

# The Mind of the Climate Change Skeptic

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A multitude of environmental scientists, among others, worry that future generations will look back at the present era as one in which the human race could have — and should have — taken decisive action to prevent (or at least mitigate) the most menacing costs associated with global climate change. According to public opinion surveys, however, only 38 percent of Americans believe that global warming will seriously affect them or their way of life (Newport, 2012), and 42 percent continue to believe that global warming claims are “generally exaggerated” (Saad, 2012). When it comes to beliefs about climate change, men are more skeptical than women, and political conservatives are more skeptical than liberals. In a Gallup survey conducted in 2010, 42 percent of men and only 30 percent of conservatives agreed that “effects of global warming are already occurring,” as compared to 56 percent of women and 74 percent of liberals (Jones, 2010; see also McCright & Dunlap, 2011).

In a recent book, the philosopher Stephen Gardiner (2011) argues that environmental inaction is the consequence of a “perfect moral storm.” Specifically, he points to the conjunction of three unfortunate causes: 1) a tendency for the richer nations of the world to foist the burden of environmental risks upon poorer nations; 2) the present generation’s temptation to defer the costs of the crisis to future generations; and 3) pervasive *ignorance* concerning science, ethics, international justice, and the interdependence of life. Gardiner writes that the last factor “not only complicates the task of behaving well, but also renders us more vulnerable to the first two storms” (p. 7). Gardiner provides an astute analysis of the problem of environmental inaction, but he overlooks the possibility that climate change denial may not merely result from ignorance. Rather, many members of the public may possess a relatively strong *motivation* to deny and minimize environmental realities. Specifically, our research team has found that the social psychological motivation to defend, bolster, and justify aspects of the status quo — what we refer to as *system justification* (see, e.g., Jost, Banaji, & Nosek, 2004) — contaminates the public’s understanding of anthropogenic climate change.

In research published in 2010, we discovered that individuals who score higher on Kay and Jost’s

(2003) General System Justification scale (which measures responses to statements such as “Most policies serve the greater good,” and “In general, the American political system operates as it should”) exhibit greater denial of environmental problems and vulnerabilities. Furthermore, system justification statistically mediates the effects of gender and political ideology on support for the environment. That is, men and conservatives are more likely than women and liberals to believe that American society is fair and legitimate, and these differences in system justification explain, at least in part, why they are so skeptical about climate change and are reluctant to take pro-environmental action (Feygina, Jost, & Goldsmith, 2010; see also Feinberg & Willer, 2011).

More recently, we have conducted a series of studies corroborating the hypothesis that system justification motivates skepticism about climate change. Specifically, we have found that the denial of environmental problems is facilitated by information-processing distortions associated with system justification that affect evaluation, recall, and even tactile perception (Hennes, Feygina, & Jost, 2011). In one study, we found that individuals who scored higher (vs. lower) on Jost and Thompson’s (2000) Economic System Justification scale (which measures responses to such statements as “If people work hard, they almost always get what they want,” and “It is unfair to have an economic system which produces extreme wealth and extreme poverty at the same time,” reverse-scored) found messages disparaging the case for global warming to be more persuasive, evaluated the evidence for global warming to be weaker, and expressed less willingness to take action to curb global warming.

In a second study, we extended these findings by demonstrating that motivated processing biases recall of information about climate change. Specifically, we exposed research participants to clips from a televised newscast and later asked them to recall details from the program and to evaluate scientific evidence concerning climate change. Once again, we found that high system-justifiers evaluated the quality of the evidence to be weaker, were less likely to believe that climate change is occurring, and viewed it as a less important policy issue, in comparison with low system-justifiers. High system-justifiers also recalled the information to which they had been exposed as less serious (i.e., remembering smaller increases in global temperatures, lower sea levels, and less reliable historical data concerning climate change) than did low system-justifiers. Poorer recall was associated with skepticism about climate change. Thus, individuals who misremembered the evidence provided in the video to be less severe were less likely to support efforts to address climate change.

In an experimental investigation, we demonstrated that temporarily activating system-justification motivation produced memory biases and exacerbated skepticism about global climate change. More specifically, we adapted a system-dependence manipulation developed by Kay, Gaucher, Peach et al. (2009; see also Shepherd & Kay, 2012) and found that when people were led to believe that the political system exerted a strong (vs. weak) impact on their life circumstances, they were more likely to misremember details from a newspaper article they read earlier in the session. Importantly, all of the memory errors were in a system-exonerating direction: The proportion of man-made carbon emissions was recalled as being less than actually reported, and the scientists who reported errors in the much-maligned 2007 report by the Intergovernmental Panel on Climate Change were misidentified as skeptics rather than believers in anthropogenic climate change (Hennes et al., 2011).

We have discovered that system-justification motivation can even affect perceptions of ambient temperature. Our research assistants approached pedestrians in New York’s Washington Square Park during the summer months and asked them a series of questions, including their estimates of the

temperature outside. Individuals who scored high on system justification or who were assigned to a high system-dependence condition reported that the current temperature was significantly lower than did individuals who scored low on system justification or who were assigned to a low system-dependence condition. These findings suggest that people may be motivated to feel (or not feel) the evidence of global warming when system-justification needs are either chronically or temporarily heightened.

Berkeley physicist Richard Muller, a former skeptic of anthropogenic climate change, made headlines last summer when he declared that not only is climate change real, but that “humans are almost entirely the cause” (Muller, 2012). If catastrophic events like Hurricane Sandy become more common, they may shift hearts and minds, albeit slowly. Given economic and other crises facing the nation (many of which probably exacerbate system-justification motivation), it still remains to be seen whether Americans and their elected officials will follow suit in embracing the scientific consensus. Climate change was a non-issue during the 2012 election campaign, and President Obama (2013) was criticized resoundingly by Senator Marco Rubio and other conservatives for emphasizing the issue in his most recent State of the Union speech. Suffice it to say that neither politicians nor the voters who back them appreciate the suggestion that the opinions they hold are motivated, even in part, by social and psychological factors that are probably outside of their awareness. American society and many others have yet to find a way of allowing the facts — scientific and otherwise — to trump special interests, political posturing, and motivated reasoning when it comes to the development of public policy. But that doesn’t mean we should stop trying.