be like tea leaves in the bottom of a cup -- ambiguous and accommodating of a large number of possible interpretations," Farah wrote on the [Neuroethics and Law Blog](#), a key website for neuroscientists.

Beyond the questions of science, political consultant Cathy Allen, a director of the American Assn. of Political Consultants, wondered whether the American public was ready for neuropolitics.

She said the technologies could backfire -- especially during an election season in which voters are demanding authenticity from their candidates. Neuroscience could get in the way of establishing an honest relationship with the electorate, she said.

"Voters think that consultants spend all their time manipulating and packaging candidates and this will make them even more suspect," she said. "Manipulating the brain -- it's too much the magic man behind the curtain."

denise.gellene@latimes.com

POST COMMENT

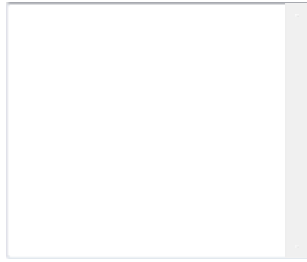
Name

Enter your comments and post to forum

DISCUSSION

Share your thoughts on the 2008 Campaign and the results of Super Tuesday.

1. Hey - did ya hear the latest from Washington State? It was originally reported that Obama won



By participating you agree to our [Terms of Service](#) and represent that you are not under the age of 13.

in all precincts except Douglas - and now it turns out that they transposed the figures from there - he won every darn precinct! Amazing eh? And Mr Reasonable - what I consider more immature is you likening Obama to Hitler. People have looked into what he is offering, with open eyes and thoughtful consideration, not a refusal to do so because of bias. Did you support Bill Clinton in the past? He was younger than Obama when he got in - and yes he talked about change too.
Submitted by: Jay
1:06 AM PST, Feb 12, 2008

2. TO Mr. Reasonable, Your comments are so moronic I am tempted to ignore them. Those of us who are supporting Obama are generally highly educated electorate who happen to know HOW TO READ and how to LISTEN. And we do it very well. If you want to know about his issues, read about them. Also, in his speeches, most of which last over 27 minutes, he clearly outlines what his issues and stands are. I am sorry that you need to be spoonfed specifics and that your immature brain cannot handle complex intellectual intricacies of Obama's message and substance.
Submitted by: Obama-Change with substance
12:58 AM PST, Feb 12, 2008

3. MrReasonable, I wonder why Obama consistently get 2/3 of voters who have a College/Post-Grad degree while Clinton consistently getss 2/3 of voters who have only a high school degree/HS drop outs, based on exit polls compiled by cbsnews.com. This disparity tells me that infact Obama voters are well educated individual who are not merely picking a familiar name as their candidate. Obama has beenquite cerebral in this election process (almost cost him the campaign actually) or have read up on his position after the "silly season" of the process began. So it would be wise to gain some knowledge before you post.
Submitted by: VarsityBlueNYC
12:51 AM PST, Feb 12, 2008

[Read all 9288 comments](#)

Save/Share



Save over 50% off the newsstand price. [Subscribe to The Times now!](#)



Valentine's getaways

Trips, gifts and other ways to celebrate the red-letter weekend. [Hotel deals](#) | [Hot rides](#)



View our readers' **National Politics** photos and share your own at [Your Scene](#).

[Submit your photo or video >>](#)

Ads by Google

Keep Your Brain Sharp

Mental workouts keep the aging brain functioning. RLTV www.rl.tv

Ann Coulter's Column Free

Get Ann Coulter's weekly column delivered to you Free via email. www.HumanEvents.com

Political Yard Signs Fast

100 18x24 250.00 Plus Free Banner 1 Color to Full Color Signs Fast www.BigDaddysSigns.com

Develop your Minds power

Activate your brain, increase IQ & build more neural connections now! www.GetiMusic.com

Hillary Clinton in 2008?

Would Hillary Clinton be good for America? Take our Poll! YourVote2008.org

More on LATimes.com

[Politics](#) | [Science](#) | [Environment](#)

Partners

[Hoy](#) | [KTLA](#) | [ShopLocal](#) | [Shopping](#) | [Grocery](#)
[Coupons](#)

Classifieds

[Career Builder](#) | [Cars.com](#) | [Apartments.com](#) | [FSBO](#)
(For Sale By Owner) | [Open Houses](#)