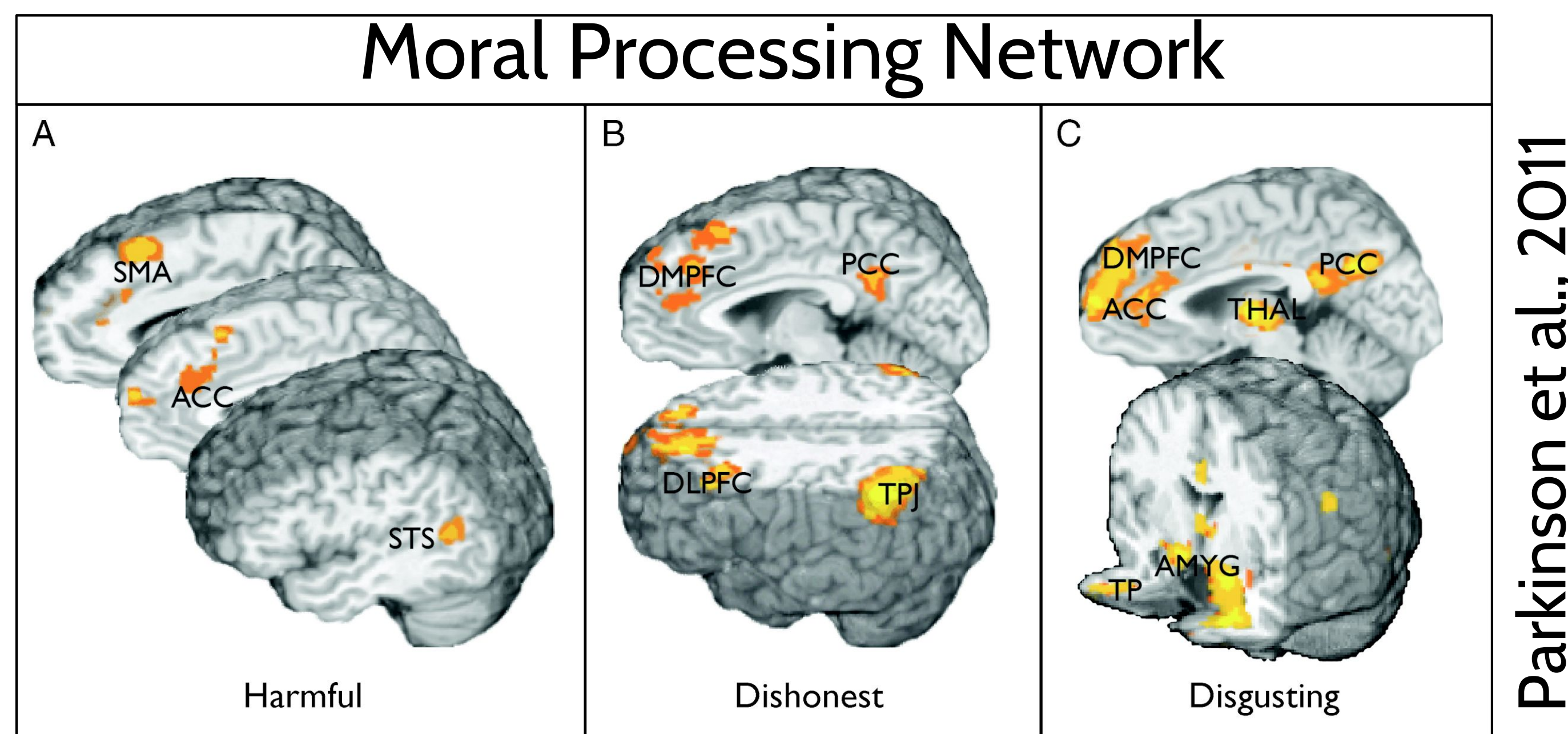
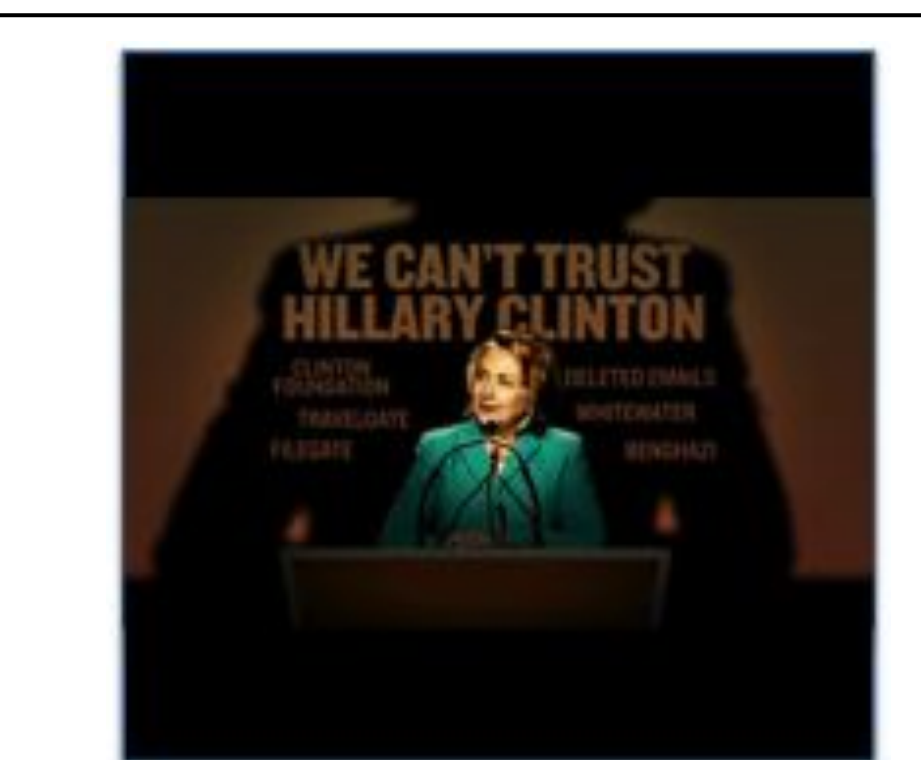


Background

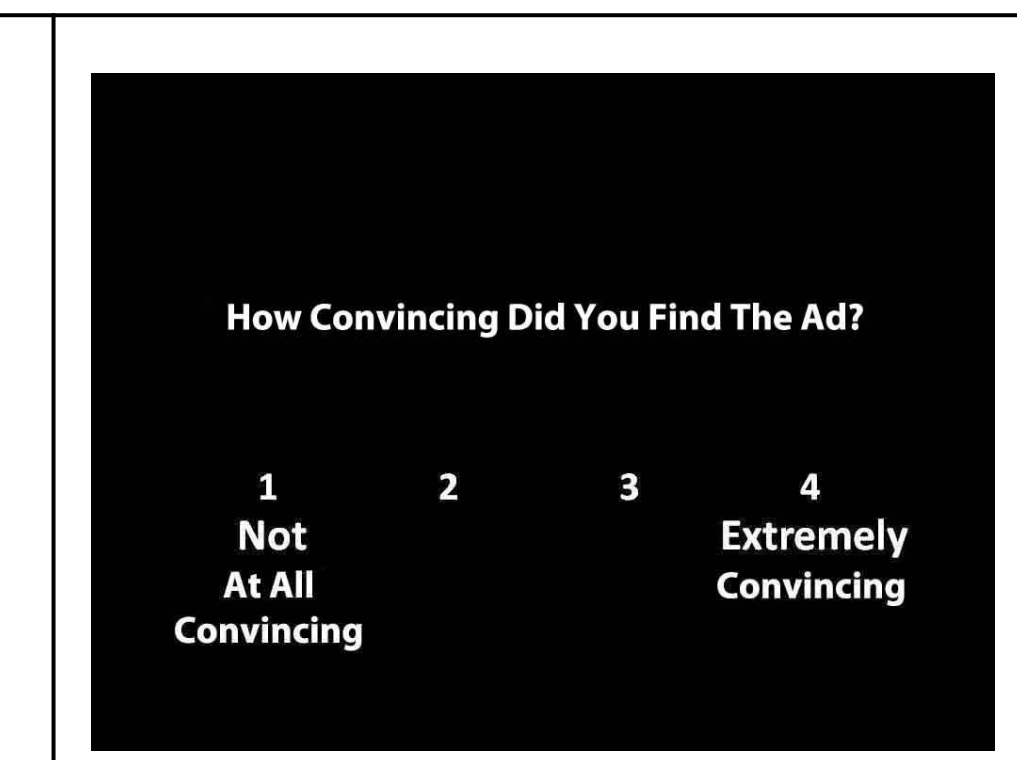
- Moral Foundation Theory (MFT; Haidt, 2001) can be used to understand processing in political communication contexts
- Previous research has shown that synchronization between individuals' brain activity is driven in part by moral perception (Weber et al., 2011)
- Goal of the present study: determine how synchrony in a network of regions related to moral processing differs as a function of partisanship (in media and viewers)



Method—General

- N=63 participants (21 Democrat, 22 Republican, 20 unaffiliated)
 - Scanned while watching 22 political attack ads (11 anti-Clinton, 11 anti-Trump; additional scans not described further here)
 - Block design
 - Ad length = 30–78s (mean = 38s)
 - Responses of “liked”/ “disliked” statements
- 

A. Political attack ad played for 30-78 seconds



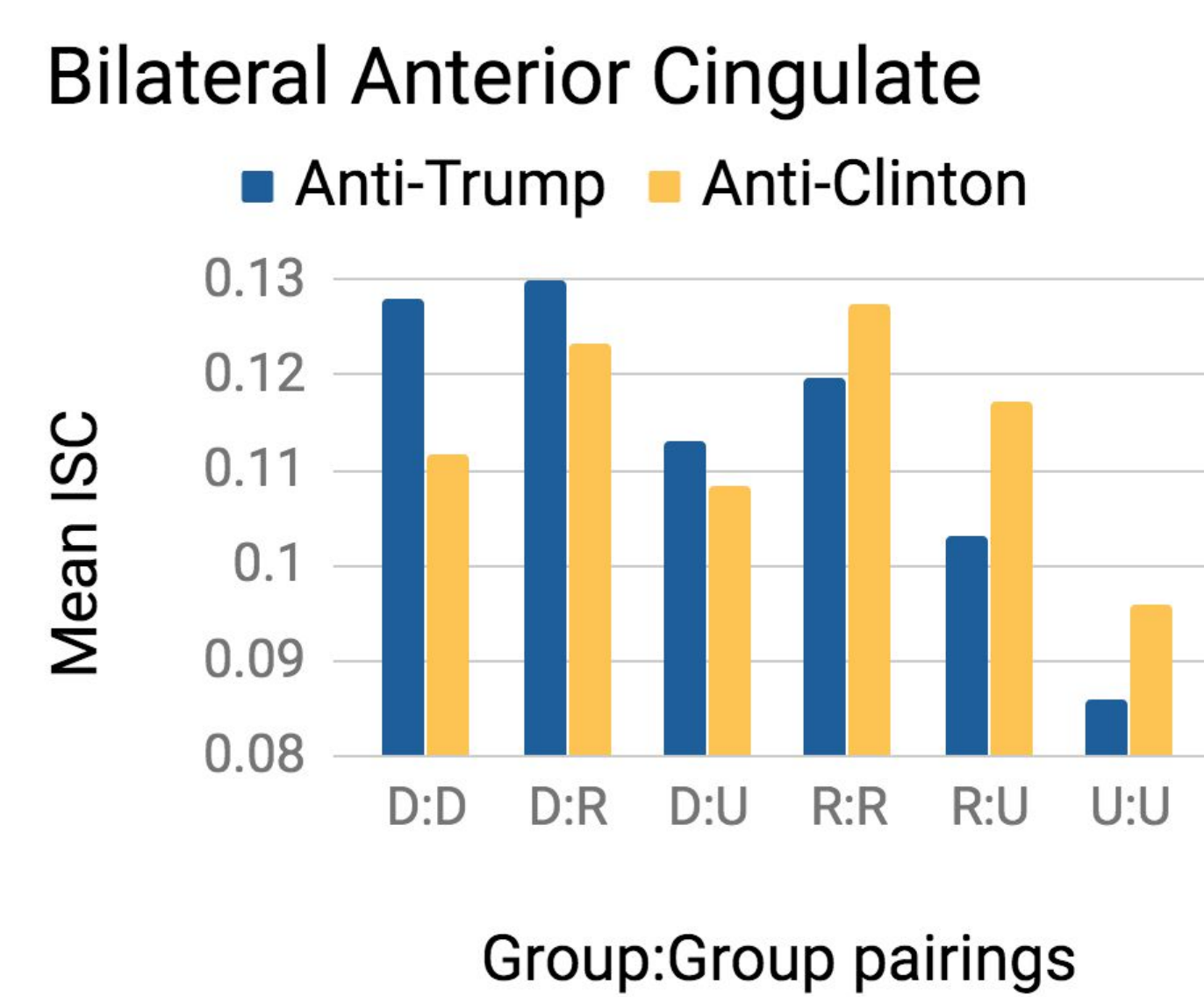
B. Between ads, subjects were asked to respond how convincing they found the ad 5 seconds +/- 2 seconds jitter

Method—Intersubject Correlation Analyses

- Method for identifying task-involved voxels/ROIs based on similarity of activity across individuals (Hasson et al., 2004)
- Here, we computed all pairwise ISCs, but labeled according to the partisan affiliation of each member of each pair
- Average ISCs for each ROI were computed for each Group: Group pairing (e.g., each Democrat–Republican pair → D:R)
- ISCs were computed using within-ROI average timeseries for each of 22 ROIs in the moral processing network

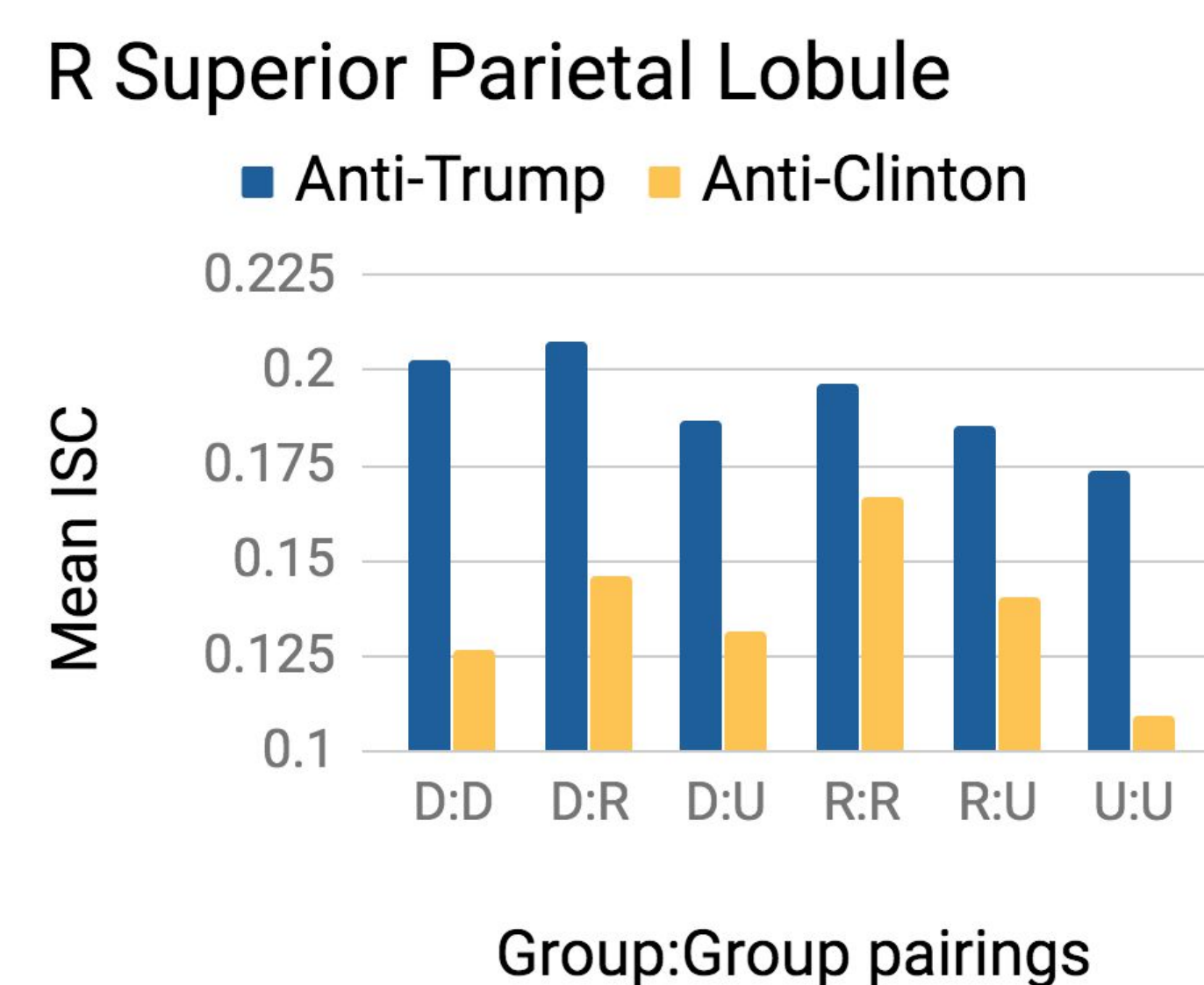
ISC Results—Moral Processing Network

- As expected given heterogeneity of function within the Moral Network, a complex pattern of relationships between partisan affiliation and video type emerged across ROIs, with many ROIs demonstrating significant links



- Anterior cingulate (implicated in conflict processing) shows a main effect of affiliation
- D, R > U

Video type (anti-Trump / anti-Clinton)	Political affiliation (D, U, R)	Interaction
$p > 0.1$	$p < 0.001$	$p > 0.1$

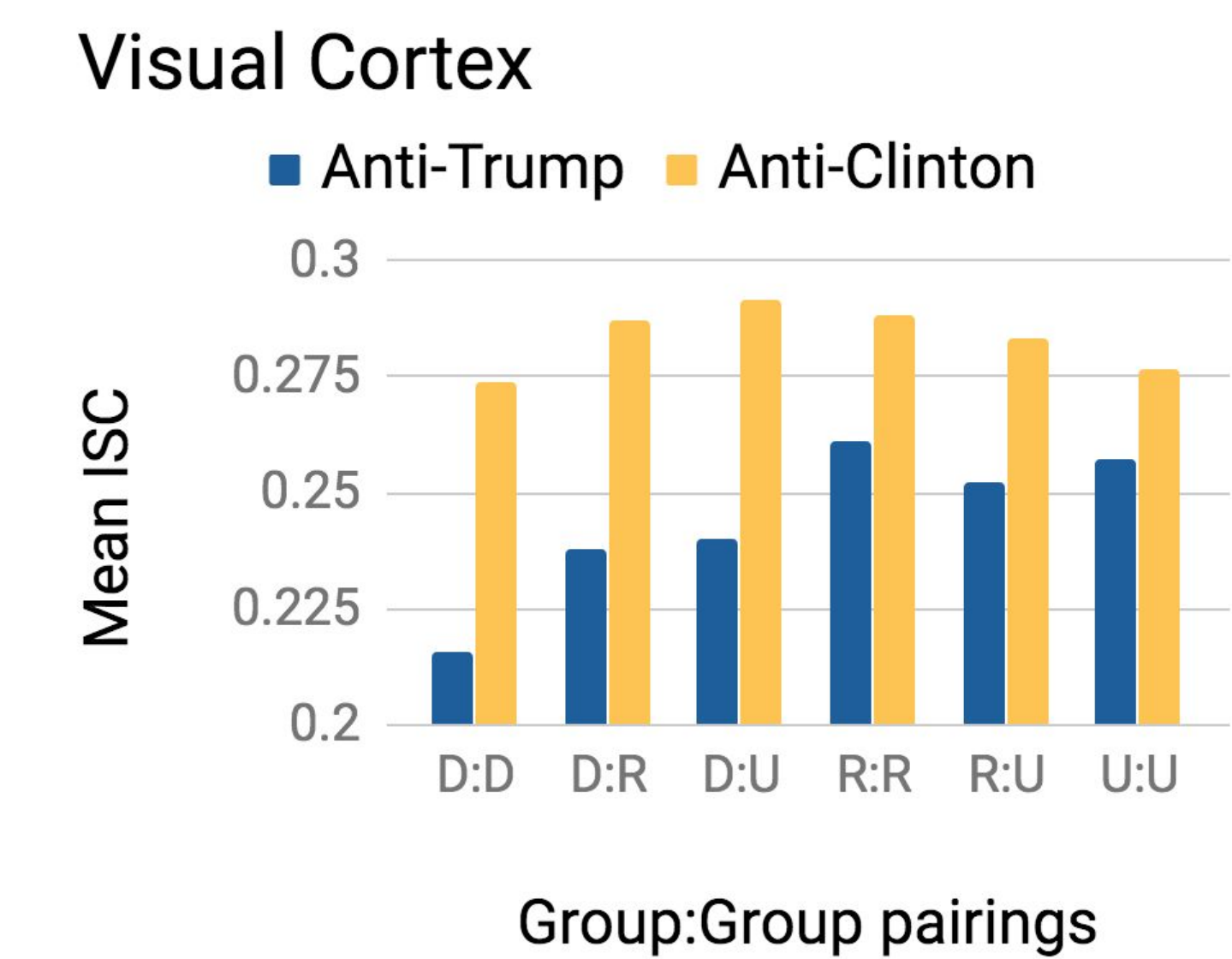


- R SPL shows a marginal effect of video type, a main effect of affiliation, and an interaction

Video type (anti-Trump / anti-Clinton)	Political affiliation (D, U, R)	Interaction
$p = 0.09$	$p < 0.001$	$p < 0.05$

ISC Results—Other ROIs

- Regions which have not previously been implicated in moral processing or political persuasion show effects of partisan affiliation, video type
- For example, visual cortex shows a main effect of political affiliation, and a significant interaction term



Video type (anti-Trump/ anti-Clinton)	$p > 0.1$
Political affiliation (D, U, R)	$p < 0.001$
Interaction	$p < 0.05$

Discussion

- Political messages have been previously shown to influence ISCs (Schmälzle et al., 2015)
- Moral processing has previously been shown to vary with partisan affiliation (Graham et al., 2009)
- Our results extend this work and demonstrate how partisan affiliation interacts with partisan messaging to modulate neural synchronization across regions in the moral processing network
- Our results further demonstrate that processing even in lower-level areas (e.g., visual cortex) may be subject to influence by partisan affiliation or message features
- Future work will seek to further explain these patterns

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