The Diverse Impacts of Politically Diverse Networks: Party Systems, Political Disagreement, and the Timing of Vote Decisions

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When friends and family members disagree about politics, do they begin to vacillate and become demobilized? Or does a little friendly political discord aid decision-making? Recently, scholars have argued that many citizens dislike disagreement and disengage from conversation even at the prospect of encountering it (Eliasoph, 1999; Hibbing & Theiss-Morse, 2002; Hopmann, 2012; Mutz, 2002, 2006). Others, however, maintain that citizens often welcome deliberation, controversy, and compromise (Neblo, Esterling, Kennedy, Lazer, & Sokhey, 2010). In fact, exposure to some forms of disagreement might even mobilize some types of citizens (Bello, 2012; Eveland & Hively, 2009; Fitzgerald & Curtis, 2012; Huckfeldt, Mendez, & Osborn, 2004; Jang, 2009; Klofstad, Sokhey, & McClurg, 2013; Matthes, 2013; Nir, 2005, 2011; Pattie & Johnston, 2009; Therriault, Tucker, & Brader, 2011). Until recently, however, this debate has focused on the American case. In this research note, I explore data on citizens' political discussions in 22 elections in 17 countries, using three rounds of the Comparative National Elections Project (CNEP). I find that the United States is something of an outlier when it comes to the consequences of disagreement. These differences, I argue, are because of the nature of the party system.

Party systems affect the number of choices available to citizens, available information about parties, and party viability. But citizens do not absorb influences from the choice and information environment *via* osmosis; the media, civil society, and social networks mediate contextual influences. In other words, political information from network members is shaped by the party system, and in turn shapes networks' political effects (Ikeda, 2010).

I identify a paradox: In systems with fewer parties, exposure to disagreement will be simultaneously less frequent and more impactful. In a world

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where supporters of candidates and parties are distributed randomly through-out the population and networks, citizens living in deeply rooted two-party systems would encounter higher levels of copartisanship than those in multi-party systems. This copartisanship occurs because the higher the effective number of candidates or parties (ENC), the smaller the percent of the elect-orate supporting each, and the lower the probability of supporters appearing in any randomly selected group of people.

Of course, personal networks are not randomly selected. Particularly in polar-ized, segmented, or fractionalized societies, many citizens successfully segregate themselves in microenvironments, shielding themselves from disagreement. Nonetheless, the availability of a party's supporters in the population, at large, affects the extent to which they appear in social networks. Examining Germany, Japan, and the United States, Huckfeldt, Ikeda, and Pappi (2005) show that discussion with similar others (based on party support) is strongly related to electoral support. Supporters of a candidate who receives 60% of the vote are much more likely to encounter homogenous agreement than are supporters of a candidate who receives 5% of the vote. The ways nonagreement is expressed, though, vary. While the Japanese are more likely to report not knowing prefer-ences, Americans are unusually likely to perceive both agreement and disagree-ment (Huckfeldt et al., 2005; Ikeda & Huckfeldt, 2001; Mutz, 2006).

Party systems also shape the ability to make a voting decision and moderate the relationship between disagreement and timing of decisions. In multiparty/multicandidate systems, I expect making a decision to take longer and require more cognitive resources. Marketing researchers find that when choice environ-ments become more complicated, decisions become more difficult (Dhar, 1997a, b; Kahneman, Slovic, & Tversky, 1982; Palma, Gordon, & Papageorgiou, 1994; Payne, 1976; Payne, Bettman, & Johnson, 1993; Swait & Adamowicz, 2001). Though heuristics such as party are powerful aids to efficient decision-making and correct voting, such aids may be less useful in multiparty systems, particu-larly new or volatile ones (Lau & Redlawsk, 2006). Experimental studies in the United States show that Americans who follow decision protocols to thoroughly consider a wide range of political options exhibit confusion, lower levels of voting in line with their interests, and lower inclination to vote at all (Barker & Hansen, 2005; Lau & Redlawsk, 2001, 2006; Miller, 2013). Furthermore, just as multi-partism can delay decision-making, so can exposure to countervailing opinions within the personal information environment. Many recent studies show that such exposure through interpersonal networks and the media substantially pro-longs voting decisions during campaigns, and that late decisions may be of poorer quality (Box-Steffensmeier, Dillard, Kimball, & Massengill, 2015; Dilliplane, 2011; Fulton & Ondercin, 2012; Kogen & Gottfried, 2011; Lisi, 2010; Matthes, 2012; Matthes & Marquart, 2015; Mutz, 2002; Nir & Druckman, 2008; Orriols & Martínez, 2014). Nonetheless, in multiparty systems, citizens

may be less likely to expect their discussants to vote the same way as they do and effectively become inured to disagreement. This may be in part because of the fact that in multiparty systems networks, members can choose different candidates or parties yet cluster closely in ideological terms.

Thus, this research note contributes to a growing body of research arguing that political institutions shape the nature and consequences of political discussion. Fitzgerald and Curtis (2012) show that proportional electoral systems attenuate the impact of parental disagreement on political engagement. Nir (2012) finds that in countries with more competitive electoral districts, political discussion is more plentiful and is distributed in a more egalitarian fashion. Are party systems social institutions or are they themselves simply a product of social cleavages that also shape personal networks? Though at critical moments, social processes may shape both electoral and party systems, an empirical regularity dates to Duverger (1972): Party systems are, in large part, a product of electoral rules (see also, Benoit, 2006; Clough, 2007; Colomer, 2005; Riker, 1982; Sartori, 1997; Singer, 2013). Here, for the sake of parsimony, I treat party systems as exogenous.

This discussion leads to the following hypotheses:

H1: The number of parties/candidates in a political system will be positively associated with the levels of disagreement and negatively associated with the levels of agreement in social networks.

H2: In the two-party context, agreement (disagreement) will be associated with lower (higher) political engagement; these effects will be attenuated in the multiparty context.

Data and Measures

I test these hypotheses using public opinion data from 22 elections in 17 countries studied in the first through third rounds of the CNEP: Bulgaria (1996), Chile (1993 and 1999), Germany (1990), Greece (1996), Hong Kong (1998), Hungary (1998 and 2006), Italy (2006), Japan (1993), Mexico (2006), Mozambique (2005), Portugal (2005), South Africa (2004), Spain (1993 and 2004), Taiwan (2005), the United Kingdom (1992), the United States (1992 and 2004), and Uruguay (1994 and 2004) (Magalhães, 2007).[1] Given the multilevel structure of the data, I develop mixed models, using a random intercept

[1] I downloaded publicly available data from http://www.cnep.ics.ul.pt/content/02-data/index.htm. CNEP II also included Italy, but I was unable to include this election because of serious problems in the publicly available data. The codebook did not correspond to the database available online, and variable names and values were not labeled in a comprehensible fashion within the database. CNEP III also included Indonesia (2006) and Greece (2004), but I am unable to include those countries because respondents were not asked about discussants' vote choices. In addition, CNEP II surveyed both West and East in the time of the just-unified Germany. However, I use data only from West Germany because the German investigators chose not to ask about parties in East Germany, presumably because of concerns that the new democratic party system had little coherent meaning for the electorate in that half of the country.

at the country-election level (Gelman & Hill, 2007; Steenbergen & Jones, 2002).

These surveys span four continents and 16 years, providing an opportunity to examine the determinants and consequences of democratic disagreement across a great range of political, development, cultural, and media contexts. The CNEP is an unrivaled source for studying citizens' discussion patterns across the globe. In each country, respondents were asked a series of questions about their spouses and others with whom they discussed "important matters." In a handful of studies (United States 1992, United Kingdom 1992, Germany 1990, Japan 1993, and Portugal 2005), respondents were not asked explicitly about spouses, but received questions on up to five discussants; in these cases, I code data for the spouse if the respondent named a spouse as any discussant. In addition, in Chile (1999) and Italy (2006), respondents were asked about discussions with spouses but not nonspouses. In the multivariate analysis presented here, I assess the determinants and consequences of conversations with first-mentioned nonspouse discussants; this allows me to include the unmarried, who may differ in important ways from the married. In the Supplementary Appendix, I present results for spousal dyads.

First-Level Variables

Based on respondents' reports, I code *frequency of political discussion* with the named discussant on a 0–1 scale, as well as a categorical variable for whether discussants *agreed* with the main respondent's vote choice, *disagreed*, or had *unreported* vote choices in the most recent presidential/general elections (see the Table A1 in the Supplementary Appendix for further information). Because preferences are measured using reported votes, agreement and disagreement can be coded only for main respondents who voted; discussants with no/unknown vote choices are included.[2] I treat agreement, not knowing, and disagreement as nonordered rather than ordinal, in part to make interpretation more intuitive. More importantly, these may be affected in various ways by social context. For instance, compulsory voting is expected to increase both agreement and disagreement, and uncertainty avoidance to decrease them; yet multipartism may decrease agreement and boost disagreement. This categorical variable is also expected to have nonlinear effects on decision timing under multipartism.

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[2]The fact that more than half of respondents in a number of countries fail to report the vote choices of the discussants they mention could lead to problems of selection bias. Unfortunately, no Heckman selection models have been developed for hierarchical data, and estimation of a selection model is, in any case, outside the scope of this brief research note. Nonetheless, in an attempt to assess the extent to which results are biased by selection factors that affect reporting of discussants' votes, I estimated a preliminary selection model that is reported in Table A6 in the Reviewer/Supplementary Appendix. Based on this model, I fail to reject the null hypothesis of no selection bias. Further exploration of this issue remains for further investigation.

There are two limitations to the measures of agreement and disagreement. First, we must rely on respondents' accurate reporting of discussants' vote choices. Second, the vote-based measure represents just one aspect of social exposure to diverse and conflictual political opinions. As Klofstad et al. (2013) show in the American case, divergence on party choice is less intensely conflictual than some other forms of interpersonal political disagreement. Discussants may not always perceive differing vote choices as in conflict, particularly in multiparty systems with several candidates or parties within an ideological bloc. Nonetheless, divergence on perceived vote preference, undoubtedly, represents a key aspect of disagreement, and has been used in many other studies in this line of literature (e.g., Bello, 2012; Huckfeldt et al., 2004; McClurg, 2006; Morales, 2010; Mutz, 2002; Nir, 2005).

I assess the extent to which these discussion characteristics affect the length of time respondents took to make a decision about which candidate/ party to support. *Decision time* is based on respondents' reports of when they made a decision about which candidate to support—from several months before the election to the day of the election. Responses within each country are recoded on a 0–1 scale, with higher values representing later decisions. In the analysis reported here, I also control for *socioeconomic status (SES)*, *newspaper*, and *television* attention (each recoded on a 0–1 scale); indicators for *female* gender and *age-group* (18–29, 30–44, 45–64, or $\geq$65 years); and an index of *political interest* that is standardized within each country.

Second-Level Variables: Party System, Culture, and Compulsory Voting

I code party system measures based on respondents' general election candidate/party preferences. The ENC in each election is based on the Laakso–Taagepera index (Laakso & Taagepera, 1979); it is coded using the formula:

$$\text{ENC}_k = 1/\sum\nolimits_{ik=1}^{j}(\text{p}_{ik}^2)$$

where k represents the country, and p_{ik} is the proportion of survey respondents supporting party i in country k, and where parties in country k range from 1 to j (See Table A1 in the Supplementary Appendix for the election-year scores). I use the survey data to calculate ENC to reflect the actual choice environment available in the CNEP surveys and to account for any idiosyncrasies in samples or in respondents' selective memories of elections that would have led to somewhat different candidate spaces than in the actual electorate on election day.

On the one end, Uruguay's (at the time) factionalized party system led it to have the highest ENC, with 4.7. Systems with three or more candidates included Germany, Greece, Hungary, Hong Kong, Italy, Mexico, Portugal,

Spain, Taiwan, and the United Kingdom. The 1992 U.S. election was unusual in that it included a prominent third-party candidate, Ross Perot, and had 2.7 effective presidential candidates. At the low end, Mozambique's 2005 election included just 1.2 effective parties.

Multivariate analysis also includes three other contextual variables. *Compulsory voting* is measured for each election by International IDEA (2015). Under compulsory voting, many voters may be more likely to report their discussants' votes. In an attempt to account for cultural attitudes toward avoiding conflict and social accommodation, I used Hofstede's (2001) measures of *uncertainty avoidance* (recoded from 0 to 1 for consistency with most of the other variables), and included an indicator variable for *Confucian* culture.
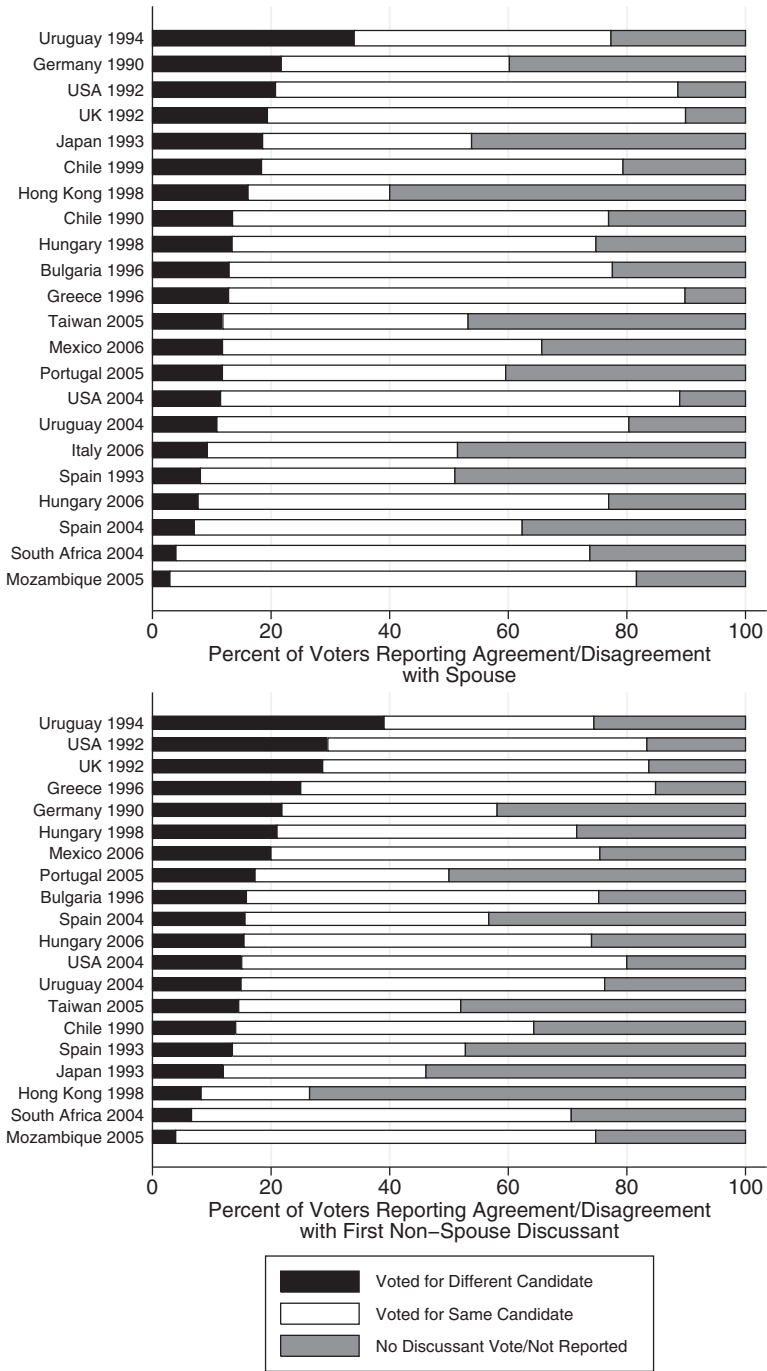
Results

I begin the empirical analysis by describing patterns of agreement and dis-agreement across countries. I then examine how those patterns are associated with the party system. Finally, I test whether the effects of disagreement on vote timing vary by the party context.

Figure 1 indicates there is great variation in the extent to which citizens report agreement and/or disagreement with their closest discussants' vote choices. In Mozambique in 2005, the United States in 2004, and Greece in 1996, three quarters of married voters reported that they and their spouses had supported the same candidate. And at the other end, only a quarter of voters in Hong Kong in 1998 did so. The experience of disagreement is relatively rare. More than a third of Uruguayans in 1994 reported that their spouses voted for a different presidential candidate, while about a fifth of Germans, Americans, British, and Japanese did so in the 1990s. Meanwhile, fewer than 5% of Mozambicans and South Africans reported that their spouses supported a different candidate in the 2005 and 2004 elections. For nonspouse discussion dyads, levels of reported agreement were lower, and both disagreement and nonreporting higher; the cross-country patterns, how-ever, were quite similar to those for spouses.

With a limited number of cases, any attempt at generalization is specula-tive. Nonetheless, response patterns appear to be grouped in interesting ways across world regions. The three East Asian countries have, by far, the lowest rates of reporting discussants' vote choices. Consequently, these countries report low rates of both agreement and disagreement. In contrast, the two African countries, Mozambique and South Africa, have low levels of disagree-ment and high levels of agreement. Of course, these two southern African countries could be clustered together simply because they both have low ef-fective numbers of candidates, limiting the availability of disagreeing discus-sion partners.

Figure 1

Agreement and disagreement across elections

Percent of Voters Reporting Agreement/Disagreement
with Spouse

Percent of Voters Reporting Agreement/Disagreement
with First Non–Spouse Discussant

■ Voted for Different Candidate
□ Voted for Same Candidate
▨ No Discussant Vote/Not Reported

Is party monopoly at the country level associated with a lack of exposure to divergent opinions within individuals' social networks? And how does multipartism condition the impact of agreement and disagreement on timing of vote decisions? In Table 1, I present three hierarchical linear models. The first two columns present coefficients from a hierarchical multinomial logistic regression model assessing determinants of having a nonspouse discussant with agreeing, disagreeing, and unknown vote preferences (agreement is the baseline). The final columns present two multilevel models, which examine how agreement and disagreement, the party system, and the interaction between the party system and discussion characteristics together influence the timing of voting decisions.

The multinomial model indicates that the higher the ENC, the more likely one is to have a discussant who disagrees or has unreported preferences; the party system more strongly affects disagreement than nonreporting. In countries with compulsory voting, citizens are more likely to know discussants' candidates, while those in uncertainty avoidant and Confucian cultures are less likely. Compulsory voting boosts reporting of differing views, but in Confucian cultures respondents are less likely to report disagreement. At the individual level, women and older citizens are more likely to report agreement, while those with higher media attention, political interest, and SES are more likely to report both agreement and disagreement.

In Figure 2, I find a strong bivariate country-level relationship between the ENC and the percentage of citizens reporting agreement or disagreement. Below about 2.5 effective candidates/parties, more than half of voters in a country can be expected to report agreeing with their first nonspouse discussant. Beyond about 3.8 effective candidates/parties, fewer than 40% of voters are expected to do so. Meanwhile, rates of exposure to disagreement rise dramatically across the range of this party system variable, from nearly nonexistent to over a third of voters.

The third and fourth columns assess the impacts of discussion frequency, political agreement/disagreement, and the party system on timing of vote decisions: The third column presents noninteractive effects and the fourth presents interactive ones. In the noninteractive analysis, across all countries, exposure to both agreement and disagreement reduces the time to make a decision relative to not knowing a discussant's preference. The coefficient for agreement is significantly larger in magnitude than that of disagreement. Discussing politics frequently also reduces the time needed to make a decision. In addition, the ENC is strongly related to timing of voting decisions; across the range of this variable (from 1.2 to 4.7), party system is associated with a 25% increase in decision time. In the final column, however, the cross-level interactions convey an important nuance: The effects disagreement on timing of vote decision vary strongly across party systems, but the effects of agreement do not.

Table 1
Determinants of Agreement/Disagreement With Nonspouse Discussant, and of Decision Time

Independent variable	Discussant 1 vote		Time to make decision	
	None/unreported	Different		
Same vote as Discussant 1			−0.074*** (0.007)	−0.052 (0.031)
Different vote from Discussant 1			−0.038*** (0.009)	0.191*** (0.043)
Frequency of discussion with Discussant 1			−0.061*** (0.011)	−0.077*** (0.010)
ENC × Agreement with Discussant 1				−0.004 (0.011)
ENC × Disagreement Discussant 1				−0.073*** (0.014)
Country/election-level				
ENC	0.163*** (0.043)	0.804*** (0.052)	0.065*** (0.017)	0.107*** (0.010)
Compulsory voting	−0.401*** (0.089)	0.606*** (0.100)	0.002 (0.030)	0.022* (0.009)
Uncertainty avoidance	1.944*** (0.105)	−0.216 (0.120)	−0.565*** (0.062)	−0.726*** (0.016)
Confucian culture	0.825*** (0.080)	−0.572*** (0.109)	−0.023 (0.039)	0.010 (0.013)
Female	−0.119*** (0.034)	−0.172*** (0.045)	0.022*** (0.006)	0.018** (0.006)
News from newspaper	−0.182*** (0.044)	0.149** (0.056)	−0.007 (0.008)	−0.015* (0.008)
Television news	−0.264*** (0.050)	0.362*** (0.066)	−0.018 (0.010)	0.011 (0.009)
Political interest	−0.394*** (0.018)	−0.134*** (0.024)	−0.006 (0.003)	−0.013*** (0.003)
SES index	−0.085*** (0.018)	0.090*** (0.023)	−0.014*** (0.003)	−0.015*** (0.003)
Constant	−1.339*** (0.104)	−3.244*** (0.144)	0.632*** (0.048)	0.636*** (0.028)
Number of observations	18,540		14,135	14,135
Number of countries	20		18	18
Log likelihood	−17,438.49			
R^2			0.17	0.18

Note. ENC = effective number of candidates; SES = socioeconomic status. Cell entries are coefficients and standard errors (in parentheses) from hierarchical multinomial regression and hierarchical regression models with country–election random effects. Indicator variables for age-groups are omitted from the table. Coefficients are significant at *p < .05; **p < .01; ***p < .001.

Figure 2

The impact of effective number of candidates on citizens' experiences of agreement and disagreement
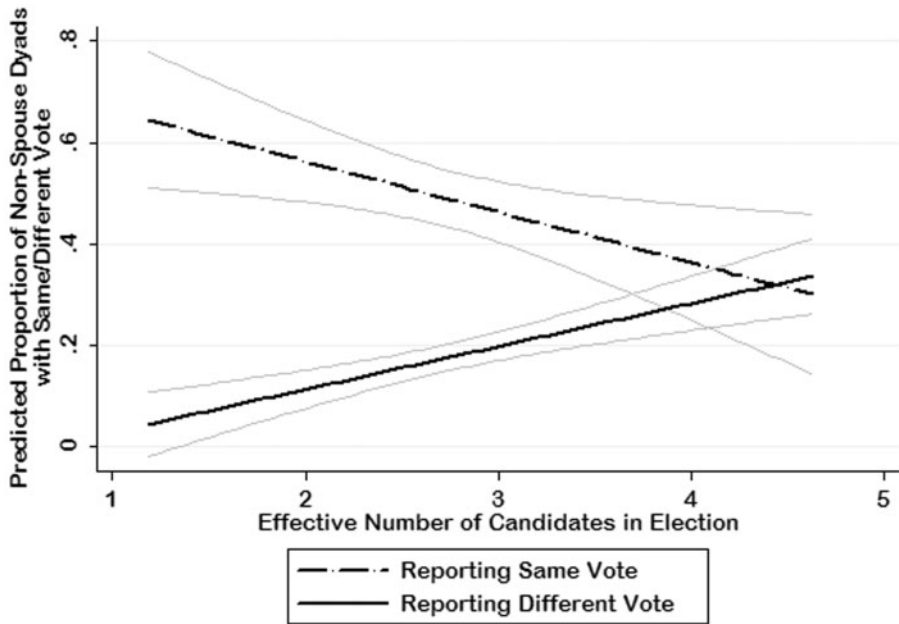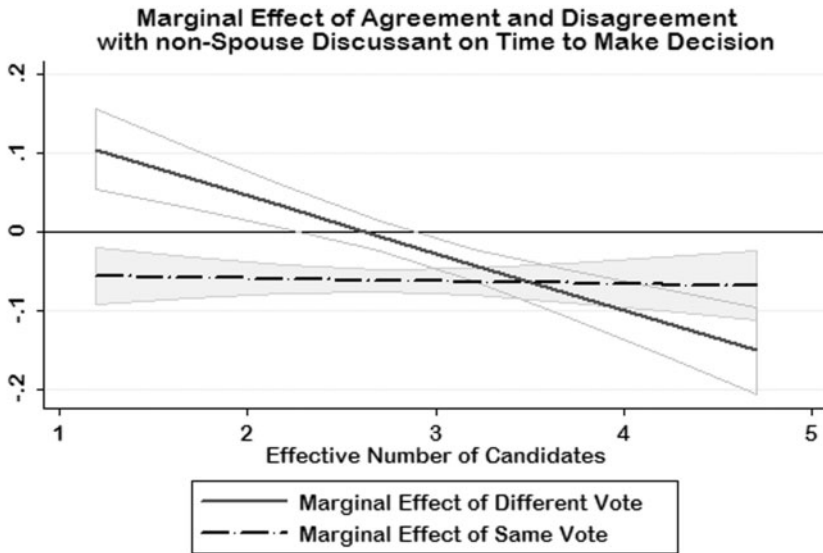

Note: Solid light gray lines represent 95% confidence intervals of estimates.

In Figure 3, I present graphics that illustrate these key interactive results. The figure shows that experiencing agreement, rather than not knowing a discussant's preferences, slightly reduces decision-making time in all countries regardless of the party system. However, the impact of disagreement on decision time varies dramatically. In systems with few parties/candidates, citizens who experience disagreement exhibit delays in decision-making relative to those who do not know a discussant's preferences or experience agreement. At a little over two effective parties/candidates, however, disagreement's impact on decision-making becomes statistically indistinguishable from that of not knowing a discussant's preference. And at a little over three effective parties/candidates, the impact of disagreement becomes indistinguishable from that of experiencing agreement. In these multiparty systems, both agreement and disagreement reduce decision-making time, relative to not knowing a discussant's preference.

Other results from the final two columns also mention discussion. Hofstede's (2001) measure of uncertainty avoidance is strongly related to timing of vote decisions; in uncertainty avoidant cultures, citizens apparently make decisions early in campaigns. At the individual level, women take

Figure 3
Interaction between effective number of candidates and agreement with discussants in predicting decision time

Marginal Effect of Agreement and Disagreement
with non-Spouse Discussant on Time to Make Decision

Note: Solid light gray lines represent 95% confidence intervals of estimates.
Omitted category is discussant having an unknown/blank/no vote preference.

slightly longer to make decisions, while older people appear to make decisions somewhat more quickly.

Discussion and Conclusion

How does encountering political disagreement in one's close relationships affect engagement with elections and decision-making processes? Scholars have rightly recognized the importance of this question for both democratic theory and practice and have devoted a great deal of academic energy to untangling the answer in the American case. In the cross-national context, a few studies have attempted to explain cross-national variation in the experience of disagreement or in disagreement's effects (Fitzgerald & Curtis, 2012; Ikeda & Huckfeldt, 2001; Huckfeldt et al., 2005).

In this research note I take up this task, using the largest data set available on egocentric networks around the world. These data reveal that the amount of exposure to agreement and disagreement varies substantially around the world, though overall levels of disagreement are low. Attempting to explain this variation, I have pointed to the nature of the party system. In systems with lower numbers of parties or candidates, the experience of disagreement is

less common. At the same time, though, when citizens in such countries encounter divergent preferences, those preferences more strongly shape citizens' interaction with the political system.

Of course, other country-level factors may also affect social network composition and condition network effects. While the data set used here represents an exceptionally broad cross-national study of egocentric networks, the still relatively low number of units at the country level makes it more difficult to determine what country-level factors explain network characteristics. Nir (2012) has suggested that electoral system's competitiveness affects the frequency of discussion, though she does not address the levels or effects of disagreement. A different possibility relates to political culture and cultural psychology. For instance, as discussed above, Figure 1 suggests that world regions might relate to differences in social networks, political discussion, and the expression of disagreement. The multivariate analysis hints that there may be many country-level determinants of discussion patterns, both institutional and cultural. It remains for future analysis to elucidate these determinants more fully.

The theory and findings presented here point the way to future avenues of investigation. Beyond the need to verify these results in broader cross-national samples, an important incipient research agenda seeks to clarify more generally how social network effects that have been identified predominantly in single-country studies vary across the world, and why. Moreover, these results suggest the importance of laboratory-based experimental work. Future research might leverage discussion groups in the laboratory. Using simulated election campaigns and varying institutional parameters such as the number of candidates or electoral rules, the researcher can examine how institutions shape the nature and outcomes of political discussions within groups. For the moment, it is clear that the nature of political discussion, its determinants, and its effects on other forms of political behavior vary dramatically around the world, and that such variation deserves sustained investigation.

Supplementary Data

Supplementary Data are available at IJPOR online.

Acknowledgments

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