## Is Twitter an Echo Chamber?

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I've been a member of both Facebook and Twitter for many years, and my experiences with the two couldn't be more different. While both are "social" in the broadest sense, Facebook for me is really like a rolling conversation, a somewhat gossipy block party where friends and family catch up on personal experiences and share some joys and sorrows. Twitter is much more contentious and political, a place for the opinionated to share their grievances and meet with others, similarly aggrieved.

I emphasize that this is one man's experience. I'm sure other members will challenge me—harshly on Twitter, more gently on Facebook. But I am not the first to contrast these two popular media, nor am I the first to charge Twitter with political polarization and cultural extremism.

But is this fair? Is Twitter a genuine national conversation about important issues of the day, or is it merely an "echo chamber"—a place where the already opinionated go to have their extreme views reinforced? And if it is an echo chamber, is this more the case for left-leaning Twitter users, or right-leaning? The fact is, this allegation has never been studied in a rigorously scientific way.

Until now, that is. New York University psychological scientist John Jost and his colleagues decided to conduct a massive Twitter analysis in order to address these important questions. Making use of an innovative method, they estimated the ideological preferences for 3.8 million Twitter users. Then, analyzing 150 million tweets concerning 12 political and non-political issues, they explored whether online communication is more conversational or more polarizing.

The Twitter discussions took place between 2012 and 2014, and the scientists deliberately chose topics of concern mostly to Republicans (the federal budget, for example) and Democrats (marriage equality, the minimum wage). Other topics, while political in nature, were of interest to both Republicans and Democrats—the 2012 presidential campaign and the 2013 government shutdown, for example. Jost and colleagues also included a variety of non-political topics—both soft topics like the 2014 Super Bowl and the Academy Awards and tragedies such as the Boston marathon bombing and the Newtown school shooting.

When they compared the content and tone on the tweets on these topics, the findings were clear and intriguing. Exchanges took place primarily among Twitter users with similar ideological preferences—but only on political issues. For other current events—the Super Bowl, Boston marathon—the exchanges were more like a bipartisan national conversation. Interestingly, tweeting about the Newtown shootings in 2012 showed a dynamic process, beginning as a national conversation about shared shock and dismay, but transforming over days into a polarized exchange, presumably about gun control.

Ideology made a difference, too, as reported in a forthcoming issue of the journal *Psychological Science*. Regarding both political and non-political issues, liberals were more likely than conservatives to cross ideological boundaries for discussion. This, the scientists say, highlights an important asymmetry in

online communication that is consistent with psychological theory: Specifically, research suggests that conservatives have a greater need, compared to liberals, to minimize uncertainty and threat and social discord. This psychological neediness could in theory be driving conservatives to seek the familiarity and comfort of a like-minded echo chamber.

This is Wray Herbert's final post on the "We're Only Human" blog, which he has been writing since 2006. He also shares insights about psychological science and other topics, both political and non-political, on both Facebook and Twitter.