Title: Breakdowns of traditional media appendix for "Lies and presidential debates: How political misinformation spread across media streams during the 2020 election"

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Note: The material contained herein is supplementary to the article named in the title and published in the Harvard Kennedy School (HKS) Misinformation Review.

Appendix D: Breakdowns of traditional media

As a supplementary analysis, we grouped newspapers and TV channels by partisan leaning and region and compared misinformation counts between these different groups. We grouped by partisan leaning (left vs. right) using Media Bias Fact Check leanings for newspapers (see Table 2 below for these groupings) and by creating groups of TV channels with a common partisan leaning: Fox News and Newsmax for pro-Republican, MSNBC and CNN for pro-Democrat. We also analyzed only those papers and channels in "purple" or "battleground" states outside of the upper Midwest. Media in these states warrant special attention due to their often-deciding role in close national elections; this includes North Carolina, Florida, Arizona, Nevada, and Georgia. Table 1 below shows the results.

Table 1. Misinformation-related topic frequencies for newspapers and television by partisan leaning and purple states.

Category of misinformation	Liberal newspapers	Conservative newspapers	Purple state newspapers	Liberal TV	Conservative TV	Purple state TV
Biden personal attacks	4,699 (47.1%)	4,074 (24.8%)	952 (19.4%)	427 (14.5%)	3,197 (59.6%)	76 (18%)
Campaigning	580 (5.8%)	838 (5.1%)	284 (5.8%)	130 (4.4%)	207 (3.9%)	7 (1.7%)
Climate	695 (7%)	1,486 (9%)	431 (8.8%)	101 (3.4%)	371 (6.9%)	36 (8.5%)
Courts	4 (0%)	1 (0%)	4 (0.1%)	0 (0%)	0 (0%)	0 (0%)
Covid-19	374 (3.7%)	1,012 (6.2%)	327 (6.7%)	358 (12.1%)	131 (2.4%)	27 (6.4%)
Economy	126 (1.3%)	277 (1.7%)	90 (1.8%)	70 (2.4%)	215 (4%)	15 (3.6%)
Election integrity	2,395 (24%)	5,748 (35%)	1,950 (39.8%)	1,410 (47.8%)	999 (18.6%)	173 (41%)
Foreign relations	2 (0%)	10 (0.1%)	5 (0.1%)	0 (0%)	0 (0%)	0 (0%)
Healthcare	57 (0.6%)	261 (1.6%)	73 (1.5%)	50 (1.7%)	49 (0.9%)	8 (1.9%)
Immigration	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Law enforcement	72 (0.7%)	151 (0.9%)	49 (1%)	26 (0.9%)	23 (0.4%)	1 (0.2%)
Military	288 (2.9%)	647 (3.9%)	190 (3.9%)	15 (0.5%)	28 (0.5%)	5 (1.2%)
Racism	205 (2.1%)	477 (2.9%)	112 (2.3%)	125 (4.2%)	91 (1.7%)	10 (2.4%)
Taxes	487 (4.9%)	1,452 (8.8%)	432 (8.8%)	235 (8%)	53 (1%)	64 (15.2%)
TOTAL	9,984 (100%)	16,434 (100%)	4,899 (100%)	2,947 (100%)	5,364 (100%)	422 (100%)

¹ We did not break down tweets or surveys in these ways because we do not have geographic data for those sources.

From this analysis we derive the following two supplemental findings.

Supplemental Finding 1: Liberal newspapers focused more on Biden personal attacks but less on election integrity than did conservative newspapers.

Liberal newspapers accounted for a disproportionate share of coverage of *Biden personal attacks* (47.1% of misinformation in liberal newspapers, vs. 24.8% in conservative ones), despite the generally higher levels of misinformation in conservative newspapers (16,434 mentions vs. 9,984 in liberal papers; see Table 1 below for complete numbers).² In contrast, conservative newspapers accounted for a greater share of coverage of *election integrity* (35.0% vs. 24.0% in liberal papers). While conservative newspapers' coverage of misinformation may be expected due to the conservative candidate's propensity to advance claims that fact checkers label as misinformation, the coverage among liberal outlets may be due to their efforts to debunk those claims against the more liberal candidate. These results also suggest partisan news outlets may avoid discussing misinformation less than they avoid factual critiques of their preferred candidate, complicating the power of partisanship to drive some coverage decisions (Budak et al., 2016).

The "purple" or "battleground" states often pivotal in national elections focused on the same topics as did newspapers overall: the *Biden personal attacks, election integrity, climate,* and *taxes* topics. However, they focused less on *Biden personal attacks* (19.4% vs. 27.7% overall), more on *election integrity* (39.8% vs. 34.0% overall), and marginally more on *Covid-19* (6.7% vs. 5.6% overall) and *taxes* (8.8% vs. 8.0% overall; see Table 1 below for complete numbers). The slightly greater focus on pandemic misinformation may reflect interest in the overall topic given the mounting Covid-19 cases in these states through the campaign season, while the relative increase in *election integrity* and *taxes* may reflect greater concern over incumbent Trump's narrative and leadership than over Biden's supposed family issues.

Supplemental Finding 2: Conservative TV channels focused more on Biden personal attacks but less on election integrity than did liberal channels.

As Figure 1 below shows, liberal TV channels accounted for a disproportionate share of coverage of *election integrity* (47.8% of misinformation on liberal channels, vs. 18.6% on conservative ones), despite the generally higher levels of misinformation on conservative channels (5,364 mentions vs. 2,947 on liberal channels; see Table 1 below for complete numbers). In contrast, Figure 2 shows that conservative TV channels accounted for a much greater share of coverage of *Biden personal attacks* (59.6% vs. 14.5% on liberal channels). These partisan tendencies are more pronounced and inverted when compared with newspaper coverage. Much as media streams differ in their carrying capacity for political content (Jang & Pasek, 2015), these results suggest that streams also diverge in how partisanship drives responses to misinformation—that is, in what false claims liberals and conservatives deem essential to discuss.

² We underestimate the greater level of misinformation coverage in conservative newspapers by including in our sample more liberal- than conservative-leaning newspapers (69 vs. 37, respectively).

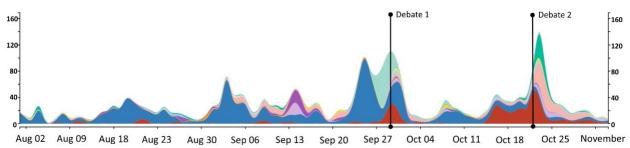


Figure 1. Mentions over time of misinformation-related topics on liberal TV channels. The key topics depicted are Biden personal attacks (red), election integrity (blue), taxes (light green), Covid-19 (pink), campaigning (purple), climate (light purple), and racism (green). For an interactive version, click here.

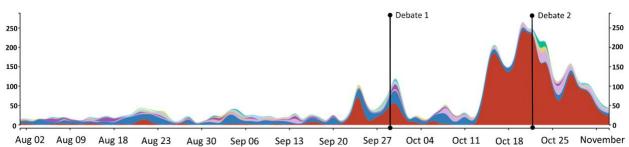


Figure 2. Mentions over time of misinformation-related topics on conservative TV channels. The topics depicted are Biden personal attacks (red), election integrity (blue), climate (light purple), campaigning (purple), and racism (green). For an interactive version, click here.

TV in purple states focused on the same misinformation-related topics as did cable TV (and newspapers) overall: the *Biden personal attacks, election integrity, climate*, and *taxes* topics (see Table 1 above for complete numbers). However, they focused less on *COVID-19*, *healthcare*, and *racism* (6.4%, 1.9%, and 2.4% vs. 11.3%, 6.0%, and 5.0% overall), and more on *election integrity* and *taxes* (41.0% and 15.2% vs. 32.7% and 11.3% overall). Such trends largely mirror the pattern in purple-state newspapers, with less focus on *COVID-19*, *healthcare*, and *racism* similarly suggesting more concern (arguably) over Trump's candidacy than Biden's.

Finally, Table 2 lists newspapers by partisan leaning and those in purple states.

Table 2. Newspapers by partisan leaning and purple states.

	T able 2 . Newspapers by part	ing and parp	
Liberal	Moderate	Conservative	Purple states
Alabama Public Radio	Associated Press	alabamanewscenter.com	Albuquerque Journal
Anchorage Daily News	<u>Chattanoogan.com</u>	Albuquerque Journal	Arizona Republic
Arizona Republic	<u>columbian.com</u>	arkansasonline.com	Asheville Citizen-Times
Arkansas Times	Des Moines Register	Boston Herald	Atlanta Journal-Constitution
Asheville Citizen-Times	Duluth News Tribune	Carroll County News	Augusta Chronicle
Atlanta Journal- Constitution	Financial Times	Chicago Tribune	Courier-Journal (Louisville)
Bangor Daily News	Gephardt Daily	Columbus Dispatch	Des Moines Register
Business Insider	Green Bay Press-Gazette	courierpress.com	Fort Worth Star-Telegram
Chicago Sun-Times	journalrecord.com	dailypress.com	goupstate.com
<u>cleveland.com</u>	keloland.com	Dallas Morning News	Houston Chronicle
Concord Journal	Lansing State Journal	Desert Sun	Kansas City Star
courant.com	Longview News-Journal	Detroit News	Las Cruces Sun-News
courier-journal.com	New Bern Sun Journal	<u>eastidahonews.com</u>	Las Vegas Review-Journal
<u>DelawareOnline.com</u>	Quad City Times	gjsentinel.com	Las Vegas Sun
Detroit Free Press	registerherald.com	inforum.com	New Bern Sun Journal
East Bay Times	Reuters	Juneau Empire	News-Sentinel (Fort Wayne)
Honolulu Star Advertiser	Sioux City Journal	Las Vegas Review- Journal	Northwest Arkansas Democrat- Gazette
Houston Chronicle	syracuse.com	New York Post	Plain Dealer (Cleveland)
idahostatejournal.com	The Daily Gazette	Omaha World-Herald	postandcourier.com
indystar.com	The Post and Courier	OregonLive.com	Richmond Times-Dispatch
Jackson Free Press	The Waterloo-Cedar Falls Courier	postandcourier.com	St. Louis Post-Dispatch
laramielive.com	WLTZFirstNews.com	Press of AC	Star Tribune (Minneapolis)
Las Cruces Sun-News		Republican American	SunSentinel
Las Vegas Sun		Shreveport Times	Tampa Bay Times
Lincoln Journal Star		Springfield News-Leader	Tennessean
Los Angeles Times		SunSentinel	The Columbus Dispatch
Milwaukee Journal-Sentinel		Tennessean	The Dallas Morning News
New Haven Register		The Post-Crescent	Winston-Salem Journal
New York Times		The Spokesman Review	WLTZFirstNews.com
NJ.com		thegazette.com	
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PennLive.com	TNonline.com	
POLITICO	Tulsa World	
Portland Press Herald	unionleader.com	
Providence Journal	Washington Times	
<u>actimes.com</u>	wcax.com	
Register-Guard	West Central Tribune	
San Francisco Chronicle	Winston-Salem Journal	
San Jose Mercury News		
Santa Barbara Independent		
seattletimes.com		
sevendaysvt.com		
sltrib.com		
St. Louis Post-Dispatch		
Stamford Advocate		
startribune.com		
Talking Points Memo		
Tampa Bay Times		
The Atlantic		
The Baltimore Sun		
The Boston Globe		
The Commercial Appeal		
The Denver Post		
The Hill		
The News-Times		
The York Dispatch		
theadvocate.com		
TIME		
USA Today		
Washington Post		