THE RACE MAY BE CLOSE BUT MY HORSE IS GOING TO WIN: Wish Fulfillment in the 1980 Presidential Election

Carole Jean Uhlaner and Bernard Grofman

Using data from the 1980 U.S. presidential election, we investigate the extent to which voter expectations about candidate electoral success and margin of victory are subject to systematic biases. In particular, we examine the extent to which candidate supporters overestimate their choice's likelihood of success. After finding a rather dramatic bias in the direction of "wishful thinking," we review alternative explanations of this phenomenon, including a model based on nonrandom contact networks and one based on preference-related differences in expectations about exogenous variables that could affect the election outcome.

Wish fulfillment and other forms of misperception are quite common. Rational choice theory (especially in its extreme "rational-expectations" form) has by and large sought to "wish away" such seeming blemishes on human rationality. Yet, the evidence is overwhelming that voters think that the candidate or party that they favor is closer to their own views than it actually is and that the other side is farther away (Page and Brody, 1972; Brody and Page, 1972; Page and Jones, 1979; Markus and Converse, 1979). This phenomenon is a form of what has been called the *assimilation-contrast effect* (Parducci and Marshall, 1962; Brown, 1982). Similarly, there is considerable (anecdotal) evidence that candidates overestimate the extent to which the views they espouse coincide with those of the electorate. Further, voters overestimate the amount of effect that their own vote may have on an election outcome. In this paper, we investigate another

Carole Jean Uhlaner and Bernard Grofman, School of Social Sciences, University of California, Irvine.

important form of wishful thinking: optimism about the success of a candidate whom one favors.

Candidate preferences and election expectations are closely intertwined. In particular, it seems well established, although insufficiently noted, that people distort their perception of an election's closeness in ways that are consistent with their preferences (Hayes, 1936; Lazarsfeld et al., 1944, p. 106; Carroll, 1978; Brown, 1982; Granberg and Brent, 1983). Because voters tend to expect their preferred candidate to win, the expectations of supporters and nonsupporters of a given candidate for the election outcome differ. Noelle-Neumann (1984) found wish fulfillment in the German electorate. Granberg and Brent (1983) established in convincing fashion the presence of this form of wish fulfillment in U.S. presidential elections between 1952 and 1980. They reported that about 80% of *each* of the two major candidates' supporters tended to expect that he would win. Clearly, a large proportion of the electorate was not predicting "correctly," that is, consistent with *post hoc* knowledge of the election outcome.

Distortions of this order of magnitude are far more than mere objects of curiosity. First, they provide important information about the nature of political cognition. Second, they suggest caution in the use of actual election results as a surrogate measure of the voters' perception of election closeness. The standard rational-choice model of voting implies that, *ceteris paribus*, turnout will be higher when elections are thought to be close (Downs, 1957; Riker and Ordeshook, 1968). Tests using the actual electoral margins to measure "perceived" closeness will be flawed by a systematic divergence between subjectively perceived closeness (biased by "wish fulfillment") and "objective" measures.[1] Finally, and most important, analysis of systematic biases in misperceptions can lead us to formulate theories that can account for such findings — theories that also have other testable and nontrivial implications. Any theory of voting behavior must be capable of explaining such biases — rather than wishing them away or dismissing them as irrelevant.

In this study, we examine the connection between voters' perception of the closeness of an election, using survey data from the Center for Political Studies (CPS) American National Election Study (NES) for 1980, and the actual closeness of the race, using the 1980 presidential election returns (coded in the NES data file). Most of our data come from the preelection wave of the major study. The interviews were conducted in four two-week waves through September and October. We remind the reader that, contrary perhaps to memories colored by knowledge of the outcome, the Gallup polls showed the race tied in mid-September and showed Carter ahead in mid-October with various fluctuations in the candidates' standing before, in between, and after (Asher, 1984, pp. 160–161). Among likely vot-

ers, the population used in many of the media reports on polls, Reagan held a slight lead in the Gallup polls through most of September and October, excluding the week or so just before the candidates' debate, during which Carter pulled ahead briefly (Pomper et al., 1981, p. 75). This reminder is prompted by the otherwise disturbing fact that the CPS respondents in our data preferred Carter to Reagan. The respondents who were registered voters also preferred Carter to Reagan. Only when we restrict the sample to those who claimed after the election actually to have voted do we find a preelection preference in this sample for Reagan over Carter.

As we shall see below, wish fulfillment appears to be ubiquitous. Our results agree with those reported by Granberg and Brent (1983), who were unable to dislodge wish fulfillment despite the application of many ingenious controls. However, their study leaves open several questions that ours addresses.

First, although they consider individuals' predictions of state-level outcomes in addition to their national predictions (ibid., p. 480), Granberg and Brent do not consider variations in the proportion of votes actually received by candidates in different states. This omission leaves their analysis open to a fallacy of composition. By the plurality voting rule, if a candidate wins a state, then that candidate's supporters will outnumber those of any other candidate in that state. Where Carter did well, one will find Carter supporters. Turning the problem around, although it is possible to distribute a candidate's supporters so that a majority of them are located in states lost by that candidate, they are more likely to be distributed so that most of them will be found in states where he or she did well. Thus, when survey respondents judge the candidates' chances in their respective states, even if they judge accurately, their *aggregated* evaluations of the statewide races will look like wish-fulfilling predictions. When we examine predictions in the light of the state race outcomes, we do find wish fulfillment, but we also find responsiveness to objective variations across states in the likely success of each of the candidates in that state's electoral contest.

Second, Granberg and Brent offer explanations of wish fulfillment that rely on aspects of psychology disconnected from politics. We suggest, in the next section, a constrained information model. Our state-level results lead us to suggest that voters, at least in part, make their predictions on the basis of the limited sample of the electorate with whom they come into contact. If the people around them support the same candidate, then they will overestimate that candidate's chances. We also suggest that the apparent irrationality of voters' expectations may lie in part in voters' choices of what information sources to believe.

Finally, Granberg and Brent consider only correlations between individuals' preferences and their prediction of the winner, without considering predictions about the closeness of the race. For certain purposes, such as the use of actual returns to measure perceived closeness, biases, if any, in the prediction of degree of closeness matter in addition to those in predictions of the winner. Thus, we shall distinguish between supporters who think their candidate will win by quite a bit and those who think the race will be close.

BASIC RESULTS

The members of the electorate in 1980 agreed that the national presidential race was close but overwhelmingly thought that their preferred candidate would win. Table 1 presents this result. The table is constructed from the items asking who the respondent predicted would win the presidential election, whether the respondent thought the race would be close or would be won by "quite a bit,"[2] and for whom each planned to vote (or would vote for if they were to vote).[3]

Among the supporters of the two major candidates, virtually identical percentages, 83.1% and 83.7%, predicted a close race, and insignificantly more of the Anderson supporters (86.7%) and of those who don't know their preference (87.3%) also predicted a close race. However, within this apparent unanimity, Carter supporters thought their candidate would win (by six to one among those who saw the race as close), and Reagan supporters thought their candidate would win (by four to one among those who predicted a close race). Anderson supporters demonstrated either some reality constraint or total woolly-headedness, depending on one's viewpoint, as the vast majority of them did not think their candidate would win, but 4% of them actually did.[4] Nine percent of the sample — and 23% of those who had no presidential preference — adopted the sensible position that the race would be close and that they were not sure who would win. If we turn our attention to those who predicted someone would win by quite a bit, we see that the supporters of the two major candidates each favored the chances of their own preferred candidate. Within both groups, virtually identical percentages (15.9% and 15.6%) predicted a landslide for someone. Among those who predicted that someone would win by a lot, Reagan supporters were seven times more likely to think their man would win than would Carter; the corresponding ratio for Carter supporters was over twenty to one.

The null hypothesis, that distortions are random, clearly fails when measured against Table 1. The data are consistent with wish fulfillment. Each candidate's supporters have fundamentally different views from sup-

TABLE 1. Percentage of Supporters of Each Candidate Predicting Various Outcomes for the National Election and for Their State: All Respondents (Who Have Preferences and Estimates)[a]

Predicted national outcome	Everyone (including those with no preferences)	Prefer Carter	Prefer Reagan	Prefer Anderson	DK who prefer
Reagan — close	33.1%	11.1%	59.8%	31.7%	25.3%
Reagan — a lot	6.8	.7	13.6	7.5	5.1
Carter — close	41.3	65.1	16.5	42.5	39.2
Carter — a lot	8.0	15.2	2.0	4.2	5.7
Anderson — close	0.3	0	0	3.3	0
Anderson — a lot	0.1	0	0	0.8	0
DK — close	9.4	7.0	7.4	9.2	22.8
DK — a lot	1.0	1.0	0.7	0.8	1.9
	100.0%	100.1%	100.0%	100.0%	100.0%
N	1,473	598	552	120	158
Percentage who think election will be close	84.1	83.1	83.7	86.7	87.3

Predicted state outcome	Everyone (including those with no preferences)	Prefer Carter	Prefer Reagan	Prefer Anderson	DK who prefer
Reagan — close	25.0%	15.5%	34.3%	30.3%	25.3%
Reagan — a lot	19.5	9.7	30.0	24.4	15.6
Carter — close	29.9	41.9	19.1	22.7	23.4
Carter — a lot	15.4	24.5	8.0	9.2	14.9
Anderson — close	1.0	0.3	0.2	7.6	1.9
Anderson — a lot	0.1	0	0	0.8	0
DK — close	7.2	6.3	6.5	4.2	16.2
DK — a lot	1.8	1.7	2.0	0.8	2.6
	100.0%	100.1%	100.0%	100.0%	100.0%
N	1,435	575	540	119	154

[a] All data reported in this and subsequent tables are taken from the 1980 American National Election Study, collected by the Center for Political Studies, University of Michigan, and were made available by the Inter-University Consortium for Political and Social Research. Neither they nor the principal investigators bear any responsibility for the analyses and conclusions reported here.

porters of other candidates on what the outcome will be, and the distortion echoes their preference.[5]

For the national data, we cannot, however, clearly reject an alternative hypothesis. All candidates may attempt to portray themselves as needing support, whether as the leader who may yet slip below 50% or as an underdog who is close to winning. The 1980 election does not permit a clear test of this hypothesis. Although both Carter and Reagan supporters have the same pattern of perceptions, this may be because it was unclear who was, in fact, in the lead. Both major party candidates could make plausible claims to be the underdog.[6] However, as we shall see when we consider the contact model, below, some of our analysis bears indirectly on this hypothesis.[7]

Additional factors may come into play in the production of wish fulfillment. How well one perceives an election's closeness might be expected to reflect not only one's wishes but also the intensity of those wishes, the amount of information one has, and one's level of cognitive sophistication. Granberg and Brent (1983, p. 480) report slightly less wish fulfillment among the better educated and slightly more among those with more interest, more concern about the outcome, stronger party identification, or a higher feeling thermometer rating of their candidate. Granberg and Brent emphasize that the differences are slight and interpret their results as indicating the pervasiveness of wish fulfilling and its robustness. However, they present no data on the effects of these control variables on the expected degree of closeness.

To examine the robustness of wish fulfillment in different subsamples of the population, we considered two direct behavioral indicators of concern about the election in particular and of involvement in politics in general: registration and turnout. We separated from the sample as a whole those individuals who registered to vote and, further, those who reported voting in the election in November. The percentages predicting various outcomes were virtually identical to those reported in Table 1. In Table 2 we show the results for those who claimed to have voted in November. They were very slightly more likely to have predicted a close race before the election than was the sample as a whole. With these small differences, we can only say that the Carter and Reagan supporters who ended up voting had been about as wish-fulfilling as the sample as a whole despite their (presumably) greater involvement in the election than the nonvoters.

We did find notable alterations when we considered people's predictions about which candidate would win in their states. In Table 3, we repeat the figures reported in Table 2, except that now we use voters' predictions of the outcome in their state as the dependent variable. At first glance, both more and less wish-fulfilling seem evident. On the one hand, Carter and

TABLE 2. Percentage of Supporters of Each Candidate Predicting Various Outcomes for the National Election: Those Who Said They Voted, Only

Predicted national outcome	All respondents		Those who said they voted	Those who said they voted who (pre-election) liked			
	N	%		Carter	Reagan	Anderson	DK
Reagan — close	488	33.1%	36.1%	12.4%	61.8%	32.9%	26.4%
Reagan — a lot	100	6.8	7.2	0.6	12.6	9.4	5.5
Carter — close	608	41.3	40.6	67.4	15.2	42.4	44.0
Carter — a lot	118	8.0	6.2	13.0	2.1	2.4	2.2
Anderson — close	5	0.3	0.4	0	0	4.7	0
Anderson — a lot	1	0.1	0	0	0	0	0
DK — close	138	9.4	8.7	5.5	7.8	8.2	20.9
DK — a lot	15	1.0	0.9	1.2	0.5	0	1.1
		100.0%	99.9%	100.1%	100.0%	100.0%	100.1%
N	1,473		922	347	374	85	91
Percentage who think election will be close		84.1	85.8	85.3	84.8	88.2	91.3

Reagan supporters are each more likely to think that their candidate will win their state *by a lot* than they were to think that he would win the nation by a lot, but more of them also think that the other candidate will win their state than are willing to make that prediction for the nation. We note, as shown in column 1, that even among all respondents, states were, on average, seen as less close than the nation. For example, among those who did not know whom they supported, but who in the end did vote, higher proportions thought one of the candidates would win their state by quite a bit than thought one would win the nation by quite a bit.

Of course, by and large, most state elections are actually more lopsided than the national results. Thus, we should calibrate these data against how well the candidates did in each state. We would prefer to have a measure of the candidates' strength in each state at the time of the survey. Unfortunately for our purposes, the sample design does not permit drawing inferences about state populations. However, the election returns allow us to order states by how well each candidate actually did in November. We then introduce the assumption that the *relative* ordering of states remained fairly stable during the last weeks of the campaign. That is, we assume that the states in which Reagan got *relatively* more votes were also the states in which he was *relatively* more popular just before the election. This as-

TABLE 3. Percentage of Supporters of Each Candidate Predicting Various
          Outcomes for the Election in Their State: Those Who Said They
          Voted, Only

Predicted state outcome	All respondents	Those who said they voted	Those who said they voted who (pre-election) liked			
			Carter	Reagan	Anderson	DK
Reagan – close	25.0%	29.2%	18.6%	37.7%	36.5%	29.5%
Reagan – a lot	19.5	20.3	10.9	29.3	18.8	18.9
Carter – close	29.9	28.8	42.9	18.7	22.4	22.1
Carter – a lot	15.4	13.8	22.5	8.1	9.4	10.5
Anderson – close	1.0	1.1	0.3	0	8.2	2.1
Anderson – a lot	0.1	0.1	0	0	1.2	0
DK – close	7.2	5.0	3.6	4.6	2.4	13.7
DK – a lot	1.8	1.6	1.2	1.6	1.2	3.2
	99.9%	99.9%	100.0%	100.0%	100.1%	100.0%
N	1,435	896	338	369	85	95
Percentage who think election will be close	63.1	64.1	65.4	61.0	69.5	67.4

sumption is reasonable as long as large state-specific swings did not occur
during the end of the campaign. Of course, the actual votes are an *ex post*
measure. However, we are not using the outcomes to proxy for respondents'
ex ante perceptions of the race's closeness, as in some of the studies we
criticize; instead, we use them to approximate the political climate sur-
rounding each respondent at the time the predictions were made. For the
predictions, we use the *ex ante* reports of the respondents.

Table 4 reports the percentage of each candidate's supporters who pre-
dicted various outcomes for the national election, separating the sample
into those who live in states where the difference between Reagan's and
Carter's percentage of the total vote was less than 10% from those who live
in states where Reagan defeated Carter by more than 10% of the total vote.[8]
Table 5 reports similar percentages, but here respondents were asked to
predict the outcome in their states.

When we compare the top part of Table 4 (close states) to the bottom
part (Reagan states), we see a slight, statistically insignificant, increase in
acknowledgment of *national* Reagan strength by Carter supporters. Only
the persons who do not know whom they support appear to reflect the
changed environment.[9] However, Table 5 indicates that even the supporters
of a candidate respond to differences in state context in predicting *state*
results.[10] Twenty percent of the Carter supporters in the "close" states

TABLE 4. Percentage of Supporters of Each Candidate Predicting Various Outcomes for the National Election (Voters Only), Controlled by How Close State Actually Was

Predicted national outcome	All respondents	Those who said they voted	Those who said they voted who (pre-election) liked			
			Carter	Reagan	Anderson	DK
A. Actual difference between Reagan's and Carter's percentage of total vote: less than 10% ("close" state)						
Reagan — close	29.1%	32.3%	11.0%	60.3%	35.0%	20.8%
Reagan — a lot	6.2	6.2	0	12.1	10.0	4.2
Carter — close	44.1	43.9	67.5	14.9	45.0	52.1
Carter — a lot	9.7	8.1	16.0	1.7	5.0	2.1
Anderson — close	0.1	0	0	0	0	0
Anderson — a lot	0.1	0	0	0	0	0
DK — close	9.6	8.6	4.5	10.3	5.0	20.8
DK — a lot	1.1	0.9	1.0	0.6	0	0
	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%
N	742	467	200	174	40	48
B. Actual difference between Reagan's and Carter's percentage of total vote: greater than 10%, Reagan ahead ("not close")						
Reagan — close	38.6%	41.1%	15.1%	64.2%	31.1%	35.0%
Reagan — a lot	7.6	8.6	1.4	13.7	8.9	7.5
Carter — close	37.8	36.3	66.2	14.2	40.0	35.0
Carter — a lot	5.5	4.1	8.6	2.1	0	2.5
Anderson — close	0.6	1.0	0	0	8.9	0
Anderson — a lot	0	0	0	0	0	0
DK — close	9.1	8.1	7.2	5.3	11.1	17.5
DK — a lot	0.9	1.0	1.4	0.5	0	2.5
	100.1%	100.2%	99.9%	100.0%	100.0%	100.0%
N	694	419	139	190	45	40

thought Reagan would win their state; forty-five percent predicted a Reagan win in the states where Reagan won big. Forty percent of the Reagan supporters in the close states thought Carter might win their state; only thirteen percent thought so where he lost badly. *Thus, wish fulfillment is not impervious to reality.*

The reduction in magnitude of the wish fulfillment effect from the national prediction to the state prediction shown in Tables 4 and 5 indicates that part of the wish fulfillment effect reflects the composition of

TABLE 5. Percentage of Supporters of Each Candidate Predicting Various
Outcomes for the Election in Their State (Voters Only), Controlled by
How Close State Actually Was

Predicted state outcome	All respondents	Those who said they voted	Those who said they voted who (pre-election) liked			
			Carter	Reagan	Anderson	DK
A. Actual difference between Reagan's and Carter's percentage of total vote: less than 10% ("close" state)						
Reagan — close	22.6%	25.5%	14.1%	37.6%	31.0%	23.5%
Reagan — a lot	10.7	10.0	5.8	14.1	9.5	11.8
Carter — close	34.7	36.4	46.6	28.2	26.2	33.3
Carter — a lot	21.1	20.0	30.9	11.8	14.3	13.7
Anderson — close	1.8	2.0	0.5	0	14.3	3.9
Anderson — a lot	.1	0.2	0	0	2.4	0
DK — close	7.7	5.0	1.6	6.5	2.4	13.9
DK — a lot	1.1	0.9	0.5	1.8	0	0
	99.9%	100.0%	100.0%	100.0%	100.1%	100.1%
N	726	459	191	170	42	51
B. Actual difference between Reagan's and Carter's percentage of total vote: greater than 10%, Reagan ahead ("not close")						
Reagan — close	28.3%	33.9%	25.9%	37.8%	41.9%	38.1%
Reagan — a lot	29.9	32.7	18.7	44.7	27.9	28.6
Carter — close	24.1	20.0	37.4	9.6	18.6	7.1
Carter — a lot	7.9	5.8	10.1	3.2	4.7	4.8
Anderson — close	0.3	0.2	0	0	2.3	0
Anderson — a lot	0	0	0	0	0	0
DK — close	7.0	5.0	5.8	3.2	2.3	14.3
DK — a lot	2.5	2.4	2.2	1.6	2.3	7.1
	100.0%	100.0%	100.1%	100.1%	100.0%	100.0%
N	672	416	139	188	43	42

various states. More of Carter's supporters live in states where Carter did
well. This finding implies that if Carter's supporters perceive their candi-
date's state-level chances *accurately*, they will be more likely to predict him
to win their states than would the rest of the sample. Analogous statements
hold for Reagan's supporters.

This dilution of the wish fulfillment effect when we examine state pre-
dictions is shown even more dramatically in Table 6. In Table 6, we report
the mean difference between Reagan's percentage of the total vote in the

TABLE 6. Reagan's Mean Actual Margin[a] over Carter by National and State Prediction by Candidate Supported[b]

Predicted national outcome	All respondents	Those who said they voted	Those who said they voted who (pre-election) liked							
			Carter	N	Reagan	N	Anderson	N	DK	N
Reagan—close	12.3	12.1	11.8	43	12.3	231	10.1	28	12.6	24
Reagan—a lot	12.4	13.9	10.6	2	14.3	47	10.7	8	15.7	5
Carter—close	9.0	9.0	8.5	234	9.9	57	10.6	36	8.9	40
Carter—a lot	6.1	6.8	5.9	45	12.8	8	2.8	2	7.0	2
Anderson—close	17.4	21.0	NA	0	NA	0	21.0	4	NA	0
Anderson—a lot	0.2	NA	NA	0	NA	0	NA	0	NA	0
DK—close	8.9	8.5	8.8	19	7.4	29	9.8	7	7.3	19
DK—a lot	9.3	13.2	8.8	4	8.7	2	NA	0	52.2	1
Predicted state outcome										
Reagan—close	11.7	11.7	13.0	63	11.0	139	11.6	31	12.9	28
Reagan—a lot	17.1	18.6	19.3	37	19.5	108	14.9	16	14.8	18
Carter—close	7.1	6.7	6.7	145	5.6	69	10.4	19	4.9	21
Carter—a lot	4.2	3.5	3.7	76	2.1	30	3.5	8	7.1	10
Anderson—close	4.2	2.3	6.5	1	NA	0	2.3	7	0.4	2
Anderson—a lot	2.8	2.8	NA	0	NA	0	2.8	1	NA	0
DK—close	10.1	9.6	8.2	12	9.9	17	13.1	2	9.6	13
DK—a lot	11.3	14.2	11.5	4	13.1	6	12.3	1	20.8	3

[a] Reagan's percentage of the total vote minus Carter's percentage of the total vote.
[b] NA = No cases fell into this category.

state and Carter's percentage of the total vote for the state of residence of our respondents, arrayed by the predictions and by the candidate supported.

The top half of the table shows a weak relationship between the actual state vote percentages and the national predictions, while the bottom half shows a stronger relationship between actual state votes and state predictions. The striking fact about Table 6 is the similarity of the percentages across columns. Reagan supporters who expect Reagan to win by a lot come, on average, from states with the same mean victory margin for Reagan as do Carter supporters who expect Reagan to win by a lot, and so on for other predictions. To put it differently, if you knew Reagan's margin over Carter in a respondent's state, you could predict her or his state (and, to a lesser extent, national) prediction equally well, whether or not you knew which candidate they supported.[11] Moreover, actual margins track predictions appropriately (Carter did get more votes in states where the respondents predicted victory for him). Thus, the bottom half of the table strongly suggests a nonwishful response to circumstances in each state. Voters' predictions (responses) vary with the support received by the candidates (as measured here by the electoral margins) in a reasonable way.

We also introduced controls for strength of party identification, for level of interest in the campaign, for attention to media, and for attention to polls, and we found little or no alteration in the basic pattern, except as described at the end of the next section, where we look at comparative effects of education and media at the state and national level.

We turn next to a discussion of possible sources of apparent wish-fulfillment, including further consideration of the role of context.

A FURTHER LOOK AT WISHFUL THINKING: WHY IS THERE SO MUCH?

At the national level, we have seen the ubiquitous nature of wish fulfillment. It is time to consider in more depth the nature of this phenomenon.

The Innate Irrationality Hypotheses

We have been using the term *wish fulfillment* to *denote* the perception by supporters of a given candidate that the candidate has more support than is in fact the case.[12] Thus, the expectation reflects the preference. The *connotation* of the term *wish fulfillment* suggests an emotional or irrational mechanism for this process. *Wishful thinking* is defined as "thinking in which one interprets facts in terms of what he wants to believe" (*Webster's New World Dictionary*, 1967 edition).

Granberg and Brent (1983, p. 489) offer three explanations for wish

fulfillment that carry this connotation. First, they suggest balance theory as developed by Heider (1946, 1958).[13] The underlying notion, that individuals attempt to maintain consistency among their cognitions and evaluations, can produce wish-fulfilling behavior in several ways. Granberg and Brent argue that if a citizen has a positive attitude toward the electorate and toward a given candidate, then acknowledgment of a disagreement between self and the electorate about the candidate would produce imbalance. Second, they suggest "the Pollyanna hypothesis (Boucher and Osgood, 1969), the assertion that there is a pervasive human tendency to communicate about and concentrate disproportionately on the positive aspects of life and the environment" (Granberg and Brent, 1983, p. 489). The third explanation offered by Granberg and Brent, "impression management," argues that people present themselves as optimistic in order to be liked by others. Optimism then becomes a habitual mode of expression, although not necessarily of belief. This explanation is instrumental: people make themselves sound like wish fulfillers in order to be liked. All three explanations imply that wish fulfilling is innate in human psychology. Moreover, although all three explanations have some behavioral support (e.g., there is a well-known positivity bias in evaluations), the latter two explanations are apolitical and are incapable of accounting for variations across individuals in the extent to which expectations are shaped by preferences. Finally, none of the three explanations help us to account for variations in the degree of wish fulfillment as a function of objective factors such as actual variations in candidates' support margins across states.

The Contact Model

We now propose a contextual and information-based explanation of wishful thinking. If people largely talk to people who think as they do, their restricted information would make wishful thinking appear to occur.[14] That is, the phenomenon may not really represent "wishful thinking" (in its most pejorative sense) but may rather be a "reasonable" response to evidence from a biased sample (citizens' own contact networks). Granberg and Brent (1983) mention this explanation but do not explore it. Noelle-Neuman (1984, pp. 12–17, 158–159) uses social contact and social communication in her explanation of shifts in public opinion and the link between public expectations and electoral outcomes but provides no formal model of this link. We offer such a model, inspired by the work of Condorcet (1785).

Consider a simple model for a two-candidate prediction situation. Let p = the probability that a randomly chosen individual expects to vote for Candidate A (that is, p equals the proportion of the electorate supporting

Candidate A, $\bar{p}$). Then, let Voter i's prediction of whether Candidate A will win be determined by the proportion of the people (including herself or himself) to whom Voter v talks who expect to vote for Candidate A. (For convenience, assume Voter v favors Candidate A.) Our simple model involves a process whereby Voter v samples the environment by learning the views of other voters. Voter v then estimates that the proportion of people in the relevant electorate who expect to vote for A is the same as the proportion in his or her sample. Because we assume two candidates, Voter v expects A to win if the proportion is over 50%. A context effect like this, in which expectations change, requires less herculean assumptions than one that involves individuals changing their *attitudes* based upon to whom they talk.

For the moment, we also make the unrealistic assumption that people get information only directly from their contacts about other people's preferences. We discuss below the implications for the model of people obtaining information from the mass media about other people's preferences (poll reports, news stories, and sense of "mood"). First, we present the two limiting cases.

Case I: Social Segregation

If the only people to whom Voter v speaks (by and large) share his or her views, he or she will certainly predict that Candidate A will win. The probability that a randomly chosen voter will favor Candidate A is, of course, simply p. (We assume no undecided voters.) Thus, under our model, if social segregation is complete, the expected proportion of voters who will predict that Candidate A will win is simply p, but *all* the voters who favor Candidate A will predict that Candidate A will win, and all the voters who favor Candidate B will predict that Candidate B will win; that is, homogeneous contact implies "wishful" thinking.

Case II: Heterogeneity

Now let us consider what happens if there is heterogeneity in contact patterns. If there is heterogeneity in the contact patterns of voters, then voters tend to perceive the winner to be the candidate who is actually ahead, with this tendency increasing as the number of contacts increases. Indeed, if every voter randomly samples the electorate and decides who will win on the basis of the vote preferences of a majority of those sampled, then the probability that a voter will predict Candidate A to win is given by

TABLE 7. The Proportion of a Group That Will Predict Candidate i Will Win for Various Values if k and p, under Our Pure Heterogeneous Contact Model[a]

		.2	.4	.5	.6	.8
	1	.2000	.4000	.5000	.6000	.8000
	3	.1040	.3520	.5000	.6480	.8960
	5	.0580	.3174	.5000	.6826	.9420
	7	.0335	.2858	.5000	.7102	.9666
k	9	.0196	.2666	.5000	.7334	.9804
	11	.0116	.2466	.5000	.7534	.9884
	13	.0070	.2288	.5000	.7712	.9930
	15	.0042	.2132	.5000	.7868	.9958
	17	.0026	.1990	.5000	.8010	.9974
	19	.0016	.1860	.5000	.8140	.9984

(The p values .2 .4 .5 .6 .8 span the header under p.)

[a] k = number of voters contacted by voter i; p = the probability that a randomly chosen voter will express the intent to vote for Candidate 1 rather than Candidate 2.

$$\sum_{i=m}^{k} \binom{k}{i} p^i (1-p)^{k-i} \tag{1}$$

where k is the number of individuals whom each voter contacts (including himself or herself), and m (a majority) $= (k+1)/2$ with k odd for simplicity, and p is defined as above. Further, the Condorcet jury theorem (a variant of the law of large numbers) tells us (see Black, 1958; Grofman, 1975; Grofman et al., 1982, 1983; Grofman and Owen, 1986) that

$$\lim_{k \to \infty} \sum_{i=m}^{k} \binom{k}{i} p^i (1-p)^{k-i} \quad \begin{aligned} &= 1 \quad \text{if } p > \tfrac{1}{2} \\ &= \tfrac{1}{2} \text{ if } p = \tfrac{1}{2} \\ &= 0 \quad \text{if } p < \tfrac{1}{2} \end{aligned} \tag{2}$$

We show the value of expression (1) for various values of k from 1 to 19 in Table 7.

Note that as k, the number of contacts, increases, if $p > \frac{1}{2}$, the proportion of the voters who expect Candidate A to win deviates further and further from the value p $(= \bar{p})$. That is, more and more voters think (as indeed is true) that Candidate A will probably receive a *majority* of the votes. In concrete terms, the more extensive an individual's network, the better sample it provides of the voting population, assuming, as we do here, pure heterogeneity. In the whole population, Candidate A will either win or lose; elections map continuous proportions into dichotomous results.

Note also, that if $k = 1$ this model becomes *identical* to the homogeneous sampling of Case I, the pure wishful-thinking model. *If the only person you contact is yourself, "contact" is the same as "wishful thinking."* Granberg and Brent (1983) mentioned the contact model in these terms in explaining wishful thinking.

We might expect some mix between perfect homogeneity and perfect heterogeneity in the real world. People are neither completely segregated nor do their contacts randomly sample the population. If so, then the results would be intermediate between our two extreme cases. That is, in a mixed world, the expected proportion of voters who say that the leading candidate will win should be *greater than* the proportion of voters who favor the winning (leading) candidate but still less than 1. One way to model this mixed case is to posit a measure for the amount of homogeneity in the electorate, and then to borrow from the seats-votes literature on proportionality effects of election systems.

*Case III: Mix between Perfect Homogeneity
and Perfect Heterogeneity*

Adapting a model developed by Theil (1970), used by Taagepera (1973) and Grofman (1982), we shall let w be the proportion of voters who think that Candidate A will win:

$$\left(\frac{w}{1-w}\right) = \left(\frac{p}{1-p}\right)^q \tag{3}$$

where q is an index of homogeneity that runs from 0 to ∞, and p is defined as before.[15] Because p is the probability that a randomly chosen voter will vote for Candidate A, p is also the expected fraction of the vote that Candidate A will receive. If $q = 1$, we have the pure homogeneous case. If $q = \infty$, we use the convention that $w = 1$, and we have the pure heterogeneity case. The more "biased" the contact set, the more likely the voter is to misperceive election closeness. Thus, we would expect misperception to be higher in more highly segmented polities.[16]

Possible Empirical Tests of the Contact Model

Our comparison of predictions of state outcomes and of national outcomes with the actual state results supports the notion that people pay attention to those around them. However, even within states, supporters of a given candidate still seem disproportionately to predict victory. Thus, our data are only suggestive. For a better test of the hypothesis, we have to

look at the context effects in terms of an individual's own social network, and we do not have the data to perform such an analysis directly. We can, however, get closer by examining smaller units of the electorate.

The 1980 data contain information on the actual election outcomes in the congressional district and in the county of residence of each respondent. Although the sample design does not allow us to draw inferences about the characteristics of individual districts or counties, the returns for these smaller units provide us information about the *context* faced by voters in more localized terms than do the state returns. By grouping respondents according to local context (strongly supportive of Reagan, strongly supportive of Carter, or somewhere in between), we can draw inferences about the population of citizens who experienced a similar local context (in terms of candidate margins). In some instances "county" is larger than "congressional district"; in others, the reverse is true. As congressional districts were used for the sampling frame for the 1980 study, we have chosen to use the congressional-district-level data.

Of course, both congressional districts and counties are far too large to capture an individual's set of face-to-face contacts. A snowball sampling design would be necessary for a proper job of assessing the effects of interpersonal networks. (Unfortunately, such samples are costly and are done infrequently for mass populations; they are especially difficult to carry out for national populations.) We then could directly assess the stated preferences of each person's contacts. Asking respondents to report their contacts' preferences comes in a distant second as it confounds questions of causality: individuals' opinions on their contacts' preferences may be shaped by each individual's own preference. Thus, our congressional-level data can at best give us only suggestive results. Despite the difficulties, however, we believe that the congressional district proxy has some plausibility. It is a small enough unit to correspond to a local political climate. Mass media typically operate over areas no smaller than districts, and major party and political organizations and officials also tend to operate on that scale. The proxy becomes better when we broaden the model, below, to allow for effects beyond strict personal contact.

In Table 8 we repeat the analysis reported in Table 6, except that now the reported means are of the returns in the respondents' congressional district instead of the state. The identity between columns disappears, reflecting the uneven distribution of Carter and Reagan supporters across congressional districts. (The distribution is more lopsided than for states.) However, the differences between *rows* are, as before, in the "correct" directions for the predictions (with the exception of one cell based on a very small number). Also, as before, the means more dramatically match the within-state predictions than the national ones.

TABLE 8. Reagan's Mean Actual Margin[a] over Carter in Respondents'
Congressional District by National and State Prediction by Candidate
Supported

Predicted national outcome	All respondents	Those who voted	Those who voted who (pre-election) liked			
			Carter	Reagan	Anderson	DK
Reagan — close	12.2	13.2	4.7	15.2	7.2	13.9
Reagan — a lot	12.6	16.0	− 17.7	18.3	10.6	19.0
Carter — close	4.2	3.8	0.9	12.5	8.6	3.4
Carter — a lot	0.6	− 0.3	− 2.1	8.2	0.7	− 5.9
DK — close	4.8	3.8	− 0.9	7.9	2.9	0.8
DK — a lot	4.2	9.1	− 6.8	21.3	− 7.9	45.6
Predicted state outcome						
Reagan — close	11.5	11.4	6.9	12.5	7.7	18.2
Reagan — a lot	17.5	20.1	12.2	23.8	18.0	14.1
Carter — close	2.2	3.1	1.0	7.6	14.8	− 7.1
Carter — a lot	− 3.1	− 6.1	− 8.0	0.5	− 8.3	− 11.1
DK — close	7.8	4.0	− 12.2	13.8	14.9	6.6
DK — a lot	6.2	15.4	12.3	19.1	2.7	15.5

[a] Reagan's percentage of the total vote minus Carter's percentage of the total vote.

In order to further examine the contact model, we use, in the analyses that follow, Reagan and Carter votes, predictions, and preferences as percentages of the two-party votes, predictions, and preferences. First, we order our respondents according to the percentage of the two-party vote received by Carter in their district. We then group them by this percentage. Within each decile, we calculate the mean vote received by Carter and the proportion of respondents who predict a Carter victory. We also collapsed the respondents into seven categories to smooth out the data.

In Table 9, we present the p's (proportion of votes in the district for Carter) and the w's (proportion who predicted Carter the winner) for the two categorizations. Using the data in Table 9, we have run linear regressions of w on p and of $\ln(w/(1-w))$ on $\ln(p/(1-p))$ (a logit formulation) to determine values for q. The proportion of respondents who predict that Carter will win nationally increases as the respondents' districts cast more votes for Carter, but the linear slope regression of w on p is slightly below .7 (for both the decile and the seven-category coding). The state predictions yield a somewhat different pattern, with a linear regression slope of

TABLE 9. p and w by Grouped Congressional Districts

Smoothed groups							
Group	1	2	3	4	5	6	7
Number of respondents in group	172	135	167	691	159	161	129
Average proportion of two-party vote received by Carter in congressional district	.26	.34	.38	.45	.52	.56	.78
Average proportion of respondents predicting a Carter national victory (as a proportion of major party predictions)	.42	.44	.54	.53	.57	.71	.75
Average proportion of respondents predicting a Carter state victory (as a proportion of major party predictions)	.21	.30	.45	.48	.64	.73	.79

Decile groups										
Group	1	2	3	4	5	6	7	8	9	10
Number of respondents in group	159	170	160	152	168	162	155	168	159	161
Average proportion of two-party votes received by Carter in congressional district	.26	.34	.38	.42	.44	.46	.48	.51	.55	.74
Average proportion of respondents predicting a Carter national victory (as proportion of major party predictions)	.44	.42	.55	.48	.54	.53	.55	.58	.70	.74
Average proportion of respondents predicting a Carter state victory (as proportion of major party predictions)	.23	.29	.46	.37	.48	.52	.46	.71	.71	.75

about 1.2. That is, in districts with little support for Carter, *fewer* people predict he will win their state than later ended up voting for him, whereas in supportive districts, *more* people predict Carter will win than later vote for him. Virtually identical estimates are derived when we run the logit regressions using the log-odds of w and p. Overall, these results are consistent with a contact model with substantial social segregation (homogeneity). Both the national and the state data yield values of q fairly near 1. We consider in the next section possible systematic reasons for differences between results at the two levels.

Modifications of the Contact Model

Despite the appeal of the contact model, it has some apparent limitations. The results that we reported at the end of the last section contain a puzzle that we need to resolve. We obtained q values below 1, although our original model would suggest 1 to infinity as the range. Of course, the result may be due to sampling error. However, we propose an answer that also addresses the problem of accounting for the consistent differences between national and state-level results. We then add to the model recognition that mass media provide information. Finally, we consider the effects of education on the process of expectation formation.

The result that q is less than 1 can occur if supporters of the underdog overpredict their candidate's chances and supporters of the leader predict less support than is in the actual distribution of preferences. That is, all estimates tend toward one half in a two-candidate race. We can account for this tendency by putting a second step into the model.

Voters go through a two-step process. First, they form expectations about the candidates' chances through the sampling process we called the *contact model.* Then, however, each voter must decide the extent to which he or she believes the estimate. In the original model, the sampling information formed the sole basis for a voter's estimates. In the new model, each voter has a prior estimate of the candidate's chances and uses the sampling information to update the probabilities. The more confidence a voter has in the sampling procedure, the more the posterior estimate will have moved from the prior. Under conditions of complete confidence they will take the values described above. Without any information, the initial prior will be one half. Under conditions of little confidence, the posterior distributions will remain closer to one half, for conditions of both homogeneity and heterogeneity. If we allow for knowledge of incumbent bias, the prior may be some $P^* > \frac{1}{2}$ in the incumbent's favor, but then the same argument holds with estimates tending toward p^*.

Which circumstances tend to increase confidence and which tend to decrease it? To the extent that voters believe that their sample is representative of the relevant population, they will have confidence in their predictions (or, to put it equivalently, will be willing to rely on the law of large numbers). Samples will be better to the degree that they are randomly chosen (heterogeneous case) from the population. That random choice will be facilitated to the extent that the relevant population is (1) available to be sampled and (2) fairly uniform itself (of low variance) so that a small sample will do. The second condition is met, for proportions, better as the proportions become more extreme (maximum variance occurs at one half). Both of those conditions are met better for state than for national predic-

tions. As we expect people to have more confidence in their state predictions, we predict that people will use the contact model predictions. For national predictions, q will drop below 1 as people discount their sample evidence because of uncertainty. In simple terms, people have more confidence in their ability to predict their state outcomes. As a result, state predictions not only track variations in percentages of supporters but are more extreme.

One of the alternative hypotheses that we presented in the section on basic results can be incorporated into this account. That hypothesis was that candidates (in a two-candidate race) try to foster the perception that their support approaches 50%. To the extent that these efforts succeed, q will be less than 1. Voters who are confident in their contact estimates will be less influenced by these efforts than those who are less confident. Thus, again, if voters are less sure about their national estimates, these will tend toward one half, and q will be less than 1.

Next, we consider the role of the mass media. The contact model assumes that people make predictions on the basis of their information. Thus, one might anticipate that confirmation conveyed by the news media would be incorporated into their estimates. Several situations are possible. Persons may receive only those media or media reports that support their views (see Sears and Freedman, 1967, for a review). If homogeneity of personal contacts obtains, the media use leaves the results unchanged. If some heterogeneity of contacts obtains, then segregating of media sources will move the mix toward homogeneity. On the other hand, if news media convey accurate information, then persons' expectations will move closer to those predicted by the heterogeneity case, even if their personal contacts are segregated.

The media may also account in part for the disparity between state and national predictions. As the mass media focus more on the expected national outcome, and as they provide more accurate predictions at this level, they provide a credible alternative to contact-based predictions. The national media, however, provide less state-level information, and local media are more likely to reflect local preferences. Thus, with regard to state-level predictions, information from the media offers less competition to predictions based on social contacts.

Persons differ in their attentiveness to the news media. If the news media convey voter preferences accurately, then persons who pay more attention to the news should make less "wish fulfilling" predictions than other people. We reran the tables relating presidential prediction to personal preference, controlling for various measures of media attentiveness. We found that this control produced very little effect. One possibility is that persons are more attentive to other people than to the media. Personal contact may

carry much more weight than indirect sources of information. This claim is supported in the cognitive psychology literature, such as the work of Kahnemann and Tversky. (See, e.g., the review in Fischoff et al., 1981. For a popular account from the advertising world, see Prescott, 1984.)

Analysis of the exact effects of the news media suffers from the ambiguity of the predictions contained in the news. During the 1980 election, the national news magazines consistently showed Reagan ahead of Carter in the Electoral College. At the same time, most of the popular press, including those magazines, focused attention on the closeness of the popular vote. We attempted to deal with this problem by again rerunning the data, this time controlling for the respondents' impression of who was ahead in the polls (asked only of those who claimed to be aware of poll results). Again, the control had little effect. Unfortunately, this control provides at best a weak test, as it, too, involves subjective perceptions that may be affected by preferences. Those who preferred Reagan may have believed him to be ahead.

Third, we should consider the effects of education on the contact hypothesis. If the more educated have more contacts and more varied contacts, then, by the contact model, those who back a winner should almost certainly predict that their candidate will win, a result producing more apparent wish fulfillment. On the other hand, among those who back a loser, the wishful-thinking effect would be reduced (as they come into contact with more supporters of the leader). If, on the other hand, the better educated are more likely than the rest of the public to have segregated contacts, then they will predict that their own candidate will win in either case.

The second step in the expanded model leads us to expect the contact model effects to become attenuated for the more educated. Because the educated access more information, and because they are trained to believe impersonal sources, they are more likely to doubt their conclusions based on personal contacts. Moreover, their information sources tend to be more varied (see, e.g., Graber, 1980, pp. 124–130). Thus, their predictions will follow the low confidence pattern we discussed above and will tend towards one-half. To test these propositions, we reran preference by prediction, controlling for three levels of education (tables available from authors on request). We found that for both national and state-level predictions, the perceived odds of the preferred candidate's winning or winning big went down as education increased. At the same time, more of the better educated predicted that the opponent would win or lose by a smaller margin. Overall, the more educated were more moderate in their predictions.

Last, we note briefly the value of testing this model by looking at voters

at times during which Candidate A was leading and at other times during which Candidate B was leading. (This procedure was possible in principle, for example, in the 1980 Carter-Reagan race. Lest we forget, in the early phases, this appeared to be a close race with *Carter* having a slight lead.) If perceptions of closeness are contact/context driven, then as the lead shifts, so too should the views about the closeness of the race of the supporters for each side (at least, if there is any heterogeneity of contacts) — so that the candidate *now* in the lead should be seen by his own supporters as being more likely to win than before. If wishful thinking is reality-independent, then the set of supporters of each candidate (who may not be the same people as before, as some preferences have shifted) would be as likely to think their candidates will win as the set of supporters for that candidate had previously thought in the period when that candidate was ahead (behind).

WHY DO VOTERS MISPREDICT ELECTION CLOSENESS?

It might seem that in a world of constant election polling, any informed voter should be able to make a rather reliable prediction about the election outcome, especially if one candidate has a large lead in the polls. For a number of reasons, we do not believe that supposition to be true. First, poll data often include a large number of "undecideds," frequently enough to change the outcome if they were to vote lopsidedly for the trailing candidate. Second, voters do lack the advantage of hindsight. At best, polls can reflect preferences at the time of polling. Intervening events (e.g., the unfolding saga of the Iranian hostage crisis) can "turn around" elections. We refer to such events as *exogenous variables*. In 1980, in particular, Reagan's election did not have the certainty that 20–20 hindsight vision now gives it:

> In hindsight, people consistently exaggerate what could have been anticipated in foresight. They not only tend to view what has happened as being inevitable, but also to view it as having appeared "relatively inevitable" before it happened. People believe that others should have been able to anticipate events much better than they actually did. They even misremember their own predictions so as to exaggerate in hindsight what they knew in foresight. (Fischoff et al., 1981, p. 42)

These general reasons that outcomes may be surprising can also provide reasons that those voters who prefer a given candidate should be more likely to think that their candidate will win than nonsupporters of that candidate. First, as proposed above, if expectations are formed by the nature of the information we get from those around us, then a bias in sampling can lead to errors in prediction. This effect is magnified to the

extent that voters are mistrustful of polls and other media sources and are more convinced by what they learn from the persons around them. Second, even if there is no sampling bias, there might be a credibility gap so that information from "hostile" sources would not be given great weight. This is, of course, a cognitive dissonance reduction mechanism (although different from one discussed by Granberg and Brent, 1983). Third, even if we believe that there was no sampling bias or credibility gap, supporters of a candidate can be expected to have different expectations about the intervening events that could change voter preferences. We call this the *exogenous variable effect*.

The *exogenous variable effect* refers to the recognition by voters that various events can change the election outcome. Many of these events are only partially or indirectly under the control of a candidate (hence, *exogenous*). For example, in 1980, there was general agreement at both the elite and the mass levels that safe release of the hostages from Iran would help Carter. Although Carter could — and did — take some actions to secure that event, the release was under the control of Khomeini. Similarly, the unusually large amounts of snow in Chicago preceding the mayoralty election between Michael Bilandic and Jane Byrne could not be affected by either candidate and contributed to Bilandic's defeat.[17] Bilandic aided the snow by his perceived failure to manage the situation effectively, but the situation itself arose exogenously.

The wishful-thinking "effect" can arise from variations across voters in their estimates of the likelihood of such events' arising to favor one candidate or the other. For example, Mondale supporters might have been more likely to expect some economic or military interventionist disaster before the 1984 election — a disaster that would have cost Reagan votes. Reagan supporters would have had a very different *expectation* about the likelihood of such disasters. Such differences are not simply "wishful thinking" about candidates whom one favors doing well. Thus, they are not differences in what voters "hope for." Rather, they reflect fundamental differences in *a priori* expectations about *events* in the world and about the consequences of certain actions. A Reagan supporter in early 1984 may have believed that governmental actions in Central America would produce successes that would gain votes, whereas a Mondale supporter may have believed that the same actions would produce disasters that would cost votes. Thus, each supporter was reinforced in the belief that the supported candidate would do well.

This effect is driven by two characteristics of the world. First, events that will significantly alter an election have some chance of occurring, but they are not certain to occur, nor can a classical probability distribution be

derived for many of them. The universe is difficult to define. Some of the events appear to be unique. In Bayesian terms, one could apply probabilities to them, but such an application depends on the population definition used by each observer, and differences in choice of population will yield differences in probability estimates. Thus, one observer might attempt to predict Khomeini's behavior as an instance of terrorist activity, whereas another might classify it among instances of religious fundamentalism and a third among political reform movements. Second, the other factors that introduce ambiguity and uncertainty into predictions leave room for the possibility that exogenous variables will alter the election outcome. These issues of "concatenated inference" (Schum, 1986) in the formation of electoral expectations are ones that remain to be explored.

We presented in the last section an argument that voters are more confident of their state predictions than of their national predictions from contact information. If so, they would be more open to the "exogenous variable effect" in making national predictions. As a result, national predictions would appear to be more "wish-fulfilling" than state-level predictions. This was, in fact, the case in our data.

CONCLUSIONS

We believe that it is very difficult to approximate voters' perceptions of the closeness of an election outcome or their expectations about the eventual winner by objective measures of actual election returns, especially when these returns are aggregated for a unit as large as a state. We thus conclude that tests of rational actor models of turnout that rely on the post hoc closeness of the actual election as a measure of anticipated closeness are invalid.[18] Further, the disparities between the actual and the perceived closeness are not random but are correlated with voter preference.

Our second principal finding is more positive. We conclude that voters are more rational than the recent wish fulfillment literature has implied. Some of the distortion found by others disappears when one allows for the differential distribution of each candidate's supporters. Some of the rest may reflect the biased information produced by these distributions. Even the discrepancies in expectations among the supporters of different candidates can be accounted for in part by differing probabilities attached to variables exogenous to the election based on differing perceptions of political reality. Although we do not then obtain *homo economicus*, we also do not model voters as Pollyannas struggling to maintain consistency while projecting images of optimistic selves.

Our third major finding is that the contact model appears to be highly

promising as a way of accounting for the formation of expectations. Nonetheless, it still awaits a definitive test with appropriate microlevel network data.

NOTES

1. Foster (1984) reviews virtually all of the studies that relate turnout to electoral competitiveness. For studies using aggregate data, she distinguishes between those studies which rely on the election results as an ex post indicator of "perceived" closeness and those which use ex ante the victory margins in previous races for the same offices as the indicator of expected closeness. The findings are mixed with the ex ante competitiveness indicator more likely to be correlated with turnout than the ex post, but the relationships are still weak overall. Because the relationship between actual election outcomes and anticipated election outcomes is mediated by voter perceptions, there is no reason to expect the ex post indicator to predict turnout even if the rational choice model of turnout were accurate. Moreover, we do not believe the usual rational choice model of turnout (with turnout as a multiplicative function of expected voter pivotalness and degree of voter concern for affecting the outcome) is of much predictive power even if a perfect measure of perceived closeness were used (Grofman, 1983). For example, even if we leave out the question of wish fulfillment, persons often make the decision not to vote a substantial time prior to obtaining information about the election's closeness – information which may change over time. Registration usually occurs well before the actual election. Those who decide not to register may be unable later to decide to vote, while those who have gone to the trouble of registering have already borne a good deal of the "cost" of voting. Thus, if any measure of competitiveness is likely to be useful, it is likely to be an ex ante one – since this can affect voter interest in bothering to register.
2. The survey items customarily used to tap perceived closeness yield a measure which is highly imprecise and "subjective" in its interpretation; if a respondent says that a candidate will win by "quite a bit," does that mean by 3% or by 20%? If the actual margin between candidates was 5%, some respondents may perceive the race as close and others not as close. Of necessity, we have had to use the trichotomous classification as given in the CPS data.
3. We omit the 92 cases who would not predict the closeness of the race and the 48 cases who fail to predict a winner. We also omit the partially overlapping 70 cases who refused to say for whom they would vote and the 27 who named someone other than Reagan, Carter, or Anderson.
4. *None* of the other candidates' supporters thought Anderson would win. Indeed, none of those who didn't know whom they supported thought Anderson would win. Only one non-Anderson supporter, a person who refused to answer the prospective vote question, thought Anderson would win.

5. Those who "do not know" whom they prefer may serve as a reference point. Since they do not have a strong preference, they should be somewhat immune to wish fulfillment.

6. Were the data different than they are—that is, if we had a lopsided national election—then one might be able to test the hypothesis that all voters believe that the race is more competitive than it is. Thus, supporters of the underdog would *overestimate* support for their candidate while those of the leader would *underestimate* it. This asymmetry produces the symmetric effect that everyone believes the race to be closer than it really is. The natural mechanism to account for such a result lies in candidate psychology rather than in voter psychology. The hypothesis makes sense if the candidates behave as if they have read Downs (1957) and attempt to increase turnout among their supporters by portraying themselves as potential winners, but only with each person's vote being essential to their victory margin. Moreover, candidates are well known never to believe themselves assured of victory. No candidate ever believes himself or herself safe enough. On the other hand, candidates are also well known for their ability to be convinced that victory is possible, even in the face of seemingly insuperable odds (Jacobson, 1983, p. 47; cf. John Anderson and Barry Goldwater). Sometimes they are right (cf. nomination of Jimmy Carter and leadership victory of Joe Clark).

7. In particular, this competing hypothesis does not seem to be borne out when we look at data on state-by-state election projections, although the evidence is mixed (see below).

8. Only twenty-one voters for whom we had a defined prediction lived in states where Carter won by more than 10% of the vote. We omit them from this part of the analysis.

9. Small numbers make this difference not quite statistically significant; probability of a difference greater than zero, on a one-tailed test, is about .16.

10. When we introduced controls for interest in the campaign and for education level, we found that the correspondence between prediction and actual election margin was unaffected. We also found that controlling for Anderson's strength made little difference in the results for either Table 4 or Table 5.

11. Consider the columns for Carter and Reagan supporters. The differences in the rows (between the candidate columns) are not statistically significant. On the other hand, many of the differences within columns (between the prediction rows) for predictions about Carter and Reagan are significant. The major exceptions are for national predictions: the Reagan — Close and Reagan — A Lot means do not differ significantly nor, for *Reagan* supporters, does the difference between Carter — Close and Carter — A Lot (due to high variance on the Carter — A Lot prediction).

12. Of course, as we have already noted, we have been forced to approximate the level of preelection support for a candidate by the temporally subsequent election results. As we comment above, we believe this reasonable because (a) we focus on relative strength and (b) we believe that the relative strength of the candidates across states is unlikely to shift much in the late weeks of a campaign.

13. The theory of cognitive dissonance (Festinger, 1957) can be thought of as an extension of Heider. If a citizen supports a candidate, then, to maintain balance, he or she will also want to believe the candidate's statements. Perhaps candidates always seek to project a "winning" image (where winning can be interpreted both literally and metaphorically). If the candidate whom one supports is a more credible source of information than is the opposing candidate, then voters will, in believing "their" candidate, overestimate their candidate's election chances.

14. We consider below the more general issue of selective exposure to information.

15. The parameter q is analogous to the swing ratio in seats-votes.

16. Noelle-Neumann's (1984) notes on German electoral wish fulfillment are consistent with this hypothesis.

17. At least one long-time Chicago voter, however, claimed that if Richard Daley had still been mayor, he could have prevented the blizzards.
18. In this paper, we use the post hoc measures to proxy individual voters' contexts but rely on their ex ante estimates.

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