

Science and the Public Square

Why Conservatism Doesn't Get Along Well With Science

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Originally published on Science Progress.org, March 29, 2013

<http://scienceprogress.org/2013/03/science-and-the-public-square/> (No longer available there)

In the past decade, we have heard a lot about how Conservatives don't like science. They are often accused of not liking evidence or of simple irrationality in the face of scientific findings. We have learned from historians that core Conservative stances, such as an emphasis on free markets, on national security, and on private enterprise, have driven science-obscuring campaigns on the link between tobacco and health, on environmental concerns such as acid rain, ozone depletion, and climate change, and on national security items like the Strategic Defense Initiative. (Oreskes and Conway 2011)

As a result of these trends, scientists have increasingly leaned towards the more liberal party in the U.S., the Democratic Party. Slates of Nobel Prize winning scientists have signed letters of support for Democratic candidates.

(<http://www.the-scientist.com/?articles.view/articleNo/32921/title/Nobel-Laureates-Back-Obama/>) [Studies have shown](#) that scientists vote Democratic more, send money to Democrats more, and support Democratic policies more.

Recently, Dan Sarewitz, Director of the Arizona State University's Center for Science, Policy, and Outcomes, has argued that this is bad for science, that it unnecessarily politicizes science. (<http://www.nature.com/news/science-must-be-seen-to-bridge-the-political-divide-1.12119>) He has suggested that scientists should make more of an effort to be bi-partisan. But Sarewitz does not see that a deep structural issue makes science more of a thorn in the side of Conservatives than of Liberals, and not just for social science.

The problem arises at the boundary between what is considered private behavior (and thus none of the government's business) and public behavior (what could reasonably come under the purview of public policy).

John Dewey, in his 1927 book *The Public and Its Problems*, noted that the boundary between the public and the private shifts over time. Behavior that was once thought to be public becomes a private matter. For example, matters of personal faith were once public issues, because flocks were damned or saved together (or at least the faith of one's neighbor was thought to matter materially on one's own salvation prospects). But this belief shifted, beginning with the Reformation, to the idea that all that really mattered was the faith of the individual. As the shift occurred, an individual's faith became a private matter. Similar shifts from public to private have occurred over issues like sodomy and interracial marriage.

Change in the opposite direction also occurs. Behavior that was once considered private can become a public concern. Wife beating was once largely a private matter, but as the women's movement gained steam and sociologists studying spousal abuse began to track the enormous toll such behavior elicits, spousal abuse became very much a public matter, and laws and policies were enacted to curtail it and protect abused spouses.

It is not just areas of social science that have this impact. Pollution was once thought of as just the private disposal of one's waste. But as the physical effects of pollution were tracked and evidence of harm, both human and ecological, were studied, environmental waste disposal, whether through the air, water, or land, became a public matter.

And this is where the asymmetrical relationship between science and the opposite ends of the political spectrum snaps into focus. One of the most important reasons for moving the boundary between public and private is the discovery of significant effects of private action on people who are not part of the private action—and such discoveries often come through science.

Dewey argued that, in general, an action that only has effects on those who engage in the action—even a group of people—remains a private concern. But when we discover that an action affects those beyond the group directly involved—particularly when a large group is affected dramatically—a public policy issue arises. In other words, what was once a private matter becomes a public matter.

How do we discover that someone's ostensibly private action is affecting people not involved in that action? We study it, and discover causal relationships not seen before. This instigates a change in our social understanding, and something that was once private becomes a public issue. Or, conversely, we might study some set of behaviors thought to have public import and find no public harm or impact from them, and they recede into the realm of the private.

These days, it is science that usually does such discovering. Thus, while custom often sets where the boundary is, it is science that often drives whether the boundary should be moved.

And moving the boundary, one way or the other, is precisely what Conservatives, especially social conservatives, are going to hate. The very idea of social conservatism, that social change is inherently difficult and tradition should be valued, makes social conservatives more unwilling to countenance arguments that suggest we should accept the fundamental social changes involved with shifting the public/private boundary. Liberals, by the very nature of their political perspective, are much more willing to consider calls for such social change.

That many social conservatives are also small government conservatives exacerbates the dislike of science, because moving something from private to public concern expands the realm of the government. The growth of government into the realm of food and medical oversight (the Food and Drug Administration, and the United States Department of Agriculture), environmental oversight (Environmental Protection Agency), and consumer product oversight (Consumer Product Safety Commission) exemplify the discovery of the widespread public effects of private behavior, change in the public/private boundary, and growth of government.

Not all issues will fall out along these lines. For example, social conservatives are desperate to generate evidence that abortion has harmful side effects, either on the women who have them or on the broader society, so that it can become a more regulated and restricted practice. In cases like this, social conservatives often seek out evidence to show that something private should

become public. Often they do so in an attempt to return society to an earlier public/private boundary.

But many cases clearly exemplify a resistance to social change, for example:

- 1) anthropogenic climate change, which makes burning fossil fuels, cutting down trees, and any other action that increases greenhouse gases publicly relevant,
- 2) gun violence and gun regulation, which turns a private ownership issue into a public policy issue,
- 3) restrictions on the use of chemicals in the environment due to toxicity concerns,
- 4) increased oversight of consumer products, and so on.

In these cases, evidence suggests that private choices have significant impacts beyond the choosers, and that a public policy issue is present. The expansion of government subsequently looms.

This does not mean that Conservatives hate evidence. It does not mean they are so wedded to their ideologies that they cannot see the evidence (at least not always). It does not mean that there are just some “ideological concerns” that happen to conflict with science, [as Amanda Marcotte, a provocative political blogger, has suggested](#).

Conservatives are generally going to demand a higher burden of proof for science that discovers significant unintended consequences of private actions (like climate change from greenhouse gas emissions) or discovers an absence of harm from previously public actions (like the lack of ill-effects on children raised by gay parents). Because Conservatives are so much more cautious about social change, they are always going to be hostile to science that instigates such social change—doubly so for discoveries that expand the purview of government.

What should we do about this? One might note that lots of science does not produce evidence which bears on the shifting public/private boundary. For example, having good weather data and good predictions on what the weather will be is simply useful for everyone’s planning, for both public and private decisions. Or knowing which flu strains will be most useful for the next year’s vaccine has little bearing on changing social mores—although calls for universal flu vaccination policies do press on the public/private boundary. Scientists could emphasize their work that does not challenge the boundary when attempting to reach across the ideological divides.

But this is little comfort for the current political imbalances and impasses created at the science policy interface. Perhaps knowing why Conservatives are likely to be hostile to science will help both scientists and politicians deal better with science. Perhaps Conservatives can be more upfront with their concerns, demanding higher (and clearer) standards of proof for claims they find worrisome, standards at which scientists can aim. Instead of ignoring evidence, Conservative politicians could demand a higher level of evidential surety before acting, and encourage (rather than discourage) further scientific exploration of key issues.

Perhaps scientists can explore ways of addressing questions and consequences that don’t alter the public/private boundary too much or too quickly, or address such issues explicitly in the

structure of their work. For example, policies that depend on better informed private action, achieved through public education, rather than stronger government policies could be used to test possible policy shifts. Or explicit test policies, [implemented in one location to track the effects](#), both intended and not, could assuage Conservatives concerns about rapid social change.

Perhaps it will help just understanding that the asymmetry between Conservatives and Liberals is real, but that in a democracy, having the research done that discovers impacts (or the lack of impacts) is crucial for our public discourse. It is not a temporary cultural shift nor irrationality nor a current ideology that is driving the distaste for science among Republicans. It is their core conservatism.