Voting genes: Are political views inherited?

I often think it's comical — Fal, Ial, Ia! How Nature always does contrive — Fal, Ial, Ia! That every boy and every gal That's born into the world alive Is either a little Liberal Or else a little Conservative!

~ From the song "Private Willis", lyrics by W. S. Gilbert, in play Iolanthe

W.S. Gilbert wrote those lines back in 1882, based on a simple observation that signs of a person's future political orientation and ideology often are evident during their childhood, and today we have scientific evidence that it's true, at least in a certain sense. A decade ago, in the psychology journal *Research and Personality*, researchers from UC Berkley <u>demonstrated</u> clear associations between liberal vs. conservative political views in young adults and various personality traits recorded when the individuals were in nursery school. That finding raises the question of whether the roots of political beliefs can be traced back even even earlier than nursery school; namely, do such beliefs have any inherited component? Can your voting behavior and political views be predicted based on your genes?

Children emulate their parents: Nature or nurture?

It actually has been <u>demonstrated scientifically</u> that children hold to their parents political ideas most of the time. The question, however, is whether this is due merely to hearing those ideas over and over at the dinner table, or whether biology also comes into play. Intuitively, we might reason that any genetic factor relating to how one votes is probably fairly minor, compared with the social factors; in other words, nurture dominates over nature. However, British investigators from Kings College London suggested recently that genetics accounts for 57 percent of the UK Tory vote, 51 percent for the Independence Party, and 48 percent for Labour and Green.

Such exact numbers might make the study sound very scientific and — in a Science Web article titled <u>Your awful, bigoted opinions are encoded in your genes</u> — at least one of the researchers, Phil Spector, has been quoted with some very confident words:

We took a bunch of old, rich, white men with entrenched and out-dated views on virtually everything, and what we found was that their children had equally disgusting views of the world. As there is no other possible way we could think of by which a parent could transfer their opinions to their children, we concluded that it must be genetic.

Before you conclude from this that there must exist genes for leftwing and rightwing beliefs, a couple of caveats must be laid out. First of all, the study cited above was not published in a peer reviewed journal, but merely in Britain's <u>The Sunday Times</u>. Second, there most certainly are possible non-genetic ways for

parents to transfer their opinions to children. Hearing something over and over again through childhood is likely to affect your point of view, as are your experiences growing up and interactions with people inside and outside your family. *The Sunday Times* study actually acknowledges this, simply by not claiming that genetics accounts for 100 percent. The real question, therefore, is this: is there any scientific evidence supporting the idea that genes, or other aspects of biology, at least factor a person's political views, or voting behavior. Looking at things from this perspective, it turns out that some relevant scientific investigations actually have been carried out.

Genetic testing not on the brink of replacing elections

Using the term *genopolitics* to describe the field of study that has emerged over recent years and that examines connections between voting behavior and genetics, one writer for the BBC, Tom Stafford, <u>points</u> <u>out</u> various studies showing inheritable factors in political ideology. These studies include <u>twin studies</u>, which have elucidated high rates of similar voting behavior between identical twins (who are identical genetically). While twins share parents, of course, and hear the same dinner table conversations, the studies show that they agree politically with one another more often than do ordinary siblings or even fraternal twins (non-identical twins who have no more genetic similarity than ordinary siblings do). But, citing science writer Ed Young, Stafford also cautions that the genetic information in our DNA isn't enough to account for complexity of our political decisions:

There is about the same amount of information in your DNA as there is in eight tracks on your mp3 player. What forms the rest of your body and behaviour is the result of a complex unfolding of interactions among your genes, the proteins they create, and the environment...Notice that there isn't any suggestion that the political opinions are directly controlled by biology. Rather, the political opinions are believed to develop differently in people with different basic biology. Something like the size of a particular brain area is influenced by our genes, but the pathway from our DNA to an apparently simple variation in a brain region is one with many twists, turns and opportunities for other genes and accidents of history to intervene on.

In other words, it's complicated, which is something that we already know about any kind of behavior — political or otherwise — when it comes to interactions between genes and brain development. Recently,for example, hormones were shown to have an influence on how people vote, and particularly on whetheror not they show up to vote, and hormones certainly are affected by genetics. Thus, it should be nosurprise each time a study comes out showing correlations between any genetic sequence and certainpolitical attitudes. We're seen them over and over in major newspapers, including the <u>New York Times</u> and the <u>Huffington Post</u> and you can expect to see more in the years to come. But don't expect thefindings to get very specific about political details in connection with genes. Fifty-secen percent of the Toryvote may sound specific, but that's merely a number devised based on how many people said what in asurvey, and perhaps that's why it was never published in a peer reviewed journal. Rather, by specific, Imean don't expect that anyone will ever identify a Tory, Independence, Labour, or for that matter aDemocratic or Republican, gene. So while your genome may have something to do with your awful, bigoted opinions, the genetic contribution is only very slight and the connection is indirect.

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