

## Appendix

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### Recap on ‘Knowing Disbelief’ versus ‘Climate Culture’

As explained in detail at the [previous post](#), Kahan’s ‘knowing disbelief’ or ‘duality’ theory is built upon two main pillars. The first is the assumption that a big majority of both Rep/Cons and Dem/Libs share ‘a latent (unobserved) disposition to attribute to climate scientists the position “we are screwed if we don’t do something”’. He makes clear that by this he thinks most respondents in [his survey](#) genuinely believe the scientists, albeit this must be deep down for many, leading overall to a ‘widespread apprehension of danger’. However, this assumption is an artifact of the form of his questioning (which is a successful ploy to separate knowledge from identity issues yet has also led to very literal answers), plus his own biased interpretation. Most respondents reflect only what they think *the scientists* believe, and *not* what they actually believe themselves. [Appendix 2](#) of the previous post demonstrates that the survey data does not indicate a universal deep-seated apprehension.

The second pillar is the [much greater polarization](#) on belief in climate change for those Rep/Cons and Dem/Libs who are science aware. Many more science aware Rep/Cons are skeptical of MMGW than the average figure for all Rep/Cons; likewise many more science aware Dem/Libs believe in MMGW than the average for all Dem/Libs. This kind of polarization (of the more literate / knowledgeable) occurs in other domains too, and indicates that strong cultural bias is present. Kahan simply pins the Dem/Lib pole to ‘the truth’, and hence via this action attributes all the bias to the Rep/Con pole, with his proposed causation as political identity defense (i.e. the cultural bias is from tribal political allegiance). Further, he then adds in the previous pillar, and so comes to the conclusion that (deep down) science aware Rep/Cons *know* the (orthodox) theory of (dangerous) MMGW must be ‘true’, and yet simultaneously *disbelieve* this theory in order to preserve their identity unharmed. Hence his speculated condition of ‘*knowing disbelief*’.

As explained in the previous [Appendix 2](#), the concept of a ‘climate culture’ gives a much better fit for this polarization data. Modest initial bias in science-questing Rep/Cons and Dem/Libs sets them on *different* paths of discovery, which therefore lead to *dissimilar* caches of knowledge. The initial bias is that seen in the science *unaware*. Via biased assimilation Dem/Libs are led into climate orthodox comprehension, and the Rep/Cons are led into skeptic comprehension. (Note that these average responses won’t apply to every individual). Hence the greater polarization. But where does *the most* cultural bias reside?

[Appendix 1](#) of the original post shows that when not called upon to defend their party / identity, more Dem/Libs do *not* demonstrate a belief in dangerous MMGW, than do. In all surveys presenting a list of priorities, this majority place policies to fight climate change low or very low. They are merely *allied* to climate change culture, and only express a true belief when questioning invokes identity issues such as party loyalty. This behavior is a product of cultural bias. The remaining minority of Dem/Libs are proper adherents of climate change culture; in identity terms one might just as easily regard them as *climate change advocates* who vote Democrat because this is the only party large enough and allied enough to advance their agenda, as *Democrats* who happen to believe in dangerous MMGW. Likewise regarding pillar 1, when distanced from identity challenge, many Lib/Dems acknowledge the likelihood of junk climate science.

In data for both of Kahan's pillars plus independent surveys, the Rep/Con responses are much more consistent *whether or not* identity issues are invoked. Hence they are exhibiting much less cultural bias than the Dem/Libs.

All this tells us that both Kahan's pillars are unfounded. Nothing fundamentally different is happening with Rep/Cons than with the Dem/Libs. Both are subject to an influence from climate change culture, itself based upon a narrative of certainty of near future calamity (without major intervention). Only *the degree of influence* varies and is much greater for the Dem/Libs, with the difference between groups widened by science awareness. However further evidence is always good, especially of a different kind. While the [Gallup poll of interest \(G1\)](#) covers respondents from the full US political spectrum, the most insightful data comes from the *Independents*. The next section is thus helpful context for understanding this data.