Partisan Vision? Partisan Bias in Simple Visual Evaluations

Carrie Roush[*]   Gaurav Sood[†]   Alex Theodoridis[‡]

June 27, 2023

Abstract

In the current era of partisan polarization, partisanship strongly colors partisans' world-views. But does it cause partisans to *see* different things? We test the hypothesis using two different experiments and a survey. The data suggest that the effect is generally small.

---

[*]Carrie can be reached at, carolyn.roush@gmail.com

[†]Gaurav can be reached at, gsood07@gmail.com

[‡]Alex can be reached at alexandertheodoridis@gmail.com

Partisans are increasingly polarized Iyengar, Sood and Lelkes (2012) with partisan cleavages outstripping some of the longer-standing racial cleavages. In this paper, we explore whether polarization affects how partisans 'see.' We test the hypothesis with simple visual evaluative tasks. In particular, we field two survey experiments and a survey. We find that partisan bias is generally small.

1 Data and Research Design

To assess how partisans *see*, we fielded two survey experiments on a nationally representative sample of people selected by YouGov (Rivers 2007) as part of a Cooperative Congressional Election Study (CCES) module. In the first experiment, we presented people with a short passage and asked them to count the number of errors in it. We manipulated the perceived party of the person writing the text (see Figure SI 1.1). In the second experiment, we showed people a photo of a parking lot and asked them to estimate the number of poorly parked cars. We manipulated which parties' members parked the car by manipulating the caption indicating where the photo was taken (see Figure SI 1.2). We replicated the first experiment on Lucid.

We complemented the survey experiments with a partisan evaluative task on a survey. In a survey conducted on MTurk, we asked respondents to watch a short video and estimate how many people in the video were wearing masks. In particular, our directions were as follows: "Please watch the following short (10-second) video. You will be asked a question about it on the next screen. ...How many people in the video were wearing masks?"

2   Results

As Table 1 shows, Democrats find 9.7 mistakes when they think the text is written by a Democrat compared to 9.9 mistakes when they think the text is written by a Republican (see also Figure SI 2.1). On the other hand, Republicans find 8.4 mistakes on average when they think the text is written by a Democrat and 8.1 mistakes when they think it is written by a Republican. And while the differences are consistent with partisan bias, the differences are small. The point is especially clear when you look at the medians, which are the same.

Table 1: Average Number of Writing Errors

pid3lean	Error_split	avg	med	n	std_error
Democrat	DEM	9.7	10.0	334	0.2
Democrat	REP	9.9	10.0	324	0.2
Independent	DEM	9.7	10.0	94	0.5
Independent	REP	9.2	9.0	110	0.4
Republican	DEM	8.4	8.0	253	0.3
Republican	REP	8.1	8.0	252	0.3

Table 2 presents the results of the replication on Lucid. Democrats find 5.5 (.6) errors on average when they think Democrats wrote the text vs. 5.9 (.8) when they think Republicans wrote it. On the Republican side, the corresponding numbers are 5.6 (.9) (when they think Democrats wrote the text) vs. 4.9 (.3) (when they think Republicans wrote it) (see also Figure SI 2.2).

Table 2: Average Number of Writing Errors (Lucid)

pid3	edit_cond	mean_mis	med_mis	n	std_error
dem	d	5.5	5.0	177	0.6
dem	r	5.9	5.0	132	0.8
ind	d	4.6	4.0	73	0.3
ind	r	5.3	5.0	72	0.3
rep	d	5.6	4.0	111	0.9
rep	r	4.9	5.0	109	0.3

We see a slightly larger partisan bias in the experiment that manipulates which party's

members parked the cars. Democrats on average believe there are 6.1 poorly parked cars outside the Democratic Party meeting while they think there are 8.7 poorly parked cars in front of the Republican Party meeting (see Table 3) (see also Figure SI 2.3). As above, the medians are much closer at 5 and 6 for the Democratic Party meeting and the Republican Party meeting respectively. Switching to Republicans, the gap is much narrower—Republicans on average think that there are 8.7 poorly parked cars in front of the Democratic Party meeting and 8.1 in front of the Republican Party meeting. The gap in medians is 1. The results from Independents make interpretation slightly complicated as Independents show a pronounced pro-Republican bias. One plausible explanation is 'hidden Republicans' among Independents.

Table 3: Average Number of Parking Errors

pid3lean	UCMParking_split	avg	med	n	std_error
Democrat	Democratic Party	6.1	5.0	211	0.4
Democrat	Republican Party	8.7	6.0	212	0.6
Independent	Democratic Party	10.9	7.0	57	1.5
Independent	Republican Party	6.7	5.0	61	0.9
Republican	Democratic Party	8.4	6.0	181	0.6
Republican	Republican Party	8.1	5.0	163	0.7

Turning to the results from the MTurk survey, we see that results are again muted (see Table 4). (We winsorized the responses because of absurd responses like 80,000.) We would have expected large differences between Democrats and Republicans but instead, we see that the means are roughly the same.

Table 4: Number of People Wearing Masks

pid_dem_l	p_25	p_50	p_75	n	mean	std_error
democrat	2.0	4.0	7.0	237	5.4	0.3
independent	1.0	2.0	6.5	15	4.9	1.4
republican	2.0	5.0	8.0	365	5.9	0.3

References

Iyengar, Shanto, Gaurav Sood and Yphtach Lelkes. 2012. "Affect, Not Ideology: A Social Identity Perspective on Polarization." *Public Opinion Quarterly* 76(3):405–431.

Rivers, Douglas. 2007. Sampling for web surveys. In *Joint Statistical Meetings*.

SI 1 Treatments

Figure SI 1.1: Text Treatment

YouGov

We want to see how good people are at catching mistakes. Please read the following text and tell us how many errors you find.

"Together we are the democratic party. Were fighting for a better, farer, and brighter future for every Americans: rolling up our sleeves, enpowering grassroots voters, and organizing everywhere to take our country back. Its more important then ever that we continue our work of electing democrats up and down the ballott. We believe in the American people and the promise of America. Their is nothing America can't do if we all works together. If you love this country, please tell your friends and family to go out and vote in this election. The future is brite! Lets go!!! We are in the final count down."

How many errors did you count?

> ❯

YouGov

We want to see how good people are at catching mistakes. Please read the following text and tell us how many errors you find.

"Together we are the republican party. Were fighting for a better, farer, and brighter future for every Americans: rolling up our sleeves, enpowering grassroots voters, and organizing everywhere to take our country back. Its more important then ever that we continue our work of electing republicans up and down the ballott. We believe in the American people and the promise of America. Their is nothing America can't do if we all works together. If you love this country, please tell your friends and family to go out and vote in this election. The future is brite! Lets go!!! We are in the final count down."

How many errors did you count?

> ❯

Figure SI 1.2: Parking Lot

YouGov

We want to see how much attention people are paying in answering questions. How many cars would you say are poorly parked in this picture of the parking lot outside a Democratic Party meeting last year?

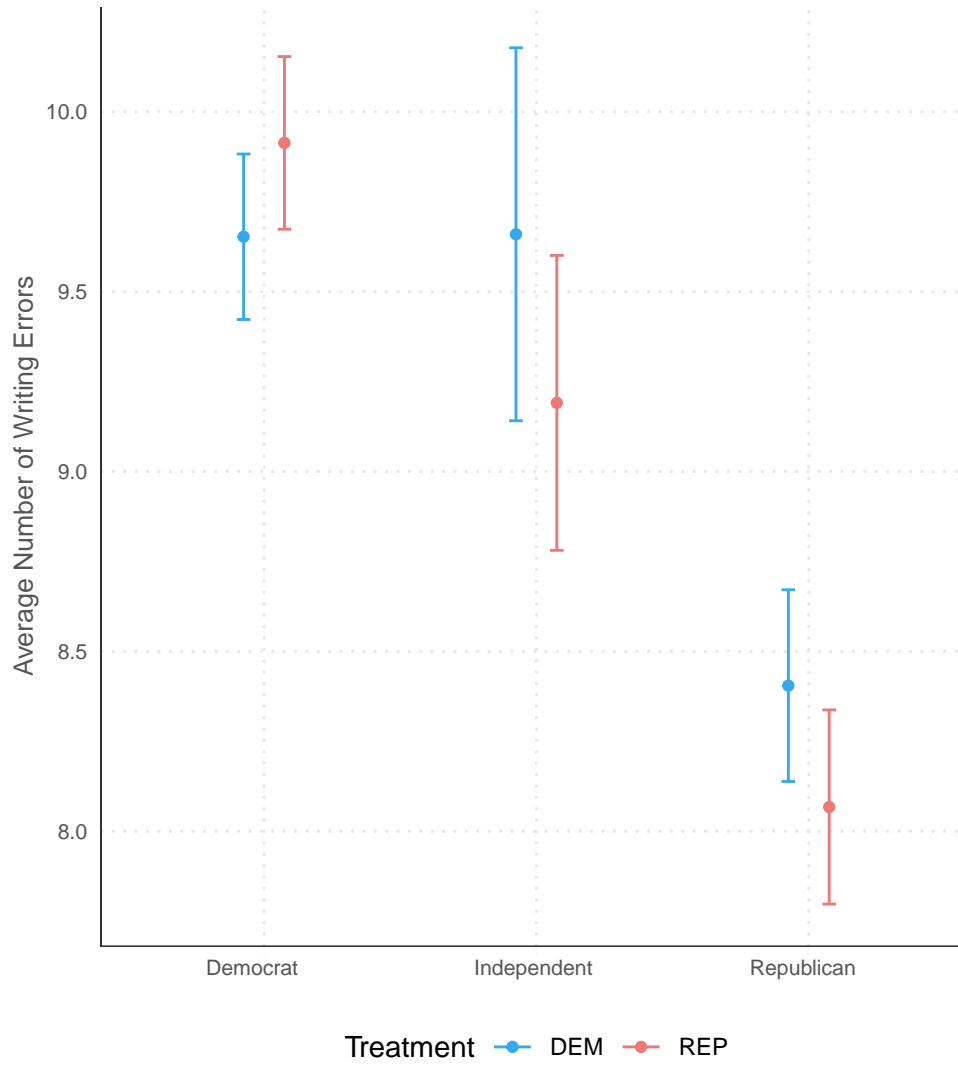# SI 2   Figures
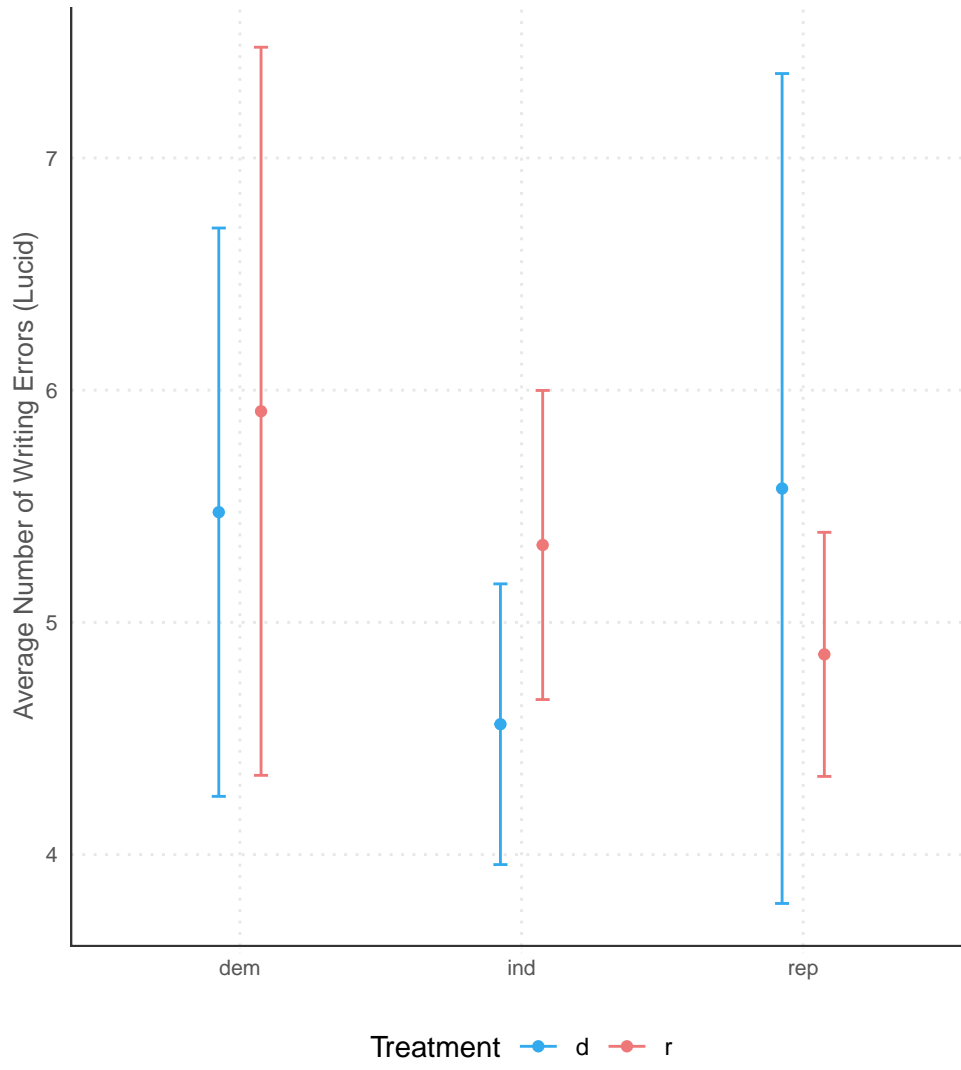
Figure SI 2.1: Writing Errors (CCES)

Figure SI 2.2: Writing Errors (Lucid)

Figure SI 2.3: Poorly Parked Cars (CCES)