Sex and the Ballot Box: Perception of Ballot Measures Regarding Same-Sex Marriage and Abortion in California

Craig M. Burnett
Assistant Professor
Appalachian State University
burnettcm@appstate.edu

Mathew D. McCubbins
Provost Professor of Business, Law and Political Economy
University of Southern California
mmccubbins@marshall.usc.edu

Abstract:

States with direct democracy routinely ask voters to modify their states’ laws and constitutions and to authorize the raising of billions of dollars in bonds and taxes. In recent elections, voters in many American states have also voted on important social policies that redefine civil liberties within their state. Do voters know enough about these social policies to make an informed decision? The common wisdom is that when choosing between candidates, voters rely on information shortcuts in lieu of extensive knowledge about the issues. Unlike candidate elections, however, ballot measures lack some useful information shortcuts such as party identification. Using data from an election survey, we test the hypothesis that voters use shortcuts to make reasoned decisions on two ballot measures central to today’s policy debates: California’s Proposition 4 (2008) on parental notification for abortion and Proposition 8 (2008) on same-sex marriage. We show that voters do not use cues universally, and furthermore, the amount of factual information a voter possesses has almost no effect on her decisions.

* We wish to thank the nearly 140 volunteers who helped collect the data for this paper. We also thank Daniel Enemark, Elizabeth Garrett, Vladimir Kogan, Colin McCubbins, and Ellen Moule for helpful comments on previous drafts.
Introduction

Initiatives and referenda routinely require the average voter to make complicated policy decisions. Indeed, direct democracy often asks voters to ratify laws or constitutional amendments on the key political issues of the day, such as taxes, debt, immigration, abortion, and same-sex marriage. Increasingly, ballot measures have focused on essential civil liberties questions. Consider California’s 2008 general election: voters defined marriage as requiring opposite-sex partners and decided that minors should not be required to notify their parents before receiving an abortion. These two examples are hardly alone. It is now common for voters who reside in states with direct democracy to alter their state’s constitution to limit or increase the rights available to the citizens of that state (Lupia et al. 2010). Indeed, ballot measures are the new weapon of choice on the frontline of the “culture war.”

But do initiatives and referenda ask too much of voters? In many elections, the demands of direct democracy may be overwhelming. Again, consider the 2008 California general election: Residents of Los Angeles County voted on twelve statewide propositions and an additional 48 local and countywide measures. Direct democracy required voters of Los Angeles to evaluate at least twelve, and in some districts more than twenty, abstruse policy proposals in addition to selecting a president, a senator, and representatives for federal, state, county, city, and other local offices. The presence of multiple ballot measures in any given election is commonplace in California, and California is not the only state in which ballots resemble telephone directories. Asking voters to evaluate complicated constitutional questions — especially ones that define civil liberties — may be demanding too much from election-fatigued voters.
As a policy maker, the average voter is inexperienced and under-informed at best. Direct democracy thus poses a troubling dilemma: can voters make reasoned decisions when evaluating complicated ballot measures? Surveys that highlight the dismal amount of knowledge that voters possess about politics (e.g., Delli Carpini and Keeter 1996) suggest the answer is a resounding “no.” The answer to this question, however, is far from clear, in part because the bulk of scholarship on ballot measures focuses on questions such as these:

- How does direct democracy work as an institution (see, e.g., Garrett and McCubbins 2008; Kousser and McCubbins 2005; Kousser, McCubbins, and Moule 2008; Kousser, McCubbins, and Rozga 2008; Lowenstein 1982; 1983)?
- How is spending regulated in direct democracy campaigns? (Garrett 1999; Lowenstein and Stern 1989; Garrett and Smith 2005)
- Does campaign spending affect voters’ awareness of ballot measures (e.g., Bowler and Donovan 1998; Nicholson 2003)?

By contrast, few studies (e.g., Burnett, Garrett, and McCubbins 2010; Karp 1998; Lupia 1994; Lupia and McCubbins 1998) use individual-level data to consider whether voters who make these policy decisions are casting competent votes — a fundamental requisite for direct democracy to “work” (see also Gerber and Lupia 1999). The question of whether individuals can cast competent votes on ballot measures is especially critical when a significant amount of proposals aim to amend a state’s constitution.

Citing Lupia’s (1994) seminal work on voters in direct democracy, most scholars now assume that individuals can make “reasoned” choices without “encyclopedic” information of the issues. Building on Lupia’s findings, Lupia and McCubbins (1998) use experimental evidence to demonstrate that individuals can make expert-level decisions when a third-party cue-giver is
knowledgeable and trustworthy. Lupia and Lupia and McCubbins (along with Popkin 1994) have shown that voters can make reasoned decisions — in both representative and direct democracy — despite their information deficiencies.

In a recent article, Burnett, Garrett, and McCubbins (2010) found no evidence that familiarity with the core facts behind a ballot measure or knowledge of the position of prominent cue-giver caused voters to vote differently compared to those who possessed neither kinds of information. This evidence stands in stark contrast to Lupia’s (1994) and Karp’s (1998) conclusion that voters routinely use information — including cues — to make decisions and raises two important questions: When and how often are voters informed about the policy choices they face on the ballot? And, when and under what conditions do voters use elite endorsements in direct democracy? We show that cue-givers sometimes succeed in influencing only a subset of voters in any given election. We also show that having specific knowledge about a ballot measure does not always influence a voter’s decision. This is surprising given that previous research (Bartels 1996; Lau and Redlawsk 1997) shows that information often affects voters’ decisions. Additional studies are necessary to move toward a general understanding of what voters know about ballot measures and when knowledge of facts and elite endorsements will influence voters in direct democracy.

**Voters and Competent Decisions in Direct Democracy**

We build on the agency-theory framework of Lupia and McCubbins (1998, Chapters 2-5), who argue that voters (whom they call “principals”) can use information from cue-givers (whom they call “speakers”) when the cue-giver meets the following common-knowledge conditions: (1) the voter believes that the cue-giver shares a common interest over policy outcomes, or, lacking that, the cue-giver must undertake an observable and costly action to
communicate a voting cue to the voter, or some external force or forces are strong enough to substitute for common interest (there is a penalty for lying or a threat of verification, thereby making the cue-giver trustworthy); and (2) the voter perceives the cue-giver to be knowledgeable about the subject matter (thus, the cue-giver is believed to have the knowledge the voter desires). Of course, the cue-giver can persuade the voter and thus change the voter’s policy choice only when the voter is uncertain about which option is better (Lupia and McCubbins 1998, 55).

While information shortcuts have great potential to help voters make decisions, the realities of political campaigns place limits the ability of cue-givers to persuade voters. For instance, Garrett and McCubbins (2008) find that many information shortcuts fail to meet the two basic conditions set forth by Lupia and McCubbins, with or without the existence of external persuasive forces, and are therefore not useful. On the other hand, Boudreau (2009a), in work that parallels the work of Lupia and McCubbins (1998) and Gigerenzer (2000; 2007; 2008), Gigerenzer and Selten (2001) and Gigerenzer, Todd, and the ABC Research Group (1999), uses experimental evidence to show that unsophisticated voters can use cues so successfully that they can, in some instances, out-perform more knowledgeable (sophisticated) voters. In a related study, Boudreau (2009b) validates the Lupia and McCubbins (1998, 55) hypothesis that an individual may ignore credible cues if she thinks she is capable of making an independent decision (see also Zaller 1992). Boudreau et al. (2010) show that for voters to become informed, voting cues must be both cheap to acquire and the problems have to be easy enough for voters to understand, thereby allowing voters to use their knowledge of cues to make a reasoned choice. In sum, information shortcuts can work, but it is unclear how often elections meet the conditions for voter persuasion.
Many scholars now incorporate information shortcuts as an essential component of vote choice models. These models assume that voters successfully and routinely overcome their information deficiencies by relying on simple cues (cf. Popkin 1994). Indeed, shortcuts can work well in elections that allow party and incumbent labels on the ballot. Party labels demonstrate a common interest (Downs 1957, Ch. 8), and incumbency signals to voters that one option has knowledge from experience (for a different perspective, see Bartels 1996). Moreover, these shortcuts are available on the printed ballot, which reduces the transaction costs for voters to access these cues. As a result, we should expect voters to use party and incumbency shortcuts to evaluate candidates for national and many state offices (e.g., Jacobson 2008).

By contrast, initiatives and referenda do not come with voting cues printed on the ballot. In order for voters to use cues to make reasoned choices with respect to ballot measures, the following must be true: (1) the source of the cue and the communication environment satisfies both of Lupia and McCubbins’ conditions for persuasion, (2) voters must have learned about the voting cue before they vote, and (3) voters recall the voting cue when they make their choice. Yet, voters are cognitive misers and many do not perform extensive searches for information about politics (see, e.g., Downs 1957, Ch. 11). Because the cues for ballot measures are not available on the ballot (although they may sometimes be found in the voter information guide), we should expect that voters will employ fewer information shortcuts in their vote choices over ballot measures than they do in their votes for national or statewide candidates.

Lupia (1994; see also Karp 1998) is the first to offer empirical support showing that voters can use information shortcuts to approximate a fully informed vote for a ballot measure. Lupia conducted an exit survey of Los Angeles voters during the 1988 general election in California to measure the electorate’s awareness of prominent endorsers and opponents of five
related ballot measures. In his survey, Lupia finds that voters who knew the information shortcuts (cues presented by endorsers) were able to use the cues to arrive at reasoned decisions on the five initiatives he surveyed (all of the measures dealt with car insurance reform). As Lupia and Matsusaka note about the seminal work, “Such evidence supports the claim that voters with apparently low levels of political information can use information shortcuts to emulate the voting behavior they would have exhibited if they were as informed as the best-informed persons in the survey” (2004: 468). As Bartels (1996) observes and Lupia and Matsusaka (2004) confirm, however, very little empirical evidence examines whether voters, in practice, actually substitute information shortcuts for extensive factual knowledge. Despite the dearth of empirical evidence, scholars have prematurely designated Lupia’s findings the conventional wisdom in the study of direct democracy. Recent empirical work on the topic, however, has begun to challenge Lupia’s results (Burnett, Garrett, and McCubbins 2010; Burnett and Parry 2012).

We test whether and how often voters use voting cues to compensate for their lack of factual knowledge about ballot measures for two initiatives. Building on Lupia (1994) and using the framework of Lupia and McCubbins (1998), we propose the following hypothesis:

**H1:** In lieu of full information, voters use information shortcuts in the form of endorsers’ cues to arrive at reasoned choices.

In addition, we examine the effects of factual knowledge on vote choice. Similar to Lupia (1994) who found that knowledge of a cue was as effective at informing voters’ decisions as factual knowledge, we expect a similar outcome. Similarly, where our expectation is that knowledge of a fact will lead voters to better decisions (e.g., Bartels 1996).

**H2:** Voters who have specific knowledge about a ballot measure will use that knowledge to arrive at reasoned choices more often when compared with the baseline category.
Data

We use data collected during California’s general election on November 4, 2008, to test our hypotheses. During this election, we assessed voters’ knowledge about two contentious propositions on the ballot, including their knowledge of endorsements from prominent cue-givers. We also asked respondents to report their vote choices and demographic information (e.g., party identification, income, education). We trained student volunteers to take interviews from voters as they exited the polling booth. We surveyed thirteen polling locations that covered nineteen precincts. Our student volunteers collected 1,002 complete interviews and received 1,051 refusals, yielding a cooperation rate of 49 percent. We instructed our student volunteers to ask every other exiting voter for an interview to randomize our sample.

We asked respondents about two initiatives that would have amended the California state constitution. Proposition 4 was an initiative that required medical officials to notify the parent or legal guardian of an unemancipated minor at least 48 hours before performing an abortion. Proposition 4 did not require parental or guardian consent. The initiative allowed for a number of exceptions: when the minor showed convincing evidence of maturity; when a court deemed that forgoing notification is in the best interest of the minor; when the parent(s) or guardian(s) had given previous consent; or in the case of a medical emergency. Additionally, Proposition 4 would have instituted mandatory reporting requirements for physicians and penalties for non-compliance.

Proposition 4 was a controversial initiative that had many proponents and opponents. Governor Schwarzenegger offered his support of the initiative on “Meet the Press” the June before the election. Despite this, he was a quiet supporter throughout the remainder of the campaign. The most vocal opponent of Proposition 4 was Planned Parenthood. Planned
Parenthood’s position satisfied the trustworthiness and knowledgeable conditions because the group is a well-known and outspoken supporter of pro-choice policies. Thus, many voters will share a common interest with Planned Parenthood, and many others will have conflicting interests. Both those who favor and those who oppose pro-choice policies, therefore, could draw inferences about Proposition 4’s policy impact from Planned Parenthood’s position. Planned Parenthood also satisfies the knowledgeable condition because it presumably has expertise about the effects of abortion regulation. Accordingly, we asked voters the following question about Planned Parenthood’s endorsement:

1) Do you happen to know if Planned Parenthood supported, opposed or took no position on Proposition 4 (the one about parental notification for an abortion)? (The correct answer is “opposed”)

Proposition 8, the second measure we asked about, was an initiative to amend the state constitution to limit the definition of marriage to be between one man and one woman. Proposition 8 offered California voters the opportunity to overrule a decision by the California Supreme Court that had struck down Proposition 22 — an earlier, statutory initiative that limited marriage to be between one man and one woman — as unconstitutional. The court’s written decision on Proposition 22 also interpreted the California Constitution to mean that same-sex couples had a legal right to marry.

Proposition 8 attracted wealthy and organized proponents and opponents. Both sides spent an incredible amount of money on their campaigns, totaling more than $108 million. The California Republican Party and Democratic Party took opposite positions on Proposition 8 (with the Republican Party in favor and the Democratic Party against the initiative). Both parties sent their endorsements out as part of a slate mailer. Voters often use political party endorsements as a cue on how to vote because their long-established and well-known ideological positions make
them trustworthy (relying on a pre-existing common interest with their members) and knowledgeable (political parties are experts on public policy). Thus, we measure our respondents’ use of the parties’ endorsements with the following questions:

2) Do you happen to know if the Democratic Party supported, opposed or took no position on Proposition 8 (the one about same-sex marriage)? (The correct answer is “opposed”)

3) Do you happen to know if the Republican Party supported, opposed or took no position on Proposition 8 (the one about same-sex marriage)? (The correct answer is “supported”)

For each ballot measure, we asked a factual knowledge question that requested respondents to recall details about the ballot measures, what Lupia (1994) calls encyclopedic knowledge. For Proposition 4, we asked:

4) True or False: Proposition 4 requires minors to get consent of a parent before having an abortion. (The correct answer is “false”)

This question assessed whether voters knew that Proposition 4 only required parental notification and not parental consent for a minor to receive an abortion. Voters who had followed the campaign or had paid close attention to the campaign materials should have learned the correct answer to this question.

For Proposition 8, we assessed whether voters understood that constitutional amendments via the initiative process only require a simple majority to pass. Specifically, we asked:

5) As a constitutional amendment, what percent of the vote is required to pass Proposition 8, eliminating same-sex marriage? (The correct answer is a “majority” of voters)

Perhaps an attempt to mobilize their supporters, the opposition campaign emphasized how easy it was to change the constitution throughout their campaign. Thus, voters who followed the
campaign or were familiar with California’s laws regarding the initiative process should have learned the correct answer to this question.²

By asking factual knowledge questions, we can separate voters who have deep knowledge of a ballot measure from voters who only have knowledge of the information shortcut (the well-known cues). Similar to Lupia before us, including these measures allows us to estimate whether factual knowledge or knowledge of a cue had any effect on vote choice. We provide the ballot summary of each proposition in Appendix A.

**Research Design and Methods**

We use a post-test-only non-equivalent group design to test our hypothesis. Our design uses responses to the factual knowledge and information shortcut questions to create variables that estimate the effect of information on vote choice. Unlike Lupia (1994) who was able to assume the direction of his information shortcuts (he assumed that voters disliked lawyers and insurance companies), we must add a “direction” to our information variables (e.g., Rabinowitz and MacDonald 1989). We expect that information — especially elite endorsements — will affect subgroups of voters differently. Our ballot measures deal with abortion (Proposition 4) and same-sex marriage (Proposition 8), two quintessential ideological issues. For example, we anticipate that voters who are liberal will view the endorsements from Planned Parenthood, the Democratic Party, and the Republican Party differently when compared to conservative voters. Therefore, we add a “direction” to our information variables by interacting them with our respondents’ self-reported ideology. Our approach is similar to Karp (1998) who adds a

---

² We asked two additional factual knowledge questions that we omit from the analysis below. For Proposition 4, we asked “Under Proposition 4, do you know the number of hours before their child receives an abortion that a parent must be notified?” The correct answer is “48 hours.” This measure, however, was never significant in any regression and we therefore dropped it from the analysis for simplicity. For Proposition 8, we asked voters “True or False: Proposition 8 would limit marriage, overturning a recent California Supreme Court decision.” The correct answer is “true.” Over 90 percent of our respondents answered this question correctly. As a result, it did not provide any predictive power in our regressions and we dropped it from the analysis.
direction to his cue variable by interacting it with a thermometer score his respondents gave regarding the cue-giver.

We employ a quasi-experimental test of our hypothesis by matching respondents in the treatment group (knowledge of a cue) to respondents in the control group (no knowledge of a cue) for both ballot measures. We use a simple matching equation where we predict the propensity of receiving the treatment with common demographic variables (age, income, education, and gender) and related knowledge variables (factual knowledge of the proposition and general political knowledge). To implement our matching equation, we use the GenMatch package for R (see Diamond and Sekhon 2005) as implemented by the MatchIt package for R (Ho et al. 2007).

Why use matching in this research? By using matching, we can be certain that our findings are not the result of some covariate imbalance between our groups (those who knew the cue and those who did not). Matching, then, simply ensures that we have covariate balance between our treatment and control conditions. In essence, genetic matching allows us to compare apples to apples, whereas a simple regression compares apples to oranges.

After matching our respondents, we use the following logit regression equation to model each respondent’s vote choice on Propositions 4 and 8:

\[
Pr(y_{iz} = 1) = \frac{1}{1 + e^{-n_{iz}}}
\]

where \( n_{iz} = (\beta_0 + \beta_1 \text{LIBERAL}_{iz} + \beta_2 \text{LIBERAL}_{iz} \ast \text{CUE}_{iz} + \beta_3 \text{LIBERAL}_{iz} \ast \text{FACT}_{iz} + \beta_4 \text{LIBERAL}_{iz} \ast \text{CUE}_{iz} \ast \text{FACT}_{iz} + \beta_5 \text{CONSERVATIVE}_{iz} + \beta_6 \text{CONSERVATIVE}_{iz} \ast \text{CUE}_{iz} + \beta_7 \text{CONSERVATIVE}_{iz} \ast \text{FACT}_{iz} + \beta_8 \text{CONSERVATIVE}_{iz} \ast \text{CUE}_{iz} \ast \text{FACT}_{iz} + \beta_9 \text{FACT}_{iz} + \beta_{10} \text{CUE}_{iz} \ast \text{FACT}_{iz} + \beta_{11} \text{CUE}_{iz} + \beta_{12} \text{X}_{iz}) \)
In Equation (1), \( \Pr(y_{iz} = 1) \) is respondent \( i \)'s estimated probability of voting in favor (where “1” indicates a “yes” vote and “0” represents a “no” vote) of proposition \( z \). The term \( n_{iz} \) defines the model that estimates \( \Pr(y_{iz} = 1) \). In the model, \( LIBERAL_{iz} \) is a dichotomous measure of whether respondent \( i \) classifies herself as a Liberal (coded as a “1”) or not (coded as a “0”). \( CUE_{iz} \) is a dichotomous measure of respondent \( i \)'s knowledge of an elite endorsement for proposition \( z \). For Proposition 4, \( CUE_{iz} \) measures whether a voter knew Planned Parenthood’s position, where respondent \( i \) receives a “1” if they know the correct answer and a “0” otherwise. For Proposition 8, \( CUE_{iz} \) indicates whether respondent \( i \) was able to identify at least one of the political parties’ positions. Respondent \( i \) receives a “1” if she knew either that the Democratic Party of California opposed the measure or the Republican Party of California supported the measure; voters who knew both cues also received a “1.” Voters who did not know either endorsement received a “0.” \( FACT_{iz} \) indicates whether respondent \( i \) gave a correct answer to the factual knowledge questions we asked for proposition \( z \).

For Proposition 4, \( FACT_{iz} \) indicates whether respondent \( i \) gave a correct answer to Question (4) above, which asked respondents recall whether Proposition 4 required parental consent (it did not). For Proposition 8, \( FACT_{iz} \) estimates the effect of respondent \( i \)'s knowledge of the vote percentage required to pass Proposition 8, where a “1” indicates a correct answer and a “0” represents an incorrect answer. \( CONSERVATIVE_{iz} \) measures whether respondent \( i \) self-identifies as a conservative (coded as “1”) or not (coded as “0”). The final term, \( X_{iz} \), is a matrix of covariates that control for Age, Education, Income, and general Political Knowledge,\(^3\) factors that have been previously shown to affect vote choice.

\(^3\) We excluded party identification from the analysis since it is very similar to ideology (correlation about .7). Political Knowledge is the percent of correct answers on five common political knowledge questions. They are: 1) Whose responsibility is it to determine if a law is constitutional or not? Is it the Supreme Court, Congress, or President?; 2) Do you happen to know what job or political office is held by John Roberts?; 3) Do you happen to
Results

We discuss our results in four steps. First, we present summary statistics to assess how much voters know about the propositions on the ballot; we also consider source credibility (Iyengar and Valentino 2000; Druckman 2001a; 2001b) and whether the cues we surveyed satisfy the Lupia and McCubbins (1998) conditions necessary for persuasion. Second, we examine the covariate balance of our sample between groups before and after using genetic matching (Diamond and Sekhon 2005). Third, we then present the regression results using the matched sample as a strict quasi-experimental test of Lupia’s theory. Finally, we calculate some marginal effects of information on vote choice.

To begin, we consider how much people knew about the propositions on the ballot. For Proposition 4, 47.3 percent of our respondents could identify the cue that Planned Parenthood opposed Proposition 4, while 8.3 percent thought Planned Parenthood supported the measure. An additional 2.2 percent believed Planned Parenthood took no position and 42.2 percent reported that they did not know what (if any) position Planned Parenthood advocated. For our factual knowledge question, only 27.1 percent of our sample appeared to know that Proposition 4 did not require parental consent and surprising 67.8 percent believed the measure required consent. The remaining respondents (5.2 percent) reported that they did not know the correct answer.

Many voters did not recognize Planned Parenthood’s position. Yet, the organization may have been a viable information shortcut for those voters who could identify its position. For instance, some voters might have viewed Planned Parenthood as a credible source of information about Proposition 4, since it is an organization that provides health services, including abortions, know what job or political office is held by Dick Cheney?; 4) How much of a majority is required for the U.S. Senate and House to override a presidential veto?; 5) Do you happen to know which party has the most members in the House of Representatives today?
at little-to-no cost. Moreover, Planned Parenthood takes a consistent pro-choice position. It is therefore reasonable that an individual could infer her own preference about a ballot measure based on Planned Parenthood’s recommendation.

There is a mild correlation between having general political knowledge and identifying Planned Parenthood’s position (.3). Thus, being able to identify the cue’s recommendation is not a byproduct of being politically informed. Finally, there appears to be no correlation between knowing Planned Parenthood’s position and knowing that the initiative did not require consent (.08). Thus, Planned Parenthood appears to be an information shortcut that is independent of our main covariates and other sources of information. While knowledge of the group’s position was not widespread amongst our sample, voters who did recognize Planned Parenthood’s voting recommendation could have used this information shortcut to make a reasoned choice.

We uncover similar numbers for Proposition 8. Many voters did not know that the Democratic Party of California opposed (53.5 percent correct) and that the Republican Party of California supported the measure (51.3 percent correct). An additional 19.3 percent and 22.7 percent provided an incorrect answer and 27.2 percent and 26 percent said they did not know the correct endorsement provided by the Democratic Party of California and Republican Party of California, respectively. For the factual knowledge question we asked about Proposition 8, only 47.8 percent of the respondents knew that the initiative, as a constitutional amendment, required a simple majority of votes to pass. The remaining respondents believed that Proposition 8 required a two-thirds majority (11.9 percent) or some other percentage to pass (4.6 percent); a strong minority simply did not know (35.7 percent).

Around 50 percent of our voters knew the positions of the Democratic and Republican Parties. Political parties provide trustworthy cues as they share a common interest with their
members (non-members can also infer information from the parties’ positions). Further, political parties send out information to guide voters in their choices for upcoming elections via slate mailers. Parties also provide information about their positions on their websites and in the voter information guide. Moreover, political parties are policy experts and therefore satisfy the knowledgeableability condition. While limited, these information shortcuts may be useful for the voters who recognized the parties’ positions.

As before, knowledge of Proposition 8’s cues appeared to be unrelated to general political knowledge and factual knowledge of the initiative. There is a weak correlation between knowledge of the parties’ positions and general political knowledge (for the Democratic Party it was .2; for the Republican Party it was .08). This suggests that knowledge of a cue is independent of general political knowledge. Voters’ factual knowledge of Proposition 8 and knowledge of the parties’ positions are also unrelated. Knowing that Proposition 8 required a majority of votes to pass correlates with knowing the Democratic Party’s position and the Republican Party’s position at .14 and .06, respectively.

While political parties satisfy the Lupia and McCubbins conditions for persuasion, their usefulness may be of limited effect. The $108 million campaign surrounding Proposition 8 led to a saturated information environment. Despite the campaigns’ best efforts, however, only 50 percent of our respondents learned much about Proposition 8, including the parties’ endorsements.

We turn now to examine the covariate balance between our treatment (knew the cue) and control groups (did not know the cue). As Table 1 shows, we had strong covariate balance between our treatment and control groups for Proposition 4 before matching. After matching, however, we achieve near-perfect covariate balance between the two groups. For Proposition 4,
the genetic matching algorithm matched 393 treated observations to 225 control cases, and 207 control cases went unmatched. Concerning Proposition 8, also shown in Table 1, the covariate differences between groups were somewhat larger before matching, though the two groups were still very similar. Again, after matching, we achieve near-perfect covariate balance between the groups. For this measure, the algorithm matched 551 treatment cases to 214 control cases, and 67 control cases went unmatched.

### Table 1 – Covariate Balance Improvement from Genetic Matching

<table>
<thead>
<tr>
<th>Proposition 4</th>
<th>Mean Treated Pre</th>
<th>Mean Control Pre</th>
<th>Mean Treated Post</th>
<th>Mean Control Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Income</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Education</td>
<td>5.0</td>
<td>4.6</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Female</td>
<td>.54</td>
<td>.48</td>
<td>.54</td>
<td>.54</td>
</tr>
<tr>
<td>Knew Proposition Required 48-Notice</td>
<td>.58</td>
<td>.53</td>
<td>.58</td>
<td>.58</td>
</tr>
<tr>
<td>Knew Proposition Required Notification Only</td>
<td>.31</td>
<td>.24</td>
<td>.31</td>
<td>.31</td>
</tr>
<tr>
<td>Political Knowledge</td>
<td>.74</td>
<td>.58</td>
<td>.74</td>
<td>.73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposition 8</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>3.0</td>
<td>2.9</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Income</td>
<td>2.3</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Education</td>
<td>4.9</td>
<td>4.5</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>Female</td>
<td>.51</td>
<td>.48</td>
<td>.51</td>
<td>.49</td>
</tr>
<tr>
<td>Knew Proposition Required Majority</td>
<td>.52</td>
<td>.39</td>
<td>.52</td>
<td>.52</td>
</tr>
<tr>
<td>Knew Proposition Overturned CA S.C. Decision</td>
<td>.95</td>
<td>.84</td>
<td>.95</td>
<td>.95</td>
</tr>
<tr>
<td>Political Knowledge</td>
<td>.69</td>
<td>.58</td>
<td>.69</td>
<td>.69</td>
</tr>
</tbody>
</table>

While covariate balance is necessary for a quasi-experimental test, similar distributions in the treatment and control groups are also required to ensure we are comparing similar groups.

Figures 3 and 4 present the distributions of the propensity to receive the treatment for the treatment and control groups both before and after matching for Propositions 4 and 8, respectively. As the figures indicate, the distribution of the control group is remarkably similar to the treatments group for both measures after matching. Figures 3 and 4, coupled with Table 1
above, assure us that our matching worked well and that our treatment and control groups are comparable.

Figure 3 – Distribution of Propensity Scores, Proposition 4

Figure 4 – Distribution of Propensity Scores, Proposition 8
Having established strong covariate balance, we turn now to present the results of our regressions. Table 2 presents the logit regression results for Proposition 4 based on Equation (1) using our matched sample. The regression produces only one significant finding: Liberals who knew that Planned Parenthood opposed the measure were significantly less likely to vote for the measure. Knowledge of the cue, however, did not have a significant effect on either moderates or conservatives. We anticipated that moderates would not be significantly affected by the cue, given that moderates are a heterogeneous group and will therefore have differing opinions on

---

As is standard, we exclude respondents who have a propensity score to receive the treatment that falls below .1 or is above .9 for both regressions. This results in exclusion of two respondents from the analysis concerning Proposition 4.
abortion. Whereas liberals and conservatives will be relatively homogeneous with regard to their views on abortion rights, moderates will vary significantly. Thus, it is unsurprising that Planned Parenthood’s endorsement would have a significant effect on liberals, but it is surprising that conservatives are not significantly affected by Planned Parenthood’s endorsement (though the sign is in the right direction). Finally, age (positive), education (negative), and general political knowledge (negative) are all significant in the expected directions.
### Table 2 – Proposition 4, 48-Hour Notification of Abortion for Minors, Matched Sample

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberals</td>
<td>-0.14</td>
<td>(0.48)</td>
</tr>
<tr>
<td>Liberals who knew Planned Parenthood’s position</td>
<td>-1.99**</td>
<td>(0.69)</td>
</tr>
<tr>
<td>Liberals who knew that Prop. 4 did not require consent</td>
<td>0.20</td>
<td>(0.88)</td>
</tr>
<tr>
<td>Liberals who knew both the cue and that Prop. 4 did not require consent</td>
<td>1.46</td>
<td>(1.12)</td>
</tr>
<tr>
<td>Conservatives</td>
<td>0.93</td>
<td>(0.60)</td>
</tr>
<tr>
<td>Conservatives who knew Planned Parenthood’s position</td>
<td>1.34</td>
<td>(0.76)</td>
</tr>
<tr>
<td>Conservatives who knew that Prop. 4 did not require consent</td>
<td>2.09</td>
<td>(1.10)</td>
</tr>
<tr>
<td>Conservatives who knew both the cue and that Prop. 4 did not require consent</td>
<td>-2.39</td>
<td>(1.35)</td>
</tr>
<tr>
<td>Moderates who knew Planned Parenthood’s position</td>
<td>0.05</td>
<td>(0.36)</td>
</tr>
<tr>
<td>Moderates who knew that Prop. 4 did not require consent</td>
<td>-0.25</td>
<td>(0.54)</td>
</tr>
<tr>
<td>Moderates who knew both the cue and that Prop. 4 did not require consent</td>
<td>0.42</td>
<td>(0.63)</td>
</tr>
<tr>
<td>Age</td>
<td>0.21**</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.35**</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Income</td>
<td>-0.10</td>
<td>(0.11)</td>
</tr>
<tr>
<td>Political Knowledge</td>
<td>-1.06*</td>
<td>(0.45)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.28</td>
<td>(0.70)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pseudo-$R^2$</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pseudo-$R^2$</td>
<td>.181</td>
<td>616</td>
</tr>
</tbody>
</table>

Logit Regression of Vote Choice (0 = Vote Against Proposition, 1 = Vote For Proposition)

Standard errors are in parentheses. Omitted category is voters who identify themselves as moderates and do not know the cue or the factual knowledge question.

* p<0.05, ** p<0.01
Three findings emerge from the regression results for Proposition 8 in Table 3. First, as above, cues matter, but their effect is not absolute. Liberals are more likely to vote against the measure when they know one of the parties’ endorsements. Likewise, conservatives are more likely to vote for the measure when they know an endorsement. Again, information does not have a discernable effect on moderates. Second, knowing that Proposition 8 required a simple majority to pass only affected liberals, who were less likely to support the measure. Finally, age (positive), education (negative), income (negative), and general political knowledge (negative) are all significant in the expected directions.
Table 3 – Proposition 8 – Initiative to Limit Marriage, Matched Sample

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberals</td>
<td>-0.35</td>
<td>(0.62)</td>
</tr>
<tr>
<td>Liberals who knew one or both of the cues</td>
<td>-2.25*</td>
<td>(0.99)</td>
</tr>
<tr>
<td>Liberals who knew Prop. 8 required majority</td>
<td>-2.30*</td>
<td>(1.11)</td>
</tr>
<tr>
<td>Liberals who knew both a cue and Prop. 8’s majority requirement</td>
<td>2.93*</td>
<td>(1.47)</td>
</tr>
<tr>
<td>Conservatives</td>
<td>1.02</td>
<td>(0.72)</td>
</tr>
<tr>
<td>Conservatives who knew one or both of the cues</td>
<td>1.99*</td>
<td>(0.87)</td>
</tr>
<tr>
<td>Conservatives who knew Prop. 8 required majority</td>
<td>0.22</td>
<td>(1.09)</td>
</tr>
<tr>
<td>Conservatives who knew both a cue and Prop. 8’s majority requirement</td>
<td>-1.13</td>
<td>(1.25)</td>
</tr>
<tr>
<td>Moderates who knew one or both of the cues</td>
<td>-0.08</td>
<td>(0.45)</td>
</tr>
<tr>
<td>Moderates who knew Prop. 8 required majority</td>
<td>0.36</td>
<td>(0.55)</td>
</tr>
<tr>
<td>Moderates who knew both a cue and Prop. 8’s majority requirement</td>
<td>-0.32</td>
<td>(0.62)</td>
</tr>
<tr>
<td>Age</td>
<td>0.32**</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.29**</td>
<td>(0.10)</td>
</tr>
<tr>
<td>Income</td>
<td>-0.31**</td>
<td>(0.11)</td>
</tr>
<tr>
<td>Political Knowledge</td>
<td>-1.06*</td>
<td>(0.46)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.77</td>
<td>(0.58)</td>
</tr>
<tr>
<td>Pseudo-$R^2$</td>
<td>0.282</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>765</td>
<td></td>
</tr>
</tbody>
</table>

Logit Regression of Vote Choice (0 = Vote Against Proposition, 1 = Vote For Proposition)
Standard errors are in parentheses. Omitted category is voters who identify themselves as moderates and do not know the cue or the factual knowledge question.
* p<0.05, ** p<0.01
To provide context to our regression results, we calculate the predicted probabilities of voting in favor of Propositions 4 and Proposition 8. These predicted probabilities are calculated using Long and Freese’s SPost program in STATA (Long and Freese 2005). We estimate the voting probabilities by varying the effects of ideology and knowledge; we set the covariates (age, education, income, and political knowledge) to their mean value. For liberals, conservatives, and moderates we calculate the baseline voting probability (without any knowledge effects), the effect of knowing a cue by itself, knowing the correct answer to the factual question, and knowing both the cue and having factual knowledge.

Figure 5 presents the predicted voting probabilities for Proposition 4. For liberals, the effect of knowing the cue was quite large: Voters who knew the cue had only a 5.3 percentage probability of voting for the initiative, a 22.7 percentage point decrease in probability compared to the baseline liberal voter. For conservatives, a voter who knew the cue or that the initiative did not require consent were more likely to vote in favor of the measure — a 28.9 percentage point and 34.6 percentage point increase, respectively — though the effect is not statistically significant. Conservatives who had full knowledge are also substantively different from the baseline (a 27 percentage point increase). Knowledge did not appear to have any substantive or significant effect on moderates.
Figure 5 – Predicted Probabilities of Voting in Favor of Proposition 4

We provide the predicted voting probabilities for Proposition 8 in Figure 6. For liberals, knowing either of the cues or that the initiative required a simple majority to pass had a limited but substantively interesting effect on votes when compared to the baseline. These differences, however, are not statistically significant from the liberal baseline (though liberals who knew the cue had a significantly different point estimate when compared to moderates). The effect of knowing a cue for conservative voters was substantively larger than liberals. Unlike liberals,
these effects were not significantly different than the baseline conservative. The effect of knowledge on moderates did not produce any substantively interesting results.

Figure 6 – Predicted Probabilities of Voting in Favor of Proposition 8

Discussion

Our results show that some voters’ do use their knowledge of facts and cues to make decisions on important constitution-changing measures, but usage is far from universal. For Proposition 4, we found that only liberals appeared to use Planned Parenthood’s endorsement to make a decision; moderates and conservatives did not. For Proposition 8, we showed that knowledge of one of the parties’ cues influenced both conservatives and liberals. Again, as
expected, we did not find any significant effects for moderates (upon whose ballots policy usually swings). The relative effectiveness of information in altering voting probabilities also varied by group. For Proposition 4, knowing that the initiative did not require consent had no discernable effect on any ideological group. It affected conservatives more than any other subgroup, however. By contrast, knowing that Proposition 8 required a simple majority to pass affected liberal voters. In other words, our findings reveal that the effects of information on voters in direct democracy elections vary by voter and ballot measure.

Our findings show that voters who self-identify with liberal or conservative ideology are likely to use cues on same-sex marriage (a very easy issue where the ballot language was short and straightforward) and liberals used a cue on a measure concerning abortion (a somewhat easy issue where the ballot language was more complicated). We cannot, however, account for how moderates made decisions on either measure. Thus, we must conclude that use of cues is conditional, at least to the extent that we could identify those cues at the time of the election. Future research should forge a path forward to understand better how all voters interact with their informational environment. Researchers should also pay special attention to moderates not just average voters: While moderates are not a homogeneous group, and it is difficult to predict how they would use such information, these are the voters deciding the outcome of most elections and thus who are deciding the outcomes of most ballot measures.

Our results also suggest that cues might be influential enough to shift elections where the swing may be very small. We demonstrate, however, that cues do not matter in every election all for all individuals. By extension, to assume from previous research that voters can know nothing about the election because there are cues and voters can rely on them as information shortcuts is misguided. If a cue is not influential, how do most voters decide? It may simply be the case that
voters make up their mind too far in advance of campaign season and the election for cues to influence most voters. If so, then we would not expect many individuals to change their assessment of ballot measures throughout the campaign. Our data, however, do not allow us to test this conjecture.

We return now to the question at the heart of our research: Can we trust voters to make important policy choices that often change their state’s constitution? Many voters seem to learn facts about the campaign — including elite endorsements — and use what they know to make decisions. In particular, voters who self-identify with one ideology or another appear to use elite endorsements somewhat often. For these voters, we can be relatively confident in their ability to make a reasoned choice when the issue is ideological. Most ballot measures — for example, those that deal with issuing bonds or altering gasoline tax policy — are not inherently ideological. Whereas interest groups and elites will have an easier time establishing trust when an issue is ideological (and therefore the issue is easier for voters to understand), interest groups and elites will have a difficult time influencing voters when the issue is non-ideological. In fact, when we (Burnett, Garrett, and McCubbins 2010) analyzed Proposition 7 — a non-ideological issue on the same ballot — information did not have an effect on voters. Even for ideological voters, then, usage of cues is conditional.

Direct democracy may also be asking too much from uninformed voters and self-identified moderates. As our data revealed, a significant number of voters did not know much about the constitutional amendments that lay before them. Almost 50 percent of the voters we surveyed were unaware of the relevant endorsements for Proposition 8 even when the supporting and opposing campaigns spent over $108 million in an effort to educate the electorate. If voters have not learned the trustworthy endorsements for the ballot measures they face and they lack
factual information about the proposed policy change, it is unclear how these uninformed voters are making decisions, let alone if they are making “good” decisions.

Understanding how moderates make decisions remains a significant challenge. Indeed, the moderate’s voting calculus with regard to ballot measures is a mystery: We cannot predict the direction of their vote on the most ballot measures because moderates vary in their support for most issues. This is especially problematic for initiatives and referenda given that moderates are swing voters who are, in essence, deciding the outcomes of important constitutional questions. While we may not expect moderates to use elite endorsements at a high rate (typically, they are the least informed about politics), we cannot test this proposition without new data and a revised voting model. Understanding how all voters make their decisions on ballot measures is exceedingly important since it is now commonplace for ballot measures to restrict or expand the rights to all citizens within a particular state.

If cues help some voters make decisions in direct democracy, how can we increase their use and effectiveness? The answer, we argue, is a simple policy change: Institutionalize cues by including information about a proposition’s prominent endorsers and opponents on the ballot itself. Adopting this policy would be analogous to having party identification and incumbency labels that appear on the ballot for many elected offices. By providing a candidate’s party label and incumbency status, voters can make inferences about a candidate based on their own evaluations of that candidate’s political party and past job performance (see, e.g., Fiorina 1981; MacKuen, Erikson, and Stimson 1989). Voters can perform these evaluations because they have the information shortcuts available to them on the ballot when they make their choice. Including elite endorsements on the ballot itself would also help establish trust between the cue-giver and
the voter because, similar to a candidate’s reported party identification, the information shortcuts on the ballot will have the credibility of an official announcement from the state.

Political parties are the obvious choice for potential endorsers to include on the ballot. If both parties take a position on a ballot measure — as was the case with Proposition 8 — those positions should be printed on the ballot. If the parties take no position on a proposition, that information should be made available as well. Endorsements, however, need not be limited to the two major parties: a number of trustworthy and knowledgeable cue-givers are available (e.g., prominent interest groups). Including relevant endorsers and opponents on the ballot for initiatives and referenda would allow voters to use their evaluations of those cue-providers to make more informed choices at the point of decision.

Why include cues on the ballot itself? Ballot titles and summaries may not be providing voters with enough information. In California, for instance, ballot titles and summaries provided on the ballot are somewhat meager, as it cannot exceed 100 words. The goal of the title and summary, according to California law, is to describe the core of the initiative or referendum (California Election Code § 9004). The Legislative Analyst also includes a short fiscal impact statement, which often indicate a large degree of uncertainty. While the fiscal impact statements may be somewhat useful, the summaries, we suspect, may not provide enough information to voters. If, for example, voters had not read or heard anything about the measure before casting their ballot as Matsusaka (2005) believes, they must rely on a short summary to inform them about a complex and often long policy proposal. Placing elite endorsements on the ballot would supply voters with vital and potentially decision-improving information that is readily available. In sum, including cues on the ballot for every proposition would increase awareness of the relevant endorsers and opponents for individuals who were not aware of them before Election
Day, and it would remind knowledgeable voters to consider the cues when they mark their choice. Together, this should increase the likelihood that voters would use information shortcuts to make informed decisions.
Works Cited


Boudreau, Cheryl. 2009a. Closing the Gap: When Do Cues Eliminate Differences Between  

Ones.” University of California, Davis.

Boudreau, Cheryl, and Mathew D. McCubbins. 2009. Competition in the Courtroom: When  
6: 793-817.

Boudreau, Cheryl, Mathew D. McCubbins, Daniel B. Rodriguez, and Nicholas Weller. 2010.  
Making Talk Cheap (and Problems Easy): How Legal and Political Institutions Can  


Burnett, Craig M., Elizabeth Garrett, and Mathew D. McCubbins. 2010. The Dilemma of Direct  

Approval." Presented at the Annual Meeting of the Southern Political Science  
Association, January 12-14, 2012, New Orleans, LA.

Political Science Review* 74: 78-91.

Delli Carpini, Michael X., and Scott Keeter. 1996. *What Americans Know About Politics and*


Appendix A – Ballot Text of Propositions

Proposition 4

Waiting Period and Parental Notification before Termination of Minor’s Pregnancy

Initiative Constitutional Amendment.

Changes California Constitution, prohibiting abortion for unemancipated minor until 48 hours after physician notifies minor’s parent, legal guardian, or, in limited cases, substitute adult relative. Provides an exception for medical emergency or parental waiver.

Proposition 8

Eliminates Right of Same-Sex Couples to Marry.

Initiative Constitutional Amendment.

Changes California Constitution to eliminate the right of same-sex couples to marry.

Provides that only marriage between a man and a woman is valid or recognized in California.