## Cuegiving and Voter Behavior on Ballot Propositions


#### Abstract

Prior work on initiatives and referenda show that elite endorsements play an important role. This research elaborates on these findings by developing a formal model that incorporates the central ideas of visibility of the cue, credibility of the cuegiver, and the proximity of the voter to the cue and the status quo. The model specifies the conditions that will make a particular cue effective, meaning at least some voters alter their opinions based on the cue. Central to the model is the uncertainty voters face with regard to the true effect of the referendum and how they update their views when provided new information. Using exit poll data from a statewide referendum in 2004, the estimated model indicates two important types of cuegivers: Proximal cuegivers, who have influence only among their fellow partisans, and dominant cuegivers, who influence voter behavior across the political spectrum.


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## Introduction

Voters faced with a ballot proposition often have a paucity of information and little incentive to devote a lot of time to gaining better information. Scholars have long identified the importance of elite cues in providing voters with a low-cost way of updating their opinions regarding the proposition. But under what conditions will these cues sway voters? And, more specifically, which voters will be influenced?

In the analysis that follows we posit and implement a simple spatial model that captures the effect of elite cues on voter behavior. In our model, the relationship between a given voter and the elite is characterized by the visibility of the cuegiver within the electorate in general, the proximity of the voter and elite ideal points, and the established credibility of the elite. If conditions are such that the cuegiver is effective, then the model points to two types of cuegivers. A proximal cuegiver is one who has influence on voters near the elite's ideal point, but minimal impact on voters further away. A dominant cuegiver, on the other hand, affects opinion across the ideological spectrum, though not all who perceive the cue move in the direction signaled by the cue.

After formalizing the conditions under which cues from different sources can have differential effects, we use a unique data set gathered during the 2004 Utah Colleges Exit poll to investigate the effects of various elite cues. Our empirical investigation explores the interesting case of the 2004 campaign to amend the Utah constitution concerning the definition of marriage. In the campaign for the constitutional amendment, both gubernatorial candidates took opposing positions that were a visible part of the campaign. Our evidence shows that these cues were
effective guides for fellow partisans but not on voters of the opposing party. This suggests that the gubernatorial candidates served as proximal cuegivers.

On the other hand, the LDS Church ${ }^{1}$ had the opportunity to mobilize both support and opposition by choosing to make a statement. The key empirical test for whether the LDS Church functioned as a dominant cuegiver is a controlled comparison of how voters, those aware and those unaware, of the Church's proposition stood on the proposition. We find strong evidence that the Church's cue was dominant, not just proximal. Ironically, the dominance of the LDS Church may help explain why the amendment passed with only 66 percent of the vote, a relatively low percentage compared to the other twelve states that voted on the issue in $2004 .{ }^{2}$

This research seeks to expand our understanding of how elite positions inform and influence voter choice. Obvious next steps include modeling the strategic interaction between voters and elites (and interaction among elites) and incorporating elite knowledge of public opinion to understand the conditions under which elites will give cues, who will believe them, and what effect they will have in determining electoral outcomes. The analysis that follows is a first formal step in that direction.

[^0]
## Theoretical Overview

Ballot campaigns share some of the properties of candidate campaigns as voters are faced with choices and asked to select between them. At the same time, however, ballot campaigns often lack key elements of candidate campaigns. For example, without party labels attached to the different choices, voters need additional information or guidance to help them navigate the complexities of the issue and to make a decision (Magleby 1984,1989; Lupia 1994; Banducci and Karp 2000; Bowler and Donovan 2002; Darmofal 2005).

Without the help of party cues and other elements of a candidate campaign, voters face a situation where they may find it difficult to acquire information about the initiatives and their effects. Two main explanations account for the lack of information. First, some research posits that it is irrational for those who manage and run the initiative campaigns to provide any more information than what is either necessary or helpful to their particular cause. The strategic and rational manager of a campaign will probably want to distribute only that information which helps the cause or information that is vague and ambiguous. It is the role of the professional consultant or campaign manager to determine what information needs to be circulated in the public and what form that information will take (Dulio 2004; Medvic 2001, 17; Magleby and Patterson 1998). The strategic imperatives for those running the campaign mean that voters may not often have copious amounts of information available to them.

Second, theoretical arguments also assign responsibility to the voter as perhaps one reason why more information is not acquired. The work of Anthony Downs shows that there is little reason for voters to engage in costly activities to acquire information when the likelihood of their efforts affecting the outcome is so small (1957). In his work on the voting behavior of Californians on 1988 insurance reform ballot propositions, Lupia explains how the opportunity
cost for acquiring large amounts of information to become completely informed about a complex initiative is daunting and that many citizens perceive that the costs of acquiring such information overwhelm the benefits. He writes that "[v]oters in large elections who consider their opportunity costs may decide that the acquisition of 'encyclopedic' information is not a worthwhile activity" (Lupia 1994, 63).

The high cost of acquiring information and the relatively low cost of shortcuts potentially make elite endorsements quite important in ballot campaigns. Indeed, numerous studies have concluded that citizens regularly rely on elite cues when forming an opinion or making a choice on a ballot initiative (Lupia 1994; Karp 1998; Paul and Brown 2001). Furthermore, when voters perceive the cues, the information they receive enhances their choices in significant ways. If the elites have taken public stands on an issue and if the public can accurately gauge the elite position, voters will be able to make decisions as though they were completely informed about the issue or make what Lupia and McCubbins call a "reasoned choice" (1998; 2000). As Lupia states, "Using widely available information shortcuts allows badly informed voters to emulate the behavior of relatively well-informed voters" $(1994,63)$.

The importance of cues or endorsements to a "reasoned choice" compels researchers to consider various scenarios under which endorsements occur and to assess the source of the endorsement. It is possible for elites in a political community to be unified surrounding a particular political issue. In those cases when elites are unified, the public tends to embrace the position favored by elites (Magleby 1984; Paul and Brown 2001). However, when elites disagree about the issue, the public tends to vote against the initiative (Paul and Brown 2001). The likelihood that a voter will vote against a proposition on which there is less elite agreement corroborates the idea that voters tend to pick out negative information more easily and to rely on
it more heavily in ballot initiative campaigns where information from multiple sources matters (Monson, Mockabee, Lavrakas 1999).

Source of the endorsement or cue and a voter's attitudes toward that particular source also condition its effect on the voter. Some research suggests that "citizens are more likely to accept cues from elites they like or trust than from elites they dislike or mistrust" (Darmofal 2005, 382). Endorsements from groups also convey cultural messages (Wlezien and Miller 1997) and can have effects beyond the membership of the group (McDermott 2006). Furthermore, the institutions or groups that have an impact in elections need not be strictly political. The literature on cues and endorsements often categorize them as political. For example, Zaller writes that elites are those individuals who dedicate a significant amount of their time or resources to political causes (Zaller 1992). However, there is a full range of institutions that can have a tremendous impact on political affairs without devoting even significant amounts of resources to political affairs.

We seek to extend the work on elite cues by examining the impact that particular types of cuegivers can have on a ballot campaign. We theorize that the different conditions surrounding ballot campaigns mean that not all cuegivers are created equal. Some may have a much higher profile in the campaign, access to resources, or connection to the predispositions that individual voters bring to the campaigns. Some cues may have only a localized effect among members, while others may transcend the usual political environment ballot propositions operate in and engage citizens and other elite actors in a different way than normally expected. Previous research cited above strongly suggests that who makes the endorsements should matter for the effect they have on voters. Therefore, we first seek to formalize the conditions under which elites make and voters receive cues. We then turn to an empirical test of the model's predictions.

## A Spatial Model of Voter Response to Elite Cue Giving

## Voter Behavior and the Policy Space

In order to carefully discuss the role of cuegiving and public opinion on ballot propositions, we briefly develop in this section a formal model that provides theoretical precision and terminology useful in understanding the empirical results that follow. As a reference, Appendix 1 summarizes the notation used in the model.

Consider a stylized polity in which voters are considering a ballot proposition, $B$. The voters' policy preferences are located spatially along a single-dimensional, real-valued policy space, $X$. The status quo position on $X$ is $\pi$. For the sake of convenience, we will think of this policy space as a left-right continuum over a finite, closed interval of the real number line with $x_{L}$ as the lower limit and $x_{U}$ as the upper limit. Voters have heterogeneous, fixed preferences. The voters know their own ideal point with certainty, which is designated as $v_{i}$ for the $i^{\text {th }}$ voter, but they do not know the status quo position with certainty. Instead, they make unbiased estimates, $\pi_{i}$, with variance $\sigma_{\pi}^{2}$ The distribution of ideal points can be described by a probability density function with mean $\mu_{\nu}$ and variance $\sigma_{v}^{2}$. The true position of the ballot proposition is at point $b$ of the policy space, but the voters also do not know $b$. Instead, each voter makes an unbiased subjective estimate of $b$, designated $b_{i}^{0}$. These estimates are assumed to be independent random draws from a distribution with mean $\mu_{b}=b$ and variance $\sigma_{b}^{2}$. Thus two voters with identical ideal points will make different decisions because they estimate $\pi$ and $b$ with idiosyncratic error.

In the absence of any additional information, voters vote in favor of $B$ if they believe that the ballot proposition is closer to their position than the status quo. If $v_{i}>\pi_{i}$ (meaning the voter's policy preferences lie to the right of the perceived status quo), then the voter will vote for
$B$ if and only if they believe that $b$ lies in the interval $\left(\pi_{i}, \pi_{i}+2\left(v_{i}-\pi_{i}\right)\right)$. This is referred to as the "acceptance region." For such a voter, points to the left of the status quo, $\pi_{i}$, are clearly inferior, whereas points beyond the upper bound of the region are so far to the right that the voter actually prefers the status quo even though it is to the left of his ideal point. Voters to the left of the status quo $\left(v_{i}<\pi_{i}\right)$ have a similarly derived acceptance region: $\left(\pi_{i}-2\left(\pi_{i}-v_{i}\right), \pi_{i}\right)$.

## Cuegiving and voter information

We next describe how (and whether) elite cues are received and incorporated into voter behavior. For the sake of parsimony, our model includes only a single elite cuegiver who is not (because our purpose is to model voter behavior) a strategic actor and who has an ideal point on $X$ given by $e$. The cuegiver makes a claim to the voters about the true position of the ballot initiative in policy space, which we designate as $c \in X$. Since most ballot propositions do not achieve widespread voter awareness, we find it reasonable to assume that a) not all voters observe the cue and b) voters have different assessments about the cue's credibility. These two features of the model determine voter responses to the cue.

The first of these two features can be described as awareness, which we model as the probability, $p_{i}$, that a voter will observe the cue. This probability depends on 1) the distance between the voter and elite ideal points, namely $\left.\delta_{i}^{e}=\left|v_{i}-e\right| ; 2\right)$ the distance of the voter from the mean of the electorate, designated as $\left.\delta_{i}^{\mu}=\left|v_{i}-\mu_{v}\right| ; 3\right)$ the level of media attention, $m$; and 4) an idiosyncratic component, $\eta_{i}$, which has a mean of zero and represents the individual voter's awareness of political issues. Thus we express $p_{i}$ as:

$$
\begin{equation*}
p_{i}=p\left(\delta_{i}^{e}, \delta_{i}^{\mu}, m, \eta_{i}\right) . \tag{1}
\end{equation*}
$$

The main theoretical content of this expression comes in the assumptions made about the partial derivatives of $p_{i} .{ }^{3}$ We posit that $p_{i}$ is decreasing with respect to $\delta_{i}^{e}$, meaning that voters are more likely to observe cues from elites who are close to them, and increasing with respect to $\delta_{i}^{\mu}$, which means that more extreme voters are likely to observe cues than are ideologically moderate voters. Next, the probability of receiving cues increases with the attention given by the media to the cue. Because our empirical implementation includes only one election (and, therefore, no variation in terms of media exposure), we do not focus here on the role of the media other than to note that media exposure of the elite's cue-what we call the visibility of the cuegiver-is a critical determinant of whether voters are aware of a given cue. In general, visibility is a necessary condition for a cuegiver to be effective. Finally, we assume that voters who are more aware generally (meaning that $\eta_{i}$ is high) have a higher probability of observing the cue. To summarize, these four partial derivatives are signed as follows:

$$
\begin{equation*}
\frac{\partial p_{i}}{\partial \delta_{i}^{e}}<0, \frac{\partial p_{i}}{\partial \delta_{i}^{\mu}}>0, \frac{\partial p_{i}}{\partial m}>0, \frac{\partial p_{i}}{\partial \eta_{i}}>0 \tag{2}
\end{equation*}
$$

The second feature of how voters incorporate cues is credibility, which is a function of both the elite's reputation and the individual voter's spatial relationship to the elite. Let the credibility weight, $r_{i}$, indicate voter $i$ 's assessment of the cue's credibility. We specify $r_{i}$ as:

$$
\begin{equation*}
r_{i}=r\left(\delta_{i}^{e}\right) . \tag{3}
\end{equation*}
$$

We can think of this weight as the voter's subjective probability that the cue is accurate. The voter's assessment of credibility declines the further the voter's ideal point is from the elite,

[^1]meaning that $\frac{\partial r_{i}}{\partial \delta_{i}^{e}}<0$. However, it is possible that the credibility weighting function is relatively flat (the derivative is negative but very close to zero). In such a case the cuegiver is credible across the spectrum, not just in the vicinity of $e$. Thus the cuegiver's reputation is a very important determinant of the credibility that voter $i$ assigns to the cue.

Once the cue is given, voters update their estimates of $b$. Let $\theta_{i}=1$ indicate that voter $i$ observes the cue and $\theta_{i}=0$ indicate that the cue is not observed (in which case no updating takes place). The credibility weight, then, determines how voters combine their initial assessment with that given by the cuegiver. Voters then arrive at their updated estimate, $b_{i}^{1}$, as follows:

$$
\begin{equation*}
b_{i}^{1}=b_{i}^{0} \quad \text { if } \theta_{i}=0 \tag{4a}
\end{equation*}
$$

and

$$
\begin{equation*}
b_{i}^{1}=r_{i} c+\left(1-r_{i}\right) b_{i}^{0} \quad \text { if } \theta_{i}=1 \tag{4b}
\end{equation*}
$$

## Public Opinion

Earlier we stated the individual voter's updating process was conditioned on whether or not the voter received the cue. Because voters with ideal point $v_{i}=v$ only differ in their idiosyncratic component, we can assume that these components are independent allowing us to take expected values that eliminate the idiosyncratic variation. If we let $p_{v}=\mathrm{E}\left(p_{i} \mid v\right)$ and $r_{v}=E\left(r_{i} \mid v\right)$ be probabilities averaged over voters with ideal point $v$, then we can calculate the mean assessment of $b^{l}$ for each value of $v$ :

$$
\begin{gathered}
E\left[b^{1} \mid v\right]=p_{v} E\left[b_{i}^{1} \mid \theta_{i}=1\right]+\left(1-p_{v}\right) E\left[b_{i}^{1} \mid \theta_{i}=0\right] \\
=p_{v} E\left[r_{v} c+\left(1-r_{v}\right) b_{i}^{0}\right]+\left(1-p_{v}\right) E\left[b_{i}^{0}\right]
\end{gathered}
$$

$$
\begin{align*}
& =\left(p_{v} r_{v}\right) c+\left(1-\left(p_{v} r_{v}\right)\right) E\left[b_{i}^{0}\right] \\
& =\lambda_{v} c+\left(1-\lambda_{v}\right) E\left[b_{i}^{0}\right] \\
& =\lambda_{v} c+\left(1-\lambda_{v}\right) b \tag{5}
\end{align*}
$$

where $\lambda_{v}=p_{v} r_{v}$. The expression above shows the effect of a cue on public opinion. ${ }^{4}$ Thus, on average, voters choose a $b_{i}^{1}$ that is a weighted average of the cue and the actual value of $b$. A cuegiver is effective with respect to voters with ideal point $v$, therefore, if $\lambda_{v}$ is large enough to significantly move voter perceptions in the direction of the cuegiver. Effectiveness does not, however, imply that the cue will significantly affect the election outcome or even increase support for the proposition. Such electoral consequences depend on the location of $b$ and $e$ relative to the distribution of voters. ${ }^{5}$

## Cuegiver Type

We have introduced several parameters that interact to determine the effectiveness of the cuegiver. The effectiveness parameter, $\lambda_{v}$, depends on $p_{v}$ (awareness) and $r_{v}$ (credibility), which, in turn, are functions of additional parameters:
$\lambda_{v}=p_{v}\left(\delta_{v}^{e}, \delta_{v}^{\mu}, m\right) \cdot r_{v}\left(\delta_{v}^{e}\right)$

[^2]where the $v$ subscripts indicate that values are averaged across voters with the same ideal point. ${ }^{6}$
From equation (6) we can identify several potential types of cuegivers. We concentrate here on two types. First, a proximal cuegiver is one whose effectiveness is limited to the voters near the ideological position of the elite (where $\delta_{v}^{e}$ is small). Given the generality of our model, there are a variety of functional forms and parameter values that could result in a proximal caregiver. However, in general, a proximal cuegiver occurs if either the $p_{v}$ or $r_{v}$ functions decline significantly and monotonically as $\delta_{v}^{e}$ increases. Second, a dominant cuegiver is one who is effective in influencing voters across the spectrum. For the case of the dominant cuegiver, a broad spectrum of voters is both aware of $c$ and find the $c$ to be a credible assessment of $b$.

We illustrate the effect of a proximal cuegiver in Figure 1. This represents one replication of a simulated election with 50,000 voters. In this scenario, we consider a proposition that would move policy from $\pi=0$ to $b=.1$, where the policy space is defined as $X=[-1,1]$. The top panel of Figure 1 shows the cuegiver effectiveness parameter, $\lambda_{v}$, across the policy space. The effectiveness reaches its peak at the position of the cuegiver ( $e=.4$ ), which for convenience, estimates that position at the same value as its elite point (i.e., $c=.4$ ). The bottom panel reflects the percentage of voters who support B before and after the cue. The figure clearly shows that voters in the proximity of the cuegiver increase their support significantly, but voters futher away have little, if any, change in their support.
(Figure 1 here)
Figure 2 illustrates the effect of a dominant cuegiver. The main difference in this simulation is that voters across the policy space are aware of the cue. This is reflected by a relatively flat effectiveness curve in the top panel. The result of this widespread effectiveness is

[^3]to polarize support for the proposition-voters on the right are much more likely to support it, and voters on the left are much less likely.
(Figure 2 here)

## Regression Specifications

In the empirical analysis that follows we differentiate between different cuegivers on a recent ballot initiative in Utah. To implement the model we run two types of probit regressions. First, we estimate the impact of voter ideal types (as proxied by party identification) on receipt of the different cues. We cannot measure $\lambda_{v}$, because we do not observe credibility, but we can estimate the determinants of $p_{v}$, the probability that voters with ideal point $v$ will be aware of the cue. For example, assume that there are three voter types: $v_{L}, v_{C}$, and $v_{R}$ corresponding to left, center, and right ideal points on the issue space, where the variables are simple dummy variables. We estimate a model of the form

$$
\begin{equation*}
p_{i}=P\left[\theta_{i}=1\right]=\alpha+\alpha_{L} v_{L}+\alpha_{R} v_{R}+\alpha_{z} Z_{i}, \tag{4}
\end{equation*}
$$

In the case of a proximal cuegiver, the group close to the cuegiver's ideal point will have a positive coefficient (e.g., a cuegiver on the left will lead to $\alpha_{L}$ being positive), while the other coefficients are near zero. In the case of a dominant cuegiver, the coefficients for $\alpha_{L}$ and $\alpha_{R}$ are small and positive, indicating that moderate voters are less likely to have heard of the cue than are voters on the left or the right.

Next we test whether voters who have received the cue are more or less likely to support (or oppose) the proposition than voters who have not-in other words, we estimate the support curves in the bottom panels of Figures 1 and 2, though we are forced to lump ranges of ideal points into broad ideological categories. If we define $y_{i}=1$ as support of $B$, and $y_{i}=0$ as opposition, then we have:

$$
\begin{equation*}
P\left[y_{i}=1\right]=\beta_{0}+\beta_{L} v_{L}+\beta_{R} v_{R}+\beta_{\theta} \theta_{i}+\beta_{L \theta}\left(\theta_{i} v_{L}\right)+\beta_{R \theta}\left(\theta_{i} v_{R}\right)+\beta_{z} Z_{i} \tag{5}
\end{equation*}
$$

The key to identifying credibility are the interaction terms, since they identify the effect of the cue upon voters who have received the cue. Suppose the cuegiver is on the right of the issue space. If the cuegiver is dominant, then $\beta_{R \theta}$ will be positive and $\beta_{L \theta}$ will be negative. But if the credibility is only proximal, then $\beta_{R \theta}$ will be positive (assuming the elite is on the right) and $\beta_{L \theta}$ will be near zero. The opposite pattern occurs when the cuegiver is on the left. In the case of a centrist cuegiver, the coefficients for $\beta_{R \theta}$ and $\beta_{L \theta}$ will be of opposite sign if credibility is dominant, and both coefficients will be small if credibility is proximal.

As defined above, a dominant cuegiver occurs when both awareness and credibility are high across the issue spectrum. The important point for identifying a dominant cuegiver is that the regressions in equations (4) and (5) are consistent with $\lambda$ being non-zero for all types of voters. With proximal cuegivers, $\lambda$ is small or zero for voters who are not near the cuegiver. Thus, we have sufficient data to identify cuegivers as either dominant or proximal. Moreover, even though we do not observe credibility directly, we can gauge the impact of credibility because we observe both awareness and effectiveness for different types of voters. ${ }^{7}$

It is important to note that other factors can yield the steep support curve found in Figure 2 other than dominant cuegiving. For instance, factors that cause voter information to be high (meaning $\sigma_{b}^{2}$ is low), will cause a steep support curve even if $\lambda_{i}$ is low and very little updating

[^4]takes place. This is why the interaction terms in the regression are so important for identifying effective cuegivers, both proximal and dominant. The electorate may be sharply divided along partisan lines, for instance, but if support for the proposition differs according to whether the cue was received, then effective cuegiving exists. A dominant cuegiver is evidenced by a support curve that is steeper among those who receive the cue (and therefore update their estimates) than among those who do not. A proximal cue, on the other hand, will produce differences between those who receive and do not receive the cue only for those with ideal points near the cuegiver. ${ }^{8}$ We now turn to a brief description of the campaign surrounding Amendment 3 before turning to the empirical test of the formal model.

## The Case of Amendment 3

Amendment 3 in the State of Utah sought to amend the state constitution to define marriage as between a man and a woman. This seems like a fairly straightforward winner given the conservative nature of the state of Utah. However, as we discuss below, the proposition had two parts, the second of which created some concern among voters and groups. Voters may not have had enough information to understand the implications of the second clause. In the absence of clear party direction on the issue, the voters would need to have turned to other sources for guidance. Therefore, the issue possessed a high visibility and yet presented a situation in which voters would have needed to assess the cues of elites for their credibility and for their proximity to their own position.

[^5]The campaigns for and against Amendment 3 could not have had a better campaign environment. There were no competing agendas as the presidential candidates did not spend time campaigning in the state. Furthermore, there was little competition from the statewide races with regard to coverage of the issues. Only the contest for governor seemed vaguely competitive. As a result, there was ample opportunity for elites to receive attention for their positions on what became a spirited debate about whether to ban gay marriage. Given Utah's conservative leanings, it is interesting that the election result was not a completely foregone conclusion. ${ }^{9}$

The campaign began in early 2004 during the Utah legislative session the legislature passed a resolution to amend the state constitution to add a provision relating to marriage defining it as only the union of a man and a woman and providing that no other union may be recognized as such. The exact wording of the amendment read:

1) Marriage consists only of the legal union between a man and a woman.
2) No other domestic union, however denominated, may be recognized as a marriage or given the same or substantially equivalent legal effect.

The second clause banned the extension of benefits to any partner other than those in traditional marriages. Thus, the conversation about the probable effects of such a ban dominated the political discussion that ensued.

[^6]As a result of the second clause, major political players lined up on both sides of the issue. The most visible statewide candidate race was for governor, and the two gubernatorial candidates disagreed on the issue. Jon Huntsman Jr., the Republican candidate, supported the amendment while Scott Matheson Jr., the Democratic candidate, opposed it. We later examine whether voters were aware of these positions and the effect it had on their votes.

However, the cleavage did not neatly break along party lines. For example, the Republican Attorney General Mark Shurtleff publicly opposed the proposition and held a news conference with his Democratic opponent and a candidate from a third party to voice his opposition. The "No" campaign worked through a group called the "Don't Amend Alliance." This coalition organized early in the year and raised hundreds of thousands of dollars to launch a campaign. The people on the "Yes" side of the amendment did not begin a coordinated campaign until much later in the year, a factor that made proponents of passage quite nervous.

Public opinion leaders began to weigh in on the issue throughout the campaign season. The LDS Church first publicized a statement in July endorsing a federal constitutional amendment to define marriage as between a man and a woman. As stated above, all three candidates for Utah Attorney General issued a joint statement opposing the amendment in August. Then in October the LDS Church issued another statement amplifying its July statement to include, "The Church accordingly favors measures that define marriage as the union of a man and a woman and that do not confer legal status on any other sexual relationship." This statement did not specifically include an endorsement of Amendment 3 and made it possible for opponents to claim that the LDS church did not actually take a specific stand on the proposition. ${ }^{10}$

[^7]Campbell and Monson (2003) demonstrate when the LDS Church takes a clear position it can have significant political influence in ballot proposition campaigns. This is not only true in Utah where Mormons constitute a significant majority of the population, but is also true in other western states where Mormons are disproportionately located. ${ }^{11}$

Immediately on the heels of the LDS Church's second statement, the Catholic and Episcopal churches in Utah issued a joint statement opposing the amendment. Religious leaders were not the only endorsements in the public eye. Five out of the six major Utah daily newspapers came out in opposition: the Salt Lake Tribune, the Daily Herald (Provo), the Standard-Examiner (Ogden), the Spectrum (St. George), and the Herald Journal (Logan). All of the editorials cited the concerns and doubts raised by the opposition with regard to the second clause of the amendment. The Deseret Morning News, which is owned by the LDS Church, was the only major paper which endorsed the amendment.

Earlier we stated that visibility is a necessary condition for a cuegiver to be effective. In the weeks leading up to the election, no other electoral campaign consistently surpassed the Amendment 3 debate news coverage. Figure 3 tracks the number of articles per week per campaign in the major Utah print news sources: the Deseret Morning News and the Salt Lake Tribune. The figure shows a baseline for the media agenda through the last two and a half
and accessed March 15, 2005) and "First Presidency Issues Statement on Marriage at http://www.lds.org/newsroom/showrelease/0,15503,4044-1-19733,00.html (released July 7, 2004 and accessed March 15, 2005).
${ }^{11}$ Campbell and Monson (2003) provide statistical evidence of the LDS Church's influence on initiative elections in Utah, Idaho, and Arizona as well as anecdotal evidence of influence in California, Nebraska, Alsaska, and Hawaii. Damore, Jelen, and Bowers (2007) give a similar account of two consecutive gay marriage campaigns in Nevada.
months of the election season. For the most part the number of articles remained low until the final three weeks of the campaign when a spike in coverage occurred for both the gubernatorial election and debate over Amendment 3. In the final three weeks of the election season, Amendment 3 received substantially more coverage in the lead newspapers. This figure indicates the visibility and coverage of the race and that it was not eclipsed by other political conversations going on in the state. Indeed, the gubernatorial race and Amendment 3 often reach similar amounts in coverage indicating that the gay marriage coverage was as prominent as the most competitive statewide race. It is also important to note that the increase in Amendment 3 coverage came on the heels of the LDS Church's October statement on constitutional amendments and its position on relationships between people of the same sex. Clearly the news organizations in the state realized the import of a statement at this time from the most prominent non-governmental institution in the state.
(Figure 3 here)
Throughout the campaign season the debate centered on two themes. First, Utah statutory law already outlawed same-sex marriage and thus the amendment was unnecessary. Second, opponents consistently argued that the second clause of the amendment was too narrow in its application repeating the mantra, "No on 3, it goes too far." The worry was that common law marriages and property rights would be invalidated. The "no" side used these arguments to try and sow the doubt and confusion that lead citizens to vote against changes to the status quo (Magleby 1989; Magleby and Patterson 2000). Those in favor of the amendment sought to negate those doubts by arguing that the amendment protected Utah from having to recognize out-of-state marriages and prevented the creation of civil unions.

Despite the seriousness and competitiveness of the campaign the amendment did well in all of the early polling. Citizens did express doubts and concerns about its effects, but about $60 \%$ of the public consistently expressed support for Amendment 3. On Election Day the Amendment received $66 \%$ of the vote, a total that surprised individuals who had been following the campaign closely.

## Results

Data for this research are from the 2004 Utah Colleges Exit Poll. Methodological details as well as the actual question wording and variable coding are included in Appendix 2. The exit poll indicated that 62 percent of the respondents voted for the ban on gay marriage, which tracks what consistent polling indicated throughout the summer. ${ }^{12}$ Even though there was much activity on this issue, the public opinion polls did not see much movement from the summer to the final election results. Table 1 summarizes the opinions of Utahns on the issue of gay rights surrounding the gay marriage controversy throughout the nation. For the most part, respondents believed there should be no recognition of gay relationships. Those people who were inclined to want to allow some recognition of a gay relationship legally split pretty evenly between civil unions and full marriage rights. These results mirror those in national surveys. ${ }^{13}$
(Table 1 here)

[^8]The exit poll also asked voters to agree or disagree with various arguments made during the campaign. Most voters disagreed with the statement that Amendment 3 would "promote intolerance, hatred, and bigotry." A sizable majority also agreed that the amendment would prevent same sex marriage from occurring in Utah. On more complex cause and effect issues such as "eliminate common-law marriage" and "keep employers from providing benefits to gay partners" the number of "Don't Know" responses increased-an effect we would expect to see in a survey. Surprisingly a majority of voters agreed with the argument of the opposition that the amendment "goes too far." This result seems to validate the attempts of the opposition to raise doubts about the consequences of changing the status quo. This particular argument resonated with some voters but was certainly not enough to defeat the amendment.
(Table 2 here)
We are most interested in how the positions on Amendment 3 given by opinion leaders were perceived by the electorate. Given the high salience of the issue as well as the amount of media coverage, it is reasonable to expect voters to know what the various opinion leaders thought about the amendment. The results in Table 3 show how accurately the voters identified the position of a particular entity or candidate. The percentage of voters who could name the correct position for each entity is listed in bold and italics. Interestingly, even though the debate received a high volume of coverage, the vast majority of people did not know the positions of opinion leaders, even when they were public. Although most respondents opted for the "don't know" category, the plurality of respondents did know the correct position when they chose.
(Table 3 here)
The group that received the highest proportion of voters claiming to know the position was the LDS Church. Only 28 percent of respondents marked "Don't know," by far the lowest
for any of the candidates or groups listed. We think this is important given the actual statement made by the LDS church. As noted above, the statement it issued in October did not specifically mention Amendment 3. Thus, one could plausibly argue that the Church took no position. A voter could have also been confused and therefore opted to mark "don't know." While it is also plausible to believe that the LDS Church did indeed endorse the amendment, we also concede that a voter may have good reasons other than ignorance to mark another answer. Furthermore, some of the "For" responses could be educated guessing as a person may have not heard anything about the debate and simply assumed that the LDS Church would be for an amendment banning gay marriage. For our purposes, what matters most is not what the correct response is but what perception voters held as they entered the voting booth.

To test the effect of a cue on a voter's position, we run two types of regressions. The first is a probit regression identifying the factors that cause voters to know a cuegiver's position. In Table 4 we present the marginal effects on from these models for each of the cuegivers. The marginal effect $(\mathrm{dF} / \mathrm{dx})$ is the change in probability caused by a one unit change of the independent variable (or a change from 0 to 1 if the variable is a dummy variable). These regressions correspond to the awareness, as discussed in our model, that different groups have for the particular cues. The 2004 Utah Colleges Exit Poll contains a number of relevant questions that were included in the model. Question wording and variable coding are detailed in Appendix 2.
(Table 4 here)
Overall, the independent variables in the model do not explain a large portion of the variation in knowledge, as reflected in the pseudo- $\mathrm{R}^{2}$ values. There are, however, some important patterns in these regressions. The strongest effects are the impact of party. As we
hypothesized, partisanship is correlated with political knowledge. In Utah, Democrats are particularly likely to be more aware of cues than Independents or Republicans. For instance, being a strong Democrat raises the probability of receiving the cue from the Democratic candidate (Matheson) by 28.2 percentage points. Being a strong Republican, on the other hand, increases knowledge of the Matheson cue by only 5.2 percentage points. On the other hand, being a strong Republican raises knowledge of the Republican (Huntsman) cue by 14.0 percentage points relative to Independents. But, interestingly, Democrats are more informed about the Republican candidate's cue than the strong Republicans. This is an important nuance in the Utah data: Democrats are more aware of Republican cues than Republicans are aware of Democratic cues, Democrats are also significantly more aware of the LDS Church's cue than are Republicans, even though members of the LDS faith are much more likely to be Republican than Democrat.

Religious differences in knowledge of cues, on the other hand, are much smaller than partisan differences and are not statistically significant in general. Interestingly, Mormons are no more likely to know the LDS position than non-Mormons and are less likely than those with no religious affiliation (though, again, these are small, statistically insignificant differences). The strongest religious divide is between Evangelical Protestants and Mainline Protestants for all three cues in Table 4, with the Evangelicals being much more aware. The difference is particularly strong for the Democratic cue, with the awareness of Evangelicals being 27.5 percentage points higher than the awareness of Mainline Protestants, a difference which is statistically significant.

The other important variable is, as we expected, educational attainment. Unfortunately, we do not have a measure of political knowledge, but use education as a proxy. Increasing levels
of education are strongly associated with more knowledge of all the cues in Table 4. Increasing income is also positively related. Race, gender, and age differences in awareness are generally small and statistically significant. ${ }^{14}$ Marital status is not important for knowledge of partisan cues, but it is for knowledge of the LDS cue.

The second type of regression we run is an estimate of the support curve, the probability of supporting Amendment 3 . We use this model to capture the credibility of each cuegiver among different types of voters. Recall from the theoretical section that credibility is captured by the interaction terms in the model and increases in credibility will move voter behavior towards the cuegiver's position if the voter is already close (in the spatial sense discussed earlier) and further away if the cuegiver is not close. Although the theoretical model employs, for the sake of parsimony, only one spatial dimension, our empirical analysis focuses on two dimensions. One is partisanship, which interacts naturally with the partisan candidate's cues. The other is religion. In our analysis, this religious dimension has only two values: Mormon and non-Mormon. This approach is not theoretically satisfying, but the empirical results, as we shall see, are strong and revealing. We also include, for purposes of control, knowledge of cues given by the state's two major newspapers. These variables, along with education, are proxies for general political awareness relative to the issue.
(Table 5 here)

[^9]The explanatory power of the probit regression in Table 5 is much higher than for the regressions regarding cue awareness in Table 4, and there are a variety of powerful effects estimated for the model. The religion and party variables are very strong predictors of voter behavior on the ballot proposition, as are the cues, and we will discuss these effects shortly. Somewhat surprisingly, the demographic variables do not have particularly noticeable effects. The one exception is that those people who know someone who is gay are much less likely to support the Amendment. Support for the Amendment rises with education level and for being married, and falls with income, though these effects are not statistically significant.

What is the credibility pattern for the different cues-meaning who is influenced by each cue? This question is answered in Table 6, which uses the coefficient estimates in Table 5 to predict voter support for different sub-groups of the population. Table 6 indicates convincingly that the cues by the gubernatorial candidates are highly credible among partisans, but not among those in the other party. Republican Huntsman's cue has virtually no impact on Democrats, but an 11.8 percentage point impact on Republicans. Similarly, Democrat Matheson's statement against the Amendment increases support by Republicans by 4.4 percentage points, but lowers it among Democrats by 22.1 points. These patterns strongly suggest that the party candidates are proximal cuegivers-believed by their partisans but ignored by opponents.

One caveat to the proximal cuegiver pattern needs to be made, however. For the Matheson cue, the Independents fit nicely into the theoretical pattern of a proximal cuegiver (the cue lowers their support, but by only half as much as among Democrats). For the Huntsman cue, however, the effect among Independents is even higher than the effect among Republicans. This is somewhat surprising given that Huntsman did not win a majority of the Independent vote. Apparently the Independents are quite persuadable. We note, however, that the partisan cues
cancel each other out for Independents. The most important feature of the partisan cues are the stark differences in the effects they have among Democrats and Republicans.

The cue of the LDS Church produces a statistically significant (see the interaction term in Table 5) difference between Mormons and non-Mormons. As illustrated in Table 6, Mormons who know the Church's position have a 9.3 point greater level of support ( $79.1 \%$ compared to $69.8 \%) .{ }^{15}$ The effect on non-Mormons, however, is even greater. Knowledge of the LDS cue lowers support of Amendment 3 among non-Mormons from $46.6 \%$ to $27.0 \%$, a drop of 19.6 percentage points. The results are even more striking if we examine a simple cross-tabulation: $42.2 \%$ of non-Mormons who did not know the position of the Church supported the Amendment, compared to only $15.7 \%$ of non-Mormons who knew the Church's position. Thus, the Church's cue is credible among both those who affiliate with the LDS Church and those who do not, which means the Church is a dominant cuegiver in terms of our theoretical model.

## Discussion

Our theoretical model pointed to the interaction of two basic characteristics of the cuegiver-voter relationship: awareness and credibility, both of which depend on the voter's proximity to the cuegiver. The essential features of the model are that in order for a cuegiver to be effective, it must get its message out (which is a function of its own efforts and the engagement of the media on the issue), and the message must be credible, meaning that it causes voters to update their estimates of the true value of $b$, the position in the issue space associated with the ballot proposition. We introduced the notion of a dominant cuegiver to identify the

[^10]situation where the effectiveness extends not only to voters ideologically near the cuegiver, but to voters further away from the position of the cuegiver.

The regression results provide strong evidence that the LDS Church's cue was dominant. Furthermore, this dominance is not influenced by awareness. It is entirely the product of credibility (recall that religion had virtually no impact on cue awareness). Why would this be the case? What is the underlying spatial dimension being captured by the simple Mormon/nonMormon dichotomy? First, and most importantly, because the Evangelical population in Utah is very small (only about $2 \%$ of voters are in this category), Mormon affiliation is probably a good proxy for social conservatism, which is probably more important for gay rights issues than is party affiliation. Second, the LDS Church has a long-standing influence on Utah politics, an influence that, at times, generates debate, and some resentment, about the influence of religion on the politics of the state. There are probably many issues in Utah politics where Church support would engender almost automatic opposition among a section of the electorate. In any case, the evidence presented here indicates that both members and non-members of the LDS Church update their perceptions of a particular political issue based, in part, on the stance taken by the LDS Church.

Cues given by party officials seem to work much differently than cues by the Church. Even though Mormons are overwhelmingly Republican in Utah, the pattern found for cues by candidates have a very different pattern. The gubernatorial candidates appear to be proximal cuegivers. Looking at the last column of Table 6, we see that the Democratic candidate's cue had a substantial impact on Democratic voters, and the Republican candidate had strong impact on Republicans, but neither had any effect at all on voters of the opposing party. In this case, the effectiveness of the cues is determined both by awareness and by credibility, though the
awareness issue is more salient for Republicans. As we noted above, Republicans in Utah are less aware of the opposing party candidates' positions than are Democrats, at least on this particular issue.

## Conclusion

We began this paper by examining the importance of cues for voters in elections where they may not have their traditional labels to help them navigate the decision or the electoral environment may lack extensive amounts of information. The literature suggests that in these situations it is reasonable for voters to rely on cues they receive from trusted and visible sources. It also seems reasonable to conclude that not all cues have equal influence across different situations. Different cuegivers have different resources and skills. They also evoke different emotions from voters. All of these differences combine to make their signals more or less credible. Electoral environments may favor one sort of entity over another.

We have used the context of a ballot contest on gay marriage in the state of Utah to help us theorize about the different sorts of effects that diverse cue givers may produce. This inductive exercise has helped us develop the idea of a dominant cuegiver. In particular situations, a cuegiver can possess enough resources, command enough attention, and inspire strong enough reactions that its signal has profound effects on the choices voters make. Sometimes these cues affect only those voters who are close to the cuegiver in the policy space, but highly credible cuegivers seem to have an impact across the policy spectrum.

## Appendix 1: Parameters Used in the Spatial Model

## The Ballot Proposition ( $B$ ) in Policy-Space ( $X$ )

$x_{L} \quad$ Lower bound of possible policies on $X$
$x_{U}$ Upper bound of possible policies on $X$
$\pi \quad$ Position of status quo
$b \quad$ True position of proposition on $X$ (voters do not know $b$ )

## Voter Preferences and Information

$\pi_{i} \quad$ Voter $i$ 's estimate of the status quo
$\sigma_{\pi}^{2}$ Variance of voter estimates of status quo
$v_{i}$ Ideal point of voter $i$
$\mu_{v}$ Mean of voter ideal points
$\sigma_{v}^{2}$ Variance of voter ideal points
$b_{i}^{0} \quad$ Initial (pre-cue) estimate of $b$ by voter $i$
$\mu_{b}$ Mean of initial (pre-cue) voter estimates of $b$
$\sigma_{b}^{2} \quad$ Variance of initial (pre-cue) voter estimates of $b$
$b_{i}^{1} \quad$ Updated (post-cue) estimate of $b$ by voter $i$

## Cuegiving and Public Opinion

e The ideal point of the elite
$c \quad$ The position of the elite's cue (what the elite says about $b$ )
$\theta_{i} \quad \theta_{i}=1$ : voter observes $c ; \theta_{i}=0$ : voter doesn't observe $c$
$p_{i} \quad$ Probability that voter $i$ observes $c$, (i.e., $p\left(\theta_{i}=1\right)$ )
$\delta_{i}^{e} \quad$ Distance between voter $i$ 's ideal point and elite's ideal point
$\delta_{i}^{\mu}$ Distance between voter $i$ 's ideal point and the mean ideal point
$r_{i}$ Credibility: the weight given by voter $i$ to cue $c$ (see Eqn. 4b)
$\eta_{i}$ Voter $i$ 's general level of political awareness
$p_{v} E\left(p_{i} \mid v\right)$
$r_{v} E\left(r_{i} \mid v\right)$
$\lambda_{v}$ Effectiveness of cue for voters of type $v_{i}=v . \quad\left(\lambda_{v}=p_{v} r_{v}\right)$

## Appendix 2: Data, Methodology, Question Wording, and Variable Coding

## Data and Methodology

Beginning in 1982 and in every biennial general election since then, students and faculty from Utah colleges and universities have conducted a statewide exit poll in Utah. The sample design is a stratified multistage cluster sample and is patterned after the sample design developed for national exit polls (c.f. Mitofsky and Edelman 1995). The poll is designed to provide estimates for election outcomes at both the congressional district and statewide levels. In the first sampling stage, counties are sampled. Several counties are included in the sample by design, either because they have a large population base and represent a large portion of the total voter population or because of their proximity to one of the colleges or universities participating in the study. The remaining counties in the state are then formed into several strata based on past voting patterns. These counties are then sampled using Probability Proportionate to Size (PPS) sampling. Within each county, polling places are sampled using PPS sampling and within each voting place voters are selected systematically throughout Election Day using a random start and a fixed interval. The values for the sampling interval are based on the projected turnout for each voting place. Interviewing begins when the polls open at 7 am and continues all day until polling ends at 8 pm . In 200490 polling places were sampled statewide and approximately 4900 interviews were completed. The response rate for the poll was 63.9 percent. ${ }^{16}$

The Utah Colleges Exit Poll questionnaires include questions relating to voting, campaign dynamics, issues, political processes, as well as political parties and interest groups. They also include a wide range of demographic questions. The vote questions are at the

[^11]beginning of the questionnaire and the demographics at the end. Whenever possible, question wording from other studies are replicated, permitting us to compare our data with those from other states or national samples. In some cases, like party identification, we have modified the question wording from the National Election Study (NES) to fit a self-completed questionnaire format. The questionnaire in 2004 fit on the front and back of a standard $81 / 2$ by 11 sheet of paper. In 2004 we administered three different forms (each designated by a different color). Each form is distributed so that each is essentially its own sample. The forms have the vote and demographic questions in common, permitting a higher N for some questions by pooling the forms. Questions are usually clustered together by topic, permitting us to compare answers to questions on related topics among the same respondents. This analysis uses questions from the Yellow form which had a total of 1,621 completed questionnaires. The Yellow questionnaire included a number of questions about Amendment 3 including the vote, agree/disagree items listing major arguments made by the campaigns, perceptions of elite endorsements, and attitudes toward gay marriage more generally. Complete question wording for the items referenced in this paper can be found below.

Volunteer student interviewers staff the polling places and conduct interviews on Election Day. Interviewers attend hour-long training sessions to give instruction on approaching voters, answering the most frequently asked questions or objections and avoiding refusals, calling in the data, and working with local election officials. In 2004 about 500 interviewers participated on Election Day. Volunteer interviewers work in teams of three to four and are monitored and aided throughout the day by roving "crisis" teams who are specially trained to handle the unavoidable issues that appear in any project of this magnitude. For a more detailed summary of the Utah Colleges Exit Poll methodology see Grimshaw et al. (2004).

## Question Wording and Variable Coding

| Variable description | Question Wording | Coding |
| :---: | :---: | :---: |
| Religious Tradition | What, if any, is your religious preference? <br> 1. Protestant <br> 2. Catholic <br> 3. LDS/Mormon <br> 4. Jewish <br> 5. Other <br> 6. No preference/ No religious affiliation <br> 7. Prefer not to say <br> Do you consider yourself to be a BornAgain or Evangelical Christian? <br> 1. yes <br> 2. no | Dummy variables: <br> Mormon, coded 1 if preference $=3,0$ otherwise. <br> Evangelical Protestant, coded 1 if preference $=1$ and Born-Again=1, 0 otherwise. <br> Mainline Protestant, coded 1 if preference $=1$ and Born-Again not $=1,0$ otherwise. <br> Catholic, coded 1 if preference $=2,0$ otherwise. <br> Other, coded 1 if preference $=4,5$, or 7 and 0 otherwise. <br> No affiliation (baseline), coded 1 if preference $=6,0$ otherwise. |
| Opinion Leader positions | Several groups and individuals took public positions on Constitutional Amendment Number 3, regarding the legal definition of marriage. Other groups and individuals did not take a public position on the proposed amendment. To the best of your knowledge, which position did each of the following take on the amendment? (groups listed in matrix with options to circle " 1 . for," "2. against," "3. did not take a position," or "4. don't know" | Dummy variables: <br> LDS Church "for" <br> Matheson (D Gov. cand.) "against" <br> Huntsman (R Gov. cand.) "for" <br> Deseret Morning News "for" <br> Salt Lake Tribune "against" <br> Each dummy variable coded 1 if the position indicated was marked and 0 otherwise. |
| Party identification | Generally speaking, do you consider yourself to be $\mathrm{a}(\mathrm{n})$ : <br> 1. Strong Democrat <br> 2. Not so strong Democrat <br> 3. Independent leaning Democrat <br> 4. Independent <br> 5. Independent leaning Republican <br> 6. Not so strong Republican <br> 7. Strong Republican <br> 8. Other <br> 9. Don't know | Dummy variables: <br> Strong Democrat, PID $=1,0$ otherwise Moderate Democrat, PID=2 or 3, 0 otherwise Independent, PID=4 (omitted category) Moderate Republican, PID $=5$ or 6,0 otherwise Strong Republican, PID=7, 0 otherwise <br> Democrat, $\mathrm{PID}=1,2$, or $3 ; 0$ otherwise Independent, PID=4 (omitted category) Republican, $\mathrm{PID}=5,6$, or $7 ; 0$ otherwise |
| Age | What year were you born? | Age $=2004$ - year born |
| Female | Are you: <br> 1. male <br> 2. female | Female $=1$, male $=0$ |
| Income | What do you expect your 2004 family | Coded as dummy variables using categories in |


|  | income to be? <br> 1. Under $\$ 25,000$ <br> 2. $\$ 25,000-\$ 39,999$ <br> 3. $\$ 40,000-\$ 49,999$ <br> 4. $\$ 50,000-\$ 74,999$ <br> 5. $\$ 75,000-\$ 99,999$ <br> 6. Over $\$ 100,000$ | the question with "under $\$ 25,000$ " as the omitted category. |
| :---: | :---: | :---: |
| White | Are you: <br> 1. Native American <br> 2. Asian <br> 3. Black/African American <br> 4. Hispanic/Latino <br> 5. White/Caucasian <br> 6. Pacific Islander <br> 7. Other | White $=1,0$ otherwise . |
| Education | What was the last year of school you completed? <br> 1. Eighth grade or less <br> 2. Some high school <br> 3. High school graduate <br> 4. Some college <br> 5. College graduate <br> 6. Post-graduate | Coded as dummy variables as indicated in the question with high school graduate or less (combining 1, 2 , or 3 ) as the omitted category. There were very few voters in categories 1 or 2 . |
| Marital Status | Are you presently: <br> 1. Married <br> 2. Divorced <br> 3. Widowed <br> 4. Single | Married $=1,0$ otherwise |
| Know someone who is gay | Do you have a friend, colleague, or family member who is gay? <br> 1. yes <br> 2. no | $\mathrm{Yes}=1,0=$ no |

## References

Banducci, Susan A. and Jeffrey A. Karp. 2000. "Gender, Leadership and Choice in Multiparty Systems." Political Research Quarterly 53:815-848.

Bowler, Shaun and Todd Donovan. 2002. "Do Voters Have a Cue? Television Advertisements as a Source of Information in Citizen-Initiated Referendum Campaigns." European Consortium for Political Research 41: 777-793.

Campbell, David E. and J. Quin Monson. 2003. "Following the Leader? Mormon Voting on Ballot Propositions" Journal for the Scientific Study of Religion 42:605-614.

Damore, David F., Ted G. Jelen, and Michael W. Bowers. 2007. "Sweet Land of Liberty: The Gay Marriage Amendment in Nevada" in Paul A. Djupe and Laura R. Olson, eds. Religious Interests in Community Conflict: Beyond the Culture Wars. Waco, TX: Baylor University Press, pp. 51-71.

Darmofal, David. 2005. "Elite Cues and Citizen Disagreement with Expert Opinion." Political Research Quarterly 58:381-395.

Downs, Anthony. 1957. An Economic Theory of Democracy. New York: Harper \& Row.
Dulio, David A. 2004. For Better or Worse? How Political Consultants Are Changing Elections in the United States. Albany, NY: State University of New York Press.

Grimshaw, Scott D., Howard B. Christensen, David B. Magleby, and Kelly D. Patterson. 2004. "Twenty Years of the Utah Colleges Exit Poll: Learning by Doing." Chance 17:32-38.

Karp, Jeffrey A. 1998. "The Influence of Elite Endorsements in Initiative Campaigns" in Shaun Bowler, Todd Donovan, and Caroline Tolbert, eds., Citizens as Legislators: Direct Democracy in the United States. Columbus, Ohio: The Ohio State University Press, pp. 149-165.

Lupia, Arthur. 1994. "Shortcuts Versus Encyclopedias: Information and Voting Behavior in California Insurance Reform Elections." American Political Science Review 88:63-76.

Lupia, Arthur and Matthew D. McCubbins. 1998. The Democratic Dilemma: Can Citizens Learn What They Need to Know? Cambridge: Cambridge University Press.

Lupia, Arthur and Matthew D. McCubbins. 2000. "The Institutional Foundations of Political Competence: How Citizens Learn What They Need to Know" in Arthur Lupia, Matthew D. McCubbins, and Samuel Popkin, eds., Elements of Reason: Cognition, Choice, and the Bounds of Rationality. Cambridge: Cambridge University Press, pp. 47-66.

Magleby, David B. 1984. Direct Legislation: Voting on Ballot Propositions in the United States. Baltimore: Johns Hopkins University Press.

Magleby, David B. 1989. "Opinion Formation and Opinion Change in Ballot Proposition Campaigns" in Michael Margolis and Gary A. Mauser, eds., Manipulating Public Opinion: Essays on Public Opinion as a Dependent Variable. Pacific Grove, CA: Brooks/Cole, pp. 95-115.

Magleby, David B. and Kelly D. Patterson. 1998. "Consultants and Direct Democracy." PS: Political Science and Politics 31:160-69.

Magleby, David B. and Kelly D. Patterson. 2000. "Campaign Consultants and Direct Democracy: Politics of Citizen Control" in James A. Thurber and Candice J. Nelson, eds., Campaign Warriors: Political Consultants in Elections. Washington, D.C.: Brookings Press, pp. 133-152.

McDermott, Monika L. 2006. "Not for Members Only: Group Endorsements as Electoral Information Cues." Political Research Quarterly 59:249-57.

Medvic, Stephen K. 2001. Political Consultants in U.S. Congressional Elections. Columbus, OH: The Ohio State University Press.

Mitofsky, Warren J. and Murray Edelman.1995. "A Review of the 1992 VRS Exit Polls" in Presidential Polls and the News Media, eds. Paul J. Lavrakas, Michael W. Traugott, and Peter V. Miller. Boulder, CO; Westview Press.

Monson, Quin, Stephen T. Mockabee, and Paul J. Lavrakas. 1999. "Preference Formation on Ballot Propositions: Experimental Evidence of the Effects of Information" Unpublished manuscript.

Paul, David M. and Clyde Brown. 2001. "Testing the Limits of Elite Influence on Public Opinion: An Examination of Sports Facility Referendums." Political Research Quarterly 54:871-88.

Wlezien, Christopher and Arthur H. Miller. 1997. "Social Groups and Political Judgments." Social Science Quarterly 78:625-40.

Zaller, John. 1992. The Nature and Origins of Mass Opinion. Cambridge: Cambridge University Press.

Table 1: Opinions about Gay Rights

| Statement | Agreement |
| :--- | :---: |
| Should be allowed to marry | 21 |
| Should be allowed to form civil unions | 25 |
| No recognition of gay relationships | 54 |

Reported as percentages
Question wording: Which comes closest to your view: Gay couples should be allowed to legally marry, gay couples should be allowed to form unions but not legally marry, there should be no legal recognition of a gay couple's relationship.

Table 2: Opinions on Effects of Amendment 3

| Statement | \% Agree | \% Disagree | $\%$ Don't Know |
| :--- | :---: | :---: | :---: |
| The amendment will prevent same-sex <br> marriage from coming to Utah | 64 | 18 | 18 |
| The amendment will keep employers <br> from giving health or other benefits to <br> homosexuals | 43 | 35 | 22 |
| The amendment goes too far | 35 | 53 | 11 |
| The amendment will promote intolerance, <br> hatred, or bigotry | 31 | 52 | 17 |
| The amendment will do away with <br> common law marriages | 23 | 48 | 28 |

Question wording: Do you agree or disagree with the following statements about Constitutional Amendment Number 3, regarding the legal definition of marriage?

Table 3: Accurate Assessments of Opinion Leader Positions on Amendment 3

| Source | \% For | \% Against | \% No <br> position | \% Don't <br> know |
| :--- | :---: | :---: | :---: | :---: |
| Deseret Morning News | 25 | 7 | 5 | 63 |
| Salt Lake Tribune | 12 | $\mathbf{1 6}$ | 5 | 67 |
| Jon Huntsman, (R) gubernatorial candidate | 42 | 11 | 2 | 46 |
| Scott Matheson, (D) gubernatorial candidate | 16 | 28 | 3 | 53 |
| Mark Shurtleff, (R) AG candidate | 15 | 20 | 2 | 63 |
| Gregg Skordas, (D) AG candidate | 4 | $\mathbf{1 7}$ | 2 | 77 |
| LDS (Mormon) Church | 46 | 13 | 15 | 28 |

Bold and Italicized percentages indicate the correct answer.
Question wording: Several groups and individuals took public positions on Constitutional Amendment Number 3, regarding the legal definition of marriage. Other groups and individuals did not take a public position on the proposed amendment. To the best of your knowledge, which position did each of the following take on the amendment?

Table 4: Knowledge of Cue, Probit Regression Results

|  | Matheson (Against) |  | Huntsman (For) |  | LDS Church (For) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mean of Dependent Variable: | $\begin{gathered} 0.255 \\ \underline{\mathrm{dF} / \mathrm{dx}^{*}} \end{gathered}$ | t-stat | $\begin{aligned} & 0.386 \\ & \mathrm{dF} / \mathrm{dx} \end{aligned}$ | t-stat | $\begin{aligned} & 0.435 \\ & \mathrm{dF} / \mathrm{dx} \\ & \hline \end{aligned}$ | t-stat |
| Religion Variables |  |  |  |  |  |  |
| Mormon | 0.050 | 1.21 | 0.081 | 1.65 | -0.070 | -1.33 |
| Evangelical Protestant | 0.203 | 1.95 | -0.007 | -0.07 | -0.028 | -0.26 |
| Mainline Protestant | -0.072 | -0.86 | -0.133 | -1.47 | -0.108 | -1.16 |
| Catholic | 0.014 | 0.21 | -0.057 | -0.75 | -0.087 | -1.16 |
| Other Religion | -0.068 | -1.35 | -0.106 | -1.69 | -0.125 | -1.91 |
| Party ID |  |  |  |  |  |  |
| Strong Democrat | 0.282 | 4.84 | 0.219 | 3.46 | 0.177 | 2.80 |
| Moderate Democrat | 0.176 | 3.28 | 0.183 | 3.08 | 0.111 | 1.88 |
| Moderate Republican | 0.050 | 1.10 | 0.186 | 3.48 | 0.085 | 1.57 |
| Strong Republican | 0.052 | 1.19 | 0.140 | 2.71 | 0.078 | 1.50 |
| Demographic variables |  |  |  |  |  |  |
| Age (in years) | -0.001 | -1.09 | 0.002 | 2.03 | 0.001 | 0.89 |
| Female | -0.014 | -0.50 | -0.010 | -0.31 | 0.005 | 0.15 |
| Married | 0.024 | 0.71 | 0.049 | 1.26 | 0.089 | 2.22 |
| Education: Some College | 0.081 | 1.60 | 0.088 | 1.74 | 0.053 | 1.04 |
| Education: College Graduate | 0.120 | 2.27 | 0.118 | 2.24 | 0.085 | 1.60 |
| Education: Beyond College | 0.177 | 2.88 | 0.181 | 3.01 | 0.129 | 2.11 |
| Income \$25,000-\$39,000 | 0.030 | 0.64 | -0.001 | -0.02 | 0.022 | 0.39 |
| Income \$40,000-\$49,000 | 0.042 | 0.69 | 0.063 | 0.95 | 0.014 | 0.21 |
| Income \$50,000-\$74,999 | 0.066 | 1.40 | 0.018 | 0.33 | -0.045 | -0.83 |
| Income \$75,000-\$99,999 | 0.117 | 2.03 | 0.151 | 2.27 | -0.049 | -0.74 |
| Income over \$100,000 | 0.079 | 1.38 | 0.099 | 1.53 | -0.057 | -0.89 |
| White | 0.025 | 0.48 | -0.003 | -0.05 | 0.034 | 0.56 |
| Know someone gay | 0.028 | 0.96 | 0.072 | 2.12 | 0.071 | 2.01 |
| $\mathrm{N}=$ | 1,468 |  | 1,468 |  | 1,468 |  |
| Pseudo-R ${ }^{2=}$ | 0.049 |  | 0.060 |  | 0.023 |  |

* For continuous variables, $\mathrm{dF} / \mathrm{dx}$ is the change in probability associated with a unit change. For dummy variables, it represents a change from 0 to 1 .

Omitted categories: Religion-No religious affiliation, Party ID-pure independent, gendermale, Marital status - not currently married, Education-high school or less, Income-less than $\$ 25,000$, race-nonwhite.

Table 5: Support for Amendment 3: Probit Regression Results

Dependent Variable: Probability of Supporting Ammendment 3

|  | Coeff. | dF/dx* | t-stat |
| :--- | :---: | :---: | :---: |
| Religion/Partisanship Variables |  |  |  |
| Mormon | 0.603 | 0.231 | 4.36 |
| Republican | 0.869 | 0.327 | 5.58 |
| Democrat | -0.292 | -0.113 | -1.68 |
| Cue Receipt Variables |  |  |  |
| LDS Church ("for") | -0.527 | -0.199 | -2.98 |
| $\quad$ Mormon * LDS cue | 0.819 | 0.282 | 3.70 |
| Matheson (D Gov. cand. - "against") | -0.312 | -0.120 | -1.01 |
| $\quad$ Matheson cue * Democrat | -0.394 | -0.154 | -0.91 |
| $\quad$ Matheson cue * Republican | 0.164 | 0.061 | 0.46 |
| Huntsman (R Gov. cand. -"for") | 0.396 | 0.147 | 1.35 |
| $\quad$ Hunstman cue* Democrat | -0.400 | -0.157 | -1.07 |
| $\quad$ Hunstman cue* Republican | 0.027 | 0.010 | 0.08 |
| Deseret News ("for") | -0.329 | -0.127 | -2.06 |
| Salt Lake Tribune ("against") | -0.191 | -0.074 | -1.04 |
| Demographic variables |  |  |  |
| Age (in years) | 0.001 | 0.000 | 0.39 |
| Female | -0.013 | -0.005 | -0.12 |
| Married | 0.195 | 0.074 | 1.62 |
| Education: Some College | 0.019 | 0.007 | 0.11 |
| Education: College Graduate | -0.324 |  | -0.97 |
| Education: Beyond College | -0.118 | 0.044 | 0.64 |
| Income \$25,000 - \$39,000 | 0.174 | 0.064 | 0.84 |
| Income \$40,000 - \$49,000 | -0.003 | -0.001 | -0.02 |
| Income \$50,000 - \$74,999 | 0.059 | 0.022 | 0.28 |
| Income \$75,000 - \$99,999 | -0.003 | -0.001 | -0.02 |
| Income over \$100,000 | -0.064 | -0.024 | -0.35 |
| White | -0.018 | -0.24 |  |
| Know someone gay | -0.018 | -0.23 |  |
| Intercept | -0.188 | -4.53 |  |
|  |  | 0.379 |  |

[^12]Table 6: Cuegivers' Impact on Probability of Supporting Amendment
Probability of voting for Amendment 3

|  | (1) | (2) | (3) | (4) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LDS Church | No Cue received | Cue <br> Received | Effect of Cue on Recipients | Probability of Cue Receipt | Total Effect (all voters) |
| Mormon All Others | $\begin{aligned} & 0.698 \\ & 0.466 \end{aligned}$ | $\begin{aligned} & 0.791 \\ & 0.270 \end{aligned}$ | $\begin{gathered} +.093 \\ -.196 \end{gathered}$ | $\begin{aligned} & 0.416 \\ & 0.372 \end{aligned}$ | $\begin{gathered} +.039 \\ -.073 \end{gathered}$ |
| Gubernatorial Race | No Cue received | Cue <br> Received | Effect of Cue on Recipients | Probability of Cue Receipt | Total Effect <br> (all voters) |
| Huntsman (R - "for") |  |  |  |  |  |
| Democrats | 0.299 | 0.297 | - . 002 | 0.386 | - . 001 |
| Independents | 0.407 | 0.564 | +. 157 | 0.273 | +. 043 |
| Republicans | 0.737 | 0.854 | +. 118 | 0.403 | +. 047 |
| Matheson (D - "against") |  |  |  |  |  |
| Democrats | 0.372 | 0.151 | - . 221 | 0.343 | - . 076 |
| Independents | 0.487 | 0.365 | - . 122 | 0.186 | - . 023 |
| Republicans | 0.798 | 0.754 | -. 044 | 0.227 | -. 010 |

Note: Column 3 contains values represent the absolute change in probability of voting for amendment due to receipt of the cue by each subgroup as predicted by the model in Table 5; all other values are held constant at their means. Column (4) contains the percentage of voters in the cateogry who receive the cue. Column (5) gives the total effect of the cue among all voters (cue-recipients and non-recipients), which is the product of columns 3 and 4.

Figure 1: Example of a Proximal Cuegiver



Note: Based on $N=50,000, \pi=0 ; b=.1, c=.4, e=.4 ; X=[-1,1]$

Figure 2: Example of a Dominant Cuegiver



Note: Based on $N=50,000, \pi=0 ; b=.1, c=.4, e=.4 ; X=[-1,1]$

Figure 3: Media Coverage of Major Statewide Campaigns


Notes: The x axis displays the nine plus weeks (Sunday through Saturday) beginning with the week before Labor Day through the election. The y axis displays the number of stories on each race that ran in the Deseret Morning News and the Salt Lake Tribune, the state's two largest circulating daily newspapers.


[^0]:    ${ }^{1}$ Throughout this paper the terms LDS Church, Mormon Church, and the Church are used interchangeably to refer to The Church of Jesus Christ of Latter-day Saints.
    ${ }^{2}$ In descending order, the percent voting to pass the marriage amendment in each state was Mississippi (86\%), Louisiana (78\%), Georgia (77\%), Oklahoma (76\%), Arkansas (75\%), Kentucky (75\%), North Dakota (73\%), Missouri (71\%), Montana (67\%), Utah (66\%), Ohio (62\%), Michigan (59\%), and Oregon (57\%).

[^1]:    ${ }^{3}$ For the sake of convenience in discussion, we assume that both $p$ and $r$ (discussed below) are differentiable, though the implications of the theory do not depend on differentiability.

[^2]:    ${ }^{4}$ We note as well that the variance of the updated estimates is $(1-\lambda)^{2} \sigma_{b}^{2}$. Thus, as the cuegiver becomes more effective, it not only pulls the electorate towards its position, but narrows the variance associated with voter estimates.
    ${ }^{5}$ Of course a rational cuegiver would only provide a cue if it expected the cue to increase the probability of moving the status quo in the voter's direction. A strategic model would capture this incentive as well as allow the voters to incorporate expectations about the rational cuegiver's behavior.

[^3]:    ${ }^{6}$ The idiosyncratic component does not appear since it has been averaged out of the equation.

[^4]:    ${ }^{7}$ Recall that effectiveness is equal to awareness multiplied by credibility $\left(\lambda_{v}=p_{v} r_{v}\right)$. Thus, if cue has an effect on the votes of a particular type of voter, but that voter type is not more aware of the cue than other voter types, then we would conclude that the effectiveness is due primarily to credibility, not awareness.

[^5]:    ${ }^{8}$ In practice, we do not expect a strict dichotomy between proximal and dominant cues. It is quite likely that a proximal component is present for a dominant cuegiver, which would be seen if the effectiveness of the cue is greater among voters proximal to the cuegiver than it is for those further away.

[^6]:    ${ }^{9}$ In a poll conducted by Dan Jones and Associates during late August, after respondents were read the ballot language the projected vote was $58 \%$ yes, $28 \%$ No, $14 \%$ undecided/don’t know. Given the disorganization of the yes campaign and the well-established pattern of increased no voting on ballot initiatives as Election Day approaches (Magleby 1984; 1989), it was not unreasonable to conclude that at least some potential existed for opponents to defeat the measure in Utah.

[^7]:    ${ }^{10}$ For the text of each statement see: "First Presidency Statement on Same-Gender Marriage" at http://www.lds.org/newsroom/showrelease/0,15503,4044-1-20336,00.html (released October 19, 2004

[^8]:    ${ }^{12}$ The actual vote was 65.9 percent "for" and 34.1 percent against.
    ${ }^{13}$ The exit poll question wording is identical to wording used by the CBS/New York Times poll. In a November 18-21, 2004 survey the national proportions were: 21 percent legally marry, 32 percent civil unions; and 44 percent no legal recognition. See http://www.pollingreport.com/civil.htm (accessed March 15, 2005).

[^9]:    ${ }^{14}$ It is important to remember that the estimated age effect is for a single year. If we look across a broad age range such as fifty years, the estimated age effect is large and comparable in magnitude to other estimated variables. Older people are less likely to be aware of the Democratic cue and more likely to be aware of the Republican cue.

[^10]:    ${ }^{15}$ We remind the reader that these are estimated marginal effects from the probit model in Table 5, holding other variables constant at their mean values

[^11]:    ${ }^{16}$ The response was calculated by dividing the number of completed interviews by the total number of completed interviews and refusals.

[^12]:    * For continuous variables, $\mathrm{dF} / \mathrm{dx}$ is the change in probability associated with a unit change. For dummy variables, it represents a change from 0 to 1 .

    Omitted categories: Religion-nonLDS, Party ID—pure independent, gender-male, Marital status-not currently married, Education-high school or less, Income-less than $\$ 25,000$, race-nonwhite.

