Does Party Polarization Mobilize or De-Mobilize Voters? The Answer Depends on Where Voters Stand

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ABSTRACT

What effect does party polarization have on voter turnout? Focusing largely on polarization as a (negative) indicator of party indifference, the existing empirical work has found mixed results. We re-examine this question, recognizing that polarization influences voters through perceptions of both alienation and indifference; we argue that the effect of polarization depends on the position of the voter relative to the party options. We introduce a new relative measure of polarization and test its effect on turnout in the two-rounds of the French presidential elections. We find that where a voter stands relative to the spread of party options is a significant predictor of turnout. If parties are either far away from the voter or are indistinguishable from each other, there is little incentive to turn out. On the other hand, party polarization leads to higher participation when the voter is close to one party and far from another.

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1. Introduction

Elections are the foundation of representative democracy. However, elections can only serve as "instruments of democracy" if voters participate. Questions about why people turn out to vote and the source of variation in that turnout have intrigued political scientists for decades. Researchers have examined the characteristics of the electorate, from age and gender to religious affiliation, occupation, income level, education level and sheer motivation (Wolfinger and Rosenstone 1980; Chapman and Palda 1983; Powell 1986; Leighley 1995; Fauvelle-Aymar and François 2006; McClendon and Riedl 2015; Kostelka et al. 2019; Blais and Daoust 2020). Others have looked to the context (e.g., electoral rules, number of parties, timing of elections and state of the economy) in which elections occur, to account for varying levels of participation (Caldeira and Patterson 1985; Chapman and Palda 1983; Powell 1986; Jackman 1987; Blais and Carty 1990; Matsusaka 1993; Franklin 2004; Fauvelle-Aymar and François 2006; Kato 2008; Ezrow and Xezonakis 2016; Gerber and Green 2016; Hajnal et al. 2017).

Underexamined in analyses of turnout is the influence of the range of policy options available to voters, or party polarization. The few studies that have examined the effect of polarization on turnout find inconsistent results. Focused largely on the role of voter indifference to unpolarized parties, some have found that the spread of parties along the left-right spectrum is positively correlated with aggregate levels of turnout (Crepaz 1990; Siaroff and Merer 2002; Bumgardner 2016; Lee 2013; Abramowitz and Stone 2006, Abramowitz and Saunders 2008; Dalton 2008; Wilford 2017). Others, examining individual-level decisions to vote, have found

more mixed evidence about the sign of the correlation between polarization and turnout (Rogowski 2014; Lee 2013).

We agree that party polarization matters for voter turnout but argue that the current empirical literature has overlooked the joint importance of alienation and indifference for understanding polarization. We posit that the effect of party spread is not uniform across the electorate. Consistent with a spatial logic of voting, we argue that polarization of the competing parties should have a different effect on an individual's rate of participation if the voter is far from both the polarized parties versus close to only one of them.

In this paper, we test the impact of this "relative" conception of polarization on voter participation. To this end, we introduce a new measure of polarization which incorporates both the degree of voter alienation from the competing party options (often emphasized in spatial models) and voter indifference between them (highlighted by the polarization literature), while overcoming the methodological limitations inherent in a more standard interactive variable. To control for the confounding factors that often plague research on turnout, we exploit the two-round structure of French national elections. The two consecutive elections enable us to examine the behavior of a given set of voters, relative to their previous turnout decision. We, thus, hold baseline factors constant across rounds.

Examining survey data from the 2012 and 2017 French presidential elections, we find that the position of the voter relative to the spread of the parties is a significant predictor of turnout. If the parties are perceived to either be far away from the voter or indistinguishable from each other (equally distant from the voter), there is little incentive for the voter to turn out. Significant ideological distance between the party options results in higher participation levels when

the voter is close to one party and far from another. These results are robust to multiple sensitivity tests.

The findings of this paper have important implications for theoretical and methodological research on turnout, party polarization and voting in general. First, among the empirical work on turnout, our theory is innovative in directly linking voter turnout decisions to the range of policy options; through this individual-level mechanism, we conclude that aggregate turnout levels are endogenous to the party choices available to voters.[3]

Second, our work demonstrates the continuing applicability of the concept of party polarization to a variety of party systems. This paper is the first to examine the effect of polarization on turnout at the individual level in a multiparty setting.[4] The French second-round runoff system has also further allowed us to explore how voters react to a wider spread of parties than typically seen in a two party system as well as the possibility that the range of options changes between rounds. Our findings suggest that voters appreciate the stakes involved with ideologically diverse options, perceive changes in polarization across rounds, and modify their behavior accordingly.

That said, our paper recognizes that, theoretically and empirically, party spread is an insufficient measure of party polarization, perhaps even more so in systems with more than two parties. Consistent with a strategic theory of voting, we find that voters consider the joint effect of alienation and indifference in their turnout decisions. And using our new measure of relative polarization, we are able to demonstrate that the conditional nature of party polarization also extends to cases where the voters are indifferent between party options because of equidistance.

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[3] Adams et al. (2006) offer a unified theory of turnout and vote choice. We build on their approach but, unlike them, we focus on polarization and its interactive effect via alienation and two types of indifference.
[4] Moral (2017) is an exception.

The paper begins by exploring the existing literature on polarization and voter turnout. We then develop the concept of relative polarization and spell out its implications for turnout levels. The third and fourth sections discuss our empirical strategy, including our focus on France, and the operationalization of relative polarization and its advantages over a more naïve interaction term. In the fifth, we present individual-level models of voter turnout in the French elections, discuss our results and conduct sensitivity analyses. We conclude by highlighting the implication of our findings.

2. The Relationship between Party Polarization and Turnout

Ideological polarization is on the rise worldwide (Schmitt and Freire 2012, 72; McCargo 2017; Prusa 2017; Ascencio and Powell 2018). Scholars have noted an increase in the spread of political parties across the ideological spectrum in countries from advanced industrial democracies across Western Europe, North America and the Pacific to Latin America and Eastern Europe (Ascencio and Powell 2018; Savage 2013; McCargo 2017; Prusa 2017). And in many of these countries, the growing distance between the political parties, often attributed to the emergence of extremist parties, is accompanied by a more polarized electorate.

A significant literature has emerged to examine the impact of party polarization on political outcomes (Thurber and Yoshinaka 2015; Pickerill and Bowling 2014; Maoz and Somer-Topcu 2010; Lindqvist and Östling 2010; Jones 2001; Warwick 1994). For instance, Jones (2001), Pickerill and Bowling (2014), and Thurber and Yoshinaka (2015) find a positive relation between polarization and legislative gridlock. Furthermore, Maoz and Somer-Topcu (2010) argue that polarization negatively affects government stability in parliamentary democracies. In

democratic countries in general, polarization is also associated with less government spending (Lindqvist and Östling 2010). In short, polarization matters for the functioning of government.

2.1. Contradictory Findings in the Literature

However, the relationship between party polarization and electoral participation has been underexamined by the empirical literature. And what work has been conducted presents an inconsistent picture. The prevalent hypothesis of the existing turnout literature is that polarization spurs voter turnout. Higher party policy distinctiveness (and lower party indifference) increases the stakes of the election and thus generates an incentive for voters to turn out to the polls (Abramowitz and Stone 2006; Dalton 2008; Abramowitz and Saunders 2008; Wilford 2017; Lee 201; Bumgardner 2016). In addition, the cost to voters of acquiring information about the parties declines as party differences become more pronounced (Aldrich 1993; Bumgardner 2016). The indifference mechanism is prevalent in research on polarization and turnout. With stakes higher and information costs lower, turnout is expected to increase.

Evidence of this positive effect has been found in multiple studies of turnout in American elections. For instance, Bumgardner (2016, 101) notes the positive and substantial effect of polarization on the levels of turnout in both Senate and House elections. Similarly, Abramowitz and Saunders (2008) and Abramowitz and Stone (2006) argue that the increase in turnout rates in the 2004 presidential elections in the United States can be explained by the high levels of party polarization in that election.

Research on how party polarization influences the behavior of voters in multiparty systems is remarkably scarce. But of the small number of cross-national comparative studies, all indicate that turnout increases as polarization increases (Crepaz 1990; Siaroff and Merer 2002;

Wilford 2017; Dalton 2008; Moral 2017). According to Dalton (2008, 914), the magnitude of the effect is similar to that of compulsory voting laws.

However, other studies have cast doubt on the positive effect of polarization on turnout. Focusing on aggregate-level data, Fiorina and Abrams (2008: 583) argue that a "sharp increase in party mobilization" was the cause of increased US turnout in 2004, rather than the polarization identified by Abramowitz and Saunders (2008) and Abramowitz and Stone (2006). Employing survey data, Rogowski (2014) and Lee (2013) find that polarization and turnout are negatively correlated among the least educated voters.[5]

Despite their often contradictory findings, the existing work on polarization shares a common focus on the role of party indifference, as measured by party policy distance, in explaining voter turnout. A core assumption behind this indifference hypothesis is that the effect of interparty distance on turnout is constant across individuals within a system. In other words, it asserts that polarization should have a consistent effect regardless of voter distribution.[6] And yet, theoretical work on voting decisions and even some of the empirical work discussed above (e.g., Rogowski 2014 and Lee 2013) highlight the importance of individual-level characteristics and perceptions in general for mitigating the effect of systemic factors in explaining turnout. In the next section, we return to the logic of the spatial theory and identify a new concept of relative polarization, in which, we argue, the effect of polarization is not constant across voters. Rather, it is contingent upon individuals' policy preferences.

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[5] To the contrary, Lee (2013) finds evidence that polarization has a positive effect on the turnout of the most educated voters.

[6] This assumption is maintained by both work that employs more traditional unidimensional and more novel multidimensional understandings of polarization (Bianco et al., ND).

2.2. The Importance of Relative Polarization

The current empirical focus on the role of indifference in turnout stems from the spatial theory of voting and its rational choice calculus of turnout. According to Downs (1957), the probability that a voter will turn out to vote is given by $R = PB - C$, where R represents the reward a voter derives from turning out, P is the probability that the voter will affect the outcome of the election, B stands for the differential benefits that the voter derives if her preferred candidate is elected, and C is the cost of turning out to vote. If the reward is positive, rational voters should cast a ballot. Focusing on the B term, scholars (Downs 1957, 263; Adams et al. 2006; Zipp 1985; Plane and Gershtenson 2004) have pointed out that if the parties are not significantly distinct from each other (i.e., voters are indifferent between the options), voters do not perceive a differential benefit in voting. And, if the non-zero costs of voting exceed the benefits, the voter is expected to abstain. That said, this is a matter of degree: voters are said to have an indifference threshold (Downs 1957, 266; Thurner and Eymann 2000), whereby if the parties seem to be similar enough, they induce indifference amongst voters.

In the turnout research on polarization, the indifference mechanism is operationalized as the spread of the parties. But, it is not always the case that the benefits of voting for one party over the other increase with party spread. First, voters can also be indifferent between parties – and thus, less likely to turn out – when the parties are not necessarily close to each other, but are equidistant to the voter. While largely ignored by the existing polarization literature, this situation is evoked regularly in the spatial modeling literature on vote choice, where a (centrist) voter facing two options equally proximal to him or her (on opposite sides) is indifferent between them (Downs 1957). It is of note that this indifference to equidistant parties emerges *regardless* of the degree of party spread. A voter is equally indifferent between two parties each two units away

from her (party spread=4) as two parties each five units away from her (party spread =10). In both cases, there is no differential benefit to derive from the two parties, and the voter will be disinclined to turn out on the basis of the B term.

Second, indifference is not the only aspect of party positioning relevant to turnout. Downs (1957), Riker and Ordeshook (1968) and others also raise the importance of alienation affecting the benefit term in the voter's calculus (Adams et al. 2006; Zipp 1985; Plane and Gershtenson 2004; Lee 2013). If the policy preference of the party is too far away from that of the voter, the voter will derive little benefit from the party (Downs 1957). And if all party options are perceived as not meaningfully representing the voter's policy preference, the voter has little incentive to engage in what is seen as the costly behavior of turning out (Downs 1957; Adams et al. 2006; Zipp 1985; Plane and Gershtenson 2004; Lee 2013). As with abstention by indifference, this is a matter of degree: the farther away the parties are from the voter's ideal policy position, the more likely he or she is to abstain (Downs 1957; Thurner and Eymann 2000; Callander and Wilson 2007; Zipp, 1985; Plane and Gershtenson 2004).

It follows therefore that party polarization should influence voters' turnout through both alienation and (multiple forms of) indifference. But as suggested above, the predicted effects of polarization differ depending on which mechanism is considered: polarization should have a negative effect via alienation and a positive effect via party spread (a negative indicator of indifference). Equidistance, another aspect of indifference, is expected to have a negative effect on turnout. If these mechanisms are simultaneously at play, what is the net effect of party polarization on turnout? The answer, as suggested above, depends on the relative position of the voter to the party options. In other words, an interactive logic is at work. In Table 1, we identify six distinct

scenarios of relative party polarization that emerge from the combination of levels of indifference and alienation from the closest party in a two party system.[7] Because voters weigh the advantages of a given party relative to the alternatives, this 3 x 3 table allows us to identify the benefit level felt by a voter and, thus, the effect of party polarization on that voter's turnout.

TABLE 1: The Effect of Party Polarization on the "B" Term

	Low Alienation	Moderate Alienation	High Alienation
Low Indifference	High Benefit (cell 1)	Medium Benefit (cell 2)	
Moderate Indifference	Medium Benefit (cell 4)	Medium Benefit (cell 5)	Low Benefit (cell 6)
High Indifference	Low Benefit (cell 7)	Low Benefit (cell 8)	Low Benefit (cell 9)

First, the benefit to turning out is high when one of the parties is close to the voter and the other is far away. This is the situation when indifference is low and alienation is low (see cell 1). In this archetypical case described by the empirical polarization literature, the stakes of the election are high, and the voter has an incentive to turn out. According to Downs (1957, 119), "it is always rational to select a greater good before a lesser, or a lesser evil before a greater; consequently, abstention would be irrational because it increases the chances of victory for the worst party."

The benefit of turning out is also significant, albeit somewhat less so, in cells 4 and 5 where moderate levels of indifference are combined with low or moderate levels of alienation.

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[7] We focus on two-party systems because of their applicability to our measure of the relative polarization concept. But the joint importance of alienation and indifference also applies to understanding turnout in multiparty elections.

For instance, consider the case of a moderate right-wing voter, who has a choice between a centrist party and a moderate left party (equivalent to cell 5). In this case, the voter is not indifferent between the parties: while the first party is not very attractive, the alternative is even less desirable. Thus, even though neither of the parties represents the voter's preferred policy position (hence, moderate alienation), the implications of the "wrong" party getting elected provide a medium incentive for the voter to turn out. The same level of policy benefit for turning out emerges when moderate indifference is paired with low alienation (cell 4).

These cases of polarization increasing the stakes of the election are the standard image behind the literature's predictions that decreased indifference, as measured by increased party spread, leads to increased turnout. However, the benefit of turning out, and thus predictions of electoral participation for each level of indifference, are not independent of the degree of alienation felt by the voter. For instance, turnout is expected to decline relative to the baseline expectation in the literature if low indifference is married with moderate alienation (cell 2) or if moderate party indifference is married with high alienation (cell 6). This latter scenario might emerge if an extreme left voter is presented with a choice between a moderate right party and an extreme right party. The parties are distinct from each other, but the voter finds neither policy position palatable. In this case, the benefit of one party over another is unlikely to be large, and thus the voter is expected to abstain.

The benefit to voting is also expected to be low regardless of the level of alienation if the voter feels that there is no significant difference between the parties (high indifference). If, as in cell 9, the voter is far away from the indistinguishable parties, he or she will not incur a cost to turn out to vote for undesirable candidates. Even as the indistinguishable parties move closer to the voter (cells 7 and 8), he or she does not have an incentive to turn out: despite sharing policy

preferences with the parties, the voter will not waste resources to go vote when the party options are equally attractive. This prediction reflects the importance of the under-recognized view of indifference as equidistant parties. To complete the description of the cells in Table 1, it is of note that would-be cell 3 is empty because the combination of high alienation and low indifference is not logically or empirically possible; a voter cannot be very far away from the closest party when the parties are themselves very different from and, thus, distant from each other.[8]

Our predictions can be summarized in the following hypothesis:

H1 (Relative Polarization): A voter's decision to turn out is a function of the voter's perceived level of alienation from the parties relative to the spread of the party options.

3. Testing the Argument: Case selection

To test the effect of our relative concept of polarization, we examine individual-level voter turnout in the 2012 and 2017 French presidential elections. The French case and these elections in particular are attractive for both empirical and theoretical reasons. First, France employs two-round run-off elections. In French presidential elections, in the absence of a majority-winning candidate in the first round, the top two candidates advance to the second round (France, Constitution: Title II, Article 7). Increasingly common across countries around the world,[9] a two-round runoff system has the advantage of allowing us to hold constant multiple background factors – including the socioeconomic characteristics of the electorate and their sense of civic duty

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[8] This impossibility of a low indifference-high alienation scenario is just one reason why we cannot model relative polarization as a simple interaction of alienation and party spread, and thus, why we develop a new measure of this concept.

[9] Bormann and Golder (2013, 368) note that the percentage of presidential systems requiring an absolute majority in the presidential elections increased from 6% in the 1950s to 35% in the 2000s. A significant number of those countries require a second round of election if none of the candidates obtains a majority (Bormann and Golder 2013; Blais and Indridason 2007).

(Indridason 2008; Fauvelle-Aymar and François 2006). The short period between election rounds increases our confidence that these baseline factors remain unchanged between elections; this assumption is less plausible in other electoral systems, even with panel data, when we are comparing a voter's behavior across elections years apart.

Beyond serving these methodological advantages, the French case is theoretically appealing. Like many advanced industrial democracies, but unlike the United States, which has been the focus of most of the turnout scholarship, France has a multiparty system. In the 2012 and 2017 elections, France had an average of 10.5 parties contesting the presidential elections. This study allows us to examine the transportability of the concept of polarization to a multiparty system, many of which also follow a runoff format (see Bormann and Golder 2013 and Birch 2003). What polarization means to a voter may be different when comparing the ideological spread across these many parties versus across two competitive ones. Even when restricting our focus to second-round two-party elections, the relevance of party polarization may vary significantly across the wider distribution of voters (and parties) typical in multiparty system. And the fact that French voters are described as being more loyal to their ideologies than to particular political parties (Bélanger et al. 2006; Lewis Beck et al. 2012) means we can be more confident that voters' turnout decisions reflect perceived party polarization rather than mere partisanship.

Finally, our study has the advantage of examining the role of polarization in both more traditional and more unusual election settings. In the 2012 French presidential election, center-left and center-right candidates squared off in the second round. Five years later, the presidential election was characterized by the emergence of a new centrist party and its candidate challenging an extreme radical right party candidate. Thus, we have the opportunity to see the robustness of the findings across centripetal and centrifugal election environments.

4. Data

Does polarization mobilize or demobilize voters? To test the effect of polarization on electoral participation, we examine individual-level data from surveys conducted following the 2012 and 2017 French presidential elections. Data is drawn from the Comparative Study of Electoral Systems (CSES) Module 4 for the 2012 presidential elections, and the French Electoral Studies (FES) for the 2017 presidential elections.[10] The surveys asked participants to indicate their preferred policy position on the left-right ideological spectrum, as well as the left-right position of a given list of parties. In addition, the dataset includes information on whether the voters participated in the first and second round of the presidential elections.[11] The dependent variable in our analysis is self-reported turnout.

Our use of respondents' perceptions of self and party placement offer several advantages over more objective measures from sources such as expert surveys and party manifestos.[12] First, it matches our theoretical interest in how voters see party options and the role these views play in a voter's individual calculus about mobilization. Second, it provides variation in our explanatory

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[10] The CSES data is not currently available for the 2017 election. However, we are able to access the French Electoral Survey upon which the CSES French survey is based (L'Enquête électorale française 2017, 2017).

[11] As with many surveys, the data used here over report turnout in each round relative to the actual rates. The actual official turnout in the 2012 election was 78.0% (R1) and 75.7% (R2) (www.interieur.gouv.fr) versus 89.7% (R1) and 89.6% (R2) according to the survey for that year. Similarly, the official turnout in 2017 was 75.8% (R1) and 66.0% (R2) (www.interieur.gouv.fr) versus 84.8% (R1) and 80.2% (R2) according to the survey data. Our concerns about the effect of this on our results are mitigated by the fact that both surveys capture the observed decline in voter turnout between Round 1 and 2 of the 2012 and 2017 elections. Second, the expected effect of this over reporting means, if anything, that our turnout results are biased against finding significant differential effects by polarization levels.

[12] This approach is employed by many scholars, including Golder and Stramski (2010), Dahlberg and Holmberg (2014) and van Egmond et al. (2020). Golder and Stramski (2010: 99) argue that use of perceived party placement is "not a problem if we are interested in evaluating how well citizens feel they are being represented; indeed it would seem to be an advantage in these circumstances."

variables; we examine how voters – facing the same presidential candidates across France – perceive the options and behave accordingly. An analysis of presidential party polarization using party position identified by manifesto or expert survey data, on the other hand, would have resulted in zero variation in party spread variables, making the effect of traditional polarization measures impossible to estimate. And third, by employing voter perception of both self and party positions, we avoid the plethora of problems of comparability introduced by importing manifesto-based or even expert survey measures of party location to use along with voter self-placement data.[13]

4.1. Independent Variables: *Relative Polarization*

We posit that both alienation and indifference matter for understanding the effect of polarization on voter turnout. Specifically, the impact of party spread – the traditional measure of indifference– on voter behavior will be relative to a voter's policy preferences. This statement suggests an interactive relationship. However, a simple interaction term is inadequate for testing the hypothesized effects that vary across differing levels of alienation and party spread as presented in Table 1. As previously noted, indifference is not only prompted by low party spread, but also by the equidistance of the parties from the voter, independent of their spread. A simple interaction of alienation and party spread variables would not allow us to distinguish between, for instance, a voter on the far left choosing between a center-left party (alienation=3) and a far right party (party spread=6) and a centrist voter equidistant (alienation=3) from a left and a right party (party spread=6). Because these scenarios are expected to produce very different incentives

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[13] Such a comparison introduces the possibility of a differential item functioning (DIF) problem, as voters and experts or even party manifesto writers are unlikely to conceptualize the political space the same way (Aldrich and McKelvey 1977; King et al. 2004). Studies have shown that this is a problem in France (Franzmann and Kaiser 2006: 164; Ascencio and Powell 2018; Powell 2019)

for voter turnout – medium in the first case and zero in the second – a different measure of relative polarization is needed.

To accurately capture the relationship between alienation and party spread, we introduce *relative polarization*, a measure designed to model a voter's decision-making process in a two-party election.[14] We operationalize it as follows:

$$Relative\ Polarization = (10 - DC) - (10 - DF)$$

DC represents the absolute distance between the voter's ideological self-placement and the position of the party closest to him or her. DF represents the absolute distance between the voter and the party farthest from his or her ideal policy position. This measure of polarization applies to an ideological scale from 0 to 10, where 0 represents the extreme left and 10 the extreme right. This measure applies exclusively to two-party elections.

Our relative polarization measure incorporates aspects of both indifference and alienation. It has a range from 0 (minimal relative polarization) to 10 (maximal relative polarization). *Relative Polarization* is equal to 0 whenever a voter perceives the parties to be at an equal distance from her ideal policy position. This can occur whether the spread of the parties is low or high. As long as the voter derives no differential benefit from either party, there is no incentive to vote. However, when the voter has a preference between the two parties, relative polarization will be greater than 0. The relative polarization measure increases when both the distance between the two parties increases and the distance from the voter's ideal point and the closest party decreases. The maximum value of the relative polarization measure is 10. We only observe this value if a voter's ideal policy position and her closest party are at one extreme of the ideological scale, and the other party is at the opposite extreme.

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[14] Although France has a multiparty system, we are able to employ this measure in the second round of the presidential elections because of their runoff formats.

To better elucidate the substantive meaning of this variable, we present five important cases. In the figures below, V represents a given voter's self-placement on the 0-10 ideological scale, and A and B represent the ideological position of two parties on that same scale.

Figure 1

Case 1: Low Alienation and Low Indifference
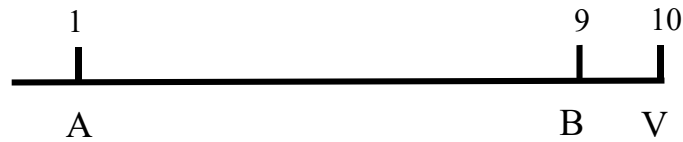
Case 1 captures the archetypical case of party polarization depicted in the empirical literature: a voter at one extreme, close to one party and very far from the other. The relative polarization score in this case is 8. Consistent with the traditional polarization literature, we predict that the voter has a high incentive to turn out.

Figure 2

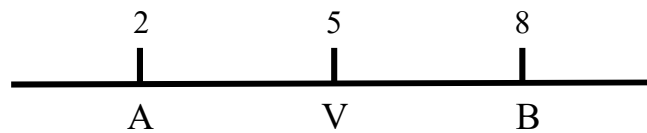**Case 2: High Alienation and High Indifference**
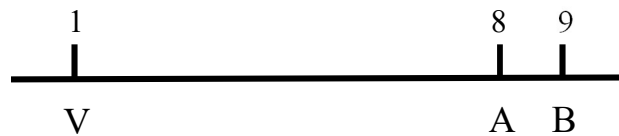
The value of the relative polarization measure, and its prediction, change if voters are indifferent to the parties. In Case 2, similar to cell 9 of Table 1, the voter is almost equally distant from A and B, with A being marginally closer to V. The relative polarization score in this case is

1. Not only are the parties significantly far from the voter, but they are also only marginally different from each other. In this scenario, we would expect the voter to have a very low probability of turning out.

Figure 3

Case 3: Moderate Alienation and High Indifference

Indifference can also manifest itself even when alienation is not high. In case 3, which is similar to cell 8 in Table 1, V is equally distant to A and B. Therefore, V has no preference between A and B. Unlike with a naïve interaction model, our relative polarization score in this case is 0. Even if the parties are relatively close to the voter, the voter derives no differential benefit from voting. In this scenario, we would expect the voter to abstain due to indifference by equidistance.

Figure 4

Case 4: Moderate Alienation and Low Indifference
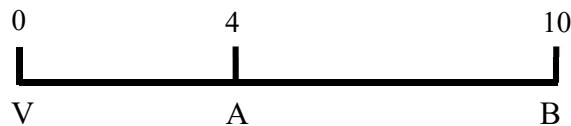
In the next two cases, we see the power of alienation. In case 4, the voter is relatively far from the closest party. Nonetheless, there is a meaningful difference between the parties, and

party B is even less desirable than party A. This case is an example of cell 2 in Table 1. The polarization score in this case is 6. This scenario captures an additional advantage of our relative polarization concept. The standard alienation literature would predict a low probability of turnout in this scenario, because it overlooks the fact that voters may also be motivated to vote by their dissatisfaction with the alternative party. According to our theory, the voter will have a moderate incentive to turn out.

Figure 5

Case 5: Low Alienation and Moderate Indifference
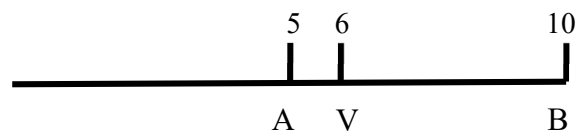
In our last example – a scenario comparable to cell 4 of Table 1 – the voter is close to A and moderately far from B. Moreover, there is a meaningful distance between A and B (i.e., indifference is middling). The polarization score is 5. Our theoretical model indicates that this voter will have a moderate incentive to turnout, motivated by both her affinity for A and her dissatisfaction with the alternative, B.

4.2. Independent Variables:

Party Spread

We also examine the traditional measure of party polarization based on indifference employed in the empirical literature: the ideological distance between the farthest left and farthest

right party, or party spread.[15] Party spread can take values of zero to ten, and it is derived from the individual's placement of the parties. Note that party spread is a negative indicator of indifference: according to the existing literature, party spread is expected to be positively correlated with turnout (Abramowitz and Stone 2006; Dalton 2008; Abramowitz and Saunders 2008; Wilford 2017; Lee 2013; Bumgardner 2016).

Alienation

Alienation is measured as the distance between the voter's preferred policy position and the position of the closest party. This variable ranges from zero to ten. In line with the spatial theory of voting and recent empirical work, alienation is predicted to be negatively correlated with turnout (Downs 1957; Adams et al. 2006; Zipp 1985; Plane and Gershtenson 2004; Lee 2013; Rogowski 2014).

5. Results

We employ logistic and multinomial logistic regression models of individual-level survey data to test whether polarization mobilizes or de-mobilizes voters. Specifically, we examine the relationship between perceptions of polarization and the individual's probability of turning out to the presidential elections pooled for 2012 and the 2017. We take advantage of the runoff format in two ways: 1) we lag the dependent variable, and 2) we create a change model.[16] These two

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[15] Scholars disagree on how to best operationalize polarization in multiparty systems. For instance, apart from the distance between the ideological positions of the parties discussed above, scholars have included the number of parties in the election, the standard deviation thereof, the share of the parties' votes or seats and positioning across multiple dimensions in their polarization measures (Dalton 2008; Alvarez and Nagler 2004; Moral 2017; Ascencio and Powell 2018; Bianco et al. ND)

[16] Supplemental Appendix Table SA.2 contains information on variable construction.

methods enable us to account for factors specific to the individual that affect his or her probability of turning out.

We start by evaluating the indifference-based hypothesis prevalent in the literature that, as the ideological differences between the parties increase (and indifference decreases), the stakes of the election rise, leading to higher turnout (Abramowitz and Stone 2006; Dalton 2008; Abramowitz and Saunders 2008; Wilford 2017; Bumgardner 2016). As we find across the models in Table 2, there is some support for this claim. Turning first to Model 1 estimating the probability that a voter will turn out in the second round given their turnout in the first round, we find that party spread has the expected positive sign and is statistically significant. But the explanatory power is not consistent when, in Model 2, we further take advantage of the runoff format by creating a model of change in turnout, which estimates the effect of a change in the spread of the most extreme parties between the two rounds. Change in party spread is statistically insignificant at conventional levels.

TABLE 2: Party Spread Is An Insufficient Factor in Explaining Turnout

	Turnout Round 2	Change in Turnout		Turnout Round 2	Change in Turnout	
		Abstain R1 Turnout R2	Turnout R1 Abstain R2		Abstain R1 Turnout R2	Turnout R1 Abstain R2
	(1)	(2)		(3)	(4)	
Party Spread	0.0972** (0.0313)					
Alienation				-0.172*** (0.0311)		
ChgPtySpread		-0.00396 (0.0456)	-0.0214 (0.0408)			
ChgAlienation					-0.0527 (0.0540)	0.180*** (0.0329)
Turnout R1	3.510*** (0.146)			3.603*** (0.150)		
2012 Election	0.762*** (0.139)	0.157 (0.241)	-0.771*** (0.227)	0.823*** (0.140)	0.175 (0.206)	-0.742*** (0.170)
Constant	-1.627*** (0.188)	-3.386*** (0.227)	-2.487*** (0.174)	-0.967*** (0.143)	-3.319*** (0.159)	-2.693*** (0.112)
Observations	3456	3349		3439	3439	

Notes: *** $p<0.001$, ** $p<0.01$, * $p<0.05$ For Models 1 and 3, results are based on logit models, where the dependent variable is turnout in Round 2. For Models 2 and 4, results are based on multinomial logit models, where the dependent variable is change in turnout between rounds, with no change in turnout (coded 0) as the excluded category. Robust standard errors in parentheses.

The rational calculus of voting (Downs 1957, 263; Riker and Ordeshook 1968; Thurner and Eymann 2000) suggests, however, that party spread is not the only feature of polarization important to turnout. In Table 2, we find support for the argument that alienation is also critical. The results of Model 3 reveal that a voter's distance to the closest party has a negative impact on her turnout. In Model 4 estimating the effect of change in party distance on change in participation between the two rounds in a given presidential election, we likewise find that as the closest party gets further away from the voter, her likelihood of turning out in Round 2 decreases and is

statistically significant; there is no significant effect of change in alienation on the probability of abstaining from round 1 and turning out to round 2.[17]

The models in Table 2 confirm that indifference is not the only aspect of polarization critical to explaining turnout: an individual's position also matters. We posit, however, that the relationship between alienation and indifference is not a simple additive one. Specifically, following the voter calculus, we argue that a voter's likelihood of turning out depends on his or her ideological position relative to that of the party options. An interactive relationship exists.

In Table 3, we begin to test this interactive logic using the standard party spread and party distance measures employed in the previous models. And the results of Model 1 in Table 3 suggest the existence of a conditional relationship between these factors and voter participation. In conditional coefficient plots presented in the Supplemental Appendix, we find that the level of alienation significantly alters the impact of indifference on a voter's likelihood of turning out, and vice versa.

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[17] This finding that change in party spread is insignificant but change in alienation is a significant predictor of turnout continues to hold when we employ a simple logit model instead.

TABLE 3: Naïve Interaction Models and Their Limitations

VARIABLES	(1) Naïve interaction	(2) Naïve interaction if voters ARE equidistant	(3) Naïve interaction if voters are NOT equidistant
Party Spread	0.0979*	0.144	0.107*
	(0.0409)	(0.146)	(0.0502)
Alienation	-0.167**	-0.167	-0.161*
	(0.0579)	(0.0892)	(0.0770)
PtySpread*Aliena-tion	0.00120	0.00640	-0.000113
	(0.0108)	(0.0456)	(0.0135)
2012 Election	0.800***	0.900*	0.781***
	(0.146)	(0.458)	(0.156)
Turnout R1	3.535***	3.559***	3.544***
	(0.154)	(0.464)	(0.163)
Constant	-1.352***	-1.290*	-1.416***
	(0.228)	(0.506)	(0.276)
Observations	3,324	321	3,003

Notes: *** $p<0.001$, ** $p<0.01$, * $p<0.05$. Results are based on logit models, where the dependent variable is turnout in Round 2. Robust standard errors in parentheses

But, as discussed in the data section, there is reason to doubt the ability of this naïve interaction model to fully capture and test for the effects of relative polarization. The multiplication of measures of party distance and party spread fails to be able to discriminate between very different voter-party scenarios, the most troubling being its inability to model cases of voter equidistance to two party options. This limitation is evident if we compare the results of models run on different subsets of the original data. As we see in Model 2 of Table 3, where the interactive analyses are limited to voters equidistant between the two parties, the explanatory power of both party spread and alienation evaporates; as seen in the conditional coefficient plots presented in the Supplemental Appendix, and even in the coefficients of the constitutive terms in Table 3, neither variable is statistically significant at any level of the other variable. Conversely, in Model

3, where equidistant voters are excluded, the results of the naïve interaction specification are even stronger and the direction of the interactive effect is now negative, as expected.

To overcome these limitations of fully capturing voter-party scenarios, we repeat the analyses with our relative polarization variable, which incorporates both the degree of alienation and indifference and is able to distinguish the differential effects of equidistance from one-party proximity. We run pooled models of voter turnout in round two across the 2012 and 2017 presidential elections, with and without controls for first round turnout.[18]

TABLE 4: Relative Polarization as a Consistent and Strong Factor in Turnout

VARIABLES	(1) Turnout Round 2	(2) Turnout Round 2
Relative polarization	0.0880***	0.0766**
	(0.0242)	(0.0282)
2012 election year	0.746***	0.780***
	(0.110)	(0.140)
Turnout R1		3.514***
		(0.146)
Constant	1.215***	-1.446***
	(0.0944)	(0.160)
Observations	3,441	3,441

Notes: *** $p<0.001$, ** $p<0.01$, * $p<0.05$. Results are based on logit models, where the dependent variable is turnout in Round 2. Robust standard errors in parentheses.

The results in Table 4 provide support for a conditional, relative conception of polarization in voter turnout decisions. The relative polarization variable has a statistically significant and positively signed coefficient in both models, with and without controlling for turnout in the previous round.

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[18] Unlike with Table 2, our models focus on voter turnout only in the second round, as our relative polarization measure is limited to incorporating the position of two parties.

A comparison of our relative polarization measure with the traditional party spread conception of polarization and the naïve interaction model of party spread and alienation further highlights the importance of our results. Let's return to the archetypical polarization scenario where the two parties are located at opposite extremes of the ideological space (party spread of 10). If the voter is located at one extreme, at the same point as one of two parties, the relative polarization measure for that voter would be 10. However, if that same voter were to be located in the center-right of the policy space (at point 7), relative polarization value would instead be 4. Despite the fact that the party spread is constant across these two scenarios, the results from Model 2 in Table 4 indicate that a voter's likelihood of turning out increases by 3.0 percentage points as that relative polarization values moves from 4 to 10, holding the other variables at their means. In other words, in contrast to the standard emphasis on party spread alone, it matters where the voter is located.

The advantages of the relative polarization measure also emerge when we consider the scenario of a voter being equidistant between the political options. As discussed with regard to Table 3, the naïve interaction model fails to be able to predict turnout under these conditions. Using the formula for our relative polarization variable, a voter equidistant between two parties – regardless of her distance to each party and regardless of party spread – would have a relative polarization value of 0. Returning to the scenario described above where two parties are at opposite extremes (party spread is 10), the estimates from Model 2 in Table 4 show that the voter's likelihood of turning out decreases by 8.0 percentage points as her relative polarization score moves from 10 to 0, holding the other variables at their means. Again, the voter is motivated by incentives for turning out, which are a function of her location relative to that of the parties, but just not in a way that the simple multiplication of distance to closest party and party spread can

capture. As both of these examples show, voters are mobilized by relative understandings of polarization – the attractiveness of a close party in light of the desirability of the alternative.

5.1. Sensitivity Analyses

We perform several additional tests to evaluate the robustness of these models and their findings.[19] Given the relative infrequency of respondent-reported turnout change between election rounds,[20] we rerun the analyses using rare events logit instead (See King and Zeng 2001). Relative polarization remains a positive and statistically significant predictor of turnout. The results for the standard polarization measures are less consistent: while alienation is still statistically significant, party spread is not. The positive and significant effect of relative polarization also remains if we no longer assume that our two round election set-up adequately controls for any effect of individual characteristics on turnout, and instead include demographic controls; we find that our main results do not change with the addition of variables measuring age, gender, income, education level, religious affiliation, and perception of the state of the economy.[21] Similarly, the results continue to support our relative polarization hypothesis over the interactive party spread-alienation variable when we disaggregate the data and run the models on the 2012 and 2017 presidential data separately.[22]

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[19] Full results are reported in the Supplemental Appendix.
[20] At least 80% of the voters report having turned out to vote in any given round.
[21] In these models with demographic controls, party spread emerges as statistically insignificant, whereas alienation is significant.
[22] Full results are reported in the Supplemental Appendix.

6. Conclusions

The global rise of party polarization has been a subject of concern for academics and the public. In this paper, we examine its repercussions for one of the pillars of democracy – elections. We advance a theory of turnout founded on the idea that voters are strategic thinkers: they evaluate their choices and vote when there is a benefit in doing so. In line with the rational choice calculus of voting, we argue that benefit to turnout is shaped not only by the policy spread between parties typically examined in the polarization literature, but also by where the voter stands relative to those policy options. The effect of party spread, thus, is not uniform regardless of voter distribution.

Our examination of turnout decisions in the French presidential elections confirms our hypothesis. We find that focusing primarily on the existing empirical literature's measure of party spread misses much of the story of polarization on turnout. Alienation matters too. Specifically, the effect of party indifference is mediated by the position of the voter. Using a new measure to capture the multiple aspects of party polarization, we find that relative polarization spurs turnout when one of the parties is close to the voter's ideal policy and the other party is ideologically far away. On the other hand, if the voter feels that the parties do not meaningfully represent his or her preferred policy, or if he or she perceives there to be no significant difference between the parties, the voter may choose to abstain.

Our results indicate that the effect of polarization depends on the distribution of the voters, and as a result, can change over time and across different electorates. As such, the present findings cast doubt on the reliability of previous studies (of any size party system) that evaluate the effect of polarization as party spread on aggregate turnout levels —without accounting for

voters' ideological preferences (Wilford 2017; Bumgardner 2016; Dalton 2008; Abramowitz and Saunders 2008; Abramowitz and Stone 2006; Siaroff and Merer 2002; Crepaz 1990).

While calling for a re-examination of past findings on polarization, this paper also argues for the extension of polarization work to new electoral settings, such as the multiparty systems and run-off elections that characterize countries such as France. As our results show, voters are aware of and employ information about the spread of party options and the relative attractiveness of the closest party in turning out to vote. These components of the "B" term seem to apply well outside of the two-party case typically associated with the rational choice calculus of turnout, despite the fact that the information demands in these settings might be even greater.

Highlighting the similarities in the applicability of the polarization concept across electoral settings, this analysis also suggests important differences. While we find some support for the strength of party spread when we restrict the model to a second round, two-party system, we might reasonably question what two extreme or "highly polarized" parties means for the turnout calculation of a voter in a multiparty system where there are other more centrist party options in a given round. In other words, polarization of the extremes is possibly less useful for understanding voter turnout in elections with more than two parties. Likewise, an additional scope condition behind any polarization theory of turnout, including this one, is that voters must care about the parties' policy positions. The literature has previously highlighted the important role that ideological position plays for voters in the French cases we examine (Lewis-Beck et al. 2012; Dalton and Wattenberg 2002). But, by that same logic, we might expect that a position-based theory of turnout, again including this one, would be less relevant in patronage systems, in which voters are driven to vote by the particularistic goods offered by the parties (see Nichter 2008).

Lastly, the findings of this study have important implications for broader issues of democratic health and representation. Party polarization has often been depicted in the literature as problematic because of the challenge it posits to the responsiveness and effectiveness of the government (McCarty et al. 2006; Binder 2000; Maoz and Somer-Topcu 2010; Jones 2001; Pickerill and Bowling 2014; Thurber and Yoshinaka 2015; Hall and Evans 2019). The conclusions of our research suggest however that too much party consensus (close to or far from the preferences of voters) leads to voter abstention. A significant opposition, rather, is needed to draw voters to the polls. This finding may help to explain why the adoption of centrist policies by mainstream parties in Western Europe (Dalton 2002) has been met with both declines in voter turnout (Dalton and Wattenberg 2002) and the subsequent emergence of new parties on both ends of the spectrum (Hooghe and Marks 2018). While more research is needed, our results suggest that the existence of extremist parties may be a necessary means to encourage voter participation and to preserve the representativeness of the party system for centrists and more extremist voters alike.

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