The Group Basis of Partisan Affective Polarization

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What explains rising partisan animosity in the United States? We argue that mass partisans' feelings toward the social group coalitions of the parties are an important cause of rising affective polarization. We first leverage evidence from the American National Election Study (ANES) Time Series to show that partisans' feelings toward the social groups linked to their in-party (out-party) have grown more positive (negative) over time. We then turn to the 1992–96 and 2000–2004 ANES Panel Surveys to disentangle the interrelationship between partisan polarization and social group evaluations. Individuals with more polarized social group evaluations in 1992 or 2000 report substantially more polarized party thermometer ratings and more extreme, and better sorted, partisan identities four years later. Notably, these variables exerted little reciprocal influence on group evaluations. Our study has important implications for understanding affective polarization and the role of social groups in public opinion.

Mass partisans in the United States increasingly dislike the other side, a phenomenon called *partisan affective polarization* (Abramowitz and Webster 2016; Iyengar, Sood, and Lelkes 2012). A leading explanation for this growing polarization points less to the role of ideology and more the increasing group distinctiveness of the parties and concomitant identity-based motivations to impugn the other side (Ahler and Sood 2018; Mason 2015, 2016). Broadly, this perspective calls attention to the increasing social homogeneity of the parties due to changes in the voting behavior of racial, geographic, gender, and religious groups (Achen and Bartels 2016; Layman 2001; Zingher 2014). Better-sorted social groups may mean that partisans are less able to see themselves—and their kind of people—in the other side, thereby leading to greater social distance between these group coalitions and ultimately enhanced animosity.

We take up this argument and address a key empirical limitation facing existing work. While this group-oriented explanation for affective polarization calls attention to *changing* evaluations of group/party relationships, for example, a growing association between the out-party and disliked groups, existing work has not examined whether these evaluations have actually changed over time. However, without this analysis we cannot truly know whether beliefs about social groups are a cause of the change over time in partisan affective polarization. We leverage ANES Time Series and Panel data to address two questions: (1) Have partisans' attitudes toward the social groups linked to the parties also polarized over time, and (2) Is any such social group polarization associated with higher levels of partisan affective polarization? We find that partisans have indeed grown to increasingly like (dislike) the groups associated with their in-party (out-party). In addition, polarization in these group evaluations is substantially related to later levels of partisan affective polarization, party identity extremity, and party/ideological sorting. Our study thus builds on and contributes to existing work connecting social groups to partisan affect by exploring a broader array of social groups over a longer period and provides novel evidence for the group origins of partisan affective polarization and ultimately partisan conflict.

STUDY 1: SOCIAL GROUP POLARIZATION OVER TIME

We turn to evidence from the American National Election Study (ANES) Time Series to investigate partisans' evaluations of the parties' social group coalitions. To do so we fit a confirmatory factor analysis on the social group feeling

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thermometers contained on each presidential-year ANES survey from 1980 to 2016.[1] This method has two advantages: (1) it enables a correction for systematic differences in the use of the thermometer scale by respondents, and (2) it enables the groups to differentially contribute to the calculation of a respondent's latent evaluation of the parties' group coalitions (Weisberg, Haynes, and Krosnick 1995; Wilcox and Cook 1989).

In each survey year, we began by fitting a two-factor model on which all social group feeling thermometers (including those for the two parties) were included: a "substantive" dimension and a "measurement" dimension on which the thermometers were constrained to load equally and which was constrained to be uncorrelated with the substantive dimension. This second dimension captures the aforementioned individual differences in thermometer use by respondents. How the groups loaded on the substantive dimension affected how we treated them in the ensuing three-dimension (Democratic groups, Republican groups, and measurement) model. Those groups that loaded in the same direction as the Democratic Party were sorted into a "Democratic groups" factor in the ensuing model while those loading in the opposite direction were sorted into the "Republican groups" factor. Common Democratic groups included *liberals*, *feminists*, *unions*, *environmentalists*, and *blacks*, while common Republican groups included *conservatives*, *big business*, *Christian fundamentalists*, and the *military*. It should be noted that we omitted the Democratic and Republican Party thermometer items in this second three-factor model so that the ensuing factor scores capture affect specifically regarding the social groups linked to the parties and not the parties themselves. Appendix A (apps. A–G are available online) provides the model results for these models.[2]

In figure 1 we plot the predicted evaluations of the Democratic and Republican group coalitions from these models with separate subgraphs for Democratic and Republican respondents. Figure 1 also plots the difference between in-group (e.g., Democrats' evaluations of Democratic groups) and out-group evaluations (e.g., Democrats' evaluations of Republican groups), and shows that partisans evaluated in-party associated groups more positively than out-party associated groups in all survey years. These ratings, moreover, have diverged over time with a jump in polarization from the 1980s to the 1990s and then again in 2012; this is notably similar to the time trends in partisan antipathy shown in Iyengar and Krupenkin (2018). However, figure 1 also shows some slight differences by respondent partisanship and target. For instance, Republicans' evaluations of their party's group coalition became only slightly more positive between 1980 and 2008 before a jump in 2012. However, Republicans grew substantially more negative in their evaluations of Democratic-aligned groups during this period, save 2008. Democratic respondents show an inverse pattern: slightly growing positive affect toward in-party aligned groups before a recent acceleration, but more consistency in their evaluations of Republican-aligned groups before 2012. Figure 1 thus demonstrates evidence in favor of increasing social group polarization over time, akin to the partisan affective polarization observed in other studies.

STUDY 2: PANEL EVIDENCE

In the preceding section, we found evidence of increasing social group polarization; partisans evaluate in-party aligned groups more positively than out-party aligned groups, and this gap has increased over time. We turn to data from the 1992–1994–1996 and 2000–2002–2004 ANES Panel Surveys to investigate the interrelationship between social group polarization and partisan affective polarization. The use of panel data here is crucial as it enables us to untangle the potentially reciprocal relationship between these concepts. However, panel data are no panacea for causal inference when working with observational data; omitted variables can cause changes in both our independent and dependent variables (Finkel 2008; Gerber, Huber, and Washington 2010).

For both panels we estimated *social group polarization* in the same manner as we did in the Time Series analyses. For all three waves of each panel survey, we fit a three-factor model on the social group thermometers in the same manner discussed above and predicted each respondent's factor score from the model. We then sorted these scores along partisan lines to produce partisan in-group and out-group evaluations much as we did earlier. We finally subtracted out-group evaluations from in-group evaluations to obtain our measure of

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1. We focus on this period because it captures the period of growing partisan affective polarization (Iyengar et al. 2012). In addition, affect toward the Democratic and Republican Parties is not asked until 1980; before then, the ANES asked about "Democrats" and "Republicans," which may elicit slightly different reactions among respondents.

2. Some additional points: first, we recoded missing data to a score of 50 to maximize the data available to us; second, the 2012/2016 results focus on non-online sample respondents. Appendix A shows that this leads to lower levels of group polarization in 2012 than would otherwise occur. Third, items would occasionally load negatively on their assigned dimension in the three-factor model, implying that the group did not belong on this dimension. In these cases the group was removed (or constrained to load at 0) from the group dimension in question such that it would no longer contribute to the estimation of the latent evaluation. We investigate a variety of alternative specifications for these models in the appendixes with broadly similar results emerging (in particular, apps. C, E–G).
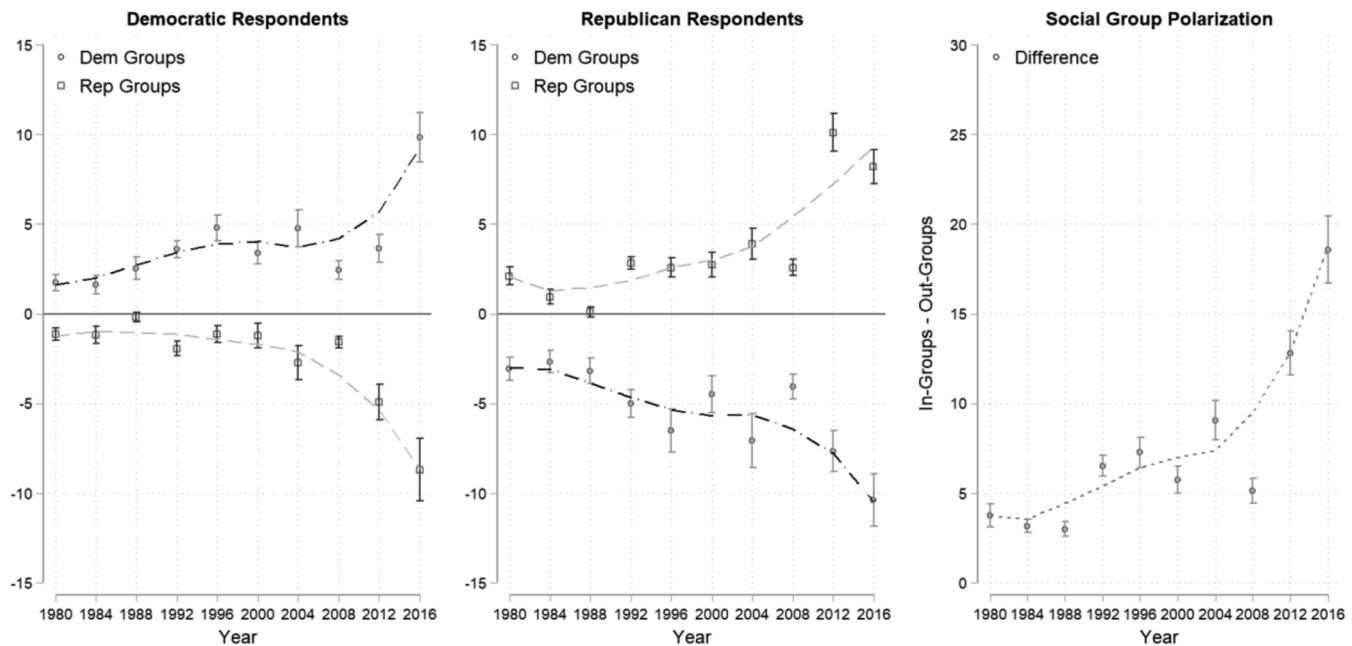
Figure 1. Democratic and Republican respondents' evaluations of partisan group coalition. The first two subgraphs provide the predicted factor score for Democratic and Republican Party aligned groups (with 95% confidence intervals) separately for Democratic and then Republican respondents. For the final graph we sorted these scores into in-groups (i.e., evaluations of Democratic groups by Democrats), out-groups (i.e., evaluations of Democratic groups by Republicans) for each respondent and took the difference; positive scores thus indicate a positive bias in favor of in-party related groups. The bandwidth for the lowest regression line is 0.8. Figure schemes courtesy of Bischof (2017).

social group polarization. We rescaled this variable to fall on a 0–1 scale where increasing values indicate a growing bias toward in-groups relative to out-groups.

We will investigate three variables related to partisan affective polarization due to unevenness in the variables available across the two panels. First, we use data from the 1992–1994–1996 panel to look at *partisan affective polarization*, that is, the difference between a respondent's thermometer rating of their in-party and out-party. Higher scores for this variable indicate greater in-party bias (scale: 0–1). Unfortunately, this variable is only available in this particular panel so we will also explore two variables theoretically and substantively related to partisan affective polarization. We investigate *party identity extremity* using data from both panel surveys. More extreme partisan identities are associated with a greater degree of partisan affective polarization (Mason 2015). As we are interested in the changing reactions of partisans, identity extremity ranges from leaning partisan ($=0$) to strong partisan ($=1$) in the first year of the panel (i.e., 1992) and from independent ($=0$) to strong partisan ($=1$) in subsequent years. This accounts for the possibility that some partisans in 1992/2000 may identify as an independent in the later waves. Finally, we will examine *partisan-ideological sorting* in both the 1992–1994–1996 and 2000–2002 ANES Panel Surveys. Sorted partisans also report more partisan affective polarization (Mason 2015); if social group polarization predicts sorting, then it

should also be related to partisan affective polarization. It is also plausible that social group polarization will predict sorting given that ideological self-placements are also predicated on social group evaluations (Zschirnt 2011). We measure partisan-ideological sorting in a manner following Mason (2015). Specifically, a respondent's sorting score is formulated by taking the absolute value of their seven-point party identification (PID) and seven-point (reverse coded) ideology scores and then multiplying this difference by both partisan identity and ideological strength.[3] We then rescaled this variable to range from 0 to 1, with higher scores indicating greater identity alignment.

We estimate the reciprocal relationship between social group polarization and these three variables via cross-lagged panel models (Finkel 2008).[4] For instance, we regress time t-values of partisan affective polarization on its $t-1$ values as well as on $t-1$ values for social group polarization. Likewise, time t-values for social group polarization are regressed on its $t-1$ values as well as on $t-1$ values for partisan affective po-

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3. In other words, sorting $= |\text{PID} - \text{ideology}| \times \text{PID extremity} \times$ ideological extremity.

4. We investigate alternative specifications in app. B. We first show results from cross-lagged ordinary least squares (OLS) models for each wave dyad (i.e., 92→94, 94→96, and 92→96). We then explore fixed-effect panel models that enable us to control for unobserved time *invariant* variables (Finkel 2008). These specifications yield substantially similar results.

larization. We estimate both models simultaneously for each year dyad (i.e., 1992→1994 and 1994→1996) using a structural equation modeling estimator (Finkel 2008). Because we control for lagged values of the dependent variable, we can thus assess whether prior social group polarization is associated with changes in subsequent levels of partisan affective polarization, and so on, and vice versa. Moreover, we can test for whether the relationship between prior social group polarization and later partisan affective polarization, and so on, is equivalent to, or alternatively greater/less than, the inverse pathway. We include a series of control variables measured in the first wave of the panel survey: age, education, race, gender, political interest, racial resentment, ideological extremity (in the nonsorting analyses), and issue extremity.

Table 1 provides an overview of the relationship between social group polarization and our three affective polarization related variables; we provide full model results in appendix B. If the group-based account of partisan affective polarization is accurate, then we should see a positive relationship between social group polarization and the three "party" variables even while controlling for prior values of the dependent variable. And, indeed, table 1 shows that so-cial group polarization measured in year t has a significant and substantive relationship with subsequent levels of party affective polarization, PID strength, and party/ideological sorting in all models save for the 2000–2002 model of PID strength. Moving from minimum to maximum levels of social group polarization in year $t-1$ is associated with 16%–25% more partisan polarization, 8%–21% more extreme partisan identities, and 12%–38% higher scores on the sorting variable in year t. However, the three-party polarization-related variables have a much more inconsistent relationship with later social group polarization and one that is generally substantially smaller in scope. Indeed the pathway from social group polarization to these party variables is nearly always significantly greater than the inverse pathway, as the Wald tests at the bottom of table 1 attest. Table 1 lends novel and substantive support to the claim that social group evaluations lead, rather than follow, party affective polarization and associated variables.

CONCLUSION

We have explored an untested implication of group-based theories of partisan affective polarization and of party conflict

Table 1. The Reciprocal Relationship between SGP and Party Affective Polarization, PID Strength, and Party/Ideological Sorting

	1992–1994–1996			2000–2002–2004	
	Party Polarization	PID Strength	Sorting	PID Strength	Sorting
Cross-lag coefficient:					
$t1$ SGP → $t2$ party	.161**	.212*	.378**	.0795	.280**
	(.0417)	(.0833)	(.0677)	(.0715)	(.0575)
$t2$ SGP → $t3$ party	.251**	.195*	.309**	.124*	NA
	(.0659)	(.0908)	(.0730)	(.0616)	
$t1$ party → $t2$ SGP	.0504+	.00394	.0847**	.0343**	.117**
	(.0290)	(.0113)	(.0225)	(.0115)	(.0159)
$t2$ party → $t3$ SGP	.118*	.0273	.100**	−.00602	NA
	(.0490)	(.0206)	(.0283)	(.0184)	
N	425	425	425	621	831
Wald tests:					
$(\text{SGP}_{t1} \rightarrow \text{party}_{t2}) = (\text{party}_{t1} \rightarrow \text{SGP}_{t2})$	$p < .05$	$p < .10$	$p < .01$	$p = .53$	$p < .01$
$(\text{SGP}_{t2} \rightarrow \text{party}_{t3}) = (\text{party}_{t2} \rightarrow \text{SGP}_{t3})$	$p = .119$	$p < .05$	$p < .01$	$p < .05$	NA

Note. Each column provides the results from a different model differentiated by which party variable is involved; SGP = social group polarization, PID = party identification. Cell entries provide the unstandardized coefficients for the party variables (party polarization, PID strength, and partisan/ideological sorting) and for SGP; $t1$ = 1992 or 2000, $t2$ = 1994 or 2002, and $t3$ = 1996 or 2004. The cross-lagged coefficients show the reciprocal influence of these variables on each other after controlling for the lagged values of the dependent variable. The Wald tests determine whether we can reject the null that the party$_{t-1}$ → SGP$_t$ path is equivalent to the SGP$_{t-1}$ → party$_t$ path. Full model results, including estimates for control variables and stability coefficients, can be found in app. B.

+ $p < .10$.

* $p < .05$.

** $p < .01$.

more generally: that partisans' evaluations of the parties' social group coalitions have polarized over time and that these evaluations are related to subsequent levels of partisan affective polarization. In the former case, we saw evidence that the polarization that has emerged along partisan lines also extends to evaluations of these social group coalitions. In the latter case, we saw consistent evidence that social group polarization is a driving force behind increased partisan affective polarization rather than vice versa. We thus provide novel and substantial evidence in favor of the group interpretation of partisan affective polarization.

There exist several notable paths that future research could take to expand on our results. First, a similar methodology as used here could be exploited to explore the origins of partisan identification itself and its roots in group evaluations. Second, the role of partisan elites in this process deserves special attention. Elites may matter in two nonexclusive ways. First, the demographic composition of party elites provides signals concerning the types of groups at home in a partisan coalition (e.g., Evans and Tilley 2017). Party elites may thus serve as a heuristic enabling voters to ascertain changes in the party's group coalitions. Second, elites appeal to social groups in society via rhetoric and also use rhetoric designed to prime group considerations (e.g., Valentino and Neuner 2018). This raises an important question for further research: What role does such rhetoric play in the development of both social group and partisan affective polarization?

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