Appendix

	Dependent variable:					
	Undervoting in Congressional Race (House or Senate)					
	(1)	(2)	(3)	(4)	(5)	(6)
Orphaned	1.803**	1.841**	2.537**	2.577**	2.296*	.007
	(.297)	(.302)	(.851)	(.866)	(.937)	(1.132)
Proximity	.338**	.316**	.353**	.332**	.229	.341**
	(.062)	(.064)	(.061)	(.063)	(.184)	(.062)
Directional	-.750	-.796	-.687	-.733	-.797*	-.774
	(.415)	(.413)	(.411)	(.409)	(.370)	(.410)
Ideology Difference	-.056	-.072	-.011	-.024	-.007	-.018
	(.116)	(.116)	(.118)	(.117)	(.119)	(.118)
Partisanship Strength	-.072		-.112			
	(.109)		(.107)			
Party Leaner (0)		.398		.404		
		(.221)		(.224)		
Strong Partisan (2)		.200		.137		
		(.186)		(.182)		
Strong Partisan (binary)					-.057	-.049
					(.165)	(.161)
Presidential Year			.182	.191	.172	.300
			(.500)	(.497)	(.495)	(.451)
California			-.058	-.035	-.060	.433
			(.546)	(.553)	(.545)	(.535)
Competition			.006	.005	.006	-.040
			(.033)	(.034)	(.034)	(.030)
Education			-.129*	-.125*	-.127*	-.122*
			(.056)	(.056)	(.056)	(.056)
Democrat			.839	.844	.820	-1.763
			(.819)	(.828)	(.814)	(1.176)
Senate Race			.357	.368	.362	.218
			(.344)	(.348)	(.345)	(.297)
Orphaned*Proximity					.126	
					(.201)	
Orphaned*Democrat						3.683*
						(1.667)
Constant	-4.126**	-4.347**	-4.726*	-5.068*	-4.606*	-4.123**
	(.308)	(.311)	(2.117)	(2.176)	(2.158)	(1.031)
Observations	3,719	3,719	3,719	3,719	3,719	3,719

Note: *p<0.05; **p<0.01

Standard errors in parentheses. Estimates are weighted.

Table 3: Logistic Regression predicting undervoting (alternate specifications)

	Undervoting in Congressional Race	
	Ideology Perceptions	Ideal Points
Orphaned	2.523**	2.005**
	(.843)	(.420)
Proximity	.341**	
	(.062)	
Directional	-.727	
	(.410)	
Ideology Difference	-.015	
	(.118)	
Proximity (real)		.313**
		(.081)
Directional (real)		-.537
		(.334)
Ideology Difference (real)		.546
		(.436)
Strong Partisan	-.046	-.039
	(.161)	(.157)
Presidential Year	.164	.209
	(.494)	(.343)
California	-.063	.681
	(.541)	(.463)
Competition	.006	.028
	(.033)	(.029)
Education	-.125*	-.123*
	(.056)	(.049)
Democrat	.803	.408
	(.808)	(.391)
Senate Race	.369	.159
	(.343)	(.422)
Constant	-4.772*	-4.141**
	(2.100)	(1.053)
Observations	3,719	4,344
Note:		*p<0.05; **p<0.01
	Standard errors in parentheses. Estimates are weighted.	

Table 4: Logistic regression predicting undervoting (perceived ideology vs. ideal points)

Statistic	N	Mean	St. Dev.	Min	Max
Undervoting	3,719	0.12	0.32	0	1
Orphaned	3,719	0.36	0.48	0	1
Proximity	3,719	1.93	1.83	0	6
Directional	3,719	0.44	0.50	0	1
Ideology Difference	3,719	0.55	0.89	0	6
Strong Partisan	3,719	0.51	0.50	0	1
Presidential Year	3,719	0.95	0.22	0	1
California	3,719	0.96	0.19	0	1
Competition	3,719	-28.53	5.61	-38.81	-2.94
Education	3,719	4.18	1.33	1	6
Democrat	3,719	0.63	0.48	0	1
Senate	3,719	0.82	0.38	0	1

Table 5: Descriptive Statistics

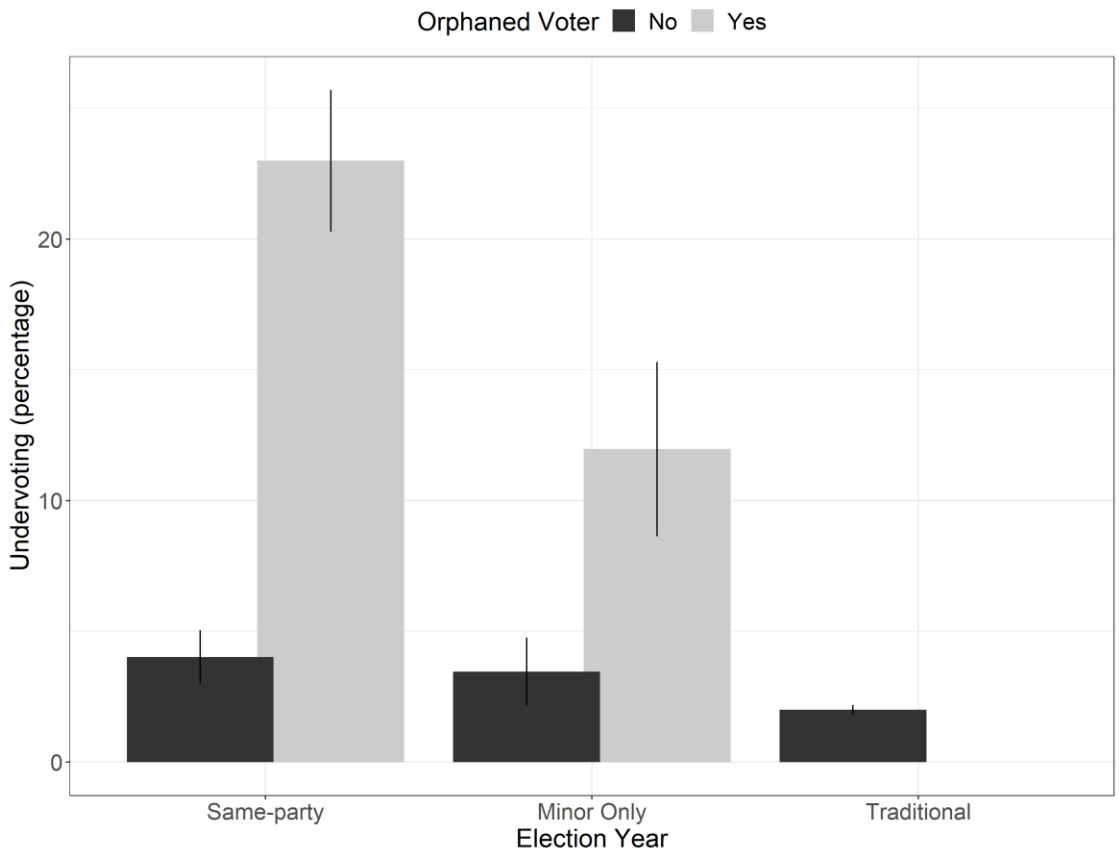

Figure 5: Undervoting in California and Washington House elections (2012-2016)

Since the adoption of the top-two primary, zero House elections resulted in unopposed races. All other matchup types are presented in the above figure. The estimates for same-party matchups show orphaned voters are about 19 percentage points more likely to undervote. Orphaned voters undervote to a lesser extent in minor only races. As indicated in the paper, undervoting in traditional matchups is seldom– similar to the rest of the country.

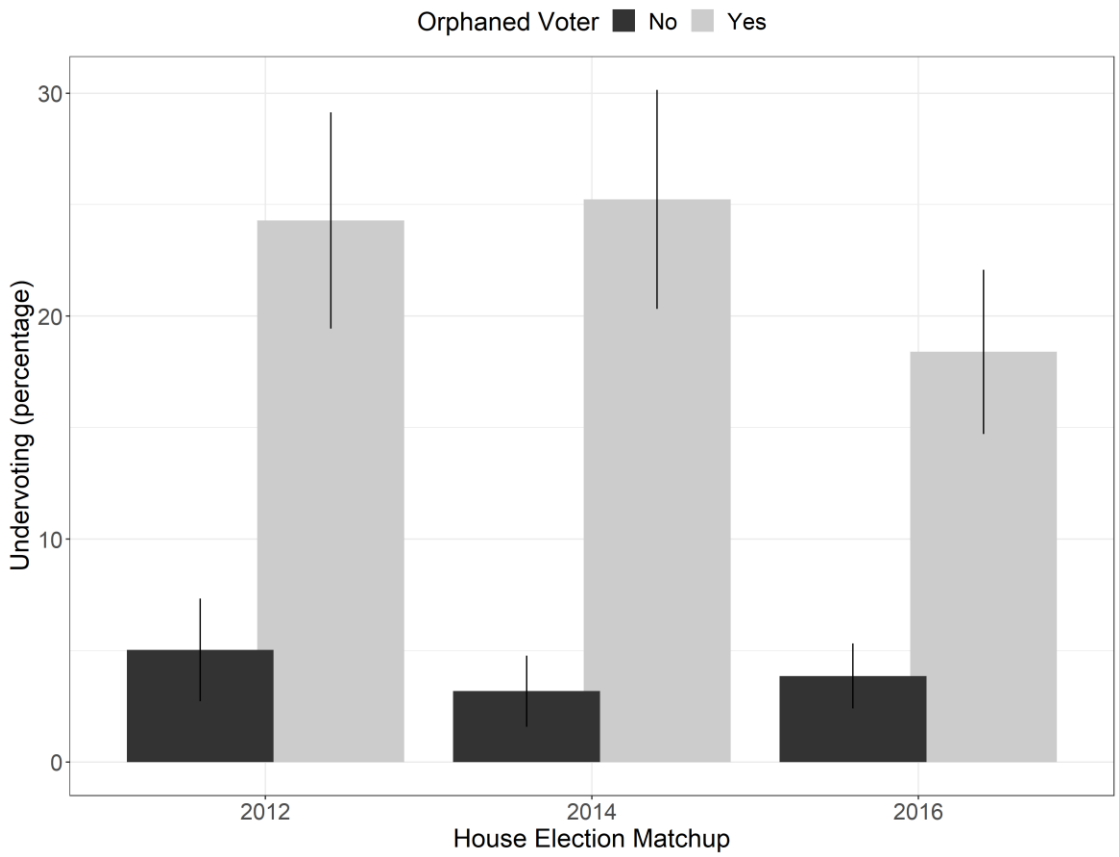

Figure 6: Undervoting in House elections (same-party matchups)

Between 2012 and 2016, undervoting rates in same-party matchups stayed relatively consistent. About five percent of non-orphaned voters or fewer failed to cast a vote in their House election. In 2012 and 2014, about 25 percent of orphaned voters did not vote for a House candidate. One interesting difference in 2016 is that orphaned voters undervoted at a lesser rate, although the estimate is not statistically different from the two previous election years.

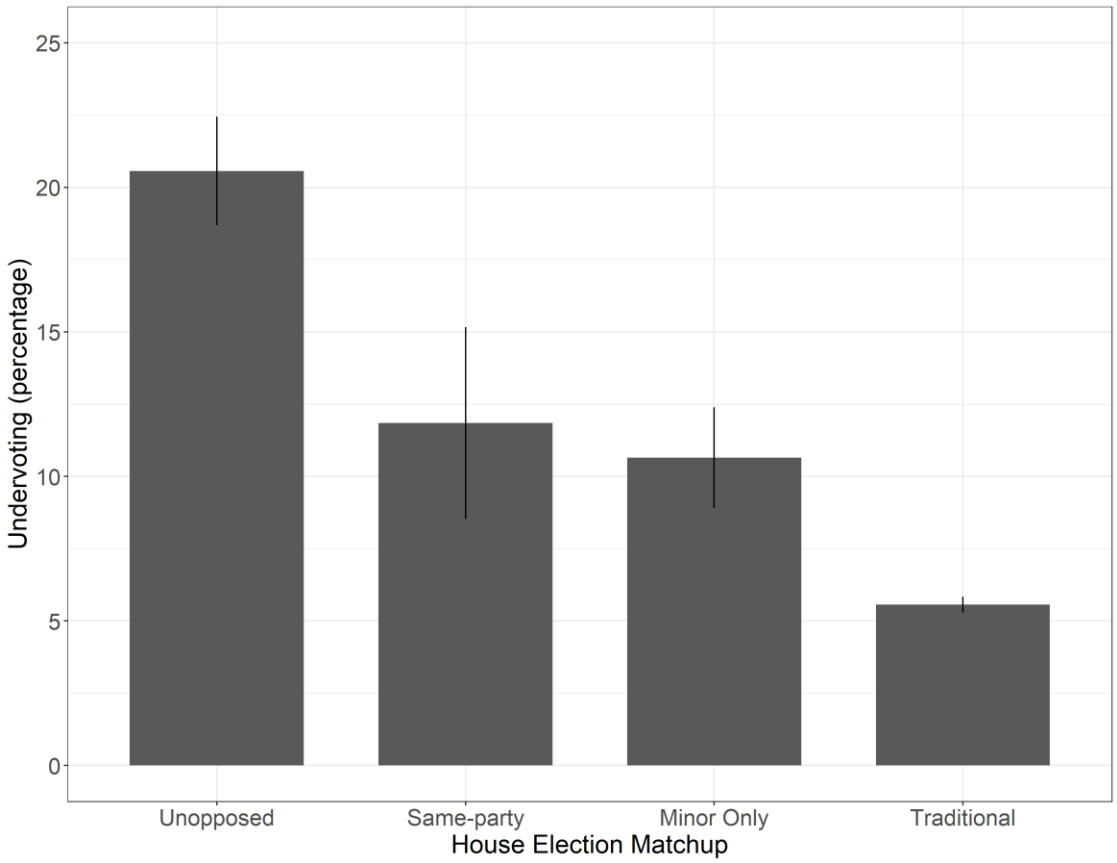

Figure 7: Undervoting in U.S. House elections from 2012-2016 (independents)

Rates of undervoting for independent voters trend the same as partisans, in that they are most likely to undervote in unopposed contests and least likely in traditional ones. Independents' rates of undervoting are half as much as partisans' in unopposed races. They are less likely to undervote in same-party and minor only contests compared to orphaned partisans. However, independents are more likely to undervote in traditional contests but only by a few percentage points.

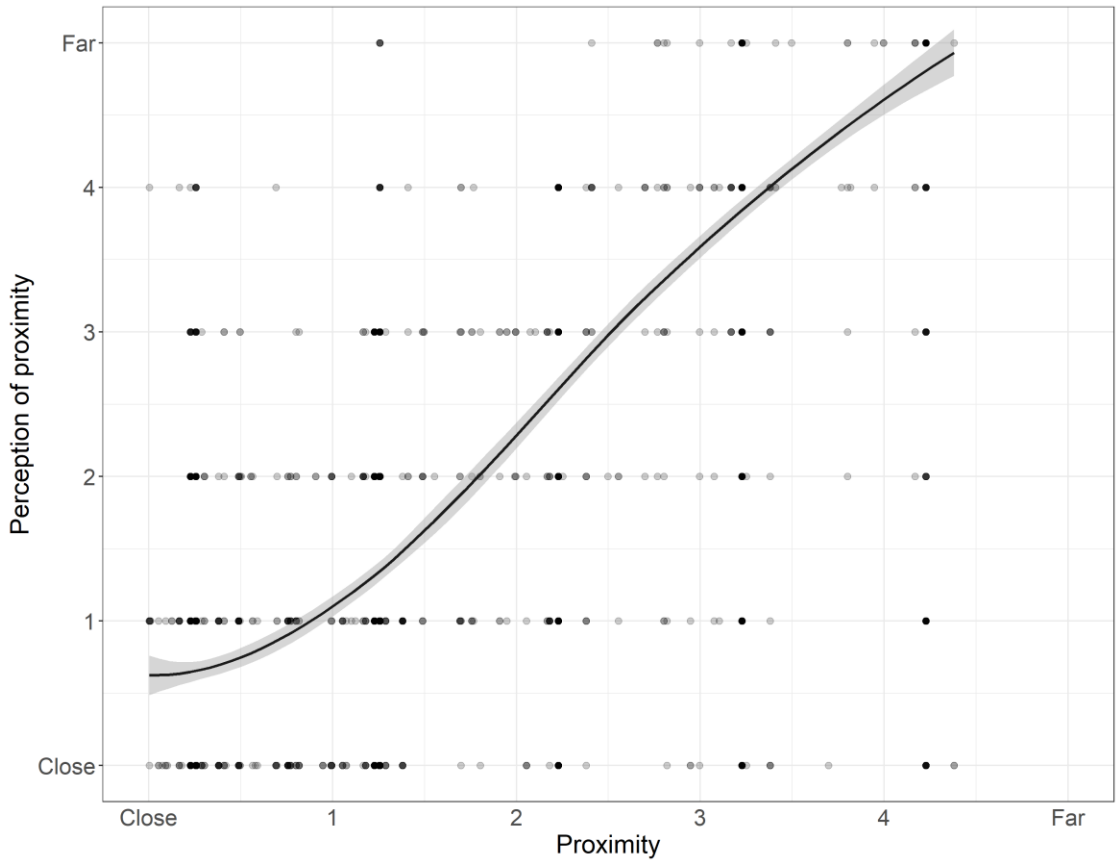

Figure 8: Proximity to candidates (perceptions versus ideal points)

This figure plots respondents' perceptions of proximity to the candidates against an external measure of proximity, using candidate ideal points from the Database on Ideology, Money in Politics, and Elections (Bonica 2017). To calculate proximity using ideal points, I rescaled the DIME scores on a 1-7 scale to match the scale given to respondents in the CCES. Next, I calculated this new proximity variable using the same methods outlined in the paper– taking the distance between the respondent's ideology and the closest candidate. Finally, I plotted the observations and graphed a LOESS line to show the relationship between the two variables. Darker dots indicate a larger number of observations at that space. The steep slope shows that there is a strong, linear relationship between perceived proximity and proximity, measured using ideal points. In conclusion, respondents are fairly good at perceiving ideological proximity to the candidates.