YouTube comments reveal scant evidence of political echo chambers
7 June 2021, by Laurel Thomas

Conservative and liberal viewers on YouTube engage in crosstalk—although it's mostly one-sided—with conservatives commenting on left-leaning videos twice as much as liberals remarking on right-leaning videos, according to a large-scale study from the University of Michigan School of Information.

Left-leaning channels had a quarter of their comments from conservative users and more than 1 in 10 comments on right-leaning channels were from liberal users, dispelling the notion of echo chambers where people of like mind and politics see only information that meshes with their existing beliefs.

The study analyzing 134 million comments from 9.3 million users showed most people who commented 10 or more times posted at least once in both left- and right-leaning channels.

Moreover, the conservatives participating on left-leaning channels were not there just to troll; their comments were not significantly more toxic than those from liberals, although cross-partisan replies could generate some heated responses in both directions.

Lead author Siqi Wu, who began the work at the Australian National University and is now a research fellow in the U-M Center for Social Media Responsibility, said a tendency for selective exposure—a theory that finds people deliberately avoid information that challenges their viewpoints—thereby creating the echo chamber, does not characterize the YouTube commenters in their study.

"Indeed, people talk to others with an opposite partisan view a lot," Wu said. "Conservatives, in particular, are more actively seeking to communicate with liberals, which contradicts the prevailing narrative that they are less open."

Their research will be presented in one of two spotlight sessions at the International Conference on Web and Social Media in June.

The work analyzing 274,241 political videos from 973 channels of partisan media in the U.S. from Jan. 1 to Aug. 31, 2020, represents the first large-scale measurement study of cross-partisan discussions between liberals and conservatives on YouTube.

By training a hierarchical attention model, researchers were able to predict user political leaning. The team found that nearly 70% of commenters posted at least once on both left- and right-leaning channels, and their remarks made up nearly 86% of all comments. Previous studies with sample sizes of around 2,000 have also observed substantial cross-partisan communication on Twitter and Reddit.

The researchers used Google Jigsaw's Perspective API to classify a comment as toxic if it was "a rude, disrespectful or unreasonable comment that is likely to make you leave a discussion."
They found that people were slightly more toxic when venturing into channels with opposing ideologies and received much more toxic replies when they did so. The highest toxicity level occurred when defending one's home territory: liberals responding to conservatives who had commented on left-leaning videos and conservatives responding to liberals who had remarked on right-leaning videos.

The team also found that YouTube's comment-sorting algorithm made these cross-partisan comments modestly less visible but still far from invisible. Conservatives made up more than 26% of all comments on left-leaning videos but just over 20% of the comments in the top 20 positions on the page. Liberals provided nearly 13% of the comments on right-leaning videos but just under 10% of the comments in the top 20 positions.

The one place that the study found echo chambers was on channels for right-wing independent political commentators. For example, the most commented-on channel in that category, "Timcast," had only about 3% of its comments from liberals.

"Political polarization is a big problem, but at least there are places online where liberals and conservatives are still talking to each other," said co-author Paul Resnick, the Michael D. Cohen Collegiate Professor of Information and director of the Center for Social Media Responsibility. "Now we just need to figure out how to talk to each other better."

In the study, the team presents ideas for how YouTube can improve cross-partisan conversations, including stratified sampling based on the fraction of cross-partisan comments. Another approach would give a boost in the ranking to those cross-partisan comments that receive a positive reaction in user upvoting.

More information: Cross-Partisan Discussions on YouTube: Conservatives Talk to Liberals but Liberals Don't Talk to Conservatives. avalanchesiqi.github.io/files/... wsm2021crosstalk.pdf