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NOTE

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From ideological congruence to satisfaction with democracy: how leverage can mitigate the ill-effects of party polarization

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ABSTRACT

The impact of party polarization on voter satisfaction is disputed. While a direct negative effect is expected, polarization has also been found to clarify party policies, with indirect positive impact. This Note proposes a more direct source of positive effects for polarization through an interaction with congruence. We use citizens' satisfaction with democracy (SwD) as the evaluation of interest; we take ideological polarization among parties and citizen-government left-right congruence as independent variables; and we use data from the Comparative Study of Electoral Systems. We find that higher polarization, while indeed detrimental to satisfaction with democracy, gives rise to countervailing effects of congruence. We borrow the geometric concept of leverage to characterize the way this interaction enhances congruence's positive effect on SwD.

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Introduction

This Research Note addresses the impact of party polarization on citizen satisfaction – a topic that is much debated, largely because it raises conflicting expectations. On the one hand, polarization is claimed to create irreconcilable differences between partisan elites (e.g. McCarty 2016), solidify disagreement between voters (e.g. McCoy, Rahman, and Somer 2018) and increasingly divide a polity (e.g. Mason 2018). A warning from Aldrich (2012, 135) suggests that polarization could even lead to growing public 'disaffection' with democracy itself – a warning seemingly prescient of recent US experience. And this is not a feature only of the American polity: Westwood et al. (2018) have reported partisan discrimination against ideologically distant opponents in parliamentary systems (Belgium Spain and the UK) as well as in the US.

On the other hand, it has also been argued that some polarization is beneficial, perhaps even necessary, if parties are to appear sufficiently distinct for voters to distinguish their

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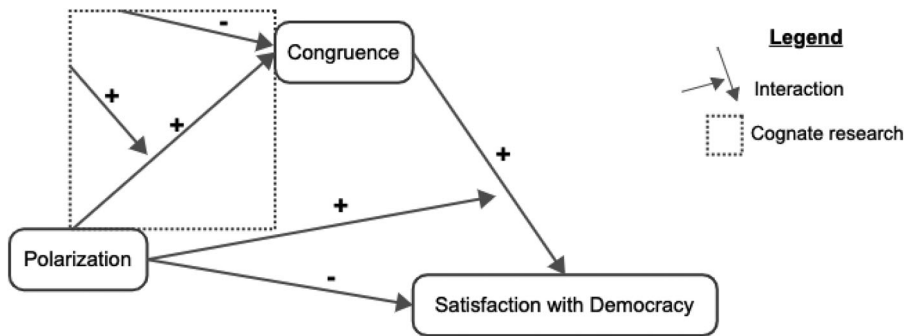


Figure 1. Theorized effects on Congruence and Satisfaction with democracy (a dotted box encloses findings reported elsewhere; +/- signs indicate the polarity of effects).

policy stances (e.g. Levendusky 2010; Lupu 2015), making it possible for congruence between voters and their elected officials to enhance citizen satisfaction cross-nationally (Kim 2009).¹

We elaborate this argument by clarifying that references to ‘enough’ polarization (in Levendusky 2010 and elsewhere) should not be taken to imply a threshold (or tipping-point) required for effective democratic governance. Rather we see effects of polarization as being explicitly a matter of degree, magnifying in a linear fashion the impact of congruence on citizen satisfaction as distinctiveness increases.²

Building on this conjecture we address an unexpected interaction, not previously theorized, between party polarization and voter-government congruence.³ With this Research Note, we hope to draw attention to this unexpected interaction, whose theoretical ramifications we describe and evaluate in a preliminary fashion, hoping to stimulate future research.

Our measure of citizen satisfaction, *satisfaction with democracy* (SwD), has been the focus of many investigations ever since Anderson and Guillory’s (1997) seminal study. Our analysis employs left-right locations of parties and voters as the most widely used means of encapsulating policy stances and preferences. We build on recent work that found party polarization magnifying the effect of ideological congruence between voters and the parties in government (Russo, Franklin, and Beyens 2020), presumably contributing to citizen satisfaction via ideological congruence as an intervening variable.

Here we highlight a different route by which party polarization can contribute to citizen satisfaction, by increasing the *leverage* (borrowing a classic concept from analytic geometry) that congruence exerts. The way this route fits into a more general picture is depicted in Figure 1. There, intersecting arrows identify constitutive terms that moderate two interactions. The left-most of these – an interaction with polarization – falls within a dotted box that encloses findings reported by Russo, Franklin, and Beyens (2020). The right-most interaction – with congruence – is the interaction that is the subject of this Research Note.

Theory and argumentation

It was long ago pointed out (Cnudde and McCrone 1966; Kuklinski and McCrone 1980) that issue salience plays a critical role in determining which issues are considered by elected representatives when making government policy. Those findings came from

analysis of US data but later research (Giger and Lefkofridi 2014) used European data to show that the same is true for voter decisions regarding which party to support.⁴

We position our investigation within this strand of issue salience theory as we propose a seemingly paradoxical role for party polarization in mitigating its own negative effects on voter satisfaction by amplifying positive effects of voter-government left-right congruence on satisfaction with democracy, as will be explained.⁵

That variable, our dependent variable, is widely employed as a measure of citizen satisfaction (for a survey see Ferland 2021; for underlying attitudes see Ferrin and Kriesi 2016).⁶ It is true that other things than democratic quality are also registered by this indicator, especially the state of the economy (Clarke, Dutt, and Kornberg 1993; Magalhaes 2016) and whether respondents' preferred parties were 'winners' in the election (Anderson and Tverdova 2001) but such effects should average out over multiple elections and respondents.⁷

Although SwD is affected by many factors that are relevant to citizen satisfaction (for a survey see Bellucci and Memoli 2012), here we focus on just one of these: individual respondents' congruence in left-right terms with the ideological profile of the government of the day – congruence that has proven to be a very reliable predictor of SwD (e.g. Kim 2009). Following Ferland (2016, 2021), we focus on ideological left-right proximity between the political positions preferred by voters and the positions taken by governments, given that governments are responsible for enacting policies that should impart voter satisfaction (or not).⁸ But, where Ferland measured the position of the median citizen, we measure the positions of individual survey respondents – what Golder and Stramski (2010) refer to as one-to-many congruence (c.f. Golder and Ferland 2018).⁹

Our primary explanatory variable is polarization. Before we move to its possible implications for SwD we should acknowledge a need to distinguish polarization of the party system (for a review, see Dalton 2008) from polarization of the electorate (Ezrow, Tavits, and Homola 2014). Both types of polarization are conceptualized on one ideological dimension, the left-right axis,¹⁰ but we treat them as separate concepts. Distinctiveness in supply-side offerings by political parties makes it easier for voters to choose between those offerings. But any similar effect of voter polarization would only apply to the demand side of electoral politics, making choice between parties no easier for voters. So we focus on party polarization because this type of polarization has implications for the salience of different issues.

It stands to reason that, if parties' policy positions are indistinguishable, salience can play no role. As policies become increasingly distinct some of them will inevitably acquire greater salience, meaning that stronger polarization will produce salient policies at greater *distance* from the point at which they are indistinguishable – distance that (in analytic geometry) is seen as producing the 'mechanical advantage' or 'moment' of a force, referred to in common parlance as 'leverage'.¹¹

Because leverage in geometry is the product of force and distance (increasing the operational effectiveness of the force according to the length of the lever), in statistical terminology it can be seen as an interaction – in our case the interaction between issue-based congruence (a force promoting government support)¹² and the polarization of the issues concerned (their distances from the political centre).¹³ So interacting congruence with polarization should provide leverage that renders congruence more effective by increasing the salience of congruent policies and thus their positive effects on SwD. Both

components of the interaction are continuous, so the interaction itself should increase in a linear fashion with increasing polarization, consistent with the meaning of the word 'leverage', more specific than 'interaction' in this regard.¹⁴

Previous research has shown that ideological congruence has a positive effect on SwD (Kim 2009; Ezrow and Xezonakis 2011) and that party polarization has a negative effect (Ezrow and Xezonakis 2011; Hoerner and Hobolt 2019). Following the surmise that party polarization might facilitate voter sorting (for a survey see Russo, Franklin, and Beyens 2020), Dassonneville and McAllister (2020) tested whether this positive aspect of party polarization is associated with higher SwD, but they also found a negative relationship.¹⁵ Our first two hypotheses are thus straightforward, and replicate prior tests for these two countervailing effect on SwD.

H1: Relative party polarization has a negative effect on SwD.

H2: Relative ideological congruence between voters and their governments has a positive effect on SwD.

Central to our theme, we also investigate the interplay between party polarization and ideological congruence, building on a longstanding intuition that party polarization facilitates clarity for voters (Lupu 2013 calls this 'party branding'), increasing party attachment (Lupu 2015). This clarity has already been found to offer voters the opportunity to elect parties better aligned with their policy preferences, potentially resulting in higher voter-government congruence (Russo, Franklin, and Beyens 2020). Here, instead, we focus on a polarization-congruence interaction that seemingly boosts voter choices in much the same way that Russo, Franklin, and Beyens (2020) found congruence itself being boosted by the interaction between voter polarization and party polarization (a boost seemingly unconnected with leverage). In doing so we step further down the causal chain to explain a boost not to congruence but to SwD itself (Figure 1 clarifies the difference between these two interactions).

H3: An interaction between congruence and party polarization can mitigate or even reverse the negative effect of party polarization on satisfaction with democracy.

We have already mentioned our view that any similar interaction with voter polarization would make it no easier for voters to choose between parties (a view that is confirmed in our online Appendix B).

Finally, our geometric view of the congruence-polarization interaction requires that the interaction be progressive in nature.

H4: The interaction mentioned in H3 is linear.

Confirmation of this fourth hypothesis would also be helpful in casting doubt on the possibility that effects of polarization involve threshold(s) or tipping point(s) that could make it hard or impossible for a polity to step back from a situation of highly polarized political contestation (Macy et al. 2021).¹⁶

Methods and data

To test our hypotheses, we rely on the Comparative Study of Electoral Systems (CSES) whose Integrated Module Dataset (IMD), constructed from CSES modules 1–4 that were

fielded between 1996 and 2016 (CSES 2018). We augment these data with CSES surveys fielded more recently as part of their Module 5. Our online Appendix A has question wordings and descriptive statistics.

Our dependent variable, *Satisfaction with Democracy* (SwD), is measured on a five-point scale. *Party Polarization* is an index (following Dalton 2008) characterizing political parties' relative left-right positions, weighted by party size (vote share at the recent election).¹⁷ The IMD studies provide left-right self-positioning of respondents and respondent placements of government parties.¹⁸ The position of the government is the average position of all parties holding government office, with each party again being weighted by its size in terms of votes received.¹⁹ *Ideological Congruence* is coded for each respondent as the inverse distance between the self-assessed left-right position of that respondent and the weighted left-right position of the post-election government, suitably adapting the median voter measure employed by Ferland (2016, 2021; see footnote 9).

Our research strategy starts by estimating the impact of election-level party polarization on SwD at the individual level. We then introduce individual-level ideological congruence and the cross-level interaction of congruence with party polarization. In this way, we can verify that the negative effect of party polarization on SwD is indeed mitigated (sometimes even reversed) by the interaction of interest.

Our country-fixed effects ensure well-specified models even without controlling for country-level aspects of election clarity but, in a third model, we add controls for election-level sources of clarity investigated by Russo, Franklin, and Beyens (2020), in case clarity and leverage are somehow related, also providing benchmarks for the strength of the interaction of interest. As already mentioned, a variety of other effects on SwD can be expected to cancel out across individuals and over time. Among these are effects of the economy (not automatically rendered harmless by our use of country-fixed effects since our data generally include multiple elections per country)²⁰ and of being a winner or loser in electoral terms – expectations confirmed in our online Appendix B.

For the sake of an intuitive interpretation, all independent variables are re-scaled 0–1 (for the lowest and highest values found empirically in our data), yielding comparable coefficients at the cost of relative rather than absolute measures.²¹

Also for the sake of an intuitive interpretation, in the main text of this Note, we employ fixed effects regression analysis. In the literature, there is an extensive debate (for an overview see Riedl and Geishecker 2014) on whether it is better to use linear regression analysis (for which some basic assumptions might be violated) or ordered logit (arguably more appropriate for an ordinal dependent variable). It is widely argued that the practical effect of violating the assumptions of a linear model is minor and that using a model whose coefficients have a straightforward interpretation outweighs the advantages of using the technically more appropriate model (Angrist and Pischke 2008).²² Moreover, interpreting the strength of an interaction effect is not straightforward when one or more of the constitutive terms is subjected to a non-linear transformation such as the logit transformation (Ai and Norton 2003), another reason for this methodological choice.

Regarding this interaction, because both constitutive terms have substantively meaningful zero points (even if those zero-points are relative rather than absolute), we refrain from centring them (see discussion in online Appendix A). In Figure 2 we graph the

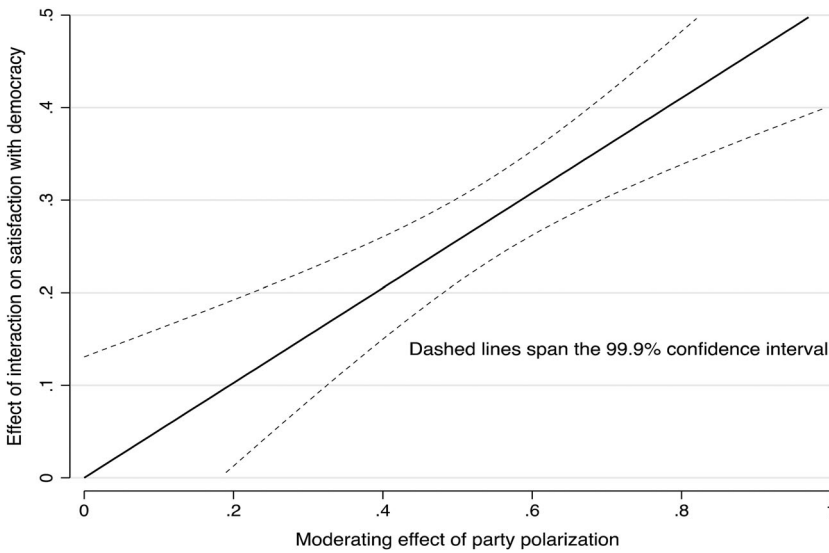


Figure 2. How party polarization affects the leverage exerted by voter-government congruence.

resulting interaction so as to verify its linearity. This also provides the check suggested by Hainmueller, Mummolo, and Xu (2019) that the marginal effect we estimate is consistent.²³

Results

Our hypotheses are tested by use of fixed effects linear regression in three different models. Model A of Table 1 shows the effects of party polarization and voter-government left-right congruence; Model B introduces the interaction between the two. Model C adds other measures of political system clarity to test for contamination by election-level forces and to serve as benchmarks. Regarding H1 and H2, the effects of both Party Polarization and Ideological Congruence are consistent with expectations: negative for *Party Polarization* and positive for *Ideological Congruence*. More importantly, the congruence-

Table 1. Fixed-effects linear regression findings for satisfaction with democracy.

Outcome: satisfaction with democracy (0-4) Inputs	Model A		Model B		Model C	
	Coef	(s.e.)	Coef	(s.e.)	Coef	(s.e.)
<i>Party and cross-level effects</i>						
Relative party polarization (0–10, rescaled)	−0.43	(0.07)	−0.44	(0.06)	−0.49	(0.06)
Relative ideological Congruence (0–10, rescaled)	0.25	(0.04)	0.22	(0.04)	0.18	(0.04)
Party polarization X Ideological Congruence			0.51	(0.07)	0.59	(0.07)
<i>Effects of political system clarity</i>						
Largest party dominance (1 – proportion gap from 0.5, rescaled)					0.18	(0.04)
Number of government (coalition) partners (0-6, rescaled)					0.33	(0.24)
Effective number of electoral parties (2-10, rescaled)					0.36	(0.03)
Intercept	2.30	(0.02)	2.08	(0.03)	1.66	(0.04)
Observations	158,220		158,220		158,220	
Number of countries	41		41		41	

Note: All coefficients significant at $p < 0.001$, one-tailed. Inputs rescaled 0–1 as needed.

polarization interaction is shown in Model B to more than match, with the opposite sign, the negative coefficient for the polarization constitutive term, supporting H3.

Because interaction effects are tricky to interpret, Figure 2 diagnoses this effect, using the method recommended by Brambor, Clark, and Golder (2006; cf. Hainmueller, Mummolo, and Xu 2019). This graph shows that effects on Satisfaction of the interaction of interest increase in linear fashion with increasing polarization, as would be expected for a geometric property, and supporting H4.

Effects on citizen satisfaction are hard to discern in such a graph, so next, we display a marginsplot that clarifies the effect of the interaction on satisfaction with democracy itself.

In Figure 3 we see that, when party polarization is at its maximum, SwD stands at around 1.6 on its 5-point scale (left-most point for polarization = 1, the lowest line) unless congruence is non-zero. With higher levels of congruence, satisfaction with democracy is greater but the effect of polarization is reduced (the three lines showing effects on SwD at three different levels of polarization converge with higher congruence). At maximum congruence, the three lines take on identical values and polarization has no effect at all.

It might be asked whether the number of respondents in the upper right quadrant of Figure 3 is sufficient for these effects to be very meaningful. Figure 4 addresses this question by aggregating the interaction's effects to the country level and plotting the positions of those countries according to their values on the two components of the interaction. This graph shows no countries falling in the upper-right quadrant, suggesting that indeed this quadrant is sparsely populated.²⁴ But Figure 4 displays additional information about each country that puts this appearance into context. Solid points identify countries where the effect of the interaction is statistically significant at the 99.9 percent level of confidence

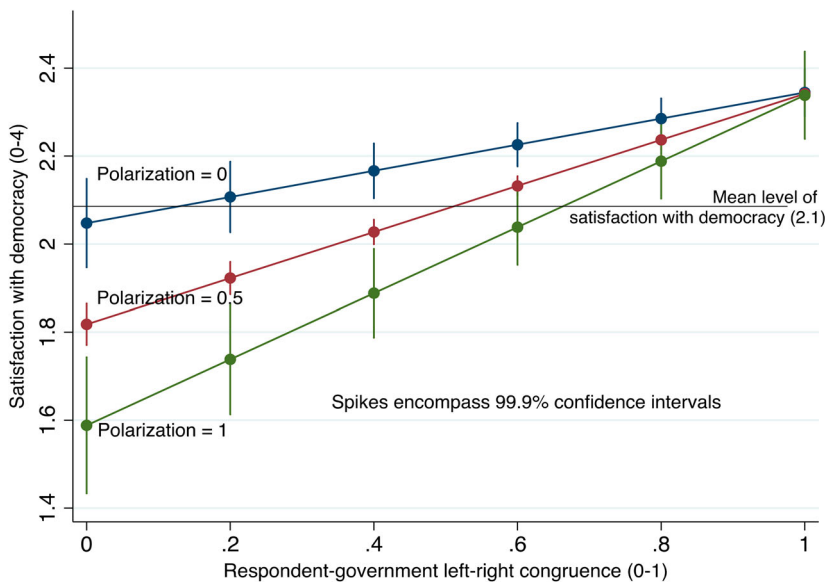


Figure 3. Satisfaction with democracy for chosen values of party polarization.

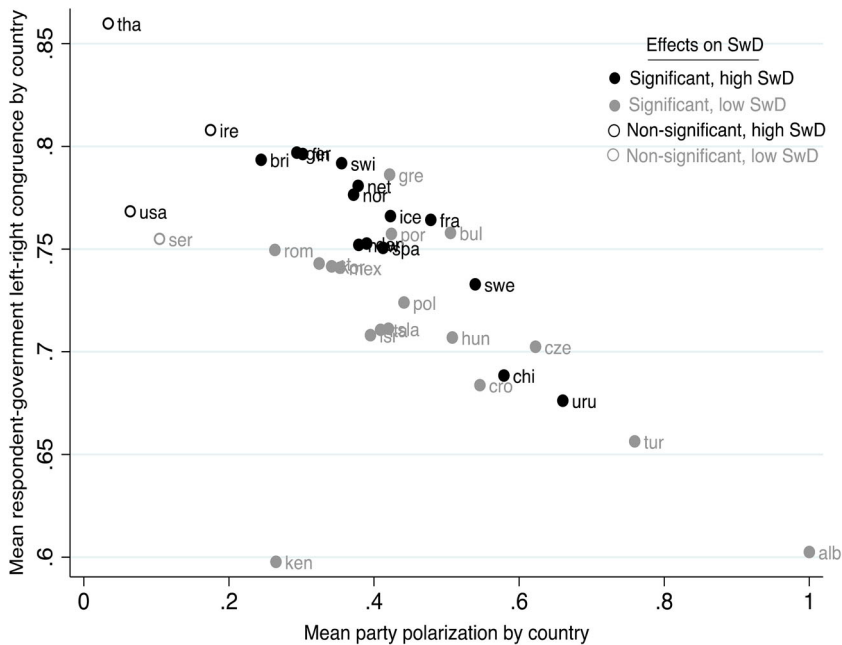


Figure 4. Countries labelled according to effects on SwD and arranged according to mean party polarization and mean respondent-government congruence.

for at least half that country's respondents; hollow points identify the few countries with lower levels of congruence.²⁵ Dark labels identify countries with above average SwD; lighter labels identify countries with lower SwD. As can be seen, significant effects of the interaction (which correspond to effects that would raise SwD from its mean value to about the highest value we see in Figure 3) are widely distributed among countries with high and low SwD (dark and light solid circles are interspersed pretty much at random along the diagonal where highest levels of the interaction are found). So what Figure 4 shows is a well-behaved analysis whose findings are widely applicable.

A number of robustness checks are detailed in our online Appendix B. In brief, we (a) establish that multicollinearity is not a problem; (b) replicate our findings using mixed effects regression, dynamic error correction models and ordered logit; (c) replicate our findings when controlling for economic conditions and individual-level correlates of SwD; and (d) support our choice of party polarization rather than voter polarization as the moderator for our interaction of interest. We also demonstrated that our findings are robust (e) to the use of alternative strategies for measuring and weighting party locations and (f) to differences between parliamentary and presidential regimes. Finally, we provide (g) reasoning and findings that support our use of individual-level respondent locations rather than median voter locations when constructing the voter-government congruence measure.

Discussion

In this Note, we have examined to what extent negative effects of party polarization on satisfaction with democracy (SwD) are mitigated by polarization's countervailing effects

in interaction with voter-government congruence. We established that, given sufficient voter-government congruence, this interaction can effectively cancel out the deleterious effects of the polarization constitutive term.²⁶

We see the boost to the effects of congruence as coming from additional *leverage* – using a term borrowed from analytical geometry – that congruence gains from higher polarization. This leverage seemingly provides additional salience to congruent policies, rendering them more effective in raising SwD. We believe that our conjectural conceptualization is original to this Note and recommend our usage as clarifying the otherwise ambiguous nature of interaction effects, which might involve thresholds (tipping points) rather than leverage.

The novelty of our conjecture regarding leverage does not put our substantive finding into question. Indeed, by failing (at a high level of confidence) to reject hypotheses based on the conjecture, we provide indirect support for the conjecture itself. We hope our example may stimulate similar clarifications regarding interaction terms in this and other research settings.

Elsewhere it has been suggested that polarization provides an aspect of political system clarity (Russo, Franklin, and Beyens 2020). And this may sometimes be the case, but not (we think) in this instance. We rather see the polarization-congruence interaction as a function of leverage than of clarity. For calibration purposes, Table 1's Model C puts this interaction into the context of effects on SwD that *do* derive from theorized aspects of political system clarity (see online Appendix A for details of these). The most powerful of the relevant coefficients is no stronger than the coefficient for the polarization-congruence interaction, emphasizing the latter's substantive importance.

Our findings might seem to suggest the possibility that democracies can function as well or better (as judged by their citizens) with high party polarization as when party polarization is low. However, we do not address substantively negative effects of polarization, which could remain debilitating even as levels of (dis-)satisfaction cancelled out across citizens with different substantive concerns. Even to the extent that our prognosis might sound encouraging, it comes with an important caveat. Positive effects of polarization depend on the well-functioning of democracy in countries threatened by polarization's potential ill-effects. Only where voter-government congruence is well above minimum does the mitigating effect of polarization become palpable. Democracies weakened by low voter-government congruence may be relatively few (see footnote 26) but such countries are not protected from the deleterious consequences of polarization laid out by Aldrich (2012) in a seemingly prescient warning summarized in the opening paragraph of this Note.

Recent US experience might suggest to some that well-functioning of democracy in the face of high polarization can be difficult to achieve; but what we see in Figure 4 comes as a surprise in this regard: the United States with party polarization that is almost the lowest anywhere, at least during the period covered by our surveys (see online Appendix Table A1). Yet that Figure also shows the US having relatively high SwD. Because an interaction whose conditioning term is low will itself have little effect, SwD in the US does not get a boost from leveraging the relatively high voter-government congruence shown for that country in Figure 4. So high SwD in the US cannot be explained on the basis of our theorizing. Rather, the situation of

the United States should remind us that, overall, satisfaction with democracy is affected by far more than just polarization and congruence, as this Note has incidentally made clear.

Notes

1. It might seem that, if congruence is what is at issue, this would be maximized when polarization is zero since, then, all parties would be equally proximate to voters. In practice, we find no polity in the CSES data we employ for which measured polarization is that low (just as well, since democracy is supposed to be centrally concerned with competition between different policy proposals, implying that some polarization is essential for functioning democracies). And, we already know that increases from low levels of polarization yield greater satisfaction (Dalton and Anderson 2011).
2. Worth noting is that an interaction whose individual constitutive terms are linear can itself be non-linear. We see polarization as having initially negative net effects that have the potential to become positive in the presence of sufficient voter-government congruence. But we will argue that this is not because polarization is conditioned by congruence. Indeed, in our theory section, we will postulate the reverse: a previously untheorized interaction in which polarization magnifies the previously established effect of congruence.
3. The interaction was noticed in the course of cognate research. In principle, a positive interaction will enhance both poles of the scale being modified; but congruence has no negative pole to be enhanced. The interaction of interest can only magnify any positive effect of congruence.
4. The literature does not distinguish between the US and other countries when theorizing the structure of effects involving congruence and SwD. Our own interest is mainly in parliamentary systems but the US case is central to the literature we cite. Although we show the US to be a somewhat special case, still the theorizing we report in regard to that case seems to also apply elsewhere.
5. This involves an interaction and, because the strength of an interaction depends on values of both constitutive terms, the mitigation we theorize requires levels of congruence somewhat above zero.
6. Ferrin (2016, 306) reports that 'SwD seems to provide a relatively reliable measure of citizens' perceptions of how well the liberal dimension of democracy works in their country'.
7. Our online Appendix B tests for contamination from these and other sources. Possible contamination from institutional differences is ruled out by our country fixed effects.
8. Of course, voters cast their ballots for parties, not governments; so it might be thought that the appropriate measure of congruence would be between voters and the parties they vote for, not voters and the parties that constitute their government. But our interest in this Research Note relates to satisfaction with democracy in general, not satisfaction with political parties in particular. The more appropriate measure of party satisfaction would be the support the party receives in votes (cf. Franklin and Lutz 2020). See online Appendix B's Table B5 demonstrates that more general satisfaction with democracy is *not* raised by polarization's interaction with voter-party congruence.
9. Median citizen positions can be useful stand-ins for individual positions when those are not available, but our theory posits individual-level dynamics and thus calls for individual-level data if a proper appraisal of our theorizing is to be made (see online Appendix B for further discussion on this point).
10. Caughey, O'Grady, and Warshaw 2019 propose a methodology for studying the dimensionality of European public opinion. Their online supplementary data measures the polarization of each dimension in standard deviation units. By factor analyzing these polarization measures across the four dimensions of European public opinion that they studied, we find one factor explaining 86 percent of variance in polarization, with none of the four individual polarization measures correlating less than 0.89 with that factor (see our online

Appendix C). So while public opinion evidently has several dimensions, polarization of the different dimensions apparently moves in step.

11. The word 'moment' is perhaps more widely used in political discourse but we deem 'leverage' more appropriate due to its mechanistic connotations.
12. Although references to political forces are ubiquitous, their similarity to mechanical forces in geometric terms has not (to our knowledge) extended beyond the force of inertia, examined in LeRoux and Rouant (2004, 224). These authors give more attention to geometric properties of issue dimensions (e.g. 137–139). Here, we posit geometric properties for an additional type of political force.
13. Even though we have pointed out that congruence and polarization relate to aspects of the left-right continuum that do not have substantively meaningful center-points (cf. footnote 2), still the 'political center' is a substantively meaningful position on that continuum.
14. The overall negative effects found in the absence of such an interaction are consistent with Powell's (2013) suggestion that, if party polarization were to rise while voters retained centrist positions, this would *ipso-facto* increase the distance between voters and parties, leading to reduced ideological congruence. But Powell's suggestion ignores the possibility that voters might become more polarized in step with increasing party polarization. Russo, Franklin, and Beyens (2020) showed that, when this happens, the interaction between the two forms of polarization can have positive effects on congruence. The implicitly suggested negative correlation between party and voter polarization is found in the US component of our data, but not overall.
15. These authors did not test for the interaction that motivates this Research Note.
16. These authors suggest that when constitutive effects are linear their effects in interaction remain reversible so that, even in highly polarized polities, parties would retain the power to step back from highly polarized stances.
17. Regarding alternative party weights see footnote 18. Party polarization is 0 when all parties occupy the same position on the left–right scale and 10 when their weights are evenly split between the scale's two extremes.
18. See online Appendix B contains robustness checks that use (1) different measures of left-right placements and (2) different methods of operationalizing party weights; also (3) different analysis procedures and (4) controls for possible contaminants including regime type (distinguishing between parliamentary and presidential regimes).
19. We use respondent-assessed party locations but we ignore placements that put a party at the same left-right location as the respondent making the assessment, avoiding possible endogeneity. See online Appendix B for details.
20. We cannot use election fixed effects because our measure of polarization (an election-level measure) would then be unable to show its effects because it would have no variance.
21. Measured minima for constitutive terms are well above zero (see online Appendix Table A2; cf. footnote 1), so we expect the interaction of interest to exert some leverage, even at the lowest values we report.
22. A replication of our main results using multilevel ordered logit is provided in online Appendix Table B3, along with relevant discussions regarding use of fixed effects.
23. Other requirements listed by Hainmueller et al. are shown in online Appendix A. to be equally fulfilled.
24. The appearance of emptiness, however, is an aggregation artifact (the distribution of the variable would need to be very skewed if its mean in any country was going to approach its maximum value). There are actually more than 3900 individual respondents in the upper-right quadrant, widely spread across European and Latin American countries. One hundred-fifty of them have interaction values above 0.9 (see online Appendix B for details).
25. The small number of hollow points should come as no surprise, given the positive skew on congruence shown in online Appendix Figure A4. That positive skew also explains why there are no countries in our CSES universe where mean respondent-government left-right congruence is less than 0.6 (another aggregation artifact, this time for a variable whose distribution actually *is* strongly skewed towards high values). The presence of the US among the

group of countries with robust SwD, despite low effects of leverage, is a topic for our discussion section.

26. The requirement for a relatively high congruence rate (0.6 when polarization is at its maximum) is satisfied for 75 percent of respondents that we study (Figure A4 in our online appendices). Moreover, when aggregated to the election level of analysis, the requirement (reframed in terms of average congruence) is satisfied in every one of the countries that we study.

Disclosure statement

No potential conflict of interest was reported by the authors.

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