

SOCIOLOGY

The growing climate divide

Climate change has reached the level of a 'scientific consensus', but is not yet a 'social consensus'. New analysis highlights that a growing divide between liberals and conservatives in the American public is a major obstacle to achieving this end.

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One need only watch the debates in Washington DC over the regulation of greenhouse gases to see that climate change has become a politically charged and partisan issue. The most recent vote to ban the US Environmental Protection Agency from regulating carbon dioxide as a pollutant (the Energy Tax Prevention Act of 2011) passed the House of Representatives by a margin of 255 to 172, with the divide falling along party lines. Every Republican supported the measure, whereas all but 19 Democrats opposed it. Does this partisan divide extend beyond political leaders in the US to the general public? Writing in *The Sociological Quarterly*, Aaron McCright and Riley Dunlap¹ show that the answer to this question is a definitive 'yes', and that the divide is widening.

There is a growing body of work in the fields of psychology², sociology³, anthropology⁴ and other social sciences that views climate change not only as a scientific issue, but also as a psychological, cultural and political one. This work helps explain why anthropogenic climate change has reached the level of a 'scientific consensus',

but is not yet a 'social consensus' — namely a view held by society as a whole that emerges from individual and social values about what is true and what is not. Whereas the physical sciences dominate scientific consensus, social consensus involves a much wider array of actors including the media, educators, and cultural and political leaders. More importantly, the processes by which these actors understand and assess the science of climate change are not always 'scientific'. Rather, they invoke deeply held beliefs and values, which are influenced by political ideology.

When individuals analyse important issues such as climate change, they employ political and ideological 'filters' that are heavily influenced by the values and belief systems of the groups to which they perceive themselves to belong⁵. People generally endorse the position that most directly reinforces their connection with other members of these groups. In the contemporary social debate, climate change has become entrenched in the so-called culture wars between values that are considered to be 'conservative' and those considered to be 'liberal', with acceptance of

the scientific evidence for global warming tightly tied with liberal views⁶. In short, it has become strongly tied to the political partisanship of our day.

This effect is partly explained by people's tendency to openly consider evidence when it is accepted by — or, ideally, presented by — a knowledgeable member of their cultural community. Conversely, they tend to dismiss information as being inconsistent with their cultural values when they perceive it as being advocated by experts whose values they reject^{7,8}. So, when influential conservative speakers or media outlets promote the idea that climate change is a 'hoax', conservative members of the public are more likely to accept that statement as being true than liberal ones. And when influential liberal spokesmen or media outlets promote the idea that climate change is 'an inconvenient truth', liberal members of the public are more likely to endorse that view than conservatives. If we wish to move beyond this ideological divide, more attention must be paid to the psychological, social, cultural and political processes through which people have become divided over the scientific consensus.

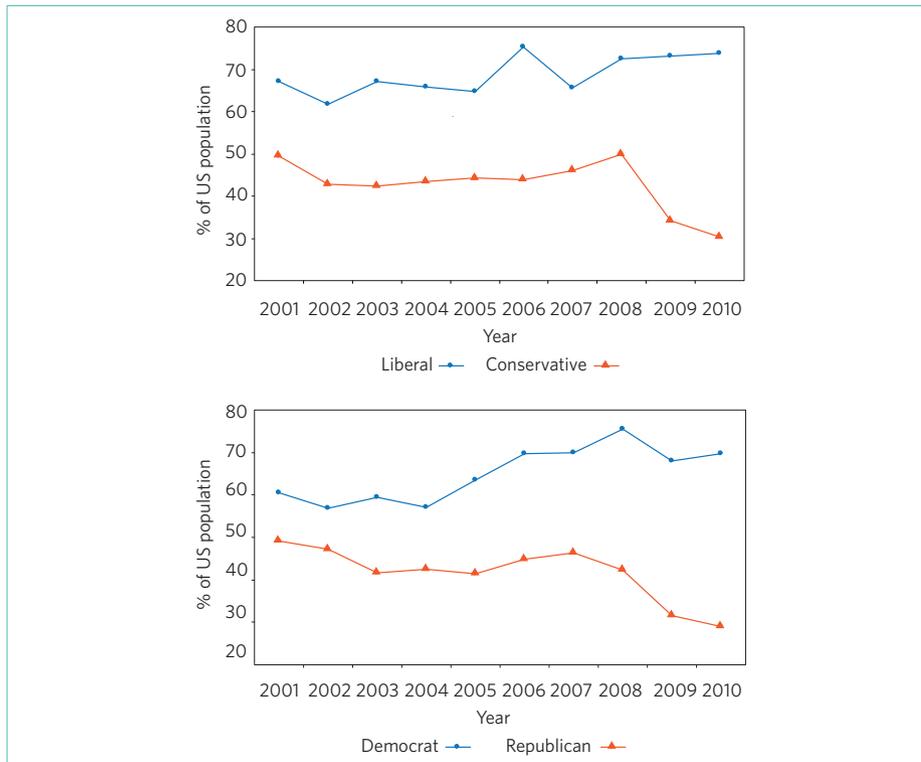


Figure 1 | Changing beliefs about climate change in the US between 2001 and 2010. The charts show the percentage of Americans who believe that global warming has already begun according to political ideology (upper panel) and the party they identify themselves with (lower panel). By analysing data from ten Gallup polls between 2001 and 2010, McCright and Dunlap¹ show that the views of liberals and Democrats have become increasingly polarized from those of conservatives and Republicans over the past decade. Figure modified with permission from ref. 1, © 2011 John Wiley & Sons.

McCright and Dunlap¹ examine the political dynamics of beliefs about climate change in the US general public over the past decade. Their study is one of the most extensive examinations of changes in beliefs about this issue over time so far. Using a ten-year dataset drawn from Gallup's annual poll about the environment, they provide compelling evidence that the American public's views about climate change became increasingly polarized along both partisan (that is, Republican versus Democrat) and ideological (that is, conservative versus liberal) lines between 2001 and 2010. Their results show that the percentage of conservatives and Republicans who believe that global warming has already begun declined from roughly 50% in 2001 to about 30% in 2010, whereas the corresponding percentage of liberals and Democrats increased from roughly 60% in 2001 to about 70% in 2010 (Fig. 1).

These findings are consistent with 'party sorting' theory — the predominant political science and sociological explanation of political polarization in the general public. Party sorting is a top-down process wherein the more visible and active

members of a party — 'ideological elites' such as activists, pundits, political lobbyists or politicians — establish views on an issue and then communicate the accepted party positions to citizens. The increasing and consistent divide between both the parties and the ideological elites from the 'left' and the 'right' on climate change over the past two decades has made it easier for American citizens to sort themselves along both ideological and partisan lines on the issue, explaining the increasing polarization observed.

The study also reveals that political and ideological orientation both affect the ways in which educational attainment and 'self-reported understanding' of climate change influence public views about global warming. Higher levels of education and understanding lead to stronger agreement with climate science and greater personal concern about global warming among Democrats and liberals, but have little effect or even reduce agreement and concern among Republicans and conservatives. McCright and Dunlap¹ suggest that this is because the American public processes information about climate change through

a political filter, relying selectively on information from ideological and partisan leaders whom they trust. This conclusion leads them to challenge the common assumption that more information and education will help convince Americans of the need to deal with climate change. If so, it seems that decision makers with a desire to convince the public of the need to tackle climate change will need to take a different tack.

McCright and Dunlap's¹ work highlights what is perhaps the most significant obstacle to bringing about a social consensus on climate change: polarization between those on the 'left' and those on the 'right'. Whether this obstacle can be surmounted is less clear. On one hand, the ideological divide may still be a result of the context in which the issue is discussed, aligning with value-laden issues that the 'left' and 'right' hold dear, such as trust in the scientific process, faith in the market, differing conceptions of the risks of taking (or not taking) action, concerns for national security or even ties to religious morality⁹. In this case, an adjustment in the terms of the debate to recognize that these are the real issues being discussed may yield common ground between the opposing sides and ways to bridge the divide. On the other hand, the issue may be so firmly entrenched in political and ideological rhetoric that it is already destined to reach a state of divide on par with other issues of the 'culture wars', such as abortion, gun control and health care. McCright and Dunlap¹ suggest that the latter is true. If so, the debate has already become a power contest among politically and economically powerful actors to establish climate 'denial' and 'belief', and — in the US at least — social consensus is unlikely to be a viable option. □

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