

## Political views are reflected in brain structure

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We all know that people at opposite ends of the political spectrum often really can't see eye to eye. Now, a new report published online on April 7th in *Current Biology* reveals that those differences in political orientation are tied to differences in the very structures of our brains.

Individuals who call themselves liberal tend to have larger anterior cingulate cortexes, while those who call themselves conservative have larger amygdalas. Based on what is known about the functions of those two brain regions, the structural differences are consistent with reports showing a greater ability of liberals to cope with conflicting information and a greater ability of conservatives to recognize a threat, the researchers say.

"Previously, some psychological traits were known to be predictive of an individual's political orientation," said Ryota Kanai of the University College London. "Our study now links such <u>personality traits</u> with specific brain structure."

Kanai said his study was prompted by reports from others showing greater <u>anterior cingulate cortex</u> response to conflicting information among liberals. "That was the first neuroscientific evidence for biological differences between liberals and conservatives," he explained.

There had also been many prior psychological reports showing that conservatives are more sensitive to threat or anxiety in the face of uncertainty, while liberals tend to be more open to new experiences.



Kanai's team suspected that such fundamental differences in personality might show up in the brain.

And, indeed, that's exactly what they found. Kanai says they can't yet say for sure which came first. It's possible that brain structure isn't set in early life, but rather can be shaped over time by our experiences. And, of course, some people have been known to change their views over the course of a lifetime.

It's also true that our political persuasions can fall into many more categories than liberal and conservative. "In principle, our research method can be applied to find <u>brain structure</u> differences in political dimensions other than the simplistic left- versus right-wingers," Kanai said. Perhaps differences in the brain explain why some people really have no interest in politics at all or why some people line up for Macs while others stick with their PCs. All of these tendencies may be related in interesting ways to the peculiarities of our personalities and in turn to the way our brains are put together.

Still, Kanai cautioned against taking the findings too far, citing many uncertainties about how the correlations they see come about.

"It's very unlikely that actual political orientation is directly encoded in these <u>brain regions</u>," he said. "More work is needed to determine how these brain structures mediate the formation of political attitude."

## Provided by Cell Press

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