

Genetics may have played a part in electing Trump president

As Americans, we must ask ourselves: Are we really so different? Do we truly believe that ALL red-state residents are ignorant racist fascist knuckle-dragging NASCAR-obsessed cousin-marrying roadkill-eating tobacco juice-dribbling gun-fondling religious fanatic rednecks; or that ALL blue-state residents are godless unpatriotic pierced-nose Volvo-driving France-loving left-wing communist latte-sucking tofu-chomping holistic-wacko neurotic vegan weenie perverts?
—Dave Barry

As president-elect Trump continues to issue a barrage of in-your-face Tweets and contradictory policy statements, voters who voted for Hillary Clinton (and perhaps even some Trump voters), may be asking themselves: “What were you thinking?” when you voted for the billionaire businessman with no public policy experience.

A number of scientists are going beyond asking this question. They want to know why; “What made you think about the candidates the way you did that led you to vote for Trump or Clinton?” These scientists suggest that our brain function — and maybe structure — may heavily influence our political and ideological views, and how we vote.

A lot of scientists and politicians have, understandably, wanted to avoid studies that could be hyped as this one was in the UK's Daily Mail: [Right-wingers are less intelligent than left wingers, says study](#).

The actual science doesn't say this at all.

A number of genetic studies have been conducted in the past, searching for a link between genes and political preferences. [Twin studies](#) show almost no heritability in being a Republican or a Democrat. But, there are studies that suggest genetics [play a role](#) in determining our political attitudes and ideology.

A political taboo: the biological environment

For many years, social (including political) scientists have side-stepped the biological implications of these findings, focusing instead on possible social underpinnings of our political beliefs. Instead, they believe our attitudes are bestowed upon us by our parents, economic status, perceived social status, and the media. Researchers like John Hibbing of the University of Nebraska's political physiology lab [summed up](#) these attitudes:

Events and situations were alleged to be the sole source of political attitudes; indeed, they had to be the sole source given the widely held assumption that people are born with politically blank slates.

Hibbing looks at biology and politics a little differently. He studies the interaction of politics with physiology and the brain, and has found that our brains are not politically naïve at birth, and may be wired in a way to

determine our political proclivities (even if the brain doesn't decide if we're red or blue).

The threat response gets (right- and left-) wings

Hibbing and his colleagues [have studied](#) volunteers who are evaluated for responses to perceived threats (by measuring eyeball movements and skin conductance of moisture). They found in a number of studies that people do vary in their physiological responses to a threat. And people who are more responsive to threats are more likely to support "law and order" policies, such as the death penalty, mandatory sentencing, restrictions on immigration, or traditional lifestyles. The "high threat responders" also did not support policies addressing other possible threats like global climate change or international disputes.

Other studies have pointed to differences in brain activity among Republicans and Democrats (or conservatives versus liberals), as well as anatomical differences (in the brain, of course). [In studies](#) like this one from the University of California, San Diego, conservative attitudes were associated with denser gray matter in the right amygdala, while liberal views and those of confirmed Democrats were associated with denser gray matter in the upper cingulate cortex. Both of these areas of the brain are associated with analyzing risk and threats. Both work in somewhat different ways, but also communicate with each other. It's also not clear whether political attitudes created the brain structural changes, or whether the structures created the attitudes.

Is my bias better than your bias?

Still [another study](#), by psychologists Mark Brandt at Tilburg University in Holland and Jarrett Crawford at The College of New Jersey, pointed to cognitive differences in political attitudes. Here, a group compared IQ tests (which are replete with their own bias issues) of respondents with the types of groups the respondents objected to. The higher the IQ, the more people rejected more "conventional/traditional" organizations. The lower the IQ, the most people rejected "outlier/nontraditional" organizations. The study didn't really show that one group was smarter than another. It instead demonstrated that prejudices and biases exist in any group, and those prejudices will vary according to a number of biological factors, including cognition.

What a number of these studies leave out is the cultural context of a political belief. A speech made in the early 1960s on communism and the Soviet Union by the late Democratic President John F. Kennedy today sounds more reminiscent of a speech by a Republican (and a rather conservative one at that). Yesterday's dire threat is today's distant international issue.

In addition, an issue in Brandt's and Crawford's IQ study is the definition of "outlier," "nontraditional" or "conventional" organization. Would a mixed-race marriage, or even a marriage between someone Jewish and someone Roman Catholic, be considered "traditional" today, even though they would have been illegal as recently as 60 years ago?

Another issue left out is whether these attitudes reflect not a political party, but a response to authoritarian behavior. Hibbing's study looks at threat responses, and it determines how people would respond to authority. This is not the sole province of Republicans. Communist governments in the former USSR and the People's Republic of China, while considered "left," exhibited considerable authoritarian behavior. So

do many college campuses, in which incidents of bullying and [faculty/administration](#) criticism have been reported by more conservative-leaning students and faculty.

These and other scientists warn against using their data to show that one party or political attitude is superior to another. Some authors, such as Paul Rosenberg in Salon, have chosen to cite, but ignore [this advice](#):

The scientists themselves insist that “citing differences in the psychological and physiological traits of liberals and conservatives is not equivalent to declaring one ideology superior to the other.” While this may be true in an abstract sense, and a mix of psychological tendencies makes a society more robust in the long run — balancing needs for caution and self-preservation with needs for exploration, innovation and renewal — in 21st century America, things look strikingly different.

Conservative fears of nonexistent or overblown boogeymen — Saddam’s WMD, Sharia law, voter fraud, Obama’s radical anti-colonial mind-set, Benghazi, etc. — make it hard not to see conservatism’s prudent risk avoidance as having morphed into a state of near permanent paranoia, especially fueled by recurrent “moral panics.

Evolution of political views

However, a robust response to a threat has been evolutionarily advantageous. It probably helped when being chased by bears. It probably helps identify true threats today, such as for a soldier or police officer in a combat situation. Such “moral panics,” and the political attitudes behind them, are a double-edged sword to any society. The diversity of our morals has been an integral part of human evolution, as we have become more complex social creatures who have to deal with a wider range of environmental issues (using the broadest sense of that term). According to [Tim Dean](#), science and technology editor at The Conversation who holds a doctorate in history and philosophy;

Intra cultural moral diversity can be attributed to individual differences in the operation of our moral psychology, ... these individual differences exist because the very nature of the problems of social living meant that evolution was not able to settle upon a single psychological type that reliably produces adaptive behavior in every social environment. Instead, a diversity—or polymorphism—of psychological types working together tended to be more evolutionarily stable.

In politics, then, we probably need both sides.

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