Online Appendix

A Figures and Tables

Source		AN	NES		CCES	ANES
Year	1980	1984	1988	1992	2008	2012
% of Democrats Who Contacted MC	14.9%	13.8%	12.8%	14.6%	26.1%	18.0%
% of Republicans Who Contacted MC	16.3%	15.3%	12.4%	12.9%	36.3%	23.1%
Republican advantage in contacting legislators	9.4%	10.9%	-3.1%	-11.6%	39.0%	28.1%

Table A1: Self-reported rates of contacting legislators by party.

Table A2: Politicians' mean absolute error (compared to MRP estimates) across all issues, broken down by policians's self-reported ideology ideology. Source: 2014 NCS.

Self-reported ideology	Mean misperception across issues
Extremely conservative	28.2
Conservative	24.6
Slightly conservative	20.8
Moderate	18.6
Slightly liberal	16.4
Liberal	16.1
Extremely liberal	17.8
Other	20.4





B Discussion of Literature on Asymmetric Polarization

One example of a dynamic our study would predict and may help explain is asymmetric polarization: the finding that Republican politicians, who we argue overestimated constituency conservatism especially in 2012 and 2014, are more extreme and out of step with public opinion on average than their Democratic counterparts. This is not a universal view, but we believe it is fair to characterize it as conventional wisdom among many scholars.³⁸ In this section we review the literature that we believe is most supportive of the existence of asymmetric polarization:

- McCarty (2015) presents a brief review of the literature on polarization and argues "the evidence points to a major asymmetry in polarization" with Republicans being more extreme than Democrats. Barber and McCarty (2015) provide a similar review with greater detail.
- Ahler and Broockman (2017) find that Democrats in the US House voted with a majority of their constituents 69% of the time on roll calls the CCES asked about in the years 2008–2016, whereas Republicans did so only 52% of the time, barely more often than would be expected by chance.
- Hall (2015) (Table A.4) finds that Republican candidates that move to the right face much larger penalties than do Democratic candidates that move to the left, which implies under a standard model of quadratic loss that they are typically further from public opinion to begin with. Put differently, Hall's (2015) findings present a puzzle regarding why Republicans take positions that are more extreme than would be electorally optimal, but no such puzzle appears to exist for Democrats (or, at the very least, the puzzle is much less present).
- Hall and Snyder (2015) finds the same.
- In a similar vein, Jacobson (2013) argues that Republicans collectively lost chamber control

³⁸We do not have a prediction about whether Democratic politicians would support policies to the right of the median voter even though we find that they overestimate conservatism, as they may be balancing responsiveness to their perceptions of their districts as a whole and other groups like primary voters that pull their positions to the left. Our prediction is only about the relative extremism of Republicans and Democrats.

of the US Senate due to running candidates that were too extreme for voters.

- McCarty, Poole and Rosenthal (2006) provide evidence from DW-NOMINATE scores that Republicans in Congress have moved further right than have Democrats moved left.
- Hare et al. (2012) provide further evidence of the validity of and interpretation of these estimates.
- Carmines (2011) finds evidence that with successive generations of new Republican entrants to Congress, each generation has tended to be more extreme than the last.
- Grossmann and Hopkins (2015) find that "Since the 1970s, congressional Republicans have collectively moved much further in the conservative direction than congressional Democrats have moved toward the liberal pole; the relatively modest liberalization of the Democratic Party is almost entirely due to the electoral decline of its ideologically atypical southern wing" (p. 120). Grossmann and Hopkins (2016) provides a more in-depth treatment still.
- Qualitative accounts of the declining presence of moderates in the Republican party can be found in Hacker and Pierson (2005, 2015), Mann and Ornstein (2013), Kabaservice (2012), and Theriault (2013).
- Smith (2014) finds that "Republicans have moved farther right than Democrats have moved left in the last two decades" (p. 288).
- Jordan, Webb and Wood (2014) finds the same evidence of asymmetric polarization over time using party platforms instead of roll call voting in Congress.
- Shor (2015) finds the same in most state legislatures.
- Broockman (2016) finds that median public opinion is at the Democratic party position on many issues and is not as conservative as the Republican party position on any issue. Similar findings about the public's liberalism on specific issues have been reached by Ellis and Stimson (2012) and Grossmann and Hopkins (2016).

- Bafumi and Herron's (2010) data which jointly scales politicians and voters using Congressional roll calls implies that Republican politicians are more right-wing than are Democrats left-wing relative to voters, although they do not state this directly.
- Branham and Jessee (2017), Figure 9 suggests the same using a set of survey items on spending policies.

C 2012 NCS

C.1 Issue Items and Support Levels

Table A3 gives the issue items and support levels.

Table A3: Issue questions from the 2012 National Candidate Study, with weighted national levels of support from the CCES.

Issue Item Wording	National Mean Support	"Yes" direction	Status quo change?	Source
"Same-sex couples should be al- lowed to marry."	53%	Liberal	Some states	2012 CCES
"Implement a universal health- care program to guarantee cover- age to all Americans, regardless of income."*	60%	Liberal	Debatable	2008 CCES
"Abolish all federal welfare programs."	16%	Conservative	Yes	2010 CCES Module

*As described in the text, the wording of this item on the CCES was slightly different than the perception item we asked politicians, as the CCES item included the phrase "even if it means raising taxes."

C.2 Sampling Frame

To measure elite perceptions in 2012, we conducted the 2012 National Candidate Study (NCS), a survey of candidates running for state legislature across the United States. In early August 2012 we gathered data on contact information for every candidate for state legislative office. Many legislators only had email addresses, many more had only physical street addresses, and the preponderance of candidates had both. We attempted to gather contact information for all 10,131 state legislative candidates though were unable to gather contact information for 306 (3%). This left a

total of 9,825 in the sampling frame. In mid-August we (citation removed for peer review) sent three waves of email solicitations to all 7,444 candidates for whom we had e-mail addresses. After 1,318 responses from this email solicitation, we then attempted to secure cooperation in a mail version of the survey among a randomly selected³⁹ 5,000 candidates who had not yet responded. These candidates were sent a postcard informing them that the survey would be arriving in the mail, followed by a paper version of the survey one week later. An additional 589 candidates returned this paper survey. In section C.5, we review the representativeness of these respondents.

C.3 Sample

1,907 politicians responded to the NCS in total, for a response rate of 19.5%, or about double the typical response rate for opinion surveys of the mass public.

To ensure that only candidates themselves completed the survey, the online survey contained a screener question that shut down the survey if the respondent identified himself or herself as someone other than the candidate.⁴⁰ The paper version of the survey included large type and a screener question to encourage only candidates to complete it.

A follow-up online-only survey conducted in mid-November yielded 514 responses among the 1,907 respondents to the first wave of the study.

C.4 Perception Items

Among other questions, the surveys queried politicians for their perceptions of the opinions of the constituents in the districts they were running to represent on three issues: same-sex marriage, universal health care, and welfare. Specifically, we asked legislators "What percent of your constituents" would "agree with" three "statements" that had also appeared on large national public opinion surveys: "Implement a universal healthcare program to guarantee coverage to all Amer-

³⁹We conducted blocked sampling on state and incumbency, retaining the probability that each individual candidate was selected but ensuring greater balance in the resulting sample on these variables.

⁴⁰Fewer than 2.5% of survey takers identified themselves as non-candidates and were screened out.

icans, regardless of income," "Same-sex couples should be allowed to marry," and "Abolish all federal welfare programs."⁴¹

We expected the public's attitudes on same-sex marriage, universal healthcare, and welfare programs would provide reasonable cases to study broader principles of representation for several reasons. Most importantly, these issues were highly salient in both national and state mass politics in 2012, with both national and state legislators making high-stakes policy decisions on these issues that affected tens of millions of Americans.⁴² Moreover, these issues tap into what many see as the two core 'dimensions' of public opinion: degree of economic redistribution and government involvement in the economy in the case of universal healthcare and welfare programs, and social conservatism and traditionalism in the case of same-sex marriage. These issues also present a wealth of available public opinion data. While the debate over same-sex marriage is only about a decade old, proposals for public healthcare programs and welfare reform have been around for much longer, suggesting that these issues might not be "hard" for both elites and the public to offer positions on.

Elsewhere in the survey, we also asked candidates whether they agreed or disagreed with eleven issue statements, including the statements about same-sex marriage and universal health care noted

⁴¹The 2014 NCS asked politicians about "residents of their districts," but the 2012 survey asked them about "constituents.' Political scientists familiar with the work of Fenno (1977) may wonder whether the word "constituent" is excessively vague – e.g., Fenno (1977) refers to legislators' "multiple constituencies." Based on pilot testing with a number of current and former legislators we found that this word was the word of choice for legislators to refer to the residents of their legal electoral districts.

⁴²We expect readers are familiar with the significant policy battles being waged on each issue in 2012, but for the sake of unfamiliar readers and posterity we record the highlights here. First, the fight over universal healthcare and the generosity of the welfare state have been one of the most enduring battles in American politics over the last century, recurring at all levels of government since the early 20th century and especially in the last two decades in the form of high-profile fights during the Clinton and Obama administrations. Recently, the Affordable Care Act and the Supreme Court's decision pertaining to the Medicaid expansion associated with it have forced state governments to decide whether and how to expand their Medicaid rolls. Many of the regulations and subsidies built into the 'Obamacare' law flow through state governments, meaning that Americans' health care will be significantly impacted by the decisions made by their state legislators. Health care captures about 15% of US GDP and determine the life changes of millions of Americans every year – needless to say, we believe the issue qualifies as politically and substantively significant by any standards. In the case of same-sex marriage, the debate over government recognition of same-sex relationships has raged for more than a decade, and it has been a cross-cutting cleavage, pitting religion against partisanship in many cases (Camp 2008; Stone 2012). During the 2000s, many state legislatures voted to initiate statutory or constitutional bans on same-sex marriage (Lupia et al. 2010). Increasingly, some state legislatures have passed bills to legalize same-sex marriage. More such bills were on the agenda in 2013.

above.

C.5 Response Rate and Representativeness

C.5.1 Party

The sample is slightly unbalanced on party, with more Democrats than Republicans.

	Democrats	Republicans	<i>p</i> -value
Response rate	20.1%	15.5%	0.00

C.5.2 2012 Obama Vote Share and Professionalization

Figure A2 plots Obama vote share in the districts with Democratic (top left) and Republican (top right) respondents against the distribution for all districts. If anything, our Democratic respondents come from more liberal districts than the population, while the districts from which we have Republican respondents are representative. The bottom panel shows that the distribution of leg-islative professionalization in districts where we have respondents matches the overall distribution well.

C.5.3 Incumbency

The sample is well-balanced on incumbency.

	Incumbents	Non-incumbents	<i>p</i> -value
Response rate	14.4%	14.8%	0.46

Figure A2: Representativeness of politicians who responded to the 2012 NCS, by party, presidential vote share in the district, and state legislative professionalization.



D 2014 National Candidate Study

D.1 Response Rate and Representativeness

In the main text, we report representativeness results for the 2014 NCS broken down by district presidential vote share, state legislative professionalization, and party. In this section we review other aspects of the representativeness of our respondents.

D.1.1 Party

The sample is unbalanced on party, with higher response rates among Democrats.

	Democrats	Republicans	<i>p</i> -value
Response rate	24.6%	16.7%	0.00

D.1.2 Incumbency

The sample is slightly unbalanced on incumbency. 14.3% of candidates we identified as already sitting in a state legislature responded, while 21.5% of candidates we could not identify as sitting in a state legislature responded. As shown above, our results are robust to only considering incumbents.

	Incumbents	Non-incumbents	<i>p</i> -value
Response rate	14.3%	21.5%	0.00

D.1.3 Chamber type

There were not major differences in response rates between candidates running for the upper and lower houses of state legislatures.

	Lower chamber	Upper chamber	<i>p</i> -value
Response rate	19.4%	18.1 %	0.17

D.2 Candidate Survey Questionnaire Item Wording

This section summarizes the wording of National Candidate Study items included in the regression model of perception accuracy.

Ideology: 'One way that people talk about politics in the United States is in terms of left, right, and center, or liberal, conservative, and moderate. Where would you place yourself on that spectrum?' *Number of polls:* 'During the course of this campaign, how many polls will your campaign run?'

Other variables included in the OLS model were taken from Project Vote Smart's database.

D.3 Comparison of NCS and CCES Issue Item Wordings

Table A4: Comparison of	f NCS and CCES	Issue Item	Wordings
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NCS	CCES
"Allow gays and lesbians to marry	"Do you favor or oppose allowing gays and lesbians
legally."	to marry legally?"
"Let employers and insurers refuse to	"Tell us whether you support or oppose the legislation
cover birth control and other health ser-	in principle Let employers and insurers refuse to
vices that violate their religious beliefs."	cover birth control and other health services that
	violate their religious beliefs."
"Require background checks for all gun	"On the issue of gun regulation, are you for or
sales, including at gun shows and over the	against each of the following proposals? Back-
Internet."	ground checks for all sales, including at gun shows
	and over the Internet."
"Ban assault rifles."	"On the issue of gun regulation, are you for or against
	each of the following proposals?Ban assault ri-
	fles."
"Allow police to question anyone they	"What do you think the U.S. government should do
think may be in the country illegally."	about immigration? Select all that apply Allow po-
	lice to question anyone they think may be in the
	country illegally."
"Grant legal status to all illegal immi-	"What do you think the U.S. government should do
grants who have held jobs and paid taxes	about immigration? Select all that apply Grant le-
for at least 3 years, and not been convicted	gal status to all illegal immigrants who have held
of any felony crimes."	jobs and paid taxes for at least 3 years, and not
	been convicted of any felony crimes."
"Always allow a woman to obtain an	"Do you support or oppose each of the following pro-
abortion as a matter of choice."	posals? Always allow a woman to obtain an abor-
	tion as a matter of choice."

E Comparison of CCES estimates of public opinion to other national surveys

In this section, we compare the national weighted mean support for our CCES items to contemporary surveys conducted by other firms that had similar topics and/or wording. One potential concern with the CCES surveys is that the highly engaged nature of the CCES sample could distort our measures of public opinion. There are more polls for some issues than for others. However, reassuringly, the CCES national marginals are similar to the national marginals these other surveys, suggesting no serious representativeness problems with the CCES sample that would lead us to underestimate conservatism by using the CCES data. The one exception is an item we originally asked about making abortion illegal in almost all cases, where the CCES estimate appears very far from other surveys, we believe because of a question wording issue; we describe this in further detail below. We were also unable to find any data from other polls in the November 2013 - November 2015 range on a question like the second immigration question we asked that had appeared on the CCES: "Allow police to question anyone they think may be in the country illegally."

For each issue, below on the pages that follow we report a table of all of the surveys found in the database at pollingreport.com from November 2013 to November 2015 whose wording and subject matter is reasonably similar enough to allow for comparisons to the CCES items. In the table for each issue area, we also report the poll sources and field dates for these polls along with the question wording and the percent of the sample that reported being in favor of the policy. (In some cases, we have collapsed multiple response options into one "favor" category.) We then report the CCES marginal from the item we used in our analysis. The marginals in these other polls line up extremely closely to the CCES marginals.

Background checks for guns

Organization	Dates	Wording	Percent in favor
CBS News/New	Dec. 4-8, 2013	"Do you favor or oppose a federal	85
York Times		law requiring background checks	
		on all potential gun buyers?"	
Gallup	Oct. 7-11, 2015.	"Would you favor or oppose a	86
		law which would require universal	
		background checks for all gun pur-	
		chases in the U.S. using a central-	
		ized database across all 50 states?"	
Pew	July 14-20, 2015	"Please tell me if you would fa-	85
		vor or oppose the following propos-	
		als about gun policy. First, [see be-	
		low]? Making private gun sales	
		and sales at gun shows subject to	
		background checks"	
2014 CCES			87

Assault weapons ban

Organization	Dates	Wording	Percent in favor
Quinnipiac	Mar. 26-Apr. 1, 2013	"Do you support or oppose a na-	59
		tionwide ban on the sale of assault	
		weapons?"	
Pew	July 14-20, 2015	"Please tell me if you would fa-	57
		vor or oppose the following pro-	
		posals about gun policy. First, [see	
		below]?A ban on assault-style	
		weapons"	
2014 CCES			61

Amnesty for undocumented immigrants

On this issue, it appears if anything that the CCES underestimates voter liberalism relative to other polls, which would bias against our findings.

Organization	Dates	Wording Percent in	
ABC News /	Sept. 4-7,	"Do you think undocumented immigrants	46
Washington Post	2014	currently living in the United States	
		should or should not be given the right to	
		live and work here legally?"	
-	Jan. 20-23,	-	49
	2014		
-	Sept 4-7,	-	46
	2014		
-	July 16-19,	-	60
	2015		
Gallup	June 15-	"Which comes closest to your view about	65
	July 10,	what government policy should be toward	
	2015	illegal immigrants currently residing in	
		the United States? Should the government	
		deport all illegal immigrants back to their	
		home country, allow illegal immigrants to	
		remain in the United States in order to	
		work, but only for a limited amount of	
		time, or allow illegal immigrants to re-	
		main in the United States and become	
		U.S. citizens but only if they meet certain	
		requirements over a period of time?"	

Public	Reli-	June 10-14,	"Which statement comes closest to	76
gion	Research	2015	your view about how the immigra-	
Institute	e		tion system should deal with immi-	
			grants who are currently living in the	
			U.S. illegally? The immigration sys-	
			tem should allow them a way to be-	
			come citizens provided they meet cer-	
			tain requirements, or allow them to	
			become permanent legal residents but	
			not citizens, or identify and deport	
			them?" (citizens and permanent legal	
			residents)	
-		Feb. 4-8,	-	68
		2015		
-		Nov. 25-30,	-	77
		2014		
-		July 23-27,	-	75
		2014		
-		Nov. 6-10,	-	77
		2013		
CBS No	ews	Jan. 9-12,	"Barack Obama recently issued an ex-	62
		2015	ecutive order that would allow some	
			illegal immigrants already in the U.S.	
			to stay here temporarily and apply for	
			a work permit if certain requirements	
			are met. Do you favor or oppose this	
			immigration policy?"	

ABC	Dec. 11-14,	"Obama has taken an executive action	52
News/Washington	2014	under which as many as four million	
Post		of the country's undocumented immi-	
		grants will not face deportation over	
		the next three years if they pass a back-	
		ground check and meet other require-	
		ments. Most will need to show that	
		they have been in the United States for	
		at least five years and have children	
		who were born here. Do you support	
		or oppose this immigration program?"	
NBC News/Wall	Nov. 14-17,	"Now, as you may know, there is a pro-	57
Street Journal	2014	posal to create a pathway to citizen-	
Poll		ship that would allow foreigners stay-	
		ing illegally in the United States the	
		opportunity to eventually become legal	
		American citizens. Do you strongly	
		favor, somewhat favor, somewhat op-	
		pose, or strongly oppose this pro-	
		posal?" (Strongly and somewhat favor)	

-	-		"And, thinking some more about this:	72
			If a proposed pathway to citizenship	
			allowed foreigners staying illegally in	
			the United States the opportunity to	
			eventually become legal American cit-	
			izens if they pay a fine, any back taxes,	
			pass a security background check, and	
			take other required steps, would you	
			strongly favor, somewhat favor, some-	
			what oppose, or strongly oppose this	
			proposal?"	
CNN/ORC	Jan.	31-	"Here are some questions about how	81
	Feb.	2,	the U.S. government should treat ille-	
	2014		gal immigrants who have been in this	
			country for a number of years, hold	
			a job, speak English and are willing	
			to pay any back taxes that they owe.	
			Would you favor or oppose a bill that	
			allowed those immigrants to stay in	
			this country rather than being deported	
			and eventually allow them to apply for	
			U.S. citizenship?"	
2014 CCES				47

Same-sex marriage

Organization	Dates	Wording	Percent in fav
CBS News Poll	Sept. 12-15, 2014	"Do you think it should be legal or	56
		not legal for same-sex couples to	
		marry?"	
-	Oct. 21-25, 2015	-	56
-	June 10-14, 2015	-	57
-	Feb. 13-17, 2015	-	60
-	Sept. 12-15, 2014	-	56
-	July 29 - Aug. 4, 2014	-	53
-	Feb. 19-23, 2014	-	56
Quinnipiac Uni-	Sept. 17-21, 2015	"Do you support or oppose allow-	55
versity		ing same-sex couples to get mar-	
		ried?"	
-	July 23-28, 2015	-	53
-	May 19-26, 2015	-	56
-	Apr. 16-21, 2015	-	58
NBC News	June 14-18, 2015	"The U.S. Supreme Court could de-	57
		cide that gays have a constitutional	
		right to marry, which would have	
		the effect of legalizing gay marriage	
		throughout the country. Would you	
		favor or oppose the Supreme Court	
		taking this action?"	

-	Apr. 26-30,	-	58
	2015		
NBC News/Wall	March 1-5,	"Do you favor or oppose allowing gay	59
Street Journal	2015	and lesbian couples to enter into same-	
		sex marriages?" (Strongly favor and	
		somewhat favor)	
CNN/ORC	May 29-31,	"Do you think gays and lesbians do or	63
	2015	do not have a constitutional right to get	
		married and have their marriage recog-	
		nized by law as valid?"	
-	Feb. 12-15,	-	63
	2015		
ABC	4/16-20/15	"Overall, do you support or oppose	56
Marrie (We also at an			
News/Washington		allowing gays and lesbians to marry	
Post		allowing gays and lesbians to marry legally?"	
-	Feb. 27-		59
-	Feb. 27- Mar. 2,		59
-			59
-	Mar. 2,		59 56
-	Mar. 2, 2014		
-	Mar. 2, 2014 May 29-		
-	Mar. 2, 2014 29- June 1, 2014 29-		56
-	Mar. 2, 2014 29- June 1, 2014 29-	legally?" -	56
-	Mar. 2, 2014 29- June 1, 2014 519,	legally?" - "Do you support or oppose the U.S.	56

-	Oct. 9-12,	"Do you support or oppose the	56	
	2014	Supreme Court action this week that		
		allows gay marriages to go forward in		
		several more states?"		
McClatchy-	Aug. 4-7,	"Do you strongly favor, favor, oppose,	54	
Marist Poll	2014.	or strongly oppose allowing gays and		
		lesbians to marry legally?" (Strongly		
		favor and favor)		
Bloomberg	March	"Do you support or oppose allowing	55	
	7-10, 2014	same-sex couples to get married?"		
Public Reli-	Nov. 12-	"All in all, do you strongly favor, fa-	53	
gion Research	Dec. 18,	vor, oppose, or strongly oppose allow-		
Institute	2013	ing gay and lesbian couples to marry		
		legally?" (Strongly favor and favor)		
Suffolk Uni-	April 8-13,	"Do you strongly favor, favor, oppose,	51	
versity/USA	2015	2015 or strongly oppose allowing gays and		
Today		lesbians to marry legally?"		
2014 CCES			56	

Organization	Dates	Wording	Percent in favor
CBS	March 20-23, 2014	"What about companies and non-	51
		religious organizations? Do you	
		think these employers should have	
		to cover the cost of prescription	
		birth control for their female em-	
		ployees as part of their health in-	
		surance plans, or should these em-	
		ployers be able to opt out of cover-	
		ing that, based on religious objec-	
		tions?"	
2014 CCES			43

Religious exemptions for birth control mandate

2014 CCES

43

Abortion Legal

Although abortion is a relatively commonly polled issue, we were only able to find one poll that closely mirrored the CCES wording. That poll, from Pew, matched the CCES marginal very closely.

Organization	Dates	Wording	Percent in favor
Pew	Sept 2-9, 2014	"Do you think abortion should be	55
		legal in all cases, legal in most	
		cases, illegal in most cases, or ille-	
		gal in all cases?"	
2014 CCES			57

Abortion Illegal Except In Special Cases

The CCES appears to produce very misleading results for one item we originally included in the perceptions battery on the NCS: "Permit abortion only in case of rape, incest or when the woman's life is in danger." Fully 50% of respondents to the CCES agreed with this statement. We suspect this represents a significant overestimate of the share of respondents who think abortion should *only* be legal in these circumstances. Of the 50% of respondents who agreed with this item, 37% agreed that abortion should always be legal as a matter of personal choice, consistent with prochoice respondents missing the word 'only' in the item wording. In addition, in the ANES when respondents are given several mutually exclusive statements about abortion, only 28% indicate that this statement best describes their view, about half the share as in the CCES.⁴³ Because of these problems with this survey item, we have excluded it from our analysis.

⁴³http://www.electionstudies.org/nesguide/toptable/tab4c_2b.htm.

F Details of MRP Estimation Procedure

Estimation of an MRP model proceeds in two stages. First, a hierarchical logistic choice model is estimated for the opinion item being studied. Our models include predictors at three different levels. At the individual level, we include random effects for the respondent's education, gender, and race/ethnicity. At the state-house and -senate district level, we include individual district ran-dom effects, fixed effects for the districts' median household income, Obama's share of the 2012 Presidential vote in the district, and, for the same-sex marriage, religious exemptions, and abortion models, percentage Mormon or evangelical (see Lax and Phillips (2009*a*, 2013)). State random effects, centered around regional random effects, complete the individual model.⁴⁴

The general form of the model is a varying intercept, varying slope model:

$$\theta_j = logit^{-1}(X_j\beta + \sum_s \alpha_{S(j)}^S) \tag{4}$$

where j indexes cells, each of which is identified by the unique combination of race, gender, education, and district, and S represents subsets of the grouping variables. β represents the fixed effects and is modeled with a uniform prior distribution. α^{S} are random effects, modeled with hierarchical Gaussian priors.

The response model is specified as:

$$Pr(y=1) = logit^{-1}(\beta_0 + \alpha_{j[c]}^{gender} + \alpha_{k[c]}^{race} + \alpha_{l[c]}^{edu} + \alpha_{m[c]}^{gender \times race} + \alpha_{d[c]}^{district} + \alpha_{s[c]}^{state} + \alpha_{r[c]}^{region})$$
(5)

The individual-level random effects are modeled as:

$$\alpha_j^{gender} \sim N(0, \sigma_{gender}^2) \text{ for } j = 1, 2$$
 (6)

⁴⁴The models are estimated using the glmer() function in R.

$$\alpha_k^{race} \sim N(0, \sigma_{race}^2) \text{ for } k = 1, 2, 3$$
(7)

$$\alpha_l^{age} \sim N(0, \sigma_{age}^2) \text{ for } l = 1...4$$
(8)

$$\alpha_m^{edu} \sim N(0, \sigma_{edu}^2) \text{ for } m = 1...4$$
(9)

The district, state and region effects are modeled:

$$\alpha_d^{district} \sim N(\alpha_{s[c]}^{state} + \beta presvote + \beta income, \sigma_{district}^2) \text{ for } d = 1...4335$$
(10)

$$\alpha_s^{state} \sim N(\alpha_{[r]}^{region}, \sigma_{state}^2) \text{ for } s = 1...50$$
(11)

$$\alpha_r^{region} \sim N(0, \sigma_{region}^2) \text{ for } r = 1...4$$
 (12)

This model yields predictions for the share of individuals in any given state legislative district who support same-sex marriage or universal health care in all possible combinations of race, gender, and education.

F.1 Poststratification

The final step in constructing district-level estimates is poststratification. We first use data from the US Census American Community Survey 2014 5-Year file to calculate the share of individuals in each state legislative district that fall into each 'cell': for example, of all the individuals living in California's 17th State Assembly district, what share of them are white college-educated white women? These official US Census estimates are exceptionally accurate.

We then merge these cell-level district proportion estimates from the Census with our cell-level opinion estimates from the multilevel regression model to construct the district-level opinion estimates. This poststratification process is a straightforward aggregation process by which estimates for each cell θ_j in each district are summed in proportion to the share of the district that they represent. Note that the cells in each district are exhaustive and mutually exclusive.

$$\theta_{district} = \frac{\sum_{j \in J_{district}} N_j \theta_j}{\sum_{j \in J_{district}} N_j}$$
(13)

The result of this poststratification process are estimates of district support for each issue for each of the nation's state legislative districts.

F.2 Allocation of Survey Respondents to Districts and MRP Weights

In fitting the multilevel choice models, respondents were matched to 2014 state legislative districts using ZIP codes. Because some ZIP codes straddle state legislative boundaries, we estimated the likelihood that each respondent had been assigned to the correct upper and lower house district by taking the percentage of the zip code contained in that district. The vast majority of respondents can be assigned to districts deterministically, but some might have been in multiple districts. For these respondents, we calculated the probability that they were in each district given their race, using data from the US Census on the racial composition of each state legislative districts. We then weighted responses by these values, such that every response in the original data represented one or more rows in the estimation data with weights that summed to one. The multilevel regression takes these weights into account. The same procedure is used in the county-level analysis to match respondents to counties.

F.3 Uncertainty in MRP Estimates

To characterize the uncertainty in our MRP estimates of district opinion, we simulate predicted cell probabilities from our multilevel models and use those simulated cell probabilities.

We follow Kastellec et al. (2015) by using arm: :sim to simulate cell probabilities, then we re-poststratify many times to simulate district-level probabilities. The simulated predictions are developed from drawing from simulations of the random and fixed effects drawn from a posterior under a flat prior and conditioned on the estimated variance-covariance of the random effects.

From the simulated cell proportions, we estimate 1,000 sets of MRP estimates for each district for each issue. Then, we use these estimates to simulate two test statistics: candidates' mean absolute error and candidates' mean conservative error. We take the 95% empirical interval of these simulations as our measure of the credible interval for the test statistics.

Table A5 shows 95% intervals for the candidates' mean overestimates of conservative policy support using the simulated MRP estimates.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex Marriage	[8.06, 10.27]	[2.64, 4.86]	[16.08, 18.38]
Religious Exemptions	[5.56, 7.44]	[-0.87, 1.05]	[15.12, 17]
Ban assault weapons	[21.49, 24.18]	[16.17, 18.97]	[29.39, 32.15]
Background check	[35.22, 37.2]	[31.01, 32.94]	[41.39, 43.41]
Abortion always legal	[10.25, 13.09]	[6.02, 8.88]	[16.39, 19.28]
Amnesty for undoc. immigrants	[7.38, 9.27]	[4.09, 5.99]	[12.17, 14.07]
Police question immigrants	[12.27, 14.33]	[9.1, 11.21]	[16.97, 19.07]

Table A5: 95% simulation intervals for conservative overestimation by party

Table A6 shows 95% intervals for the candidates' mean absolute errors computed using the simulated MRP estimates.

F.4 Robustness to Alternate Specifications of MRP Models

To test the robustness of our MRP estimates to alternative specifications of the multilevel model, we re-estimate the models using only one district-level predictor, as is recommended (at

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[16.14, 16.99]	[13.49, 14.06]	[19.91, 21.54]
Religious exemptions	[16.8, 17.32]	[14.08, 14.39]	[20.66, 21.88]
Guns: ban assault weapons	[25.28, 27.19]	[21.6, 23.21]	[30.68, 33.14]
Guns: background check	[35.77, 37.62]	[31.68, 33.45]	[41.75, 43.7]
Abortion legal	[16.86, 18.29]	[14.82, 15.92]	[19.64, 21.82]
Immigration: amnesty	[15.99, 16.77]	[13.77, 14.42]	[19.19, 20.26]
Immigration: Police question	[19.12, 20.21]	[17.23, 18.23]	[21.89, 23.27]

Table A6: 95% simulation intervals for absolute error by party

least with respect to a state-level MRP, using one state-level predictor) by Lax and Phillips (2013). We re-estimate the MRP models using the same procedure as above, except one set of predictions uses district-level presidential vote as the only fixed effect, excluding district median household income, and the other using only household income, but excluding presidential vote. We then simulate from these fitted models as we did in Section F.3, generating two new sets of predictions and confidence intervals.

Below we repeat Tables A5 and A6 using each of the two additional sets of simulated MRP estimates. Tables A7 and A9 show versions of Table A6 estimated without the use of household income and without the use of Presidential vote, respectively. Tables A8 and A10 show versions of Table A5 estimated without the use of household income and without the use of Presidential vote, respectively. The use of Presidential vote, respectively. The results are quite similar, suggesting that our MRP estimates are not sensitive to the inclusion or exclusion of particular district-level predictors or the use of only one predictor.

Table A7: 95% simulation intervals for absolute error by party, using MRP estimates from a model using only 2012 presidential vote as a district-level predictor.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[16.01, 17.06]	[13.49, 14.22]	[19.56, 21.61]
Religious exemptions	[16.82, 17.35]	[14.12, 14.43]	[20.69, 21.91]
Guns: Ban assault weapons	[25.13, 27.03]	[21.45, 23.15]	[30.44, 32.98]
Guns: Background check	[35.39, 37.35]	[31.26, 33.19]	[41.4, 43.47]
Abortion legal	[16.66, 18.33]	[14.8, 16.08]	[19.19, 21.7]
Immigration: amnesty	[15.95, 16.66]	[13.73, 14.34]	[19.12, 20.14]
Immigration: police question	[19.11, 20.17]	[17.24, 18.19]	[21.94, 23.24]

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[7.22, 10.15]	[1.78, 4.74]	[15.34, 18.3]
Religious exemptions	[5.36, 7.24]	[-1.03, 0.87]	[14.93, 16.82]
Guns: Ban assault weapons	[21.12, 23.8]	[15.85, 18.56]	[29, 31.81]
Guns: Background check	[34.81, 36.91]	[30.52, 32.64]	[41.02, 43.2]
Abortion legal	[9.52, 12.77]	[5.29, 8.63]	[15.59, 18.96]
Immigration: amnesty	[7.44, 9.23]	[4.11, 5.92]	[12.19, 14.03]
Immigration: police question	[12.25, 14.19]	[9.07, 11.07]	[16.98, 18.93]

Table A8: 95% simulation intervals for conservative overestimation by party, using MRP estimates from a model using only 2012 presidential vote as a district-level predictor.

Table A9: 95% simulation intervals for absolute error by party, using MRP estimates from a model using only median district household income as a district-level predictor.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[17.28, 18.58]	[14.74, 15.84]	[20.6, 23.11]
Religious exemptions	[17.84, 18.7]	[15.25, 15.9]	[21.27, 23.24]
Guns: Ban assault weapons	[25.32, 27.79]	[21.69, 23.84]	[30.5, 34.14]
Guns: Background check	[35.45, 37.73]	[31.12, 33.43]	[41.74, 44.09]
Abortion legal	[17.84, 19.99]	[16.09, 17.72]	[20.09, 23.47]
Immigration: amnesty	[16.85, 17.84]	[14.63, 15.52]	[19.85, 21.41]
Immigration: police question	[19.87, 21.17]	[17.89, 19.14]	[22.79, 24.41]

Table A10: 95% simulation intervals for conservative overestimation by party, using MRP estimates from a model using only median district household income as a district-level predictor.

Issue	All Politicians	Democrats Only	Republicans Only
Same-sex marriage	[7.02, 10.87]	[1.16, 5.05]	[15.72, 19.61]
Religious exemptions	[4.93, 7.98]	[-1.88, 1.19]	[15.06, 18.19]
Guns: Ban assault weapons	[20.19, 24.03]	[14.35, 18.38]	[28.6, 32.72]
Guns: Background check	[34.7, 37.23]	[30.17, 32.8]	[41.29, 43.8]
Abortion legal	[9.26, 13.75]	[4.35, 8.92]	[16.23, 20.6]
Immigration: amnesty	[7.66, 10.04]	[3.83, 6.27]	[13.15, 15.55]
Immigration: police question	[12.16, 14.75]	[8.77, 11.42]	[17.17, 19.83]

G Regression Discontinuity Analysis of Partisan Differences in Contacting Politicians

The main text claims that Republican politicians are especially likely to hear from Republican constituents relative to how often Democratic politicians are to hear from Democratic constituents. This descriptive claim is demonstrated to hold in the 2008 CCES in Table 7 in the main text. Our claims in the main text about who Democratic and Republican politicians tend to hear from do not depend on any causal interpretation of these differences. For example, it may be the case that Republican citizens in districts that elect Republicans tend to be more active for some other reason. However, here we show that it appears this descriptive claim may indeed be driven, at least in part, by an underlying causal behavioral process among Republican citizens. In particular, in Table A11, we formally analyze a regression discontinuity to see whether the descriptive finding presented in the 'Partisan Asymmetries in Contact and Activism' section of the main paper has a causal underpinning such that having a Republican MC causes Republicans to be more likely to reach out to their MC. We specify the regression discontinuities at the district level using Republican winning percentage as the running variable. We use the Calonico, Cattaneo and Titiunik (2014a) method for robust inference, as implemented in the rdrobust package for R (Calonico, Cattaneo and Titiunik 2014b). We test four outcome variables at the discontinuity, using local linear fits in the optimally selected bandwidth:⁴⁵ the percent of contacts coming from Democrats and Republicans in each district, and the percent of Democrats and of Republicans in each district who report contacting. These results suggest that the main driver of the asymmetry in contacting is that Republican citizens are especially likely to contact Republican legislators.

Figure A3 shows the apparent effect of electing a Republican on Republicans' and Democrats' contacting behavior visually. Figure A4 shows the implications for politicians' perspective.

One important caveat to this analysis is that regression discontinuity designs estimate causal

⁴⁵See Calonico, Cattaneo and Titiunik (2014*a*) for more information on the optimal bandwidth selection procedure we implement.

Outcome	Estimate: Effect of Republican Victory	Robust 95% CI	Robust <i>p</i> -value
Percent of Dems contacting	5.25	[-6.03, 14.87]	0.41
Percent of Reps contacting	15.30	[8.00, 23.51]	0.00
Percent of contacts from Dems	-7.71	[-19.02, 1.33]	0.09
Percent of contacts from Reps	5.97	[-2.62, 16.11]	0.16

Table A11: Regression discontinuity results: Effects of 2006 US House election results on 2008 CCES self-reported contacting of US House Members

effects that are local to the kinds of areas that are at the cutpoint—in this case, highly competitive districts. As a result, please note that the results in Table A11 test the causal effect of a Republican just winning in marginal districts whereas the key claim our broader analysis relies on is different, the simple descriptive difference shown in Table 7 between all Democratic and Republican districts.





Notes: The top panel plots the percent of Republicans in each district who reported contacting their US House Member's office in the 2008 CCES. The x-axis records the Republican margin of victory in the 2006 elections, such that the right half of the figure describes contacting behavior from 2007-2008 in districts where Republican candidates served during that period because they won a 2006 House election. The bottom panel shows the same for Democrats, who do not show the same dramatic increase. The Figure shows that Republican citizens contact Republican representatives especially often.





Notes: This Figure plots the proportion of total contacts to the office that come from Republicans. The black line represents a "null" under which all citizens contact equally. Democratic politicians hear from Republicans disproportionately; Republican politicians hear from Republicans constituents especially disproportionately.

H How Misperceptions Vary with The Partisan Imbalance in Constituency Contact

In the main text, we speculate that the general pattern that politicians in 2012 and 2014 overestimate conservatism and that Republicans do so especially may result from biases in who participates in the public spheres they inhabit, which we proxy with data on constituent contact. One implication of this hypothesis is that there should be variation in the strength of conservative misperceptions politicians hold within party that corresponds with variation in the strength of the Republican-leaning imbalance in constituent contact in their districts.

To test this implication, we undertake an additional analysis of the contacting data to extend the results more fully to state legislative districts. This analysis should be regarded as exploratory, as it has at least three important limitations. First, the data on contacting behavior are from 2008, the most recent year in which the CCES asked this question, but our data on politicians' perceptions and public opinion are from 2012 and 2014. (Using the 2012 ANES data is not feasible because the sample size is far, far too small, and the ANES data does not have the necessary geographic identifiers available.) Second, the CCES data asks about contacting Congress, while our focus is on state legislative politicians. Finally, sample sizes are extremely small, so these estimates are very noisy. Measurement error in dependent variables biases estimates toward zero (Achen 1982), and the measurement error in the dependent variable of contacting is very large. In some districts, we are even missing data altogether, and these districts are dropped from the analysis.

For our analysis, we first estimate contacting rates for Democrats and Republicans in each district. We then calculate a dependent variable called "Republican Contact Advantage" which is the share of individuals who said they contacted their legislator who are Republicans minus the share that are Democrats. Higher values of this variable correspond to districts where politicians should hear from Republicans more overwhelmingly. For our independent variable we overestimation of conservatism, calculated as the mean difference between the MRP estimates and the politicians' perceptions of public opinion across the issues the politician was asked about.
Again emphasizing the previous caveats, we do find some evidence of an association between higher rates of contacting by Republican constituents and increased conservative misperceptions among politicians. The first column of Table A12 shows that the larger the Republican contact advantage in a district, the more a politician in that district overestimates conservatism. This regression also includes dummies for whether a politician is a Republican and for which issue questions they were shown (as we rotated which perceptions questions we asked and there are different mean levels of conservatism overestimation on different questions).

With this said, a simple alternative explanation for this finding that we cannot rule out is that the presence of more active conservatives, not their higher levels of contacting and other public sphere behavior, are what drives this result. To try to deal with this alternative explanation, we include a control for district-level McCain vote share in 2008, as this is the year the CCES contacting question was asked. In the presence of this control, the coefficient is still positive and substantively significant but is statistically insignificant. Unfortunately, it is not necessarily straightforward how to parse this result. As Achen (1982) shows, when two correlated dependent variables are entered into a regression, regression favors the variable that is more precisely measured, and true McCain vote share in each district is much more precisely measured than is the contacting behavior we estimated from the CCES sample survey, which contains a great deal of measurement error.

To try to reduce the measurement error in our dependent variable, we also analyzed the data at a higher level of analysis, the state level, in Table A13. There we test the hypothesis that politicians misperceive public opinion more in states where Republicans are especially active relative to Democrats. We find a similar pattern of findings in that analysis, with a coefficient twice the size as the coefficient on the district-level analysis. However, again, this coefficient reduces in size and its standard error increases when we include the colinear predictor of McCain vote share—but, the coefficient remains positive and substantively large in magnitude. In both cases, we cannot be sure to what extent the facts of measurement error in multivariate regression or simple omitted variable bias is responsible.

In summary, although we urge caution in interpreting these results, they do seem to be consis-

tent with our interpretation that asymmetric rates of contact from conservative citizens could be a potential mechanism for state legislative politicians' misperceptions of public opinion in their districts.

	DV = Mean Overestimation of Conservatism		
Republican Contact Advantage	3.89*	0.91	
in District	(0.80)	(0.87)	
McCain 2008 Vote Share		0.15*	
		(0.02)	
Republican Politician	12.02*	11.88*	
	(0.75)	(0.76)	
Dummies for Questions Answered	Yes	Yes	
Constant	15.22 *	14.18 *	
	(5.12)	(5.18)	
N	1117	1026	
R^2	0.23	0.26	

Table A12: Politicians who hear from Republicans especially often overestimate constituency conservatism especially: district-level results.

Standard errors in parentheses.

* indicates significance at p < 0.05

	DV = Mean Overestimation of Conservatism		
Republican Contact Advantage	6.96*	2.80	
in State	(2.98)	(4.13)	
McCain 2008 Vote Share		0.10	
		(0.07)	
Republican Politician	11.99*	11.96*	
	(0.79)	(0.77)	
Dummies for Questions Answered	Yes	Yes	
Constant	18.67**	14.50	
	(7.83)	(8.95)	
N	1,543	1,543	
R^2	0.21	0.21	

Table A13: Politicians who hear from Republicans especially often overestimate constituency conservatism especially: state-level results.

Robust standard errors in parentheses, clustered by state. \ast indicates significance at p < 0.05

I Reanalysis of Historical Data on Politicians' Perceptions

The main text found suggestive evidence that the asymmetric misperceptions we found may be traceable to Republican citizens' especially high propensity to contact their politicians, especially when these politicians are Republicans. We showed that the asymmetric mobilization of conservatives to contact legislators is relatively recent, in line with other literature. If asymmetric misperceptions do trace to asymmetric constituent contact, we would therefore not expect to find asymmetric misperceptions in earlier eras when asymmetric constituent contact was not present.

Unfortunately, when it comes to the question of whether asymmetric misperceptions were present in previous decades, no data is available we are aware of that closely mirrors our design in years past. The contemporary CCES surveys are relatively unique in asking the public dichotomous items about concrete policies that can be easily mapped to district-level percentage support estimates. Our surveys of politicians in 2012 and 2014 were also unique, as far as we are aware, in asking US politicians to estimate support for policies in their districts in terms of percentages.

However, there are three previous studies we are aware of and were able to secure replication data for where data on politicians' perceptions of public opinion and data on actual public opinion are both measured: Miller and Stokes (1963), the 1992 Convention Delegate Study, and the 2000 Convention Delegate Study, all available at ICPSR. Below we describe results from reanalyses of these studies we conducted. With this said, these three datasets have major imperfections that limit the extent we can draw credible inferences from them. Therefore, this analysis should be viewed as exploratory.

Each of the three studies has data on three issues. On none of the nine do we see patterns like the ones we saw on every issue in 2012 and 2014. In all three cases we do find that political elites misperceive public opinion, but we do not find evidence of consistent asymmetric misperceptions in the conservative direction wherein liberals overestimate conservatism some but conservatives do so more. In general, although not in every case, both sides of the issues we study overestimate support for their views. With that said, again, we urge extreme caution in interpreting these results for reasons we describe below; each of these datasets has very major limitations.

I.1 Miller and Stokes (1963)

Miller and Stokes (1963) asked politicians for their attitudes and their perceptions of their districts' attitudes in three issue areas that they also asked the mass public about in their 1956, 1958, and 1960 election studies, which were the precursors to the ANES. The replication data for Miller and Stokes (1963) is available at ICPSR, as study 7293. Here we analyze the perceptions of incumbents in Congress in 1958, when the study was completed.

To measure politicians' perceptions of constituency opinion, Miller and Stokes (1963) asked politicians the following, beginning with a question about foreign policy:

Now I'd like to ask you a few more questions about sentiment within your district. First, take foreign affairs. How do the people of your district feel about an active internationalist policy. Would you say that...

- More of them are in favor
- They are fairly evenly divided
- More of them are opposed

The question for "social welfare" was:

How about legislation concerning the role of the federal government in domestic affairs. How do the people of your district feel about things like public power and public housing. Would you say that...

- More of them are in favor
- They are fairly evenly divided

• More of them are opposed

The question for "civil rights" was:

How about civil rights. How do the people of your district feel about desegregated schools and federal action to protect civil rights. Would you say that...

- More of them are in favor
- They are fairly evenly divided
- More of them are opposed

As the codebook notes, the public opinion studies did not ask identical questions to the mass public in these constituencies, nor were politicians asked about their own views in the same terms as the public was asked about theirs. Instead, Miller and Stokes compiled different items on each of the surveys they believed were within these policy areas into scales for each area. Therefore, the scales for elite perceptions, elite attitudes, and constituency attitudes are not directly comparable, and so it is difficult to speak with confidence about whether politicians overestimate or underestimate support for certain positions. (The replication data does not make the individual item marginals available, likely to maintain the anonymity of the Congressional respondents.)

With these caveats in mind, Figure A5 shows the results. Each subfigure shows actual district opinion on its x-axis. To compute actual district opinion, we rescale the Miller and Stokes (1963) 0-2, 0-3, and 0-4 constituency opinion scales in the replication data to 0-1 and take a weighted average of these rescaled 1956, 1958, and 1960 opinion estimates, weighted by the district Ns in each year. On the y-axis of each subfigure is the MC perception item, with 0 meaning the Member indicated they thought most are opposed, 0.5 meaning the Member thought their constituents are divided, and 1 meaning the Member thought most are in favor. Because these issues did not break down cleanly along partisan lines in Congress in the late 1950s-1960, we show the data separately at each level of the Member of Congress' own attitudes, which again is available as a 0-3 or 0-4 scale in the replication data and we rescale to 0-1. Each circle on the graphs represents one

incumbent/district, with the size of the circle corresponding to the square root of the sample size of the public opinion survey that took place in their district. Jitter is added for visibility. The blue lines show a local polynomial fit, again weighted by the square root of the number of ANES respondents in each district. Figure A6 dichotomizes the MC attitude items, combining MCs who gave any conservative and any liberal response. (For Figure A6, MCs who registered attitudes at the middle of the scale are dropped.)

We focus on Figure A6 given its easier interpretability. The scales are all oriented such that higher values correspond to more liberal perceptions and more liberal views. Taking these estimates at face value, if the patterns we observed today were present in this data, we should expect to see conservatives, on the subgraphs at left, systematically underestimating support *and* liberals, on the subgraphs on the right, *not* overestimating support, or even underestimating it also. Recall that this is what we saw among state legislative candidates in 2012 and 2014: conservatives (Republicans) underestimate support for liberal policies dramatically, and liberals (Democrats) also usually underestimated support for liberal policies, although by less.

Instead, the pattern that we see in 1956-1960 in Figure A6 is more consistent with a straightforward pattern of motivated reasoning or false consensus bias. Conservatives appear to underestimate constituency liberalism, but liberals appear to overestimate constituency liberalism (unlike they do today, where they if anything underestimate constituency liberalism also). On foreign policy, MCs with liberal attitudes all perceive their district as having liberal attitudes, regardless of whether the districts are more towards the center of the scale. On social welfare, liberals and conservatives are essentially mirror images. On civil rights, in nearly evenly divided districts liberals almost always say their districts favor civil rights whereas conservatives nearly always say their districts oppose it.

We regret that it is difficult to perform more systematic analyses than this due to uncertainty into how to bridge the MC attitude, district opinion, and MC perception scales. There are simply too many major limitations to the instrumentation in the Miller and Stokes (1963) data. With this said, while the design of Miller and Stokes's (1963) study makes it difficult to answer questions



Figure A5: Symmetric Misperceptions in Miller and Stokes (1963)



Figure A6: Symmetric Misperceptions in Miller and Stokes (1963) — MC Attitude Dichotomized

about asymmetries in misperceptions with confidence, as best we can tell, the data from this study is consistent with the *asymmetric* misperceptions we witnessed today not being present during this earlier period.

I.2 1992 and 2000 Convention Delegate Studies

The 1992 and 2000 Convention Delegate Studies, available from ICPSR (study numbers 6353 and 31781), asked convention delegates to the 1992 and 2000 Democratic and Republican conventions to give their perceptions of the *national electorate's* opinion in several policy areas that were also asked about in identical or nearly identical ways on the ANES surveys those years.

Many of the respondents to the Convention Delegate Studies indicated that they held elected office: 899 respondents in 1992 and 432 in 2000. We exploit the presence of elected officials in this dataset to measure how elected officials perceived public opinion in previous decades. Our analysis is limited to these self-identified elected officials.

In 1992, the three policy areas the CDS asked about that the public was also asked about on the contemporaneous ANES were: abortion, the "helping blacks" 1-7 scale, and the "government services" scale. In 2000, the three policy areas were: abortion, the "helping blacks" 1-7 scale, and the "government insurance" scale=. On all of these six items, specific policies were not named.⁴⁶

As an example of these questions, on the issue of abortion, the 1992 and 2000 study asked respondents...

There has been a good deal of discussion about abortion during recent years. Which one of the opinions expressed below (a, b, c, or d) best agrees with your view? Then,

⁴⁶There were also other perception items on the Convention Delegate Studies that we do not include because they either do not match an ANES item closely or because they are not about a policy issue. For example, there is a question about job protections for homosexuals in 2000, which the ANES item about this issue did not match well. There are also questions about 7-point ideological identification, which other literature shows elites and the mass public interpret very differently and so we do not include. In the 1992 CDS, there was also a question about military intervention that we did not include because answers to it do not correlate by party (many Republicans and Democrats place themselves on both sides of this scale) and are not straightforward to map to partisan or ideological divides.

we're interested in where you would place the following persons and groups on the same scale.

•••

National Electorate

•••

- No abortion ever.
- Abortion only when raped.
- Established reasons other than rape.
- Abortion as free choice.

A very similar question about abortion was present on the 1992 and 2000 ANES, providing us an opportunity to compare the public opinion estimates in the ANES to the elected officials' perceptions in the CDS.

We use this data to explore how our findings may have differed had we conducted our study in 1992 or 2000. With that said, there are four very major differences between these questions and the questions we used in our studies in 2012 and 2014:

- The questions in the Convention Delegate Study ask about perceptions of the national electorate, not about perceptions of the constituency where the individual was running for office or lives.
- We are unable to match the CDS respondents to particular constituencies (and therefore cannot estimate support in their constituencies).
- The CDS questions ask the respondent to simply name which category they think best represents the national electorate, and not what percent of the national electorate falls within each category. It is therefore unclear whether respondents thought they should select the median, mean, mode, an intensity-weighted mean, what position would be most politically

advantageous to take, or some other summary statistic. Here we make the assumption that respondents interpreted the question as asking what the median opinion was in the national electorate, which we computed from the corresponding items in the ANES.

- Because CDS respondents are asked to place the electorate at a single point on a scale and not to provide a continuous number (as in our questions), we cannot make statements (like we can about our findings) like "on average politicians overestimate support by X%." We can only make statements like "X% of politicians overestimate support."
- All the questions except the abortion questions solicit opinions and perceptions on abstract 7-point scales that, although they clearly confine themselves to particular policy domains, are nevertheless without clearly specified policy referents. As a result, we are not sure whether any misperceptions are a result of elites misperceiving the public's actual opinions or simply misperceiving how the public would interpret an abstract survey question.

These caveats should be kept in mind when interpreting the results.

With this said, an advantage of these items relative to the Miller and Stokes (1963) items is that more specific policy areas are stated and that these policy areas match the policy areas we asked about in 2012 and 2014 in two cases: abortion (in both the 1992 and 2000 CDS) and health care (in the 2000 CDS).

Recall that we found two patterns in our data from the years 2012 and 2014: across issues, Republicans overestimate conservatism dramatically and Democrats overestimate conservatism mildly.

Tables A14 and A15 show the results from the 1992 and 2000 CDS. In both tables, we add a final line with an example of how the results might look if they mirrored in the 2012 and 2014 results in the main paper.

In brief, Republicans are more likely to overestimate conservatism than to overestimate liberalism on 2 of the 3 issues in both years. Democrats are, however, also more likely to overestimate liberalism than to overestimate conservatism on 2 of the 3 issues in both years as well. These patterns differ from the patterns we saw in 2012 and 2014.

On abortion, in both years we see a straightforward pattern consistent with a false consensus or motivated reasoning effect, such that both sides overestimate support for their position, although Democrats do so more. This is unlike the 2012 and 2014 pattern.

On the "helping blacks" scale, both Democrats and Republicans dramatically overestimate liberalism in 1992 and only mildly overestimate conservatism in 2000. This is again unlike the 2012 and 2014 pattern, where Republicans overestimate conservatism dramatically.

On the spending scales, "services" in 1992 and "insurance" in 2000, we see that both parties overestimate conservatism in 1992 and support for their own side in 2000.

In summary, the only issue on which we see a pattern that resembles the patterns we find in 2012 and 2014 is the "government services" scale in 1992. However, even in this case, we do not see asymmetry in the misperceptions; Democrats and Republicans misperceive public opinion equally.

	Democrats		Republicans	
Issue	Overestimate	Overestimate	Overestimate	Overestimate
	Conservatism	Liberalism	Conservatism	Liberalism
Abortion policies	9%	45%	24%	18%
"Helping blacks" scale	14%	52%	11%	56%
"Government services" scale	47%	11%	48%	18%
Example: 2012 and 2014 results	70%	15%	90%	5%

Table A14: Misperceptions in the 1992 Convention Delegate Study

Table A15: Misperceptions in the 2000 Convention Delegate Study

	Democrats		Republicans	
Issue	Overestimate Conservatism	Overestimate Liberalism	Overestimate Conservatism	Overestimate Liberalism
Abortion policies	14%	33%	29%	9%
"Helping blacks" scale	10%	2%	16%	4%
"Government insurance" scale	11%	53%	42%	16%
Example: 2012 and 2014 results	70%	15%	90%	5%

I.3 Summary

Across both Miller and Stokes (1963) and the 1992 and 2000 CDS, then, the most common pattern is that liberal elites overestimate mass liberalism and conservative elites overestimate mass conservatism. In none of the cases — 3 issues each across 3 years — do we see patterns like the patterns we see on every issue in our data 2012 and 2014 reported in the main text. In 2012 and 2014, we found that Republican elites strongly overestimated conservatism but that Democrats did not overestimate liberalism and indeed usually overestimated conservatism, although by less.

With this said, the Miller and Stokes (1963) and CDS data by no means definitively establish that the biases we documented indeed appeared more recently—there are simply too many differences between the methodologies and samples. However, this data does represent one further piece of evidence that appears consistent with the differences we document in the paper emerging relatively recently.

In terms of the implications of these findings for understanding the causes of asymmetric polarization, taking the Miller and Stokes (1963) and CDS data at face value and setting aside the many caveats, this data would be most consistent with a story where the replacement of southern Democrats with conservative Republicans in Congress were most responsible for the increase in asymmetric polarization until the 1990s (McCarty, Poole and Rosenthal 2006), when asymmetry in contact was not yet present and the 1992 and 2000 CDS studies do not find them, but that the further increases in asymmetric polarization that have been seen in the last decade could be at least partly attributable to the rise of asymmetric misperceptions, which results in larger part to incumbent Republicans in Congress being replaced by even more conservative Republicans (Theriault 2006, 2013). Again, however, such an analysis would rely on setting aside the many limitations of the Miller and Stokes (1963) and CDS data.