

The surprising links between faith and evolution and climate denial — charted

For a long time, we've been having a pretty confused discussion about the relationship between religious beliefs and the rejection of science — and especially its two most prominent U.S. incarnations, evolution denial and climate change denial.

At one extreme is the position that science denial is somehow deeply or fundamentally religion's fault. But this neglects the wide diversity of views about science across faiths and denominations — and even across individuals of the same faith or denomination — not all of which are anti-climate science, or anti-evolution.

At the other extreme, meanwhile, is the view that religion has no conflict with science at all. But that can't be right either: Though the conflict between the two may not be fundamental or necessary in all cases, it is pretty clear that the main motive for evolution denial is, indeed, a perceived conflict with faith (not to mention [various aspects of human cognition](#) that just make accepting evolution very hard for many people).

The main driver of climate science rejection, however, appears to be a [free market ideology](#) — which is tough to characterize as religious in nature. Nonetheless, it has often been observed ([including by me](#)) that evolution denial and climate science rejection often seem to overlap, at least to an extent.

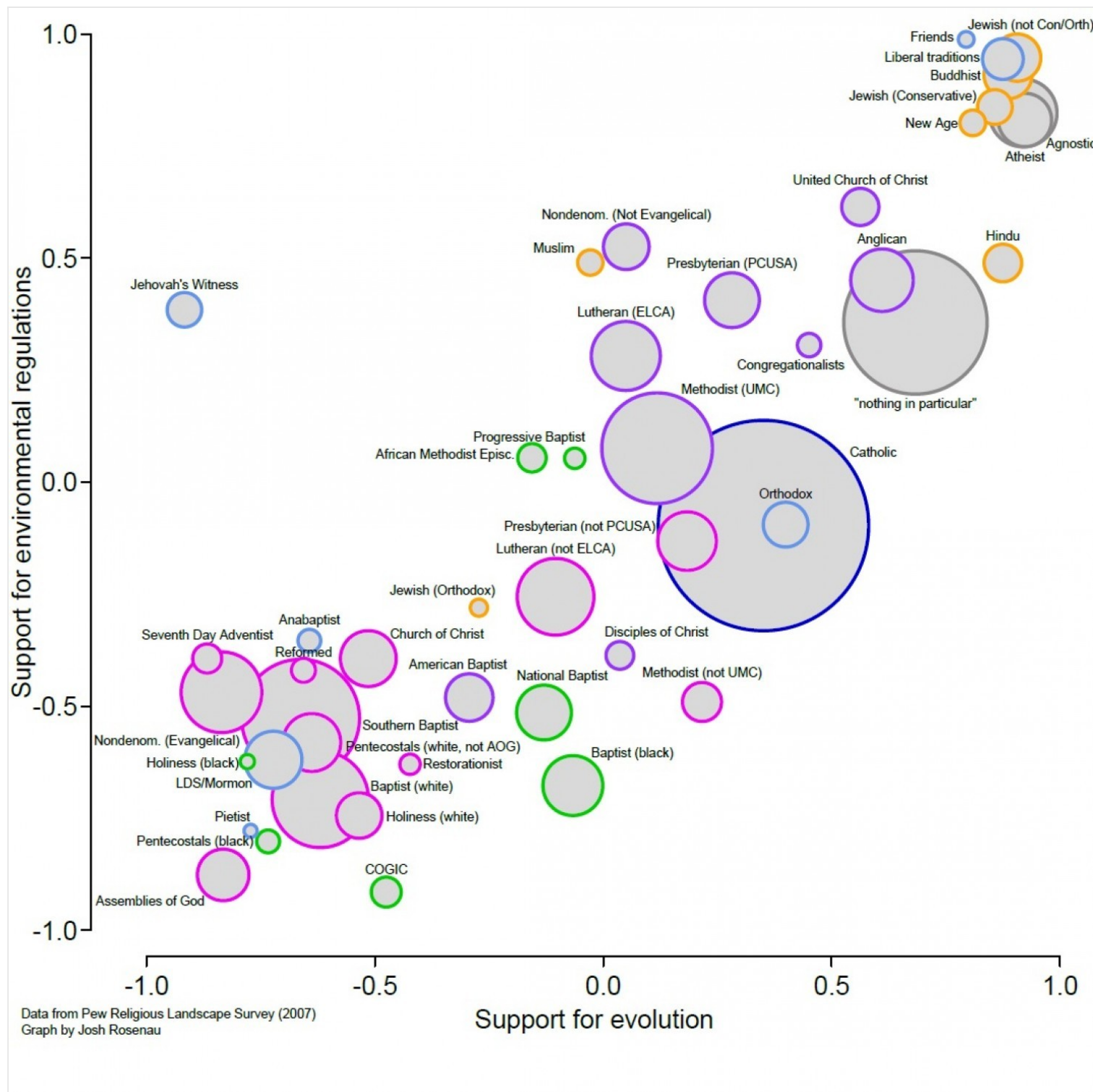
[\[Pope Francis has given the climate movement just what it needed: faith\]](#)

And there does seem to be at least some tie between faith and climate science doubt. Research by Yale's Dan Kahan, for instance, found a [modest correlation](#) between religiosity and less worry about climate change. Meanwhile, a [2013 study](#) in *Political Science Quarterly* found that “believers in Christian end-times theology are less likely to support policies designed to curb global warming than are other Americans.”

So how do we make sense of this complex brew?

[Josh Rosenau](#), an evolutionary biologist who works for the National Center for Science Education — which champions both evolutionary science and climate science teaching in schools — has just created a [chart](#) that, no matter what you think of the relationship between science and religion, will give you plenty to talk about.

Crunching data from the 2007 incarnation of a massive Pew survey of American religious beliefs, Rosenau plotted different U.S. faiths and denominations based on their members' views about both the reality of specifically human evolution, and also how much they favor "stricter environmental laws and regulations." And this was the result (click to enlarge):



Credit: Josh Rosenau/National Center for Science Education. Used with permission of the author.

As Rosenau notes, in the figure above, “The circle sizes are scaled so that their *areas* are in proportion to the relative population sizes in Pew’s massive sample (nearly 36,000 people!).” And as you can see, while at the top right atheists, agnostics, Buddhists, non-Orthodox Jews and others strongly accept evolution and environmental rules, at the bottom left Southern Baptists, Pentecostals and other more conservative leaning faiths are just as skeptical of both.

Obviously, it is important to emphasize that a given individual, of any faith, could be anywhere on the chart above — it’s just that this is where the denominations as a whole seemed to fall out, based on Rosenau’s analysis (which itself mirrors [prior analyses](#) of the political alignments of U.S. faiths and denominations by political scientist and Religion News Service blogger [Tobin Grant](#)).

Reached by phone Tuesday, Rosenau (whom I’ve known for a long time from the community of bloggers about science and the environment) seemed to be still trying to fully understand the implications of the figure he’d created. “People seemed to like it,” he said. “I think some people are finding hope in it” — hope, specifically, that there is a way out of seemingly unending science versus religion spats.

Here are some of Rosenau’s other conclusions from the exercise, from his blog post introducing the chart:

First, look at all those groups whose members support evolution. There are way more of them than there are of the creationist groups, and those circles are bigger. We need to get more of the pro-evolution religious out of the closet.

Second, look at all those religious groups whose members support climate change action. Catholics fall a bit below the zero line on average, but I have to suspect that the forthcoming papal encyclical on the environment will shake that up.

[\[Our new pro-science pontiff: Pope Francis on climate change, evolution, and the Big Bang\]](#)

Rosenau also remarks on the striking fact that for the large bulk of religions and religious denominations, as support for evolution increases, so does support for tougher environmental rules (and vice versa). The two appear to be closely related.

So what can *that* mean?

Rosenau told me he was still trying to work that out — still playing with the data and new analyses to try to understand it.

One possible way of interpreting the figure is that as with political parties themselves, people at least

partially self-sort into faiths or denominations that seem more consonant with their own worldviews. And thus, a cluster of issue stances may travel alongside these choices of affiliation. “People are choosing what religion they want to associate with,” suggested Rosenau. “If people feel alienated from a church, they’re switching.”

There may also be a substantive point here that links together the ideas. A view of the world that thinks of human beings as having evolved, as being part of the natural world and having emerged through the same process as other organisms, may also be related to a manner of thinking that puts great overall emphasis on the value of nature and one’s connectedness with it.

In any case, while the pattern above may require more analysis, one clear punchline of the figure is that it really doesn’t make sense to say that religion is at war with science. You can say that for some people, religion is clearly linked to less science acceptance — especially on evolution. But for others, clearly, religion presents no hurdle at all.

I would also agree that these data reinforce the idea that the pope’s coming encyclical on the environment [could really shake matters up](#). Catholics are the biggest bubble in the chart above, and they’re right in the middle of the pack on the environment.

The pope, incidentally, also appears to [accept evolution](#).

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