The Space Between: How Ideological Similarity Limits the Effectiveness of Ambiguity

Overview

This *Appendix* provides robustness checks, alternative specifications, and empirical models that are referenced in the manuscript.

Actual Distance

In the manuscript we show that the ability of voters to distinguish parties' ideological positions influences the effectiveness of ideologically ambiguous messaging strategies. While we control for respondents' perceived distance from the party, it may also be the case that the actual distance from the party shapes party vote. We create *actual distance*, which measures the absolute difference between the respondent's left-right self-placement and the party's "true" position based on expert judgments from the CSES. In Table 1 we display Models 1 and 2 from the manuscript and then Model 3, which exchanges the *perceived distance* for the *actual distance*.

Table 1 shows that the key findings from the manuscript are robust to the addition of this variable. The magnitude, signs, and levels of confidence for the coefficients are similar across Models 2 and 3. Moreover, the marginal effects figures (Figures 1-2) echo the support found for our last three hypotheses: there is (largely) a positive relationship between *ambiguity* and *party vote* (*Ambiguity Hypothesis*) and *ideological overlap* shrinks the positive impact of *ambiguity* (*Ambiguity Limits Hypothesis*), and *ideological overlap* has a negative effect on *party vote* for nearly all values of *ambiguity* (*Ideological Overlap*)

	Model 1	Model 2	Model 3
Ambiguity	-0.68^{***}	1.81***	1.85***
	(0.04)	(0.12)	(0.10)
Ideological Overlap	-2.98^{***}	3.04^{***}	3.50^{***}
	(0.12)	(0.29)	(0.25)
Ambiguity \times Ideological Overlap	1.15***	-2.41^{***}	-2.60^{***}
	(0.06)	(0.16)	(0.14)
Partisan	-0.39^{***}	2.59***	2.73***
	(0.01)	(0.02)	(0.02)
Likeability	-0.44^{***}	0.70***	0.78***
	(0.00)	(0.00)	(0.00)
Actual Distance	0.26***		-0.06^{***}
	(0.00)		(0.01)
Perceived Distance		-0.34^{***}	
		(0.01)	
Intercept	6.43^{***}	-8.61^{***}	-9.78^{***}
	(0.09)	(0.23)	(0.20)
AIC	1727059.61	125728.79	132181.39
BIC	1727157.97	125813.86	132266.55
Log Likelihood	-863520.81	-62856.39	-66082.70
Num. obs.	411904	306659	310238
Num. groups: ccses	125	102	102
Var: ccses (Intercept)	0.19	0.81	0.81
Var: Residual	3.87		

Table 1: Multilevel analysis of the interactive effects of *ambiguity* and *ideological overlap* on *perceived distance* (Model 1) and *party vote* (Models 2-3): controlling for actual distance from the party

Note: dependent variable is absolute distance of self placement to the party's placement (Model 1) and vote for party j (Models 2-3).

***p < 0.01; **p < 0.05; *p < 0.1

Hypothesis). The key results in the manuscript are therefore robust to the decision of including either *perceived distance* or *actual distance* in a model of party support.

Figure 1: Marginal effect of *ambiguity* on *party vote* across *ideological overlap* (Model 3)



Figure 2: Marginal effect of *ideological overlap* on *party vote* across *ambiguity* (Model 3)



Ambiguity as Perceptual Disagreement

In the manuscript we measure party-level ambiguity with "brand dispersion", which measures the standard deviation of the distance of voters' placements of a party from the party's true position. As a robustness check we also calculate ambiguity with the perceptual agreement score (Van der Eijk, 2001), reversed so that higher values reflect more disagreement about the parties' positions (called *perceptual disagreement*). We expect that both measurements of ambiguity will provide similar results because they both tap into the amount of disagreement that voters have about party positions, which arises partly from the electoral strategies that parties employ. In Table 2 we replicate the models in the manuscript with the exception that we measure ambiguity with *perceptual disagreement* rather than *brand dispersion*. While both measures of ambiguity are scaled so that higher values mean greater ambiguity, the different ranges of the variables (*brand dispersion* ranges from 1.2 to 3.9 while *perceptual disagreement* ranges from -0.83 to -0.06) make directly comparing the coefficients (especially the coefficient for *ideological overlap*) difficult.

Figure 3 shows that the effects of *ambiguity* on the perceived proximity of a party depends on the degree of ideological crowding in the party landscape. At lower levels of *ideological overlap* ambiguous messages decreases *perceived distance* from the party; the same ambiguous messages will backfire if *ideological overlap* is greater than about 0.8, making it seem like the party is further from the respondent. Figures 4-5 show that measuring ambiguity with *perceptual disagreement* does not change our conclusion about the moderating effects of *ideological overlap*; Figure 4 shows that the effect of *ambiguity* depends on *ideological overlap*. While the shape of the marginal effects plot is similar to the one shown in the manuscript – revealing the conditional relationship – the plot is shifted downward. The implication is that the range of ideological landscapes where *ambiguity* actually increases electoral support is reduced considerably. Rather than benefiting parties with values of *ideological overlap* lower than about 0.65, Figure 4 suggests that the threshold is closer to 0.4 (and this is estimated with a higher degree of uncertainty). Moreover, greater *ideological overlap* between parties reduces the probability of *party vote* at all levels of *ambiguity*. Thus we find robust evidence in favor of the Ideological Overlap Hypothesis. Altogether, measuring ideological ambiguity in different ways largely echoes the findings from the manuscript with the exception of pointing to a smaller range of ideological landscapes where ambiguity can reliably improve parties' electoral fortunes.

Table 2: Multilevel analysis of the interactive effects of *ambiguity* (measured with *perceptual disagreement*) and *ideological overlap* on *perceived distance* (Model 4) and *party* vote (Models 5-6)

	Model 4	Model 5	Model 6
Ambiguity	-3.46^{***}	0.26	0.95***
	(0.14)	(0.32)	(0.25)
Ideological Overlap	1.97^{***}	-1.91^{***}	-2.65^{***}
	(0.12)	(0.27)	(0.21)
Ambiguity \times Ideological Overlap	4.61***	-1.66^{***}	-2.99^{***}
	(0.21)	(0.43)	(0.34)
Partisan	-0.38^{***}	2.58***	2.72***
	(0.01)	(0.02)	(0.02)
Likeability	-0.44^{***}	0.71***	0.78***
	(0.00)	(0.00)	(0.00)
Actual Distance	0.27^{***}		-0.05^{***}
	(0.00)		(0.01)
Perceived Distance		-0.33^{***}	
		(0.01)	
Intercept	3.07^{***}	-5.41^{***}	-6.04^{***}
	(0.10)	(0.22)	(0.19)
AIC	1726831.43	129371.10	132323.21
BIC	1726929.79	129456.42	132408.37
Log Likelihood	-863406.72	-64677.55	-66153.60
Num. obs.	411904	316179	310238
Num. groups: ccses	125	102	102
Var: ccses (Intercept)	0.19	0.87	0.86
Var: Residual	3.87		

Note: dependent variable is absolute distance of self placement to the party's placement (Model 4) and vote for party j (Models 5-6).

***p < 0.01;**p < 0.05;*p < 0.1

Figure 3: Marginal effect of *ambiguity* (measured with *perceptual disagreement*) on *perceived distance* across *ideological overlap* (Model 4)



Figure 4: Marginal effect of *ambiguity* (measured with *perceptual disagreement*) on *party* vote across *ideological overlap* (Model 6)



Figure 5: Marginal effect of *ideological overlap* on *party vote* across *ambiguity* (measured with *perceptual disagreement*) (Model 6)



Vote Share Models

In the manuscript we find what we believe is compelling evidence that voters will heavily discount ambiguous campaign messages if the increased uncertainty makes it difficult to distinguish one party's ideological position from another. We show that *ideological overlap* conditions the effect of *ambiguity* on voters' perceived proximity to the party – making the party seem farther from the voter – and that *ideological overlap* conditions the effect of *ambiguity* on the tendency to vote for that party – reducing the probability of support for that party. An implication of this theory is that we should observe similar relationships when we aggregate to the party-level and observe party vote shares at elections. In this section, we turn our attention to empirically testing this implication. Our dependent variable is the vote share from that election, taken from the CSES data. In all models we include the previous vote share because vote shares are highly autoregressive; the best predictor of current support is the previous level of support. We include a selection of control variables to address possible confounding relationships. In Lupu's (2013) assessment, ideological convergence and ideological inconsistency diminish the level of party support. His understanding is that parties may converge by changing their platforms closer to other parties through compromises, formal and informal party alliances, all of which might make voters perceive parties to be ideologically closer to one another. Ideological convergence may have an impact on perceptions of parties and their electoral support. To show that this is an independent effect, we also use the absolute difference of the average perceived position of two parties¹ (*ideological distance*).

The illustrative examples we showed in the manuscript may give the impression that the phenomenon we described is a product of polarization itself. And while moving to the extreme ideological positions may indeed clarify the ideological leaning to the voter, and *ideological overlap* would tend to be lower, parties may become more ideologically distinct even positioning in the center by becoming less ambiguous and clarifying its position to the voter. Thus we control for polarization by generating the variable *extreme*, which is the absolute value of the party's average perceived position minus 5^2 . The variable ranges from 0 to 5, in which 0 means exactly at the center of the scale and 5 means the party is positioned at one of the extremes.

We also control for the number of parties competing in the election. More parties competing in an election may crowd the ideological space thus making it harder for parties to distinguish their relative ideological positions. However, while on average we expect there to be more ideological overlap in systems with more parties, the phenomenon we describe is independent and it does not necessarily mean that higher number of parties will always result in higher ideological overlap. To account for this effect we also included the *effective number of parties* (Laakso and Taagepera, 1979), which is calculated 1 divided

¹The *ideological distance* is constructed by first calculating the distance between every pair of parties competing in an election. The pair of parties is the same pair used to calculate the overlapping areas of *ideological overlap*.

 $^{{}^{2}|}p_{j}-5|$, in which p_{j} refers to the average position of party j in a given election.

	Mean	S.D.	Min.	Max.
Party-Level				
Vote Share	16.38	10.70	1.17	52.92
Brand Dispersion	1.92	0.40	1.20	3.89
Perceptual Disagreement	-0.56	0.11	-0.83	-0.06
Ideological Overlap	0.43	0.22	0.05	0.99
Extreme	1.73	1.03	0	4.17
Effective Number of Parties	5.65	2.67	2.00	24.00
Ideological Distance	2.57	1.63	0	7.87

Table 3: Summary statistics for the party-level variables

by the sum of the squared decimal vote share of parties competing in that election, or $\frac{1}{\sum v^2}$. In Table 3 we provide the summary statistics for these variables.

In Table 4, we report our multilevel models in which we regress vote share on ambiguity, ideological overlap, their interaction, and control variables. We estimate multilevel models because we have two levels of analysis, the party level and the party-dyad level. Theoretically, the moderating effect of the strategic ambiguity is imposed by the parties competing in that election, which we capture as one party is related to every other party in the dyadic level. Empirically, the intraclass correlation coefficient (ICC) reports a coefficient of 0.27, indicating that the party dyads account for around 27% of the variation of our dependent variable vote share³. We estimate a variety of multi-level models where we let ambiguity randomly vary across dyads, but model fit statistics point to the fixed effects model as having a better model fit. In Table 4 we regress vote share on ideological overlap and ambiguity – measured with brand dispersion (Model 7) and perceptual disagreement (Model 8).

The results in Models 7 and 8 support all of our hypotheses at the party level. Parties that increase ambiguity or maintain clear ideological distinctiveness increase their vote share. And, the negative (and statistically significant) interaction coefficient suggests that ideological distinctiveness moderates the positive effect of the ambiguity strategy on electoral support. To explore the viability of the ambiguity strategy we present the short-term marginal effects of a one-standard deviation increase in *brand dispersion* (0.40) (Figure 6) and *perceptual disagreement* (0.11) (Figure 7) on *vote share* across the range

³The results for these tests are in Table 5.

Table 4: Multilevel analysis of the interactive effects of $ambiguity$ – measured with $bran$	d
dispersion (Model 7) and perceptual disagreement (Model 8) – and ideological overlap or	n
vote share	

	Model 7	Model 8
Brand Dispersion	5.42^{***}	
	(1.08)	
Perceptual Disagreement		12.99***
		(3.79)
Ideological Overlap	6.56	-11.05^{**}
	(4.15)	(4.36)
Brand Dispersion \times Ideological Overlap	-6.26^{***}	
	(2.07)	
Perceptual Disagreement \times Ideological Overlap		-13.16^{*}
		(6.98)
Ideological Distance	-0.49^{*}	-0.31
	(0.25)	(0.26)
Extreme	0.53^{***}	0.83^{***}
	(0.17)	(0.18)
Effective Number of Parties	-0.59^{***}	-0.60^{***}
	(0.10)	(0.10)
Vote Share_{t-1}	0.79^{***}	0.79^{***}
	(0.01)	(0.01)
Intercept	-1.22	14.61^{***}
	(2.24)	(2.80)
AIC	7349.76	7375.19
BIC	7400.49	7425.93
Log Likelihood	-3664.88	-3677.59
Num. obs.	1179	1181
Num. groups: dyad	266	266
Var: dyad (Intercept)	0.00	0.00
Var: Residual	29.31	29.76

Note: dependent variable is party vote share.

***p < 0.01; **p < 0.05; *p < 0.1

of *ideological overlap*.⁴ An increase of *ambiguity* this size is similar to the difference for both parties between panel 2 and panel 6 of Figure 1 in the manuscript.

At lower levels of *ideological overlap* – when it is easy for voters to clearly distinguish the ideologies of neighboring parties – *ambiguity* has a positive and statistically significant effect on *vote share*. If *ideological overlap* exceeds about 0.65 (roughly equal to the *ideological overlap* depicted in panel 5 of Figure 1 in the manuscript), *ambiguity* ceases to have a statistically significant effect. This is the case even when we consider for the possible confounding effects of ideological extremism and the number of parties competing in elections. To conclude, Figure 6 shows that pursuing a strategy of ideological ambiguity is only likely to be successful when voters are able to clearly distinguish neighboring parties. Indeed, roughly 52% of the observations of *ideological overlap* fall above the 0.63 value, indicating that the strategy is not likely to be successful for a sizeable portion of the sample.

 $^{^{4}}$ The presence of a lagged dependent variable with a moderate degree of positive autoregression means that in the long-term these effects are much larger; of course, all this is *ceteris paribus* and changing circumstances from election to election limit the usefulness of drawing conclusions about the long-term effects.

Figure 6: Marginal effect of *ambiguity* (*brand dispersion*) on *vote share* across *ideological* overlap (Model 7)



Figure 7: Marginal effect of *ambiguity* (*perceptual disagreement*) on *vote share* across *ideological overlap* (Model 8)



Justification for Multi-level Analysis for Vote Share Models

We choose to estimate multilevel models because we have two levels of analysis: the party level and the party-dyad level. Theoretically, the moderating effect of the strategic ambiguity is imposed by the parties competing in that election, which we capture as one party is related to every other party in the dyadic level. Empirically, the intraclass correlation coefficient (ICC) reports a coefficient of 0.27, indicating that the party dyads account for around 27% of the variation of our dependent variable *vote share*. We estimate four types of multilevel models and present the model fit statistics in Table 5. In Model A1, we regress only the party-level independent variables allowing *ambiguity* to randomly vary across dyads. In Model A2, we add the dyadic level variables still letting *ambiguity*

randomly vary across dyads. In Model A3 we add the cross-level interaction term. In the last model (Model A4) we allow all level 1 variables to randomly vary across dyads. Model fit statistics point to the fixed effects model as the best fitting model, so we follow this guidance in all our empirical models.

Table	5:	ANO	VA	test
	~ -			

	npar	AIC	BIC	logLik	deviance	Chisq	Df	$\Pr(>\chi^2)$
Model A1	10.00	7370.98	7421.72	-3675.49	7350.98			
Model A2	12.00	7374.98	7435.86	-3675.49	7350.98	0.00	2	1.0000
Model A3	15.00	7380.13	7456.24	-3675.06	7350.13	0.85	3	0.8382
Model A4	19.00	7387.52	7483.93	-3674.76	7349.52	0.61	4	0.9621