

An Exploration of Correct Voting in Recent U.S. Presidential Elections

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Lau and Redlawsk (1997) proposed that the quality of voter decision making can be evaluated by measuring what they called correct voting—the extent to which people vote in accordance with their own values and priorities—but in so doing provided little guidance about what actually determines whether voters can make such high-quality decisions. This article develops a framework for analyzing the vote decision that views the quality of decision making as a joint function of individual characteristics and various higher-level campaign factors. We hypothesize that differences in cognitive capacity, political motivation, the availability of political heuristics, and macrolevel factors that affect the difficulty of the choice confronting citizens, including the nature of the political information environment, should all affect the probability of a correct vote. We find significant support for seven proposed hypotheses across three levels of analysis, which places responsibility for incorrect votes on both the individual and our electoral system.

Democracy works best when citizens are interested in politics, able to place current events in proper historical context, attentive to the actions of representatives in government, aware of institutional rules and requirements so that responsibility for government actions can be properly attributed, and engaged in the governing process to the extent they vote for the candidates they believe best represent their interests. This is a pretty tall order, one that few citizens come anywhere close to filling. Because of limited cognitive resources (Anderson 1983; Simon 1979), people simply do not have the time and energy to pay that much attention to politics. These same cognitive limitations affect every aspect of our lives, of course, including home, family, children, and work—domains that are generally much more important to people's everyday well-being than politics. Yet people have learned to cope with their cognitive limits in negotiating their day-to-day lives in ways which, if not always

perfect, nonetheless seem to yield pretty good decisions most of the time (Fiske and Taylor 1992). People do this by utilizing different cognitive shortcuts or heuristics to cope with information overload, shortcuts that produce at least satisfactory outcomes most of the time—and rarely such poor outcomes that they lead to the extinction of the individual decision maker!¹

Of course the cognitive heuristics and shortcuts that humans have learned to use in coping with an information-rich world may not work as well in politics as they do in other areas of social life. Cognitive shortcuts are not infallible in any domain (Lau and Redlawsk 2001; Nisbett and Ross 1980), and politics are relatively removed from everyday life, more future-oriented, with at best ambiguous feedback about the success or failure of previous decisions and actions—all reasons to believe common cognitive heuristics may be less helpful in politics than in many other domains.

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¹Indeed, evolutionary theory would lead us to believe that such information-processing shortcuts *must* be effective most of the time, or they never would have developed in the first place (Gigerenzer and Todd 1999). See Kuklinski 2001, 2002; Kuklinski and Quirk 2001; Lau 2003; Lau and Redlawsk 1997, 2001, 2006; Lau and Sears 1986; Lodge and McGraw 1995; Lupia, McCubbins, and Popkin 2000; Popkin 1991; Simon 1985; and Sniderman, Tetlock, and Brody 1991, for discussions of cognitive shortcuts and heuristics as they relate to political behavior.

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But there is a larger point underlying our skepticism about the effectiveness of cognitive heuristics as they apply to politics, and it is this larger point that motivates this article. Just because citizens take the time and effort to go to the polls and vote does not mean that they have fulfilled their duty as citizens of a democracy, nor that that democracy is working as effectively as it should. Democracy depends on citizens voting for the candidates or parties who pledge, if elected, to do in government those things the citizen would like to see done. But our brief discussion of cognition limitations should convince us that voting alone is not enough. If people vote randomly, or make “safe” choices by voting for a familiar face without regard to campaign promises, or worse yet are somehow fooled into voting for parties or candidates who pledge to do things that are *counter* to the interests and concerns of the voter (see, for example, Frank 2004), then democracy is *not* accomplishing what it is designed to do.

Although some political scientists have acknowledged this point in the past (e.g., Berelson, Lazarsfeld, and McPhee 1954; Campbell et al. 1960), few researchers have attempted to grapple with it empirically,² and too often this argument is simply ignored. Instead, the simple act of voting is often taken as evidence that citizens are doing all that is expected of them. Franklin, for instance, states that the very “health of a democracy is often seen in terms of its level of turnout” (1996, 216), implying that countries where 90% of eligible citizens usually vote are working much better than countries where only 50% of eligible citizens regularly vote. We believe this view is too simplistic. We contend that votes freely given are meaningless unless they accurately reflect a citizen’s true preferences. From this viewpoint, countries with high levels of turnout might well have much weaker and less effective democracies than countries with lower turnout if many of those additional voters in high-turnout countries are not taking the time and effort to vote their true preferences.³

Correct Voting

To ask whether voters can accurately select the candidates or parties who best represent their interests suggests one

²Kuklinski et al. (2001) would be one exception to this rule.

³For example, countries with compulsory voting laws have significantly higher turnout than countries without such laws (e.g., Mackie and Rose 1991), but if many citizens in the former countries are going to the polls and simply randomly pulling levers to avoid a fine, few would believe those citizens are fulfilling their citizen duty, or that that system of government is working as effectively as it might.

has a means of judging accuracy or effectiveness. As defined by Lau and Redlawsk (1997), *correct voting* refers to the likelihood that citizens, under conditions of incomplete information, nonetheless vote for the candidate or party they would have voted for had they had full information about those same candidates and/or parties. Incomplete information is almost inevitable during any political campaign, where the total amount of potentially relevant information is huge, much of it is rather obscure and hard to come by, and candidates often have incentives to obfuscate their own opinions (Page 1978). Lau and Redlawsk describe two related measures of correct voting. The first is easy to justify normatively because voters themselves decide if they voted correctly. After making a vote decision in a mock presidential election campaign, voters were given complete information about two of the candidates in the election and asked to state whether they would stick with their original vote having now seen all the information available about both candidates. If so, Lau and Redlawsk counted them as voting correctly. But if the voters would now switch to the other candidate after getting full information, that voter was counted as voting incorrectly. Lau and Redlawsk (1997) report that about two-thirds of their experimental subjects voted correctly by this standard in their mock presidential primary.

This first measure of correct voting is relatively difficult and costly (in terms of experimental time) to obtain, however, making it of limited use outside of the laboratory. This led Lau and Redlawsk to consider a second measure of correct voting, a *normative naive* measure, that is estimable with standard survey data. This measure is normative, in that it is based on *expert judgment* of where the candidates actually stand on the issues,⁴ and the normative judgment that if a particular issue is considered about one candidate, it ought to be considered about *every* candidate in the choice set. But it is naive in that it is based on each individual voter’s *own value preferences* and his or her *own determination* of what issues are important to consider. The two measures of correct voting correlated strongly with each other in Lau and Redlawsk’s experiments ($\approx .61$, with over 74% agreement), providing an important initial level of construct validity for the normative naive measure.

Lau and Redlawsk went on to operationalize the latter measure with ANES data and proposed several construct validity tests about differences in correct voting across election years. Specifically, Lau and Redlawsk

⁴The term “issues” is employed quite broadly here to include any attribute or dimension of judgment voters consider in making their choices. Hence it includes not only standard policy issues, but also judgments about qualifications for office, intelligence, compassion, morality, etc.

hypothesized that aggregate levels of correct voting would be higher when there were only two serious candidates compared to years when there was a prominent third-party alternative; when the major candidates were relatively more ideologically distinct and thus easier to distinguish; and when campaign resources were more equally distributed across the candidates, giving each candidate an equal chance of getting his message across. Lau and Redlawsk (1997) reported strong support for all three of these stylized hypotheses, lending substantial additional validity to their normative naive measure.

While their second measure of correct voting gains support in these tests, Lau and Redlawsk did not attempt either elaborate theory or empirics on what influences correct voting beyond these limited macrolevel hypotheses. Thus while we are left with a reasonable standard, we do not know what actually makes voters more or less likely to vote for the candidate best representing their interests. All three of the hypotheses tested by Lau and Redlawsk (1997) focus on system-level factors that are generally outside of the control of the voter. Yet it seems likely that there are many more factors influencing the probability of a correct vote, including the nature of the election campaigns themselves and voters' own individual proclivities and shortcomings. It is our purpose here to develop a comprehensive multilevel examination of correct voting in recent U.S. presidential elections, considering both individual-level and institutional predictors that theoretically ought to be associated with different levels of correct voting.

What Should Predict Correct Voting?

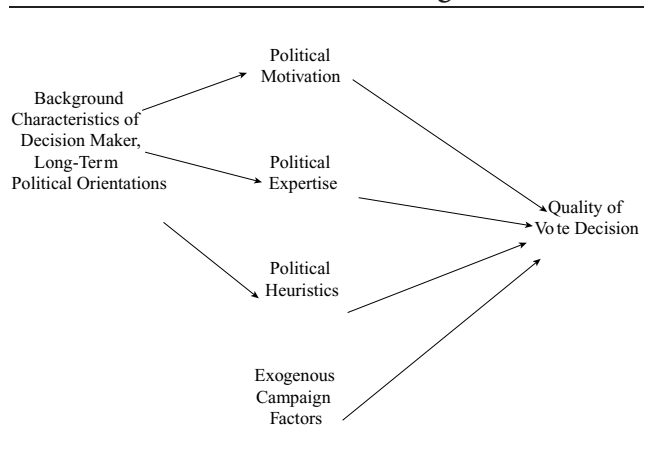
We believe that all decision makers are guided by two chief motivations, the desire to make a *good* decision, and the desire to make an *easy* decision (Lau 2003; Lau and Redlawsk 2006; Payne, Bettman, and Johnson 1993). When the stakes are high people will be motivated to put more effort into the decision making, which should translate into a higher probability of a correct vote. Thus motivation is one factor that should predict higher levels of correct voting. But when the stakes are relatively low, as they almost always are in mass politics, people fall back onto easier automatic processing, in which case general cognitive capacity and domain-specific expertise, along with the availability of effective heuristics, should have a positive influence on correct voting. Social psychologists have made similar arguments about different "routes" to attitude change, a more effortful "central" route for people strongly involved with an issue, and a peripheral heuristic route for the less involved, that is very compati-

ble with our viewpoint (see Eagly and Chaiken 1998; Petty and Cacioppo 1986).

If correct voting were solely a function of such individual differences, however, even well-intentioned government officials or other concerned citizens would have limited ability to try to improve the workings of their democracy. Cognitive ability is an inherited trait, and most relevant motivational differences are a product of early family socialization that is largely beyond the reach of policy makers. But the characteristics of individual decision makers are not the only determinants of the quality of the decisions they reach: the nature of the decision task itself should also influence levels of correct voting. Simply put, objectively easier tasks generally result in more high-quality decisions than more difficult tasks. This is an important point because it is possible to imagine different institutional arrangements that can help determine the objective difficulty of the decisions confronting voters.

Figure 1 presents a simple framework for studying the quality of the vote decision. This framework allows for the standard set of demographic and long-term political orientations to have an effect on decision making, but suggests that the quality of the vote decision is going to be primarily a function of motivation to make a good decision, expertise in the domain of the decision (for our purposes, political knowledge), the availability of effective political heuristics (Lau and Redlawsk 2001, 2006), and what the decision making literature refers to as "task demands" (that is, the complexity of the decision at hand; see Payne, Bettman, and Johnson 1993), which we translate into *campaign factors*. The individual differences represented by the top half of the figure vary at the individual level, while campaign factors/task demands are

FIGURE 1 General Framework for Studying Voter Decision Making



generally exogenous to the decision maker, and vary at a more aggregate level.

We expect three broad categories of variables to be important predictors of correct voting, all of which provide specific hypotheses for testing. These predictors vary across three levels of analysis. At the *individual level*:

H1: The more motivated citizens are to make good decisions—the more it *matters* to them which candidate wins—the higher the probability of their voting correctly.

Several available variables tap this concept. *Caring* about the outcome of the election is the most obvious and straightforward measure of motivation; it should be positively associated with correct voting. Likewise the greater the policy differences between the major party candidates the more it should *matter* which candidate wins, which again leads us to expect a positive relationship with correct voting. Furthermore, commonsensically:

H2: Political experts (most immediately) and possibly also those with higher basic intelligence should have a higher probability of voting correctly.

Domain-specific expertise is measured most directly by political knowledge, while basic intelligence is measured indirectly by education.

H3: The use of prominent political heuristics should also be positively related to correct voting.

H3a: Paradoxically, however, we expect heuristics to be most effective in the hands of political experts. Hence we predict an interaction between political knowledge and the availability or salience of political heuristics.

The vast psychological literature on cognitive shortcuts and heuristics would certainly lead us to predict a positive effect of heuristic use on correct voting, particularly when voters are trying to make quick and easy decisions as we believe most will during a typical election. We cannot measure heuristic *use* directly with survey data, but we can estimate their presence or “availability.” Following Lau and Redlawsk (2001) and Sniderman, Brody, and Tetlock (1991), however, we expect the advantages of heuristic use to disproportionately advantage experts—those *least* in need of cognitive shortcuts. This advantage probably comes from experts better knowing which heuristics are most useful in different situations, but it undercuts the alleged role that heuristics play in substituting for real knowledge or experience in any particular domain.

State Level. A variety of higher-level contextual factors can influence the objective difficulty of the decision task. To begin with, the nature of the information environment should impinge on the quality of decision making. An information environment is comprised of both task-relevant and task-irrelevant information. Anything that increases the availability of task-relevant information should increase the incidence of correct voting, while anything that increases the prevalence of task-irrelevant information could well lower the probability of correct voting. Now to a certain extent “relevance” is a function of the personal concerns of the voter, but even restricting consideration to political topics, it is safe to say that information about the presidential candidates and national issues will in general be more relevant to choice in the presidential election than will information about local issues and statewide races.

It is the job of a political campaign to bring decision-relevant information to the voter, but the incentives created by the Electoral College mean that presidential candidates do not campaign equally in every state, creating natural variation across states in how easy it is to obtain information about the competing presidential candidates. To the extent that campaigning translates into the greater availability of (or ease of obtaining) information about the candidates, we would expect campaign intensity to be positively related to correct voting in that campaign’s election (McClurg and Holbrook 2006). At the same time, the presidential election is not the only election on the ballot in November, and most voters will try to make reasonable choices in every election they face. There is only so much time and cognitive resources people can possibly devote to politics, however, and assuming there is a finite political “pie” that voters divide among competing demands for their attention to civic concerns, the probability of a correct vote in any one of those elections ought to be less, the more such decisions a voter must make at any given time and the greater the information they are exposed to about those other (nonpresidential) elections. Thus we hypothesize:

H4: The more heavily the presidential candidates campaign in a state, the higher the probability of a correct vote in that presidential election.

H5: The greater the number of *other* high-profile statewide elections on the ballot, however, the lower the probability of a correct vote (in the presidential election).

These two contextual variables are measured at the state level, with all of the individual survey respondents residing (clustered) in one or another of the states.

Election-Year Level. At an even higher level of aggregation, the objective difficulty of the decision can be measured by several factors that vary by election, including the number of serious candidates/parties competing in an election, and their ideological distinctiveness. These last hypotheses subsume two of the validity tests originally reported by Lau and Redlawsk (1997), but now in the context of a much more fully specified model. Such higher-level hypotheses are important to test because there are large literatures in both the comparative study of electoral systems and formal theory which address the number and distinctiveness of candidates. For example, Duverger's law holds that single-member electoral districts and first-past-the-post election rules (such as we have in the United States) have a strong bias toward two-party systems which would tend to restrict the number of serious candidates running in any election (Duverger 1954). On the other hand, the median voter theorem holds that in a two-party election, whenever citizen preferences are unidimensional and roughly normally distributed (as it is conventional to assume of public opinion), it is rational for both parties to adopt positions as close as possible to the median of the distribution of opinion, thus making the positions of the parties very difficult to distinguish (Enelow and Hinich 1984). So:

- H6:* Any factor that makes the decision task objectively more difficult (e.g., more than two alternatives) should lower the probability of a correct vote.
- H7:* Any factor that makes the decision task easier (e.g., more ideologically distinct alternatives) ought to increase the probability of a correct vote.

Both the state-level variables and the individual-level variables are clustered within election year.

Method

Operationalizing Correct Voting in the ANES Surveys

If correct voting is to become one method by which we judge the relative health of any democratic system, we must be able to measure it with fairly standard survey data. As described by Lau and Redlawsk (1997), it is very possible to construct with the information available from the typical ANES survey a measure analogous to the normative naive method of determining candidate preference originally proposed by those authors. We will focus here on the American case, but the same methods can

be applied to any major large-scale election study with a similarly broad set of questions.⁵

Three types of information are needed: (1) measures of voters' preferences on a number of different issues or "considerations" by which the competing candidates could be distinguished; (2) measures of which of those different considerations any individual voter believed to be more and less important; and (3) some defensibly objective measure of where the candidates actually "stand" on those same issues or dimension of judgment. We will discuss each of these in turn.

Voter Preferences. Questions about the voter's values and preferences abound in the ANES surveys. We considered five types of questions: party identification, policy considerations, group-based associations, candidate personalities, and performance evaluations for the sitting president. We reserve the specific details for the appendix, but essentially we considered, in addition to party identification, every policy question where respondents were not only asked to give their own opinion but also their perception of where the major candidates stood on that issue, every personality trait, every dimension upon which the president's job performance was rated, and every social group that respondents could have felt "close" to.

Importance Weights. There are few direct measures of the importance of different predictors in the ANES surveys. Occasionally (e.g., 2004) the ANES will directly ask respondents how important each policy issue is to them personally, and such questions are an obvious measure of the importance of each issue in the voter's decision calculus. But those questions are not available in very many of the ANES surveys, nor are there comparable measures of the relative importance of different personality traits, performance evaluations, or group-based considerations. There are, however, several indirect methods we could employ to construct such measures. We will use willingness to answer survey questions about the candidates (e.g., willingness to attribute issue stands to them) as a plausible *implicit* measure of the relative salience or importance of the different attributes of judgment to each voter.

Objective Information for Candidate Placement. To begin with, we know which party each candidate is affiliated with, and thus whether strength of Republican (or Democratic) identification should be associated with more positive or negative evaluations of that candidate. In every survey we created a scale of political knowledge based on answers to every objective question we could

⁵See Hines (2006) for an effort to do just this in the context of both national elections in Europe and elections for members of the European Parliament.

find and used the average perceptions of those above the median on political knowledge as our semi-objective measure on where each candidate stood on the issues under consideration, how strongly each trait described each candidate, and how well the incumbent president had performed in different aspects of his job. We computed simple cross-tabulations between the vote choice and subjective feelings of being “close” to a number of different social groups, again limiting the analysis to the more politically knowledgeable. Whenever closeness to any of these social groups was significantly associated with vote for any candidate, we considered those groups to be objectively better served by that particular candidate. Note that while respondents’ own positions on policy issues determine whether the candidates’ positions on those same issues are viewed positively or negatively (as is also the case with party identification), and their own subjective identification with social groups determines which candidate-group associations are important, there is a universal character to personality traits and job evaluations such that pretty much everyone likes people who are hardworking, intelligent, trustworthy, compassionate, and perform their jobs well; and dislikes people who are lazy, incompetent, immoral, out-of-touch, and perform their jobs poorly. Thus when we take the mean ratings of our political experts as objective measures of personality traits and job evaluations, these become fixed mean adjustments which should raise or lower evaluations of the candidate—but only for people who consider that attribute to be important.

Preliminary Results: Determining Which Candidate Is Correct

Even with good subjective measures of voter preferences and defensible objective measures of where the candidates “stand” on those same dimensions of judgment, there is an extremely large number of different ways this information could be combined into overall judgments about how much each candidate represents the preferences of each voter, and thus which candidate is the correct choice. Prior theory helps us reduce these possibilities to a manageable few. On the one hand, we want to know which, *if any*, weighting scheme to employ in combining the different attributes of judgment; and then we must decide whether the various considerations should be combined in an *additive* or *averaging* manner. We have developed an implicit weighting scheme that can be constructed in every ANES survey and many other election studies as well. But an even simpler alternative is to apply equal weights to every consideration. The general finding in the decision making literature is that unweighted (i.e., equal weights)

evaluations usually perform at least as well as more complicated judgments (Dawes 1979). Below, we will examine empirically both weighted and unweighted approaches.

The literature is much less clear as to whether additive or averaging methods better represent preference formation, however. While we would certainly expect the different procedures to produce evaluations that are highly correlated with each other, several situations quickly come to mind where averaging and summing produce different results. For instance, new neutral information about a candidate will have no effect on an existing summative measure but will pull an average toward the midpoint of the evaluation scale. Or consider the case where a voter is indifferent between two equally liked alternatives. If the voter receives new information about one of those alternatives that is basically consistent with the existing impression of that alternative, it will have no effect on an average evaluation, but will make a summative evaluation more extreme, providing a basis for choosing between the alternatives.

Some psychologists recommend additive procedures (Lichtenstein and Srull 1987) while others prefer averaging methods (Anderson 1965, 1981; Belmore 1987). See Kelley and Mirer (1974) for a political science example of the former, and Lodge, McGraw, and Stroh (1989) for a political science example of the latter.

As a preliminary step in our analysis, we took every other election study between 1972 and 2004 and formed four different summary evaluations of every major presidential candidate. We first rescaled every consideration on which voters expressed a preference to range between -1 and $+1$, and then multiplied each of these different considerations by a weight between 0 and 1 devised from our two different weighting schemes. We then formed summary evaluations of each candidate by first adding, and then averaging, the resulting product terms together. This produces 2 (weighting schemes) $\times 2$ (combination procedures) = 4 different summary judgments about each candidate that could be used to determine which candidate best represents each voter’s preferences. Our procedures are not designed to determine how much each candidate is *liked*, but rather which of the competing alternatives best represents the voter’s preferences.⁶ Nonetheless it is very reasonable to expect that candidates who represented the

⁶The *naive* aspects of the judgment procedures designed here incorporate individual values and preferences and should be the basis of positive correlations with any summary affective evaluation of a candidate. But the *normative* aspects of the procedures rely on expert (as opposed to subjective) judgments of where the candidates “stand” on the different attributes of judgment and also direct that the same attributes of judgment and the same importance weights be used in forming judgments about every candidate. Such requirements are not necessary to form an evaluation of any individual political figure.

TABLE 1 Mean Correlation of Four Different Methods for Estimating Candidate Judgments with Feeling Thermometer Evaluations of Those Candidates

	Additive Combination	Averaging Combination
Equal Weights	.45	.45
Implicit Importance Weights	.46	.46

Note: Table entries average across 15 correlations with post-election feeling thermometer evaluations of major presidential candidates from the 1972, 1980, 1988, 1996, and 2004 ANES surveys.

voter's values and preferences will also be highly evaluated. Thus correlations with feeling thermometer evaluations of these candidates give us an independent standard by which we might choose among the four alternatives.

These preliminary analyses are reported in Table 1. The implicit weighting scheme provides the best overall results, although barely better than a simple equal weights (unweighted) procedure. Furthermore, there were absolutely no differences between the additive and averaging algorithms for combining the information. While it is certainly possible to create situations where these two procedures produce very different results, in practice those situations apparently do not occur very often.

As a basis against which to judge the performance of our theory-based measures of judgments about which candidates best represent a voter's interests, we also regressed the feeling thermometer evaluation on every individual consideration that went into our summary judgments, allowing blind empiricism (and the least squares algorithm) to determine the best possible weights on average to use across the entire sample. The multiple correlation coefficient (R) from this regression is an indication of the maximum possible correlation that we could be able to observe, if predicting liking of the candidates were our primary goal. It averages .62 across these same 15

In certain situations it could be reasonable for some citizens to cast their vote "strategically" for an acceptable but less preferred candidate if that candidate had a better chance of winning than the citizen's most preferred alternative, and if that support would prevent an even less acceptable candidate from winning (Abramson et al. 1992). Conceptually, what we mean by a citizen's "true preferences" would certainly include instances of strategic voting, although in practice it would be difficult to distinguish such sophisticated voting from an *incorrect* vote. Lau and Redlawsk (1997, 2006) report that none of their original conclusions about correct voting change if they replace the reported vote choice with a measure of the relative liking of candidates, where strategic considerations should be irrelevant and there is no reason for citizens to report anything but their true preferences.

correlations, compared to the .45 - .46 observed for our theory-based measures.

These results give us four more or less equivalent bases for judging which candidate should be preferred by each voter, and it should not matter much which of the four we choose. As a first cut, Figure 2 presents estimates of the overall level of correct voting in every U.S. presidential election since 1972. The data in the figure average across results based on the four methods of determining which candidate is best for each voter.⁷ These numbers accord well with the figures reported by Lau and Redlawsk (1997) for elections through 1992. They vary from a low of under 51% of voters choosing correctly in 1980, to just over 85% in our most recent election, with an overall mean across the nine elections of 75.1% correct. This figure can be viewed as surprisingly high or depressingly low, depending on one's expectations, but however we view this overall number we must acknowledge that almost a quarter of all voters in the most important and salient U.S. election voted for the wrong candidate, by our calculations. This gives us a goodly amount of variance to try to explain.

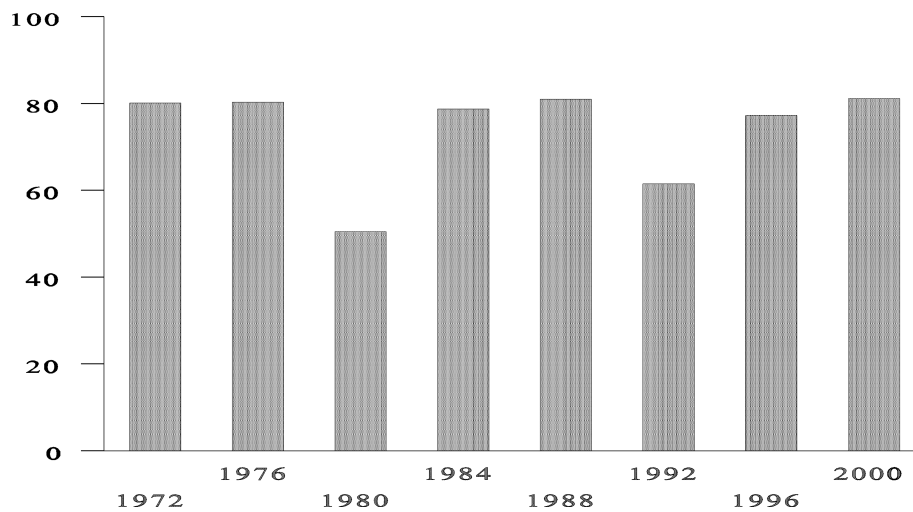
Operationalizing Other Variables in the Analysis

The purpose of this article is not to estimate overall levels of correct voting in recent U.S. presidential elections, however, but rather to try to explain why some voters are more likely than others to vote correctly irrespective of the nature of the campaign environment, and why some election years have higher overall levels of correct voting than others. To do this, we must operationalize a number of potential predictors of correct voting at both the individual and more aggregate levels to fully specify a model. At the individual level, the theoretically important variables are measures of political motivation, cognitive capacity, and heuristic availability.

- *Political motivation* is measured by the standard item of whether respondents care about the outcome of the election, and the policy-based distinctiveness of the major party candidates (based on Rabinowitz and

⁷In no case do any of the individual estimates produced by any of the four methods differ by more than 5% from the mean levels reported in the figure. Only in 1980 and 1992 do any of the estimates vary by more than 2% from the reported means. The averaging procedures are noticeably more likely to determine that a third-party candidate was the best choice, compared to the additive procedures. If we assume that voters will generally know less about third-party candidates, this result makes perfect sense.

FIGURE 2 Estimated Levels of Correct Voting in Recent U.S. Presidential Elections



Note: Data come from the American National Election Studies. Yearly estimates are based on the mean of four closely related measures of correct voting.

MacDonald's [1989] directional procedures—see the appendix for more detail).

- *Cognitive capacity* is measured by a summary scale of political knowledge based on answers to every factual question asked in each survey, and years of education.
- The availability of *political heuristics* is measured by a single variable, strength of party identification. While most previous treatments of party identification as a heuristic cue have viewed it as pushing voters in either a Democratic or Republican direction, for our purposes it is the *existence* or availability or salience of a party cue that matters, irrespective of its direction. Strength of partisanship captures this notion perfectly, although we would also expect strength of partisanship to be correlated with political involvement and interest, and thus to be an indirect measure of motivation. With two more direct measures of motivation in the equation, however, the residual effect of strength of partisanship in our analysis should mostly represent the availability of a party heuristic.
- Individual-level *control variables* in the analysis include standard measures of age, gender, race (nonwhite), income, and representing long-term political orientations, liberal-conservative identification. We have no reason to expect any of these control variables to be associated with correct voting, but degrees of freedom are not lacking, and we will include them as additional controls.

Our general framework for studying the vote decision displayed in Figure 1 suggests that correct voting will

also be a function of campaign factors, and these will be measured at higher levels of aggregation. The prevalence of campaign-relevant information in a voter's information environment should be a function of how intensely the major candidates campaigned in each state, which can be measured by the number of political advertisements each candidate aired in the state and the number of times the candidate visited the state during the campaign.⁸ The prevalence of campaign-irrelevant (or distracting) information in a state is measured by the number of statewide initiatives and propositions on the ballot. This measure varies across states (but within election year). All of the individual survey respondents reside in one of the states, and the resulting data clustering dictates that a multilevel statistical analysis is necessary to properly test the model (Steenbergen and Jones 2002). These two state-level variables are both level-2 predictors in the multilevel analysis.

We also have two aggregate-level predictors of the difficulty of the decision that vary across election year and will thus serve as level-3 predictors in the multilevel analysis. There was a relatively successful third-party candidate running for president in 1992 and 1996, Ross Perot, and because his candidacy provides a third viable alternative

⁸Data on campaign intensity were provided to us by Daron Shaw, whom we thank profusely. Our measure of intensity combines standardized scores of the number of visits and the number of television ads aired by the Democratic and Republican candidates in the state. Shaw (1999) originally published such statewide data for the 1988, 1992, and 1996 elections and has given us comparable data for the 2000 and 2004 elections. We limit our multilevel analysis to the last five election years because of the availability of this crucial level-2 data.

from which to chose, we must expect lower levels of correct voting in those two election years. On the other hand, the ideological distinctiveness of the major party candidates running in the election should be positively related to correct voting because it should be easier for voters to distinguish between them. All else equal, this would suggest higher rates of correct voting in 1988, 1996, and 2004, when the competing candidates were viewed as more ideologically extreme, than in the remaining years, when more centrist major party candidates opposed each other.⁹

Results

We test our seven hypotheses with a nonlinear multilevel model which simultaneously considers both individual-level and contextual-level predictors of our dichotomous dependent variable, correct voting. Because the level-2 variable on campaign intensity is only available starting in 1988, we limit analyses to the five presidential election years from that year onward. All analyses were conducted with the program HLM6 (Raudenbush et al. 2004) with a binomial sampling model and a logit link function for the level-1 model. The results are shown in Table 2. Following Lau and Redlawsk (2006), we report the results from the weighted-additive method of determining correct voting, but the three alternative measures produce very similar results.¹⁰

⁹George W. Bush has turned out to be one of our most conservative presidents, but he campaigned in 2000 very much as a centrist (see Pomper 2001). Similarly, Bill Clinton’s initial images as a “moderate Democrat,” operative in 1992, shifted to perceptions that he was fairly liberal because of his efforts during his first term in office to pass comprehensive national health insurance. Given that our analysis also controls on the objective policy distinctiveness of the two major party candidates, this level-3 measure of ideological distinctiveness might be considered another measure of heuristic availability, assuming that the media more often referred to the candidates in ideological terms in 1988, 1996, and 2004. A similar system-level measure of heuristic availability might be whether an incumbent president is running for reelection. This would suggest higher levels of correct voting in 1992, 1996, and 2004 than the remaining years. There are only so many ways one can divide up the four degrees of freedom available to us at level three, however, and for consistency with prior work we operationalized the same election-year variables that were initially tested by Lau and Redlawsk (1997).

¹⁰Since our dependent variable is dichotomous there is no straightforward way to talk about variance components at different levels of analysis as there would be with a normally distributed dependent variable (Raudenbush and Bryk 2002). One possibility is to estimate the total level-1 variance as $1/[(p)(1 - p)]$ where “p” is the overall proportion voting correctly. With such a standard, in a null model with no predictors .3% of the total variance exists at level two and 1.6% exists at level three. This is by no means the only

TABLE 2 A Multilevel Analysis of Correct Voting in American Presidential Elections, 1988–2004

	Coefficient	S.E.		
<i>Level-1 Predictors</i>				
Age	.294*	(.152)		
Family Income	-.200	(.159)		
Male	-.115@	(.069)		
Nonwhite	.468***	(.104)		
Liberalism-Conservatism	-.207	(.157)		
<i>Motivation</i>				
Care about Outcome of Election	.486***	(.082)		
Policy-Based Distinctiveness	1.023**	(.257)		
<i>Cognitive Capacity</i>				
Years of Education	.504	(.348)		
Political Knowledge	.914*	(.374)		
<i>Heuristics</i>				
Strength of Party ID	1.677***	(.106)		
Knowledge X Strength of PID	1.892***	(.556)		
<i>Level-2 Predictors</i>				
Campaign Intensity	.476*	(.230)		
# Statewide Referenda on Ballot	-.482*	(.209)		
Referenda X Education	-2.794*	(1.284)		
Referenda X Policy Distinct.	.816***	(.275)		
<i>Level-3 Predictors</i>				
Number of Candidates	-.499***	(.077)		
Ideological Distinctiveness	.464***	(.078)		
Constant	-.741*	(.142)		
<hr/>				
	<i>Variance</i>		<i>Chi-</i>	
	<i>Components</i>	<i>df</i>	<i>square</i>	<i>Prob</i>
<i>Level-2</i>				
Intercept	.104	161	203.75	.01
Education Slope	1.405	166	197.14	.05
Policy Distinct. Slope	1.100	166	202.22	.03
<i>Level-3</i>				
Intercept	.001	2	4.50	.10

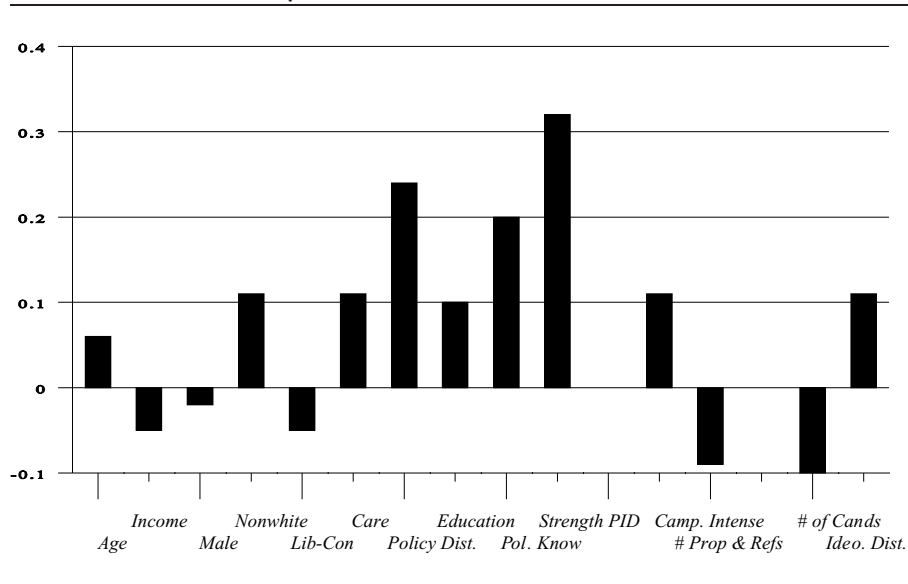
@ $p < .09$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Note: Table entries report the population average results from a multilevel model produced by the program HLM. The model includes five level-3 units (years), 179 level-2 units (states), and 5865 survey respondents at level-1. Although not shown in the table, both education and policy distinctiveness are treated as random effects, contingent upon the number of statewide referenda on the ballot.

Three individual-level variables dominate the equation, one measure of political motivation, the policy-based distinctiveness of the two major party candidates; one of our measures of cognitive capacity, political

(and probably not the best) way to think about this question, but it does provide ballpark estimates of the proportion of the variance existing at different levels of analysis.

FIGURE 3 Estimated Effect of “Full Dose” of Each Variable on the Probability of a Correct Vote



Note: Data come from the 1988–2004 American National Election Studies.

knowledge; and our lone measure of the availability of a prominent political heuristic, strength of party identification. But our second measure of motivation, caring about the outcome of the election, is also highly significant, and our second measure of cognitive capacity, years of education, just misses conventional levels of significance ($p < .08$, one-tailed). Clearly, all three of these types of individual-level factors contribute to citizens' ability to find the candidate who best represents their interests and concerns.

Figure 3 translates the logistic regression coefficients into the change in probability of a correct vote resulting from a “full dose” of each independent variable, holding all of the other predictors at their median or modal value. As shown in Figure 3, when there are large policy-based distinctions between the candidates, people are 24% more likely to vote correctly than when there are no differences between the candidates; and controlling on policy distinctiveness, simply caring about the outcome of the election increases the probability of a correct vote by another 11%. Someone with an advanced degree is 10% more likely to vote correctly than someone without any formal education, but domain-specific knowledge is twice as important, increasing the probability of a correct vote by 20% between its lowest and highest values. Controlling for other variables in the equation, the effect of the availability of an effective political heuristic (party identification) is also quite large, increasing their probability of voting correctly by about 22%.

It is sometimes argued that we do not need to worry about notoriously low levels of political knowledge and interest among the American public because political heuristics can compensate for their absence (Collier, Ordeshook, and Williams 1989; McKelvey and Ordeshook 1986; Mueller 1992; Popkin 1991). If this were true, then the interaction between political knowledge and the availability of political heuristics would be negative. Lau and Redlawsk (1997) and Sniderman, Brody, and Tetlock (1991) argue just the opposite, that some level of political knowledge is *required* before heuristics can be used effectively, in which case we would see a positive interaction between knowledge and heuristic availability. The data in Table 3 are clearly more supportive of this second point of view, as the interaction term is positive and significant. While both strength of party identification and political knowledge are individually related to correct voting (controlling on each other, and holding all other variables in the equation at their midpoint), their combination boosts the probability of a correct vote considerably. A full dose of political knowledge has almost no effect on the probability of a correct vote among nonpartisans but increases the probability of a correct vote from .27 to .62 among strong partisans. Together, these results provide strong support for our first three hypotheses.

All of the higher-level predictors have noticeable effects as well, however, and they add significantly to the explanatory power of the equation. Both of the level-2 predictors have their expected signs and are statistically

significant. Holding other variables at their medians or modes, this translates into an increased probability of a correct vote of about 12% in battleground states where both candidates are blanketing the airwaves with ads, compared to states that the candidates are largely ignoring. This is a reasonably large effect that can be attributed to the campaigns themselves, and it provides strong support for Hypothesis 4. On the other hand, a large number of propositions on the ballot evidently distract voters from the presidential election, and at its maximum is associated with an 11% decrease in the probability of a correct vote, providing some support for Hypothesis 5.

We considered several other indicators of distraction, including the presence of a senate or governor's election on the ballot, or their combination (assuming two elections are more distracting than one), but these measures provided no traction. We then thought that only *close* senate or governor's races would be distracting, but again could not find the expected effects. Only the number of initiatives and propositions on the ballot provided us with the predicted effects. This is the one finding reported in this article that is *not* robust against alternative specifications of the crucial variables, and it should be treated much more tentatively.

At level three, having a major third-party candidate on the ballot significantly reduces the probability of a correct vote, by about 12%, all else equal. Likewise, having candidates who are perceived to be ideologically distinct marginally increases the probability of a correct vote by about 12%. With only five election years in the analysis, we have little power to detect even seemingly large level-3 effects. Under these circumstances, the data provide very strong support for the final two hypotheses.

Our analyses suggested that the effects of two of our level-1 predictors, education and policy distinctiveness, vary across level-2 units. In each case this variation can be explained in part by the number of state referenda appearing on the ballot, and our model included these two cross-level interaction terms. The most interesting effect involves the interaction of education and the number of referenda on a state's ballot. Education has a positive effect on the probability of a correct vote in states where there are no referenda on the ballot—about a 10% increase. The effect of education is still positive, albeit cut in half, at mean levels of state referenda. But as we move toward the upper end of number of referenda on the ballot (e.g., states like California), the effect of education actually reverses quite strongly so that the most educated have a 45% *lower* probability of voting correctly than the least educated. It is as though the most educated try to make sense of every different choice they have, but when there are too many choices they become overwhelmed and

cannot make a good decision in the presidential election (nor, presumably, on the referenda, although we have no data on this point). This finding is very consistent with some of the experimental results of too much information reported by Lau and Redlawsk (2006).¹¹

There were two notable unexpected effects as well. All else equal, nonwhites were significantly more likely to vote correctly—about 12% more likely. And the oldest people in our sample were about 6% more likely to vote correctly than 18-year-olds. While we had no theoretical reason to predict either effect, we might speculate that nonwhites have strong group-based cues that could help them vote correctly that would be absent (or weaker) for many mainstream whites. The same could be true for older people vis-à-vis younger people. Moreover, greater experience with the political system could translate into some level of wisdom—defined here as being more likely to accurately perceive which candidate truly represents one's interests—among older voters.¹² But we will not pretend that this is anything other than post hoc speculation. Clearly this is one potentially useful route for future research.

Discussion

We began this article with largely normative concerns. Political science has focused on turnout as the most important act of democratic citizenship, but we argue that citizens do not fulfill their democratic duty by simply showing up at the polls and voting. For democracy to work the way it is supposed to, citizens must also vote for the candidate or party who best represents their interests and concerns. This is hardly a controversial point.

¹¹We could find no evidence of any other cross-level interactions, however, including a quite plausible interaction between strength of party identification and campaign intensity. The efficacy of political heuristics does not seem to vary by context. We also examined results for the individual election years, ignoring the level-3 effects. These results were very much as expected, in that the strongest effects in the combined analysis reappear in almost every election year, while the weaker effects sometimes replicate and sometimes do not. Political knowledge, for example, is only statistically significant in one of the five election years, although if we remove the heuristics by knowledge interaction, then knowledge is a significant predictor in four out of five years. Either campaign intensity or distraction proves to be significant in either year, but rarely both. We did not see anything in the results from the individual years that would lead us to qualify the analysis presented in Table 2, however.

¹²Lau and Redlawsk (2008) discuss three distinct age-related trends that affect the relationship between age and political cognition, trends that can be captured by second- and third-order polynomial terms that model a reduction in the probability of correct voting toward the end of life. These trends are evident in our data, but for simplicity we approximate them here with a linear term that captures the major trend in the data.

Yet by raising it we acknowledge that *all voters are not voting correctly*—that is, voting in accordance with their own values and interests. Indeed, from an information processing perspective we might wonder whether ordinary cognitively limited citizens can come anywhere close to living up to the standards their system of government presumes. Our answer, however, based on a fairly detailed examination of recent voting in one such democracy, is a very clear and emphatic “Yes they can.” Updating research originally presented by Lau and Redlawsk (1997), we find that an average of a little over three-quarters of the voters in the past nine presidential elections in the United States have, according to at least one defensible criterion, voted correctly—that is, in accordance with what their fully informed preferences should be. But then by our accounts about one-quarter of all voters voted *incorrectly*, sending a misleading message about the direction of their preferences rather than the message presumably sent by all nonvoters, that they just don’t care enough to bother voting. This then gives democratic theorists a new goal for improving democracy: not only should we try to find more ways to motivate citizens to vote (e.g., Gerber and Green 2000), but we should also try to find ways to help voters vote correctly.

The more immediate goals of this article were to explore several alternative methods of operationalizing correct voting and then to propose and test several theoretically derived hypotheses about factors that can lead to a higher probability of someone voting correctly. We have devised four closely related methods of determining correct voting that can be estimated with good survey data, and so far we have not found any situations where it matters much which criterion we employ. Our intuitions tell us that some differential weighting procedure is more likely to approximate how people actually make these judgments than any equal weights method, but we readily admit that empirically it is hardly worth the effort to devise the weights. Likewise our intuitions tell us that adding (rather than averaging) together the different considerations that go into determining which candidate is best for a voter is closer to the procedure that is actually used, but again we have no empirical evidence for this intuition. We do urge researchers attempting to operationalize correct voting in other countries or other surveys and/or other elections to employ as many different “considerations” by which the candidates or parties might be judged as possible and to devise some objective means of determining which candidate best represents a citizen’s values on each of those dimensions of judgment, rather than relying on purely subjective judgments by survey respondents themselves as to where the candidates stand on the issues or considerations at hand.

Turning to those factors that we have found to increase the probability of a correct vote, by our results the onus falls most clearly on the individual citizen, as it was the more effortful individual-level factors of political knowledge and political motivation, along with the availability of a powerful political heuristic, that all had large effects on the expected probability of a correct vote. Political heuristics can also help simplify decision making, to be sure, and in some cases increase the probability of a correct vote a lot (see in particular Lau and Redlawsk 2006, chap. 11), but heuristics are not enough, and they cannot completely replace political knowledge and interest.

Our electoral institutions do not get off scot-free, however, as several variables that are clearly a product of them had important effects on correct voting. In particular, strong policy differences between the candidates also had a very large effect on the probability of a correct vote, and this effect is based at its extremes on both the citizen *and the candidates* holding clearly distinctive policy opinions. We also found an effect of campaign intensity of over 12% in the predicted probability of a correct vote between the least and most intense statewide campaigns. Here the onus is clearly on the electoral system. Campaigns are zero-sum games in that there is only so much air time that can be purchased, and only so much time in a candidate’s day, and the more resources candidates devote to one state, the less they can devote to others. Given the incentives provided by the Electoral College, we cannot expect presidential candidates to campaign equally in every state. But given the demonstrable effect of campaign intensity on correct voting, would it be unreasonable to require candidates receiving public funding to spend at least *some* of their advertising dollars trying to get their messages across to candidates in every state? Both George Bush and John Kerry received \$75 million in taxpayer dollars for the general election campaign of 2004; why should citizens of Florida, Ohio, and Pennsylvania so disproportionately reap the benefits of those dollars, while citizens in California and Massachusetts and Texas are ignored?

In any case, campaign intensity would be a major reason why we would expect lower levels of correct voting for lower offices than the presidency, for which the level of campaigning is almost always much less intense. The ANES surveys are generally weak on questions about candidates for office other than the presidency, and we have never tried to use good statewide polls to look at correct voting in gubernatorial elections, but it should be possible to do—and we would expect something less than the 75% correct average we observed in presidential elections.

There are several system-level variables that also prove to have quite strong effects on the probability of a correct vote. In particular, two-candidate races involving candidates who are perceived to be reasonably distinct ideologically produce an increase in the probability of a correct vote of about 23%, all else equal, compared to three-candidate races involving ideologically similar candidates. Two-party systems are supposed to typically produce two centrist candidates, while proportional representation (PR) systems should more often produce multiple (that is, more than two) ideologically distinct candidates, so one might think this combination of propitious circumstances would rarely occur. But by “ideologically distinct,” we are not talking about the difference between a Barry Goldwater and a George McGovern. Even the range of distinctiveness between the major party candidates that typically occurs in the United States (a range that produces noticeably more distinct candidates a little less than half of the time) is sufficient to produce these differences—at least in the United States. Whether this magnitude of effects would translate into higher levels of correct voting in other democratic systems is another question for future research. We can only presume, however, that if in the United States, a Barry Goldwater actually did face off against a George McGovern, levels of correct voting would increase even more.¹³

Readers may wonder if incorrect voting has ever changed the outcome of a U.S. presidential election. Surely with the closeness of the presidential election in some states in recent election years, it would not take much to switch the outcome of particular races. We do not have the large state-based samples that would be required to answer this question definitively, but we estimate that between 1980 and 2004 on average the Democratic candidate would have gotten about 6% more of the nationwide vote, major third-party candidates (when they were on the ballot) about 2.5% more of the nationwide vote, and the Republican candidate about 8% fewer votes, had all voters voted correctly. This is certainly larger than the margin by which George W. Bush won the 2000 and 2004 elections (of course, he *lost* the popular vote in 2000 even with the benefit of more than his share of incorrect votes). On the other hand, the Electoral College system means that all incorrect votes are not equally consequential, and our model estimates that the probability of a correct vote is 12% higher where the race is presumably close and both candidates are campaigning intensely. The positive effects of such intense campaigning on the probability of a correct vote would mitigate against the likelihood of incor-

rect voting affecting the outcome of the election in these crucial battleground states.

We close by raising two theoretical issues about correct voting that we have not yet addressed, questions which our focus on the single electoral system in the United States has allowed us to ignore. First and most obviously, we have defined correct voting by the preferences of *voters*. This is a good starting point, but if we are going to use the concept as one criterion of a healthy democracy, we must decide what to do with nonvoters. Turnout across the nine U.S. presidential elections considered here averaged about 55%; in Australia for roughly this same period, it was 95% (Franklin 1996). If we tried to measure correct voting in Australia, how could we compare whatever figure we would find there to the United States? We need some method for including nonvoters in the mix. Lau et al. (2005) are beginning to address this issue.

Second, in defining correct voting we have simply asked whether voters choose the candidate who best represents their values and interests. But we have not asked how *closely* those interests are represented. Consider two elections, the first involving two relatively centrist candidates, the second involving four candidates more evenly distributed across the ideological spectrum. With our measure it would be possible to observe higher levels of correct voting in the first election, while there were higher levels of *representation* (defined as the similarity between the preferences of the voter and the values of the candidate the voter supported) in the second. The first situation is more likely to occur with plurality election rules and single-member districts, while the latter is more likely to occur with multimember districts and proportional representation. Differences in expected levels of correct voting across different electoral systems could be another important criterion, along with accountability and responsiveness (Blais and Massicotte 2002), by which these electoral systems can be judged. Just as turning out per se should not be equated with fulfilling one’s citizen duty, so high levels of correct voting should not be equated with high levels of representation. These and related issues must be addressed in a more comprehensive—and undoubtedly comparative—consideration of correct voting.

Methodological Appendix

This appendix provides a more detailed account of how the variables used in this analysis were constructed, in particular the variables used to measure correct voting. Interested readers are also urged to go to <http://www.votingcorrectly.com>, where the exact syntax commands used to produce our measures can be found.

¹³See Nie, Verba, and Petrocik (1979, chap. 17) for some interesting experiments along these lines.

Correct Voting

Determining which candidate is “correct” for each voter is a fairly straightforward process of estimating a function reflecting how well each major candidate represents the interests and concerns of each voter. The correct candidate is the one with the highest estimated value of this function. To estimate these functions, we must determine (1) what the interests and concerns of each voter *are*; (2) how much the voter apparently *cares* about each of these dimensions of judgment; and (3) as objectively as possible, where the candidates “stand” on each of the dimensions under consideration.

First, we consider five categories of potential interests and concerns of voters.

Party identification is the standard 7-point scale, recoded to range between -1 and $+1$ for “strong” identifications with either of the two major parties. There are always a few “Don’t Know” or stray minor party responses to this question, and these responses were counted as missing except in the years with a major third-party candidate. In those years we computed an “antimajor-party” scale that ranged between 0 (strong identification with either of the major parties) to 2 (for “independent-independents” and the “Don’t Know” and minor party responses).

Issue stands are simply the respondent’s position on every policy question (including liberal-conservative identification) where respondents are asked not only for their own opinion but also for their judgment as to where the candidates stand on these same issues. If respondents do not have an opinion on the issue, it is counted as missing.¹⁴

Candidate personality is measured by how well each of several personality traits described each candidate. These ratings are recoded to range between -1 and $+1$ (where $+1$ means a positive trait describing a candidate “very well” and -1 means it describes him “not at all.” This coding is reversed for negative traits).

Candidate-group links are measured by a series of items asking respondents whether they feel “close” to any of roughly 16 different social groups. Whenever respondents said they felt close to a group it was coded as 1; otherwise it was 0. Whenever there was a significant relationship between responses to these items and the vote

¹⁴Most of these policy questions are 7-point scales, although a few (e.g., the question on abortion) are asked in a different format. In the latter case, responses to the item were recoded to have a 7-point range. The ANES (then CPS) first employed the 7-point format in the 1968 survey, but only for two questions. This 7-point format was adopted much more fully in 1972. As that was the year items about the perceived “closeness” to different social groups were also introduced, we limit our analyses to presidential elections from 1972 on. It would be harder (and involve a very different process) to estimate semiobjectively where the candidates stand on these same issues for ANES surveys before 1972.

(see below), the item was included as a dimension of judgment for the candidate who benefitted from the group identification.¹⁵

Finally, the incumbent president’s *performance evaluations* are measured by a number of questions asking respondents whether they approve or disapprove of the job the president has done—overall, and typically in more specific domestic and foreign policy domains. Again, responses to these questions are recoded to range between -1 and $+1$. Whenever the incumbent president was seeking reelection (so that these judgments referred to one of the actual candidates), we used responses to each of the domain-specific items. In 1988 and 2000, when the incumbent president could not seek another term but the vice president was the party’s nominee, we employed the single overall evaluation of the incumbent’s (administration’s) job performance and applied it to the vice president. Hence these performance evaluations are counted more when it is the incumbent himself who is seeking reelection.

Second, determining how much each respondent cares about each of these dimensions of judgment amounts to devising a series of weights for each one. Because of its preeminent theoretical status, party ID always had a weight of 1 (unless respondents did not give a valid answer, in which case its weight was 0). We had no good way of determining subjective weights for the candidate-group linkages, and these too always had a weight of 1. Notice, however, that the full range of these items was only 1.0, while the full range of all other items was 2.0. We were able to estimate “implicit” weights for every other dimension of judgment, however, based on the assumption that the more questions a respondent answers about a particular topic, the more, implicitly, he or she cares about that dimension. In the case of performance evaluations, the weight was based on the proportion of those items that were answered by the respondent. Thus if there were four such questions asked in a particular survey and respondents gave valid answers to all of them, the weight is 1.0; if they answered three of the four questions, the weight is .75; etc. The same weight was employed for every performance evaluation. Respondents are asked to attribute every personality trait to multiple candidates. In this case we can estimate a distinct weight for each trait, based again on the proportion of those questions answered. The typical procedure for policy questions is to ask respondents first for their own opinion on an issue, and then only for respondents who report having such an opinion, to ask for their perceptions of the candidates’ position on

¹⁵These group identification items were dropped from the 2004 survey. We came as close as we could with other available items (e.g., feeling thermometers for those same groups) that year; again, the exact details are available from <http://www.votingcorrectly.com>.

those same issues. This again allows us to calculate distinct weights for every policy question. If respondents did not have an opinion on an issue, the weight is 0, but if respondents reported a position, the weight was set to .5. This weight was then increased proportionately, according to how many of the major candidates the respondent was willing to attribute a position to, such that it equaled 1.0 if every pertinent question was answered.

Third, our semi-objective determination of where the candidates stand on each dimension of judgment begins by estimating a scale of political knowledge, based on answers to every question we could find in the survey that had a correct answer. The mean (subjective) judgments of respondents above the median in political knowledge of (a) where the candidates stand on policy issues, (b) which social groups are better off with each candidate, (c) how well each trait describes them, and (d) how well the incumbent president has performed different aspects of the job, are our “objective” measures of where the candidates stand on these various considerations. We know which party each candidate belongs to and recode the party ID scale so “strongly identifying” with the candidate’s party counts +1, and strongly identifying with the other party counts as -1. We use Rabinowitz and MacDonald’s (1989) directional procedure for determining how much each respondent agrees with each candidate on each issue, rescaled so that at the extreme, each variable ranges between -1 and +1. We prefer the logic underlying Rabinowitz and MacDonald’s model compared to the more common Euclidean approach to estimating issue distances, but extensive experimentation with each approach has never produced an instance where it mattered beyond the third decimal place which method one employs. Whether the respondent is closer to one candidate or the other thus depends both on our objective estimates of where each candidate stands on each issue, and also where respondents themselves stand on each issue. To determine which social groups are linked to each party, we computed simple crosstabs between feeling close to a social group and the vote choice of those above the median in political knowledge. Whenever this crosstab produced a statistically significant relationship, the candidate preferred by those who felt close to the group is considered “linked” to that group.

In the case of party identification, issue stands, and group identifications then, there is an individual, naive component to the evaluation such that each individual respondent’s values and preferences determine whether, and how much, each of these considerations increases or decreases how well each candidate represents the views of each citizen. Both performance evaluations and candidate traits have a universal character to them, however, such that we assume that *everyone* prefers candidates

who perform their jobs well rather than poorly, are hard-working rather than lazy, honest rather than dishonest, etc. This translates into there being a (semi-objectively determined) *constant* mean judgment for each of these considerations that becomes part of the summary judgment about each candidate.

As described in the text, we then compute four closely related summary judgments about each candidate, by (1) adding, and then (2) averaging, these unweighted different considerations together; and then multiplying each consideration by its individualized implicit weight, and again (3) adding or (4) averaging the resulting products together. The correct candidate is the one with the highest summary judgment.

Predictor Variables

Measures of age, family income, gender, race, and years of education all come from the standard ANES items. Strength of party identification is the standard party ID scale, folded at its midpoint. Liberalism-conservatism is the 7-point self-identification. Caring about the outcome of the election is the familiar 3-point variable. Political knowledge is the proportion of correct answers to every objective question we could find in the survey that has a correct answer.

Finally, we created an individual-level measure of how distinct the major party candidates were on the issues. We employed the “directional” procedures of Rabinowitz and MacDonald (1989) to determine average policy agreement with each major party candidate across every political issue where respondents were asked to place both themselves and the candidates on the issue. We employed our semi-objective estimates of where the candidates actually stood on these issues. The absolute value of the difference between mean policy agreement with the Democrat and the Republican is a strong summary measure of policy-based distinctiveness of the candidates. Generally speaking, respondents who hold more ideologically extreme positions on the issues themselves will score higher on this measure, which we expect to be positively related to correct voting.

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