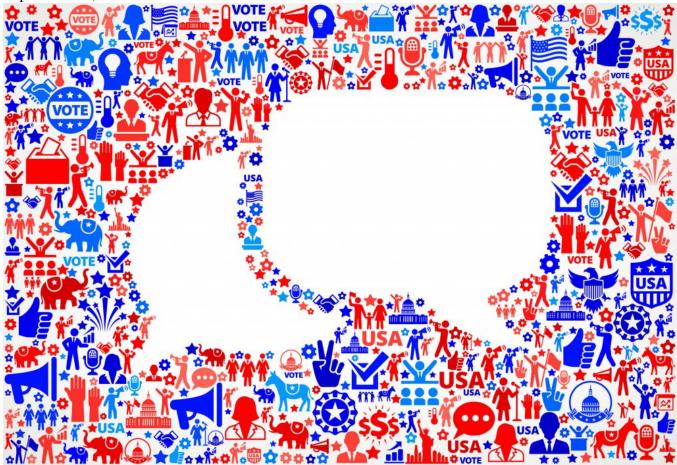
This is Your Brain on Politics

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U.S. presidential candidates have been stumping for nearly two years with their every move being analyzed and reported ad nauseum. Logically, voters should be able to tap into lots of information when they make their decisions come November. But it turns out there's a lot more going on when we step behind the curtain to cast our ballot.

The founders of the United States didn't have the advantages of fMRI brain imaging and had no concept of the amygdala, but they were hesitant about political parties and political campaigning nonetheless. Fearful that a "torrent of angry and malignant passions will be let loose," Alexander Hamilton railed against political parties in the first Federalist Paper, saying the parties would try to "increase the number of their converts by the loudness of their declamations and the bitterness of their invectives."

It turns out there was some reason to be concerned about the relative influence of information versus emotion when it comes to political judgments and affiliations. Though it is impossible to know for sure whether people actually vote along party lines, many psychological studies have shown that political affiliation plays a large role not just in the voting booth but also when people must decide how they feel about political issues.

In 2005, Emory University political psychologist Drew Westen and his colleagues published a study in which they correctly predicted people's views on political issues based solely on their emotions. When the Bill Clinton-Monica Lewinsky scandal broke in March 1998, the psychologists quizzed participants to gauge their knowledge of Clinton and the details of the scandal. Then they asked emotion-based questions about how participants felt about Clinton as a person, how they felt about the Democratic and Republican parties, and how they felt about infidelity in general. Months later, before the Congressional impeachment trial began in December, they called the participants back and asked them a series of questions along the lines of "Do you think what the president has been accused of doing meets the standard set forth in the Constitution for an impeachable offense?" Using only what they knew about the respondents' emotions, the researchers were able to correctly predict their views on impeachment 85 percent of the time. Knowledge meant little: When they factored in what the respondents actually knew about the situation and the Constitutional requirements for impeachment, they only improved the accuracy of their predictions by three percent.

They did similar studies of the controversial 2000 election just before the Supreme Court gave its ruling.

"The results were consistent with our three Clinton studies," Westen writes in his book, *The Political Brain*. "What people knew about the disputed election had no impact on their judgments. ... The lion's share of voters' judgments about the relative validity of manual versus machine counts reflected nothing but their feelings toward the parties and the candidates."

Westen said the only time they found something even remotely different was when they asked people about the economy. "There we found some connection to reality, but it was still swamped by their feeling about the incumbent party and whether that party was theirs," he says.

What's more, Westen believes that we become even more partisan as we age because we are faced with partisan decisions again and again. Research by Philip Converse, a leader in the field of public opinion, has also shown that people express stronger party affiliations with age.

Partisan Neurons

Westen and colleagues used neuroimaging to look at the neural responses of individuals who described themselves as partisan. They showed the participants one of three groups of slides: one group about their party's candidate, one about the other party's candidate, or one about a neutral control subject. In each group, the first slide revealed a position the politician had taken, and the second depicted a contradiction — something the candidate had done or said that seemed to be contrary to what the first slide was saying. Not only were the participants unable to see the contradiction for their own candidate, but the neuroimaging also showed that they were regulating their emotional response. The researchers saw large areas of activation in the prefrontal cortex, which indicates emotional influence on reasoning, and in the posterior cingulated cortex, associated with forgivability. Essentially, participants detected the contradiction in their reasoning, but they weren't allowing it to affect their opinion. Westen describes this as "motivated reasoning."

There's more. Westen showed the participants yet another slide, this one offering a rationale for the earlier contradiction. When they did this, large areas in the ventral striatum became active, suggesting that participants were rewarding themselves for working through the problem. This combination of the

suppressed negative emotions and reward for reaching a biased conclusion "suggests why motivated judgments may be so difficult to change," Westen writes. "They are doubly reinforcing."

But how do we become partisan in the first place? That's a complicated question, but much of it appears to relate to simple convenience. Samuel Popkin, a political science professor at University of California-San Diego, argues that it makes sense for average citizens, who are worrying about their own lives and the week-to-week struggles of surviving, to follow the leadership on issues they don't understand or don't care enough to learn about.

Because it is impossible to know everything there is to know, humans — and as it turns out lots of other species as well — use cognitive shortcuts when necessary to help the make a lot of life's decisions. These mental shortcuts are not foolproof, but they're convenient and good enough most of the time. APS Fellow and Charter Member Robert Cialdini, a leader in the field and the author of *Influence: The Psychology of Persuasion*, gives examples from the non-political world: Female turkeys embrace babies that make a certain sound but reject any that don't make that sound as a shortcut to determining whether they are healthy enough to survive. Instead of having to know about the anatomy of baby turkeys and health issues, the mothers know this one shortcut is often correct when determining whether their children are healthy.

Harvard psychologist and APS Fellow and Charter Member Ellen Langer observed similar rule-based behavior in a typical office setting. She had researchers ask if they could cut in line to use a copy machine. When they simply said, "Excuse me, may I use the copy machine?", only 60 percent of the subjects complied. When the researchers gave a reason — "Excuse me, may I use the copy machine because I'm in a rush?" — 94 percent said yes. Langer tested this one more time with the phrase, "Excuse me, may I use the copy machine because I need to make some copies," and again 93 percent of respondents agreed — despite the fact that "I need to make some copies" is not really a very good reason for cutting in line.

The way Langer and Cialdini describe it, people hear the word "because" and assume that there is a good reason. That is to say, the word "because" is a shortcut people use to distinguish between good arguments and bad. Though he hasn't looked specifically at this phenomenon in politics, Cialdini says it's certainly plausible that people might use political party affiliation as a shortcut as well. "They don't even have to know the candidate on the ballot," he says. "They just have to know the party the candidate is associated with. And that allows them to make a choice that they will openly support based on the commitment to one party. ... It's a perfect example of a shortcut."

APS Fellow and Charter Member John T. Jost, a psychology professor at New York University, has a different theory about political behavior, focusing more on ideology. He investigated American National Election Studies data from 1972 through 2004 and found that two-thirds of respondents chose to describe themselves as liberal or conservative — a figure that rose to 75 percent in respondents since 1996, indicating that the country may be becoming even more divided.

Jost argued in a March 2008 article in *Perspectives on Psychological Science* that ideology is a psychological trait. This trait emerges in a variety of domains throughout a person's life, not just in the political realm. For example, he writes, "Implicit and explicit preferences for tradition, conformity, order, stability, traditional values and hierarchy — versus progress, rebelliousness, chaos, flexibility,

feminism and equality — are associated with conservatism and liberalism, respectively." In five different studies in 2000 and 2004, Jost had participants report their political orientation on a seven-point scale and then examined their implicit preferences for different values. Participants in general preferred order over chaos and conforming over rebelling, but "the magnitude of these preferences increased with the participants' degree of self-reported conservatism." Liberals tended to prefer flexibility over stability and progress over tradition.

This does not mean that all political ideology is entirely based on implicit preferences. Threats to mortality have been shown to increase conservative appeal, even among liberals. For instance, a 2004 study by Florette Cohen and colleagues asked participants whether they preferred George W. Bush or John Kerry in the upcoming presidential election. Some participants first filled out a survey about how watching television made them feel and others filled out a questionnaire about how death made them feel. Those who had been emotionally primed with thoughts of death were strongly in favor of Bush, whereas those who had been primed with thoughts of television were strongly in favor of Kerry. This finding is consistent with what's known as "terror management theory," which holds that people use ideology to protect themselves psychologically from paralyzing fears of dying.

Jost also found that ideology spilled over into people's everyday lives. In his studies, liberalism is associated with appreciation of new experiences in general, including decidedly non-political preferences such as foreign food, film, and travel. Conservatives similarly show a preference for television, marriage, and children, among other things. (Jost is quick to point out that this link could work either way, that is, people who are politically conservative could learn to prefer tradition and stability over flexibility and progress, or it could be that people with those leanings choose a political affiliation that suits them.)

Political affiliation also tends to get passed from generation to generation, although again it is unclear whether it is a preference for a specific political party that children are picking up on or simply a preference for a world view. "Our parents are intentionally or unintentionally giving us a moral education — when they're teaching us right or wrong, they're giving us ideas about personal responsibility toward people who are less advantaged than we are," Westen says.

Psychology of Swing-Voting

Despite the fact that the majority of Americans are set in their partisan ways, general elections are actually won by courting the independents — the one-third of the population that votes based on the options presented them each year. So how do these people decide? A lot of them use shortcuts too. Some will obviously look at the issues, the economy, and the current state of the country and make an educated decision. But again, some people just don't have the time. These people turn to their guts — or at least a more automatic part of their brain.

Throughout the primary season, we saw Barack Obama go bowling and drink Yuengling while Hillary Clinton sat in diners and talked about shooting guns with her grandfather. When the general election heats up, we will no doubt hear Obama, who is Ivy League educated, and John McCain, who is the son of an admiral, talk about who is more elite. This is nothing new. Most voters will remember attacks against John Kerry in 2004 because he liked wind surfing and Philly cheesesteaks with provolone cheese. And all the way back in 1840, William Henry Harrison campaigned under a banner picturing a

log cabin and a bottle of hard cider, despite the fact that he came from a wealthier background than his opponent, Martin Van Buren.

These charades actually makes sense, psychologically. Research has shown again and again that people prefer that which is familiar to them. In *Influence*, Cialdini writes about two studies that demonstrated this point. In one, experimenters on a college campus asked students for a dime to make a phone call. The experimenters were dressed in either "hippie" or "straight" clothing (this was the 1970s), and they were more likely to get a dime from students who were dressed the same way. Similarly, marchers in an anti-war demonstration were more likely to get people to sign a petition when they were dressed the same way as the people they were propositioning.

In the political arena, one way to make yourself more familiar to people is to drink beers and eat eggs in as many small-town bars and diners as possible. That strategy is very successful on a small scale, but when you are competing in a national election, no candidate can meet everyone. So they rely on other strategies, such as celebrity endorsements and television commercials, to increase both their recognition and comfort levels. Advertisers have used positive associations for a long time. Cialdini describes one study in which men who saw a car advertisement with an attractive model actually rated the car as faster than those who saw an ad without the model. "The important thing for the advertiser is to establish the connection," Cialdini writes. "It doesn't have to be a logical one, just a positive one." Which explains why you've seen Oprah Winfrey or Chuck Norris out on the campaign trail this election season. What do they have to do with health care or homeland security?

This "proximity effect" can hurt a candidate as well as help him. For example, psychologist Michelle Hebl from Rice University had people rate male job candidates in a couple different scenarios. In one situation, the participants saw the job applicant sitting next to an obese woman, and in another he was sitting next to an average-sized woman. Given that obese people are often stigmatized, Hebl hypothesized that the applicants sitting next to obese women would be rated lower on a variety of traits that seemingly had nothing to do with weight. She was right. "Across the domains of Hiring, Professional Qualities, and Interpersonal Skills, the male associate was denigrated substantially more if he appeared with a heavy woman than an average-sized woman," Hebl writes in a 2003 article in *Personality and Social Psychology Bulletin*. Apparently, even a very loose connection to someone undesirable can have a major effect on how people view a candidate. This obviously has very real implications for politicians who are constantly trying to distance themselves from controversial figures. Just think of Obama's difficulties because of Reverend Jeremiah Wright or McCain's embarrassment over Pastor John Hagee. It also explains why we likely won't see the President stumping for Republicans this election season.

Another Kind of Imaging

A major way that politicians try to shape their own image, whether by branding themselves or their opponents, is through television commercials. A lot of research on political commercials has been done by Ted Brader, a professor of political science and political psychology at the University of Michigan. Brader studied hundreds of commercials and classified them into two groups: fear-inducing and feelgood. "The soundtrack of fear ads features tension-raising instrumentals full of minor chords, ominous rhythms, and discordant tones," he notes in his book, *Campaigning for Hearts and Minds*. "These ads use grainy, black-and-white images or dark and muted colors." This is the opposite of "feel-good ads,"

which tend to use smiling kids and upbeat music.

Brader wanted to test the effect of these audio and visual cues on both types of ads, so he had people watch a 30-minute local news segment under the guise of it being an experiment studying what people learn from the local news. Halfway through the news, participants saw one of four different commercials. Some saw a "feel-good ad" either with strong emotional cues, such as children playing outside or sitting in a classroom, or muted ones, such as aerial pictures of a city or pictures of buildings. Others saw an "attack ad" with either the proper negative cues or with muted visual and audio cues similar to the ones in the feel-good ad.

After the news segment was complete, he asked the participants to rate how they felt. Those who had seen the negative ad with the menacing music and imagery reported being the most anxious, worried, and afraid, and those who saw the positive ad with the cheerful imagery reported feeling the most hopeful, reassured, and confident. What's more, participants who saw the positive ads in general — and, in particular, the ones who saw positive ads with emotional cues — reported being more interested in the campaign than those who saw the negative ads.

It turns out that voters are actually quite perceptive, and most can gain a lot of knowledge through these short, 30-second television clips, meet-and-greets, or televised debates — so every interaction counts. Psychologist Nalini Ambady, of Tufts University, has done a lot of work looking at what she calls thin slices of behavior. In one study, she had students watch a 30-second silent clip of a lecturer at the beginning of the semester and had them rate the lecturer on qualities such as competence and confidence. The students' evaluations mirrored those of students who, months later, rated the lecturers after hearing them teach for an entire semester. In a different study, Princeton psychologist Alexander Todorov found that participants were able to predict the winner of unfamiliar House and Senate races with 69 percent accuracy just by looking at one-second clips of the candidates' faces.

The implication for politicians is again very clear: ooze charisma. If you can do that, play off the emotions of your constituents in TV commercials, avoid associating with any questionable characters, be as much like "the people" as possible, and, of course, be a member of whichever political party is currently most popular, then you're well on your way to being the next president of the United States. ?

The Clinton Effect

For weeks after the democratic primary ended, Hillary Clinton supporters were telling the media and pollsters and anyone who would listen that they were not going to support Barack Obama. It seems like an odd phenomenon because it doesn't take a political scholar to realize that Obama is a lot closer to Clinton on the issues than John McCain is.

Cialdini thinks there are a few good explanations for this attitude. He writes about a study psychologist Stephen Wochel did in which he gave people a jar of cookies, asked them to take one, and then asked them to rate the cookies. Some people got a jar with just two cookies in it, and others got a jar with 10 cookies, but before they could take one, a researcher came and took eight of the cookies away. The people in this second group rated the cookies as more desirable than did those who just had two cookies to begin with, implying that people like something more when it is taken away from them.

For months and months, Clinton supporters and Obama supporters argued about who was the better candidate. They gave time, money, and support to their respective campaign. Once the candidate they supported was taken away from them, that candidate became even more desirable — and the other candidate even less so.

The scarcity principle might also come into play in a unique way in this election because Clinton supporters may not see another viable female candidate in the near future. "To the extent that that's the case — that they don't see another candidate that fits that demographic — that does make that person's candidacy more valuable as a consequence," Cialdini says.

Lowenthal has a different view. In her dissertation, she ran other attraction effect studies that looked at a candidate leaving the race. In all of her studies, the candidate who was most similar to (but worse than) the one who dropped out benefited from the dominant candidate leaving the race. Using this logic, having Clinton in the race may have actually benefited Obama — even among strong Clinton supporters, who thought of their candidate as the dominant candidate.

And Lowenthal has a response for those who say they're going to vote for McCain: She doesn't believe all of them. She did another study where she asked participants to give their positions on two political issues and two political candidates and to say whether they thought their positions would change during the next two months. Then she gave them another survey two months later asking the same participants to give their current positions and recall past positions. Across the board, respondents underestimated both how much their positions would change and how much they did change over time.

Sure, some of the Clinton supporters will actually switch parties, Lowenthal says, but in general, "people are really, really bad at predicting what their preferences are going to be in the future."

The Nader Effect

Ask a Democrat what they think of Green Party candidate Ralph Nader and most of them will say he caused them to lose the 2000 presidential election. Conventional thinking is that when you introduce a candidate who, like Nader, is similar to one of the leading two presidential candidates (in the case of the 2000 election, Al Gore), the third-party candidate will take votes away from the candidate he most resembles. But an idea from cognitive psychology called the "attraction effect" actually argues the opposite: according to this theory, a third candidate can actually help the person most similar to him.

Here's an example of the attraction effect from psychologist Diane Lowenthal's lab. Candidate A (which she labels "the competition") promises to bring 2,000 jobs and \$500,000 in new business to the district and candidate C ("the target") plans to bring 1,500 jobs and \$900,000 in new business. When participants are told about only these two candidates, they choose candidate A 61 percent of the time, leaving C with 39 percent. But for some participants, she also introduces candidate B (known as "the decoy"), who promises to bring 1,000 new jobs and \$800,000 in new business. Notice that candidate C's campaign trumps candidate B's — he is promising more new jobs and more new business. Despite the fact that candidates A and C are still offering exactly the same promises as before, participants now choose candidate C 58 percent of the time when all three candidates are in the race. Lowenthal did similar studies with different promises (increases in education, constituent services, job training, and

infrastructure), and in all of them, the voters changed their priorities based on who was in the race.

Lowenthal offers some explanations for this counterintuitive finding. She says it could have to do with the popularity effect — what Cialdini describes as social proof — where people who don't know where their priorities are look to others to tell them what to do. Because two politicians are pushing for the same issue — in this case, more new business — voters assume it must be more important than they originally thought.

Using this theory, Lowenthal says Nader could help Obama if he continues to push the idea of universal health care — something Obama supports as well, just not to the same degree. The key is that in Lowenthal's experiments, the decoy was trumped on all aspects by the target candidate. In the real world, some people may actually decide to vote for Nader (or Bob Barr on the conservative side), but Lowenthal says it is possible that third-party candidates are still trumped by the Democrat and Republican candidates because people don't want to feel like they are throwing away their vote. If that turns out to be the case, Democrats might end up thanking Nader this time around.