

# **Confusion, Information and Voting Errors in Initiative Races**

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## **Abstract**

This paper addresses to two separate, yet related strands of research in American political behavior. On the grand scale, this paper adds to the centuries of debate on the cognitive capacity of the masses. Some recent scholarship in this debate has focused on the electorate's ability to 'vote correctly.' The vast majority of previous research on this topic suggests that by and large voters get it right most of the time. However, "most of the time" is not all of the time. By looking at votes cast on ballot initiatives in California's gubernatorial election in November of 2006, this work asks the question, can voters vote correctly in proposition elections?

Secondarily, scholars of direct democracy have believed that confusion leads voters to vote 'no' on ballot initiatives. If voters bias their votes toward 'no' because the propositions are too confusing, this leads to a failure of the institution of direct democracy to accurately translate voter preferences to public policy. In answering the initial question, several trends begin to emerge. First, voters are pretty good at translating their preferences into votes (around 80% of the sample). Second, contrary conventional wisdom, confusion does not lead to increases in 'no' votes on propositions, nor does it lead to significantly more voting errors. Uninformed voters can have proportionately more voting errors than informed voters under certain conditions. Finally, the only apparent bias in voting errors is towards the losing side, which suggests that the institution of direct democracy allows for the successful transfer of preferences to electoral outcomes.

If “voters are not fools” as V.O. Key so boldly stated in *The Responsible Electorate*, why has there been such fevered debate on this topic? And even if voters are not fools, does that mean they can wade through the morass that is politics in a democracy? No matter how optimistic scholars are about the electorate, nobody has claimed that voters are perfect. If voters are not perfect and can have difficulty translating their preferences into votes, it becomes imperative to assess whether or not there is a systematic bias in any failure to make this translation. This research will analyze the role that confusion plays in vote choice, as well as, how confusion and information impact the ability of voters to vote correctly.

Historically, theories of democracy operated on the assumption that an informed and active citizenry was vital to its existence. Political information has been conceptualized in a myriad of ways, such as, holding consistent ideological beliefs (Converse 1964), an accumulation of political facts (Delli Carpini & Keeter (1996) and even relative awareness of ideological locations of political figures or parties (Palfrey and Poole 1987). Unfortunately, Americans tend to fall short of the idealized citizen, and in the mid twentieth century academics (from Columbia and Michigan) sounded the alarm that the American electorate was neither informed nor active. Campbell et al.’s (1960) *The American Voter* suggested the citizenry lacked an ideological belief structure and large levels of political information. Converse (1964) continued the assault on the democratic ideal, pointing to issue inconsistency over time within the electorate. With this base, a second wave of literature began to critique the early work and paint the American electorate in a more positive light. However, there was no great shift in

American levels of political information; the vast difference in understanding of what the electorate knows or does not know is mostly a matter of perspective.

### **“How Dumb Are the Voters, Really?”**

Whether or not voters can act rationally is one of the arguments at the core of American political behavior. Converse's (1964) findings suggest that the number of people with coherent ideological belief systems is small. As one moves down the information scale, people not only do not grasp the standard liberal/conservative belief systems, they also have large holes in the knowledge of what policy matches which belief system (I think this is what you mean to say). Achen (1975) countered this claim and viewed opinions as a distribution of preferences as opposed to static points. Achen also argued that Converse's claim of doom for democracy was flawed by large amounts of measurement error. Using survey research, Zaller and Feldman (1992) further developed the idea of preferences having a central tendency and a variance. In so doing, they added weight to the critiques of the early work and reinforced Achen's claims that opinions are not static points.

Aside from the distribution of opinion, scholars looked to Downs' (1957) propositions (that there is little rationale for participating or becoming informed in a large democracy) for a theoretical defense of this troubling empirical evidence of an uninformed electorate. Following Downs, a growing literature attempts to explain the behavior of the mass public. At the mass aggregate level (Page and Shapiro 1992) and at the individual level (Popkin 1991, Lupia & McCubbins 1998, see Lupia 1994 for evidence about direct democracy) authors began to explain how low information can appear to function rationally and effectively for democratic theory. Page and Shapiro conclude that while

individual opinion and information levels may be of questionable validity, aggregate public opinion is stable over time, legitimate and reacts to real world events; that is, public opinion is rational. Popkin addresses and defends low-information rationality at the individual level, showing that ‘reasoned choice’ with the use of heuristics (rational shortcuts) results in accurate voting at the presidential level. Both views conclude that the electorate operates rationally, but Page and Shapiro are agnostic about the rationality of the individual. Popkin’s work at the individual level is a more theoretically defensible position because Page and Shapiro ignore the possibility that a collective irrationality or bias would aggregate, and while stable would certainly not necessarily be rational.

Additionally, Popkin’s (2006) latest reinterpretation of “The Nature of Belief Systems in Mass Publics,” convincingly argues that the electorate is not a chaotic mess, but rather capable group of ‘sorters and rankers’ capable of translating preferences into votes. This argument is a compelling, even though researchers have continually found that the American electorate is woefully uniformed about politics, in both civics book style facts and complex policy attributes (Campbell et al. 1960, Converse 1964, Delli Carpini and Keeter 1996).

### **Is the Glass Half Full, Half Empty or Both?**

The level of political information in the electorate and its impact on democracy is a central concern for scholars, but within a representative democracy the citizens’ most important actions come on the first Tuesday, following the first Monday, in November. Several attempts have been made to analyze the ‘correctness’ of voters’ decisions. Most notably Bartels (1996) and Lau & Redlawsk (1997) tested the accuracy of the voters’ choices. Bartels analyzes NES data to conclude that there are significant deviations

between ‘fully informed’ individuals and demographically similar ‘uninformed’ voters. Yet, these deviations are substantively not very large and with such small changes in vote choice outcomes, it can just as easily be said that informed and uninformed voters act relatively similar in the voting booth.

Lau and Redlawsk’s (1997) experiments show that 75% of the time, the uninformed would not change their votes if fully informed. While Lau and Redlawsk focus on the positive evidence for rational and informed publics, Bartels focuses on the negative evidence. Similar to Bartels, Delli Carpini and Keeter (1996) spotlight the relatively small uninformed portion of the electorate. They look at information levels that are remarkably similar to the rest of the literature, yet come to conclusions troubling for democratic theory. Their concern is that since more information can lead to higher levels of participation, more consistent opinions and more suitable policy outcomes, those that are not informed may have their interest subordinated to the more organized political interests. Delli Carpini and Keeter are concerned that the policy outcomes will be slanted toward highly informed and mobilized interests; however, there is scant empirical evidence that any particular class of informed *voters* has been systematically under represented.

Fortunately, most of the literature, while quite contradictory, is rather homogeneous. It simply depends on which half of the information glass is discussed and highlighted. Lau and Redlawsk look at the successful 75% of the uninformed, Delli Carpini and Keeter would essentially look at the other 25%. Overall, based on the scholarship in the field, it appears that democracy functions effectively given the constraints of human nature, and while increased political information could result in

more favorable outcomes for the masses, it is not clear that the under informed are negatively impacted by the outcomes of elections.

### **Theories about Confusion and Voting**

The role of confusion in vote choice is analogous, though not identical, to the role that information plays. Political information has decades of scholarship elucidating clear conceptual and operational definitions. Confusion, on the other hand, suffers from vague and sometimes contradictory conceptual definitions with various theorized results in the voting booth. The overwhelming belief is that confused voters (variously defined) vote 'no' on initiatives. While this is apparently common knowledge, as evidenced by its regular assertions in the literature (Hyink 1969, Magleby 1984, Bowler and Donovan 1998, Higley and McAllister 2002, Goldsmith 2004) and routine anecdotal quotes by campaign consultants (Magleby and Patterson 1998), there is scant empirical evidence in support of this claim, some empirical evidence against this claim (Darcy and Laver 1990) and relatively flimsy theoretical explanations for this supposed phenomena (Lowenstein 1982). Though a number theories suggest how and why voters become confused, the resulting 'no' votes that are assumed to occur have not been empirically verified.

One theory about how these confused voters cast ballots is that risk adverse voters unsure about the initiative simply vote 'no' to maintain the status quo (Hyink 1969, Lupia and Matsusaka 2004). This emanates from Kahneman and Tversky's (1979) 'prospect theory' of decision making when people are faced with risk. Prospect theory claims that people undervalue outcomes that are probabilistic, in comparison to guaranteed outcomes. The resulting public policy consequences from ballot initiatives are uncertain, not only from a standpoint of individual interpretation of the potential law, but also the

implementation of that ballot proposition is far from certain. Legislative and bureaucratic responses to direct democracy can limit the impact of initiatives (Gerber, Lupia, McCubbins and Kiewiet 2001, Gerber, Lupia and McCubbins 2004), but in a federal system, other levels of government can attempt dilute alter the results or outcomes of these elections as evidenced by the lawsuits in federal against Proposition 187, the “Save Our State” initiative in California in 1994 that aimed to deny illegal immigrants social services. Aside from simple uncertainty about the implementation, policy consequences are far from certain, as well. California’s Proposition 140 instituting term limits has had numerous unintentional consequences, many of them negatively impacting the state (Kousser 2005).

Another belief is that voters become frustrated with competing initiatives (Ainsworth 1990, Bowler, Donovan and Happ 1992) and in order to avoid voting for the wrong initiative, the voter simply votes no on all competing initiatives. Additionally, as rational voters use trusted elites or organizations as shortcuts instead of gathering costly encyclopedic information (Lupia 1994, Lupia and McCubbins 1998), voters may become confused if they receive contradictory signals from the elites (Zaller 1992) leading to ambiguity about the elites’ and their own true preferences. This ambiguity would then be translated into a ‘no’ vote.

Finally, another supposed outflow of confusion is simple abstention. Downs’ (1957) discussion of the utility of voting predicts that if voters lack a clear candidate preference (or in this case policy preference) they will not vote. There has been some work that implicitly suggests that confusion can lead to abstention. Work done on “roll-off” or within ballot abstention that shows low information candidate races suffer from

this phenomenon (Klein and Baum 2001, Darcy and Schneider 1989). Perea's (2002) work shows that longer ballots can increase abstention rates in Western European referenda elections and Walker (1966) shows how longer ballots can lead to abstention in the United States, and though there is no direct tests, it is theorized the confusion works as the intervening variable in the causal chain. Additionally, the types of ballots available can influence abstention in initiative voting rates (McDonald 2003). Mueller (1969) suggests that media attention to elections, and by extension information and reduced confusion levels (Matsusaka 1993), diminishes the abstention rate in non-controversial ballot initiatives.

### **More questions than answers?**

Following Achen, if voters have a distribution of preferences centered on a mean when it comes to answering public opinion survey research, why would opinion formation differ for actual vote choice? The situations are identical. Individuals are forced to make choices, often with ballots being much more restrictive than surveys, about issues or candidates that the voter has thought little about. This paper follows the lead of Lau and Redlawsk's "Voting Correctly," and attempts to measure how well voters can translate their preferences into actual votes on Election Day. While Lau and Redlawsk focused on candidate based elections using experiments and NES data, this research uses exit poll data about state level initiatives. Absent the most valuable cue voters can lean on (partisan affiliation), two questions are raised. First, can voters make seemingly rational choices in the voting booth about complex issue propositions absent party cues? Second, if voters find the decision making process confusing, do they then vote in ways contrary to their preferences?"



In addressing these questions, this research differs in several ways from “Voting Correctly.” The first difference is by using exit poll data this sample is restricted to actual voters. The NES data analysis assuredly included non-voters as over reporting turnout is a serious problem with survey research due to the social desirability of voting (see Abramson & Aldrich 1982 and Teixeira 1987 for problems specific to NES data). Though it is unlikely that the misreported votes would have altered their analysis, including non-voters could have artificially decreased the amount of ‘correct votes’ and actually muted their findings. Of more importance is the misreporting of votes in the survey research (see Wright 1993 for this problem with NES data). Election winners receive disproportionately more votes in the ‘post’ election portion of the survey which could bias their analysis and again reduce the accuracy of the voting public. Exit poll data lessens this problem as voters are unaware of the official results at the time of their responses to the survey. Even though ballot drop off is a concern when analyzing bottom of the ballot issues, voting on (or not voting on) any single proposition lacks the social desirability of turning out in general. Therefore, it is unlikely that individuals misreported their vote either by claiming to have voted for the winning proposition or claiming to have voted on an issue when in fact they did not.

### **Hypotheses**

*H<sub>1</sub>: Confused voters will be more likely to vote ‘no’ on initiatives than voters who are not confused.*

*H<sub>2</sub>: Voters who are not confused about initiatives are more likely to ‘vote correctly’ than voters who are confused.*

*H<sub>3</sub>: Informed voters are more likely to ‘vote correctly’ than not informed voters.*

*H4: Voting errors are biased in toward 'no' for ballot initiatives.*

## **Data & Methods**

I designed and conducted an exit poll to overcome the obstacles of inferring voter preferences and confusion from demographic or ballot characteristics. Voters were directly asked about their issue preferences and also asked about levels of confusion for two ballot propositions. This unique data set taken from an exit poll in the city of San Diego during the 2006 California Gubernatorial Election (N = 638) presents an opportunity to assess the aforementioned hypotheses.<sup>1</sup> The exit poll was conducted by student volunteers in an upper division political behavior course at San Diego State University, an introductory American politics course and a senior research methods course in Urban Studies & Planning at the University of California, San Diego. The students received extra credit in their classes for conducting approximately 3 hours of interviewing at a given polling station. A total of 638 respondents from 14 separate precincts were interviewed over the course of the day. The precincts were chosen using a random cluster sampling method. Eight precincts were randomly selected from a list of precincts from the most recent election in San Diego (June 6, 2006 Gubernatorial Primary Election). The additional six precincts were located at the polling stations of the eight originally selected precincts.

## **Dependent Variables**

The dependent variables, vote choice on two separate ballot initiatives – Proposition 87 and Proposition 89, are coded as one (1) for a 'yes' vote and zero (0) for a

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<sup>1</sup> One potential limitation of using an exit poll for analysis is that absentee voters are not part of the sample and they can differ in voting patterns for direct legislation (Dubin and Kalsow 1996). The only way this would affect the results of this test is if absentee voters responded differently to information or confusion, not if their information or confusion levels were systematically higher or lower. There is no evidence or theory that would suggest this to be the case.

'no' vote. Proposition 87 was a controversial proposal that would have introduced a severance tax on oil production within the state of California. The initiative would have generated between \$225 and \$485 million annually for the state to fund \$4 billion in new alternative energy programs (California Secretary of State). Environmental organizations and other proponents of Prop 87 raised upwards of \$61 million<sup>2</sup>, \$40 million of which came from a single donor – Steve Bing. Opponents of Prop 87, mostly oil companies, managed to raise upwards of \$90 million.

Proposition 89 was an effort to introduce publicly financed elections to California state level campaigns. Candidates that met certain requirements, most notably the collection of a specified number of campaign donations of \$5.00, would have been able to receive public funding for their campaigns. A .2% increase in corporate income tax rates would have funded the \$200+ million program. Supporters of Prop 89 spent approximately \$6 million, while opponents spent slightly less than \$5.5 million. This race was lacked the big money special interests involved in Prop 87 and provides variation in the kind of campaign that was run.

### **Independent Variables**

Political information is often operationalized in the literature by creating scales (Delli Carpini & Keeter 1996), or complex indices (Palfrey & Poole 1987); unfortunately, this dataset precludes these options and limits political information to a single question. Political information is a dichotomous variable in this analysis, operationalized by correctly placing the two gubernatorial candidates on scale measuring preferred levels of

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<sup>2</sup> All campaign finance data was obtained from the California Secretary of State's website. Last accessed February 12, 2007.

spending and taxes.<sup>3</sup> A correct response, and hence ‘informed’ person, was able to correctly place Arnold Schwarzenegger to the left of Phil Angelides on this scale, indicating that Angelides would prefer more spending and higher taxes.

The difficulty in parsing out an operationalization of a measure that is ill defined at a conceptual level can be extremely difficult. Since both researchers and the general populace often have a ‘I know it if I see it’ feeling about confusion, it may be best left up to the individual respondent to determine the level of confusion surrounding any particular proposition. Instead of simply asking voters if they were confused, which would likely yield biased results (as respondents would be inclined to give the socially desirable response), the respondents were asked, “Do you think any of the propositions on the ballot were too confusing for the average voter to understand?” If the respondent answered, “yes”, they were prompted, “which ones?” This direct measure of confusion is coded as one (1) if the respondent believed that the individual proposition was confusing and zero (0) otherwise.

Voter preferences for the two ballot propositions were measured by asking whether they supported policies that were at the heart of each of the propositions. For Prop 87 respondents were asked, “Do you favor raising taxes on oil companies?” In order to obtain preferences for Prop 89, respondents were asked, “Do you favor tax increases for publicly financed elections?” Both variables are dichotomous, with one (1) representing “yes” and zero (0) equaling “no.”

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<sup>3</sup> Exact question wording, “Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. [Show Services Scale to Respondent] Suppose these people are at one end of a scale, at point 1. [Point to “Fewer Services” on the scale] Other people feel that it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. [Point to “More Services” on the scale] And, of course, some other people have opinions somewhere in between, at points 2,3,4,5 or 6. Where would you place Arnold Schwarzenegger on this scale? [Wait for response] How about Phil Angelides?”

Additionally, voters can be influenced by sociotropic or pocketbook sentiments. For Prop 87 concerns for the environment could influence voters and lead them to vote for the initiative. This was operationalized as a dichotomous variable by asking respondents, “If passed, which (if any) of these propositions do you think will help the environment?” Answers of “Prop 87” were coded as one (1), otherwise was coded as zero (0). An additional sociotropic measure questions how the respondents believe the propositions will impact the state as a whole. For both Prop 87 and Prop 89 voters were asked, “If passed, which (if any) of these propositions do you think will improve the general welfare of the state?” If the respondents answered in the affirmative for the respective proposition, that variable was coded one (1), zero (0) otherwise. To assess the impact of the pocketbook on vote choice, voters were asked, “If passed, which (if any) of these propositions do you think will raise your taxes?”

Aside from direct preferences on the issue, voters can have additional influences when it comes to deciding how to vote. Most notably party identification, a common determinant of vote choice in candidate elections, can serve as an influence in ballot propositions. Party identification is measured on a seven-point Likert scale with one (1) representing ‘Strong Democrat’, four (4) equaling ‘Independent’ and seven (7) representing ‘Strong Republican.’ Finally, two demographic variables are included in the analysis, age and income. Age is measured with an ordinal scale, 1 = Under 25, 2 = 26-35, 3 = 36-45, 4 = 46-55, 5 = 56-65, 6 = Over 65. Annual household income is also measured with an ordinal scale, 1 = Under \$50,000, 2 = \$50,001 - \$100,000, 3 = \$100,001 - \$150,000, 4 = Over \$150,000.

## **Findings**

The results of the two regression equations listed below (see Table 1) show several intriguing results. Due to the lack of intuitiveness of logit coefficients (no, really?), the regression results will be briefly discussed followed by predicted probabilities that were generated using Clarify (see Table 2) to fully elucidate the influence (or lack thereof) the variables of interest have on vote choice. First and foremost, confusion and political information are not statistically significant in either equation. This suggests that voters that are confused act similarly to voters who are not confused about propositions. The coefficient in the first equation (Prop 87) is in the negative direction, though not statistically significant. Perhaps the conventional wisdom about ‘no’ votes applies only to limited circumstances, such as highly publicized initiatives. Nonetheless, assuming confused voters vote ‘no’ appears to be incorrect.

[Insert Table 1 about here]

Political information plays practically no role in the voting decisions for Prop 87 and only a minor role for Prop 89. This comports with most research, as the effect of political information often plays its role in determining who shows up at the ballot box, rather than what buttons they push once they are there. The demographic variables have little impact and the rest of the covariates have coefficients in the expected direction. Voter’s preferences on issues (both sociotropic and pocketbook) are in the expected direction and are either statistically significant or close to being statistically significant.

In order to more intuitively understand the lack of impact confusion has on vote choice, Clarify,<sup>4</sup> is used to produce estimates of the effect of changing a median type

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<sup>4</sup> “Clarify is a program that uses Monte Carlo simulation to convert the raw output of statistical procedures into results that are of direct interest to researchers, without changing statistical assumptions or requiring new statistical models” (Tomz, Wittenberg and King 2001, p. 4).

respondent from “not confused” to “confused.” The values in the regression were set to median type responses. For Proposition 87 the hypothetical respondent is informed, a weak Democrat, aged 46 – 55, has an annual household income ranging from \$50,000 – \$100,000, does not believe that Prop 87 will raise their taxes, help the environment or improve the general welfare of the state, but does support raising taxes on oil companies. The effect of being confused increases the probability of voting ‘no’ by 7.92%. Though the estimates are not statistically significant, an 8% change in predicted probability could easily move a respondent from the ‘yes’ column to the ‘no’ column.

[Insert Table 2 about here]

For Prop 89 the hypothetical respondent is informed, a weak Democrat, aged 46 – 55 years old with an annual household income between \$50,000 – \$100,000, who does not support raising taxes for publicly financed elections and does not believe Prop 89 will raise their taxes or improve the welfare of the state. In this situation, being confused only increases the probability of voting ‘no’ by .02%. Therefore,  $H_1$  is not supported and the conventional wisdom needs revising.

In order to measure voting errors, two methods can be used. The first uses simple comparison of preferences and vote choice. Voters who expressed a preference on an issue and voted in the opposite direction, are considered to have voted incorrectly. The second method uses the predicted probabilities that were generated and analyzes the cases that were incorrectly predicted vis a vis the observed outcomes in the sample data. Neither method is perfect, the first risks confounding measurement error with voting errors and the second essentially tests the viability of the regression model. Nonetheless, if both methods yield similar results it adds to the validity of the tests. Table 3 (using

issue preference) and Table 4 (using incorrect regression predictions) compare the voting errors on Proposition 87 for confused and not confused voters, as well as, informed and not informed voters.

[Insert Table 3 & Table 4 about here]

The results are rather striking. Overwhelmingly, the voters manage to get it right, between 72% and 89% of each of the subgroups ‘voted correctly’. These results comport well with, and in fact suggest fewer voting errors, than the data that Lau & Redlawsk (1997) reported. Though the two of the measures employed to assess voting errors did not result in identical outcomes, both tables are rather similar. The confused and not confused voters showed very little difference, and in neither table were the differences in voting errors significant. This evidence provides no support for H<sub>2</sub>. Conversely, the uninformed voters got it wrong 28% of the time, respectively. These error rates were significantly different from the informed voters who got it wrong only 17% and 13% of the time. Therefore, Proposition 87 provides supporting evidence for H<sub>3</sub>.

For Proposition 89 the results in Table 5 and Table 6 are slightly different. The confused voters are still markedly similar to voters who are not confused, making errors between 19% – 21% of time. However, for Proposition 89 the informed and uninformed voters do not differ very dramatically, and in Table 5 the uninformed make proportionately fewer voters errors 16%, than the informed 22%. This conflicting evidence for H<sub>3</sub> suggests that addition research needs to be done to understand the role of information and voting errors in initiative elections.

[Insert Table 5 & Table 6 about here]



Finally, it is worth looking at the direction of all of the voting errors to determine if policy outcomes are being affected. Both propositions and both methods of determining voting errors yield consistent results; errors are biased toward the losing side. For both the high intensity election with over \$150 million spent and its low intensity counterpart that had barely \$10 million spent on it, when errors made, they were made disproportionately in favor of the losing side. This consistent evidence provides grounds for rejecting  $H_4$ . This intuitively makes sense if there is no bias in the voting errors. The winning side has more voters, and if the bias is random, more voters from the winning side will make errors than those on the losing side simply because there are more voters from that pool to choose from. While these errors would not impact the preponderance of elections, it is possible that due to random chance an extremely close election may have its outcome changed due to these random voting errors.

## **Discussion**

The results presented in this paper suggest that the conventional wisdom behind  $H_1$  and  $H_2$  needs revising. Confusion clearly does not lead voters to vote 'no' on ballot initiatives. Although the coefficient for confusion was negative for Proposition 87 in Table 1, it failed to reach statistical significance. If, and this is mere speculation without more cases and further evidence, this trend suggests anything, it may be that increased spending and exposure to contradictory ads aimed at changing voters' minds could be successful at causing voters to vote against their preferences. Additionally, both methods of determining voting errors for both propositions showed no substantive or statistically significant differences. Confused voters are no worse at voting their preferences than voters who are not confused.

One of the more interesting results from this data analysis is the inconsistent effect that political information has on voting errors. Tables 3 & 4 show support for H<sub>3</sub>, in that uninformed voters make significantly more voting errors than the informed. For Proposition 87, political uninformed voters are more likely make voting errors than their informed counterparts. Yet, the results do not hold for Proposition 89. Yes, Prop 89 had significantly less spending on its behalf and even the politically aware were not likely to have received much information about this issue and that likely played some role, as voting errors increased among the informed from 13% – 17% for Prop 87 to 19% for Prop 89. However, this can only be part of the story because the uninformed improved their voting accuracy reducing their voting errors from 28% to 16% – 22%. Perhaps similar to confusion, the increased spending and often misleading political advertisements may have contradictory effects on the informed (as these present more information) and the uninformed (as they confuse the voter and lead the voter to incorrect votes).

The data show clear and consistent results for the H<sub>4</sub>, the only apparent bias in voting errors is towards the losing side. This implies that ballot races are not negatively impacted by voting errors. Granted, extremely close elections could be adversely affected, but in order to substantiate that claim better data are needed. Though these data are limited in nature and by geography, and (as an exit poll) only includes voters that physically go to their polling stations in San Diego, they provide a sound starting point for this analysis. There is little reason to believe that San Diegans react any differently than other Californians, other Americans or even other people worldwide when it comes to decision-making processes involving complex choices with limited information. And

while voting errors hovering around 20% may sound high, the errors appear to be random with little effect on electoral outcomes. Consequently, these results bode well for the institution of direct democracy, as the results of the initiative elections are representative of the voters' desires.

## References

- Abramson, Paul and John Aldrich. 1982. "The Decline of Electoral Participation in America." *American Political Science Review* 76:502-21.
- Achen, Christopher. 1975. "Mass Political Attitudes and the Survey Response." *American Political Science Review* 69:1218-1231.
- Ainsworth, Bill. 1990. "Initiative Wars, If You Can't Beat 'em, Swap 'em," *California Journal* XXI (March): 147-49.
- Bartels, Larry M. 1996. "Uninformed Votes: Information Effects in Presidential Elections." *American Journal of Political Science* 40: 194-230.
- Bowler, Shaun, Todd Donovan, and Trudi Happ. 1992. "Ballot Propositions and Information costs: Direct Democracy and the Fatigued Voter." *Western Political Quarterly* 45: 559-68.
- Bowler, Shaun and Todd Donovan. 1998. *Demanding Choices: Opinion, Voting, and Direct Democracy*. Ann Arbor: University of Michigan Press.
- California Secretary of State. Website last accessed February 8, 2007:  
<http://voterguide.ss.ca.gov/props/prop87/prop87.html>.
- Campbell, Angus, Philip Converse, Warren Miller and Donald Stokes. 1960. *The American Voter*. New York: Wiley.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." *Ideology and Discontents*. ed. By David E. Apter. New York: The Free Press.
- Darcy, R. and Michael Laver. 1990. "Referendum Dynamics and the Irish Divorce Amendment." *The Public Opinion Quarterly* 54(1): 1-20.
- Darcy, R. and Anne Schneider. 1989. "Confusing Ballots, Roll-off and the Black Vote." *Western Political Quarterly* 42:347-64.
- Delli Carpini, Michael X. and Scott Keeter. 1996. *What Americans Know About Politics and Why It Matters*. New Haven: Yale University Press.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper & Row.
- Gerber, Elizabeth, Arthur Lupia and Mathew McCubbins. 2004. "When Does Government Limit the Impact of Voter Initiatives? The Politics of Implementation and Enforcement." *Journal of Politics* 66:43-68.

- Gerber, Elizabeth, Arthur Lupia, Mathew McCubbins and Roderick Kiewiet. 2001. *Stealing the Initiative: How State Government Responds to Direct Democracy*. Upper Saddle River: Prentice Hall.
- Goldsmith, Arthur A. 2005. "Plebiscites, Fiscal Policy and the Poor: Learning from US Experience with Direct Democracy." *Development Policy Review* 23 (5):553-66.
- Higley, John and Ian McAllister. 2002. "Elite Division and Voter Confusion: Australia's Republic Referendum in 1999," *European Journal of Political Research* 41 (6):845-61.
- Hyink, Bernard. 1969. "California Revises its Constitution." *The Western Political Quarterly* 22 (3):637-54.
- Kahneman, Daniel and Amos Tversky. 1979 "Prospect Theory: An Analysis of Decision Under Risk." *Econometrica* 47:263-91.
- Key, V.O., Jr. 1966. *The Responsible Electorate*. Cambridge: Belknap
- Klein, David and Lawrence Baum. 2001. "Ballot Information and Voting Decisions in Judicial Elections." *Political Research Quarterly* 54 (4):709-28.
- Kousser, Thad. 2005. *Term Limits and the Dismantling of State Legislative Professionalism*. Cambridge: Cambridge University Press.
- Lau, Richard R. and David P. Redlawsk. 1997. "Voting Correctly." *American Political Science Review* 91(3): 585-599.
- Lowenstein, Daniel. 1982. "Campaign Spending and Ballot Propositions: Recent Experience, Public Choice Theory and the First Amendment." *UCLA Law Review*. 29:605-41
- 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 John G. Matsusaka. 2004. "Direct Democracy: New Approaches to Old Questions." *Annual Review of Political Science* 7:463-82.
- Lupia, Arthur and Mathew McCubbins. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* New York: Cambridge University Press.
- Magleby, David. 1984. *Direct Legislation: Voting on Ballot Propositions in the United States*. Baltimore, MD: Johns Hopkins University Press.

- Magleby, David and Kelly Patterson .1998. "Consultants and Direct Democracy." *PS: Political Science*. 31:160-69.
- Matsusaka, John G. 1993. "Election Closeness and Voter Turnout: Evidence from California Ballot Propositions." *Public Choice*. 34:313-34
- McDonald, Michael. 2003. "California Recall Voting: Nuggets of California Gold for Voting Behavior." *The Forum* 1(4):Article 6.
- Mueller, John E. 1969. "Voting on the Propositions: Ballot Patterns and Historical Trends in California." *American Political Science Review* 63:1197-1212.
- Page, Benjamin, and Robert Shapiro. 1992. *The Rational Public: Fifty Years of Trends in America's Policy Preferences*. Chicago: University of Chicago Press.
- Perea, Anduiza E. 2002. "Individual Characteristics, Institutional Incentives and Electoral Abstention in Western Europe." *European Journal of Political Research*. 41:643-73.
- Palfrey, Thomas R., and Keith T. Poole. 1987. "The Relationship Between Information, Ideology, and Voting Behavior." *American Journal of Political Science*. (31): 511-530.
- Popkin, Samuel L. 1991. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*. Chicago: University of Chicago Press.
- Popkin, Samuel. 2006. "The Factual Basis of 'Belief Systems': A Reassessment." *Critical Review* (18): 233-254.
- Teixeira, Ruy A. 1987. *Why American's Don't Vote: Turnout Decline in the United States, 1960-1984*. New York: Greenwood.
- Walker, Jack L. 1966. "Ballot Forms and Voter Fatigue: An Analysis of the Office Block and Party Column Ballots." *Midwest Journal of Political Science* 10:448-464.
- Wright, Gerald. 1993. "Errors in Measuring Vote Choice in National Election Studies, 1952-1988." *American Journal of Political Science*. (15): 543-563.
- Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.
- Zaller, John and Stanley Feldman. 1992. "A Simple Theory of Survey Response." *American Journal of Political Science*. (36): 579-616.

**Table 1:**  
**The Effect of Confusion on “Yes” votes for Prop 87 and Prop 89**

	Prop 87	Prop 89
Confusion	-0.338 (0.307)	0.001 (0.301)
Informed	-0.018 (0.326)	0.228 (0.326)
Issue Preference	1.879** (0.323)	2.253** (0.274)
Help Environment	-0.598 (0.997)	
General Welfare	2.050** (0.298)	1.292** (0.319)
Raise Taxes	-0.427 (0.295)	-0.648* (0.287)
Party ID	-0.336** (0.071)	-0.265** (0.066)
Age	-0.117 (0.096)	0.060 (0.093)
Income	0.219 (0.142)	-0.092 (0.130)
Constant	-0.145 (0.671)	-0.649 (0.607)
Observations	419	399
Pseudo R <sup>2</sup>	0.43	0.36

Logit coefficients in cell, Standard errors in parentheses

Dependent variable = 1 if respondent voted “Yes” on the proposition

\* significant at 5%; \*\* significant at 1%

**Table 2**  
**First Differences from “Confused” to “Not Confused” for Proposition 87 and 89**

	Proposition 87 Probability of Voting “No”	Proposition 89 Probability of Voting “No”
Confused	41.62%	23.87%
Not Confused	33.70%	23.85%
Effect of Being Confused (Difference in Probabilities)	7.92%	.02%

Note: The values are set to median type responses for both Proposition 87 and Proposition 89.

**Table 3**  
**Voting Errors for Proposition 87 (Issue Contradiction)**

	Not Confused	Confused	Informed	Not Informed
Total “Yes” Vote	65.84%	60.12%	65.77%	58.91%
Predicted “Yes” Vote	67.49%	68.71%	70.42%	62.02%
Voting Errors as % of Total Votes	19.28%	18.40%	<b>16.67%*</b>	<b>27.62%*</b>

Note: Voting errors were determined by variation between vote choice and stated issue preference. Bold cells are significantly different from each other at 5%.

**Table 4**  
**Voting Errors for Proposition 87 (Prediction Contradiction)**

	Not Confused	Confused	Informed	Not Informed
Total “Yes” Vote	66.32%	61.94%	65.03%	64.52%
Predicted “Yes” Vote	69.82%	64.93%	68.71%	66.67%
Voting Errors as % of Total Votes	18.95%	10.45%	<b>12.88%*</b>	<b>27.96%*</b>

Note: Voting errors were determined by incorrect prediction from the regression equation. Bold cells are significantly different from each other at 1%



**Table 5**  
**Voting Errors for Proposition 89 (Issue Contradiction)**

	Not Confused	Confused	Informed	Not Informed
Total “Yes” Vote	41.39%	46.58%	46.43%	32.80%
Predicted “Yes” Vote	37.50%	44.52%	43.37%	28.00%
Voting Errors as % of Total Votes	19.44%	21.23%	19.19%	15.89%

Note: Voting errors were determined by variation between vote choice and stated issue preference.

**Table 6**  
**Voting Errors for Proposition 89 (Prediction Contradiction)**

	Not Confused	Confused	Informed	Not Informed
Total “Yes” Vote	42.76%	48.28%	46.95%	35.23%
Predicted “Yes” Vote	40.99%	50.00%	47.59%	29.55%
Voting Errors as % of Total Votes	18.73%	20.69%	18.65%	21.59%

Note: Voting errors were determined by incorrect prediction from the regression equation.