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Americans' Perceptions of Presidential Candidates: A Test of the Projection Hypothesis

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According to psychological theories of cognitive consistency, voters are likely to overestimate the degree to which political candidates they like agree with their own policy preferences, and to overestimate the degree to which political candidates they oppose disagree with their own policy preferences. This paper reviews and critiques the literature evaluating these hypotheses, referred to as positive and negative projection. Then it reports results of a new empirical investigation that applied improved analytic methods to survey data on three issues collected during the 1984 American presidential election. Analyses using traditional methods replicated previous findings of both positive and negative projection, but improved analyses indicated that neither positive nor negative projection occurred. The vast majority of voters were accurate in their candidate perceptions, especially political experts and citizens to whom an issue was personally important. These findings provide further evidence of the generally high accuracy of social perception, particularly among individuals who are especially attentive to a stimulus.

There is now a large literature in psychology examining the effects of interpersonal expectations on social cognition and social behavior, and recent research has also begun to explore the sources, origins, or determinants of social expectations. This latter work suggests that they are derived in relatively straightforward ways from two types of knowledge: target-based knowledge and category-based knowledge. Target-based expectations about a person are based on that person's past behavior. Category-based expectations about a person are derived

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Asymmetry. Early research on the cognitive consistency theories' predictions found evidence of a possible asymmetry in the effects of sentiment toward others. Laboratory and field studies of agreement and attraction revealed that although people clearly prefer to agree rather than disagree with others they like, they are not as motivated to disagree with others they dislike (for a review, see Kinder, 1978). Newcomb (1953, 1968) argued that this occurs because people disengage from others they dislike, and are therefore less aware of and less bothered by cognitive inconsistencies involving attitudes toward and perceptions of these individuals. This is the theoretical justification for the asymmetry hypothesis, which states that positive projection onto liked targets will be stronger and more common than negative projection onto disliked targets.

Application to Political Candidate Perception

The notion of projection is especially compelling when considered in the context of political candidate perception, particularly of candidates running for president. Once in office, the most significant actions a president takes are to formulate new legislation and to press for its passage in Congress. A president's decisions about which policies to champion and which to forgo are believed to have tremendous impact on the workings of government during and immediately after his tenure in office (Neustadt, 1960). Furthermore, public expectations about which policies a candidate is likely to pursue once in office are thought to be important determinants of voting behavior in elections (Krosnick, 1988a), and might therefore be sources of self-fulfilling prophecies and confirmatory biases in judgment. The topic of political candidate perception is therefore a sensible focus for an investigation of self-based interpersonal expectancies.

Election analysts have asserted that candidates have incentives to be ambiguous on policy issues and that they win more votes through vagueness than they do by taking clear stands (Bartels, 1988; Downs, 1957; Page, 1976, 1978; Shepsle, 1972). Indeed, ambiguity is the norm in political campaigns, because candidates rarely state their positions on issues (Arterton, 1984; Patterson & McClure, 1976). Candidates frequently endorse the "end states" they find desirable, such as peace and prosperity, but they rarely describe the policy *means* by which they would achieve those end states (McGinniss, 1969).

Voters who wish to evaluate candidates on the basis of their stands on policy issues are therefore likely to be frustrated if they search for direct information about candidates, so these individuals must carry out some sort of inference process. Consequently, projection may play an important role in determining citizens' expectations regarding presidential candidates' policy-related behavior. According to the projection hypothesis, a citizen would expect candidates he or she likes to pursue policies he or she favors, and to shun policies that he or she opposes. By the same token, a citizen would presumably expect candidates he or she dislikes to pursue policies he or she opposes and to shun policies that he or she favors.

Previous Tests of the Projection Hypothesis

Past studies of projection fall into two groups. Most have used cross-sectional data to examine the relation between sentiment toward a candidate and agreement between a voter's issue position and his or her perception of the candidate's position. In some investigations, agreement was assessed by computing the difference between a voter's self-placement on an attitude dimension and his or her placement of a candidate on that dimension (Berelson, Lazarsfeld, & McPhee, 1954; Brent & Granberg, 1982; Shaffer, 1981; Sherrod, 1972). Other studies computed measures of linear association between voters' own policy attitudes and their perceptions of a candidate's position (Conover & Feldman, 1982; Enelow & Hinich, 1985; Granberg, 1985; Granberg & Brent, 1974, 1980; Granberg & Jenks, 1977; Granberg, Kasmer, & Nanneman, 1988; Granberg & Seidel, 1976; Kinder, 1978; King, 1977-78; Page & Brody, 1972; Shaffer, 1981). These studies consistently found strong positive associations between respondents' own positions and their perceptions of liked candidates' positions, a result that has been viewed as supportive of the positive projection hypothesis. These studies also discovered negative correlations between voters' attitudes and their perceptions of disliked candidates' attitudes. These negative correlations were smaller in absolute value than the positive correlations found in perceptions of liked candidates, thus supporting the asymmetry hypothesis.

It is now recognized that the analytic method used in these studies is problematic, because many psychological processes other than projection could have produced the observed correlations. Specifically, Judd, Kenny, and Krosnick (1983) outlined three such processes. First, perspective effects (e.g., Judd & DePaulo, 1979; Ostrom & Upshaw, 1968) occur when different respondents attach different meanings to the end points of attitude rating scales. In the present case, perspective effects are likely to induce positively correlated measurement error between voters' reports of their own policy attitudes and their perceptions of candidates' policy attitudes. Thus, the positive correlation between voters' attitudes and their perceptions of liked candidates could actually reflect perspective effects rather than projection.

Second, cognitive inconsistencies involving candidate perceptions can be resolved by similarity-based evaluation or persuasion (as described above), in addition to projection. Either of these processes would induce a positive correlation between voters' reports of their own policy attitudes and their perceptions of liked candidates' policy attitudes. These processes would also induce a negative

correlation between voters' reports of their own policy attitudes and their perceptions of disliked candidates' policy attitudes. Thus, the observed correlations might be the result of similarity-based evaluation and/or persuasion.

Third, the observed correlations could be induced by variations in candidates' statements of their own policy positions. There is a fair amount of evidence that candidates fine-tune their statements of their policy attitudes to match their audiences' proclivities (Graber, 1976, p. 181; Miller & Sigelman, 1978; Mueller, 1969, p. 189; Page, 1978, pp. 143–149; Williams, 1980). If even a small proportion of voters' perceptions of candidates reflect this variation, it would induce a positive correlation between voters' policy attitudes and their perceptions of candidates' policy attitudes. Thus, the positive correlation usually attributed to positive projection may actually reflect variation in candidates' behavior.

Krosnick (1988b) identified a fourth problem with traditional studies of projection. Measures of linear association between voters' policy attitudes and their perceptions of candidates' policy attitudes are well suited to testing the positive projection hypothesis. This hypothesis asserts that the farther away a voter's attitude is from a liked candidate's, the more that voter should need to misperceive the candidate's attitude in order to resolve the cognitive inconsistency. However, the negative projection hypothesis suggests a nonlinear relation between these two variables. Specifically, the closer a voter's attitude is to a disliked candidate's, the more inconsistency the voter should experience, and the more he or she should need to misperceive the candidate's attitude to achieve consistency. Voters who disagree substantially with disliked candidates should have no need to misperceive them. This implies that a negative linear association between voters' policy attitudes and their perceptions of disliked candidates' attitudes does not precisely assess negative projection. Instead, a nonlinear, cubic relation would be predicted and must be assessed. Failure to test negative projection appropriately may have led past studies to underestimate negative projection, thus enhancing the likelihood of finding asymmetry.

Studies That Attempted to Overcome These Problems

One step toward overcoming these problems would be to analyze panel data. If a group of respondents are interviewed on two occasions (time t and time $t + 1$), it is possible to assess whether changes in perceptions of a candidate's policy attitude from time t to time $t + 1$ can be predicted by voters' policy attitudes at time t and voters' sentiment toward the candidate at time t. In any longitudinal analysis, it is possible to estimate causal effects more precisely while ruling out alternative explanations (see Kessler & Greenberg, 1981). In the present case, the lagged effect of voters' attitudes on candidate perceptions would be unaffected by perspective effects, persuasion, similarity-based evaluation, and variations in candidate attitude statements (for details on the reasoning involved, see Krosnick, 1988b). Therefore, this lagged effect can be interpreted as evidence of projection with greater confidence than cross-sectional correlations permit.

A number of previous studies used panel data to assess changes in candidate perceptions over time (Feldman & Conover, 1983; Granberg & King, 1980; Markus, 1982; Markus & Converse, 1979; Swindel & Miller, 1986), but the analytic methods used in these studies all involved significant misspecifications (for details see Krosnick, 1988b). Most importantly, none recognized that the negative projection hypothesis predicts a nonlinear relation between voters' own policy attitudes and their perceptions of disliked candidates' policy attitudes. Therefore, this evidence cannot be considered conclusive regarding the projection or asymmetry hypotheses.

The Present Investigation

This paper offers new evidence assessing the strength of projection effects. Using data collected just before and after a recent American presidential election, it first assesses the accuracy of citizens' perceptions of candidates' stands on policy issues. It then uses the traditional (misleading) analytic approach to assess positive and negative projection. Finally, it reports the results of a new analytic method that overcomes the problems inherent in the traditional method. The new method uses longitudinal data to overcome perspective effects, persuasion, similarity-based evaluation, and variation in candidate attitude statements. It also tests for negative projection by assessing the nonlinear association predicted by the hypothesis.

All of these analyses assess whether accuracy and projection vary depending upon a citizen's level of political knowledge, and the amount of personal importance the citizen attaches to his or her attitude on an issue. The likely relation between knowledge and accuracy seems clear: politically knowledgeable individuals should presumably be more accurate in their perceptions than less well-informed individuals because the former group are exposed to more information about candidates. For the same reason, politically knowledgeable individuals would be expected to reveal weaker projection effects.

The likely relation of attitude importance to accuracy and projection is less clear. On one hand, cognitive consistency theories clearly assert that projection is more likely to occur among people for whom an attitude is important. Therefore, if projection occurs, it may lead to lowered levels of accuracy among these individuals. On the other hand, people for whom an attitude is important would seem especially likely to attend carefully to issue-relevant information. These individuals may therefore be more accurate in their perceptions if projection does not occur.

Data

In 1984, the Center for Political Studies at the University of Michigan conducted interviews with a representative national probability sample of nearly 2000 American adults. Most of these individuals were interviewed on two occasions, before and after the 1984 American presidential election, and the analyses reported below are confined to only these panel respondents. The preelection interviews took place between September 4 and November 5, and the postelection interviews were conducted between November 7 and January 14. The length of time between respondents' preelection and postelection interviews ranged from 9 to 124 days, averaging 47 days with a standard deviation of 18 days.

During both the preelection and postelection interviews, respondents were asked about their attitudes on a number of government policy issues, and where they perceived Ronald Reagan and Walter Mondale to stand on those issues. For three of these issues, respondents were also asked how important they considered the issue to be to them personally. Because the analyses reported below required these measures of attitude importance, only three issues were examined: whether or not government spending on social welfare programs should be cut, whether U.S. involvement in Central America should be increased or decreased, and whether the federal government should guarantee all Americans a job and a good standard of living.

Respondents reported their own attitudes on these issues and their candidate perceptions on identical 7-point scales. For example, the Central America question asked,

> Some people think that the United States should become much more involved in the internal affairs of Central American countries. Suppose these people are at one end of a seven point scale, at point number 1. Others believe that the U.S. should become much less involved in this area. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven't you thought much about this?

Respondents who placed themselves on the scale were then asked to place Reagan and Mondale on the scale as well. Point number 7 on these scales represented the liberal position on government spending and Central America, and the conservative position on guaranteed jobs.

Attitude importance was measured with the following type of question:

> How important is it to you that the federal government do what you think is best on this issue of involvement in Central American countries? Is it extremely important, very important, somewhat important, or not important at all to you?

Identical procedures measuring attitudes, candidate perceptions, and attitude importance were used during both the preelection and postelection interviews.

Early in the preelection interviews, respondents were asked about their sentiment toward Reagan and Mondale. Specifically, they reported how favorable or unfavorable they felt toward each candidate by selecting a number on a "feeling thermometer" ranging from 0 to 100, where 0 meant a very unfavorable rating and 100 meant a very favorable rating. During the postelection interview, political knowledge was assessed by asking respondents which party controlled the U.S. House of Representatives and the Senate before and after the election. Each respondent was assigned a knowledge score based on the proportion of these four questions that he or she answered correctly.

As computed in this fashion, political knowledge was essentially uncorrelated with the personal importance respondents attached to the government spending issue ($r = .11$, $N = 1630$, $p < .01$), the Central America issue ($r = .11$, $N = 1473$, $p < .01$), and the guaranteed jobs issue ($r = .004$, $N = 1652$, ns). Therefore, any effects of attitude importance and political knowledge found below are orthogonal to one another.

Results

Accuracy

Before gauging the extent of projection in candidate perceptions, it seems appropriate to assess the accuracy of these perceptions. In the context of candidate perception, accuracy is a bit difficult to assess formally, because there are no clear and agreed-upon criteria for determining where a given candidate stands on a particular issue. One might imagine that the appropriate criterion would be the candidate's statements of his or her stand on the issue. However, careful reading of candidates' campaign speeches rarely reveals clear and direct statements of their issue positions. Thus, this approach seems untenable.

Given the lack of a suitable criterion, it seems appropriate to take a relatively less formal approach to assessing accuracy of perceptions. First, we can explore whether Democratic candidates are perceived as being on the liberal side of a policy issue, and whether Republican candidates are perceived to be on the conservative side of the issue, as is typically the case. In terms of the national sample's average perception of Reagan and Mondale in 1984, this relatively relaxed criterion was met in every case. Reagan was perceived as being on the conservative side of the government spending issue ($M = 2.80$ and 3.15 at preelection and postelection, respectively, $N = 710$), the Central America issue ($M = 2.72$ and 2.94, respectively, $N = 648$), and the guaranteed jobs issue ($M = 5.07$ and 5.10, respectively, $N = 721$). And Mondale was perceived as being on the liberal side of the government spending issue ($M = 5.09$ and 5.23 at preelection and postelection, respectively, $N = 649$), the Central America issue ($M = 4.42$ and 4.59, respectively, $N = 536$), and the guaranteed jobs issue ($M = 3.18$ and 3.10, respectively, $N = 664$).

Underlying this high level of accuracy in average perceptions, however, was a fair amount of variability in voters' perceptions of candidate stands. In

general, most respondents did place each candidate on the "correct" side of the scale midpoint (the mean was 66%, and the range was from 49% to 77% for different candidates and issues). A substantial additional group of respondents placed each candidate at the midpoint of the dimension (M = 18%; range = 9% to 28%)—an ascription that hardly seems unfounded given the rarity of clear statements from candidates regarding their stands on issues. However, nontrivial portions of respondents did place each candidate on the wrong side of the scale midpoint. This proportion averaged 16% and ranged from 9% for Mondale on government spending during the postelection interview to 27% for Mondale on Central America during the preelection interview. These figures were generally similar for Mondale and Reagan, with the exception of Central America; on this relatively unfamiliar issue, Reagan was apparently more accurately perceived than Mondale. For both candidates, these inaccuracy figures were higher for Central America (M = 20%) than for the other two issues (M = 13% for government spending, 14% for guaranteed jobs), suggesting that voters were better informed about candidate stands on domestic economic issues than on this foreign policy issue. Some respondents who stated their own opinions on an issue nonetheless said that they were not certain where a given candidate stood. Such statements were 2–3 times more common regarding Mondale (10%–15% of respondents) than regarding Reagan (about 5% of respondents). Given typically high levels of candidate ambiguity, these responses are not necessarily indicative of inaccuracy in perceptions and are therefore not a focus of discussion here.

One of the reasons that voters may disagree with one another about where a candidate stands is perspective effects (Ostrom & Upshaw, 1968). That is, different respondents may define the meanings of the scale points differently, which would lead them to rate an identically perceived stimulus at different points on the scale. One particularly problematic possibility in the present context is that not all respondents may have viewed the midpoint of the 7-point scale as indicating a neutral attitude. This inherent limitation in the rating scales can be overcome by examining voters' comparative placements of the two candidates. Rather than defining accuracy in terms of absolute placements of the candidates relative to the scale midpoints, we can examine whether voters recognized that Reagan was more conservative than Mondale on each issue.

Using this criterion, the sample's candidate perceptions appeared to be quite accurate. Between 69% and 82% of respondents correctly perceived Reagan to be more conservative than Mondale on each issue, and between 7% and 18% of respondents saw the candidates as taking identical stands on each issue, again perhaps an accurate perception. Thus, between 9% and 17% were clearly inaccurate on each issue, which suggests a high level of accuracy for the sample as a whole. Also, the relative placements indicated slightly greater accuracy on the domestic policy issues (approximately 11% of respondents were inaccurate on average) than on the foreign policy issue (approximately 16% inaccurate).

The upper portion of Table 1 displays perceptual accuracy levels (in terms of the relative placement of the two candidates) at four levels of political knowledge. As expected, there was a substantial positive effect of knowledge on accuracy. In the lower portion of Table 1, levels of accuracy are displayed at four levels of issue importance. Here again, higher levels of importance were associated with higher levels of accuracy. Thus, accuracy is apparently enhanced by greater attention to political affairs in general and greater attention to issue-specific information in particular.

The evidence reviewed thus far indicates that voters' perceptions of candidates' issue stands are generally fairly accurate. Nonetheless, there is considerable variability in these perceptions. Thus, there is room in these data for projection effects. Furthermore, the results so far suggest that projection effects may be more powerful among voters who are low in political knowledge and who do not consider an issue to be personally important, thus leading to lower levels of accuracy in these groups. However, it is important to acknowledge that projection could coincidentally produce accuracy, even though it is motivated by desires to maintain cognitive consistency, and is not based on accurate percep-

Table 1. Percentages of Respondents Perceiving Reagan as More Conservative than Mondale (Wave 1 Only)

	Political knowledge			
Issue	Highest	High	Low	Lowest
Government spending	92.5 (358)	79.4 (588)	72.8 (239)	66.7 (285)
Central America	83.1 (314)	67.8 (494)	65.5 (203)	62.8 (234)
Guaranteed job	86.6 (350)	65.6 (577)	50.2 (241)	51.5 (296)
	Attitude importance			
Issue	Highest	High	Low	Lowest
Government spending	80.8 (407)	79.6 (662)	73.5 (539)	58.8 (34)
Central America	75.8 (269)	73.0 (474)	65.5 (563)	60.0 (80)
Guaranteed job	74.2 (333)	69.5 (659)	66.8 (591)	64.7 (68)

Note. The numbers in parentheses indicate the number of cases on which each percentage is based.

tion or integration of information directly revealing candidates' issue stands. That is, a voter whose candidate perceptions are purely based on projection could happen to end up with accurate perceptions. Thus, the relatively high levels of accuracy documented thus far do not necessarily place a ceiling on the size of projection effects we can expect to observe below. Furthermore, projection could conceivably be stronger among politically knowledgeable individuals than among less well-informed ones, and it could be stronger among people who consider an issue important than among those who do not.

Traditional Analysis of Projection

To explore the presence of projection in these data, the traditional analytic method used in most past studies of candidate perception was implemented first. This involves computing OLS regressions separately for respondents at different levels of sentiment toward a candidate. In these regressions, voters' perceptions of a candidate's attitude on an issue are predicted using voters' own attitudes on that issue. Traditionally, positive regression coefficients have been viewed as indicating positive projection, whereas negative coefficients have been viewed as indicating negative projection.

The results of this sort of analysis, done using the preelection data only, are displayed in Table 2. When the same analyses were repeated using the postelection data only, comparable results were obtained. Unstandardized regression coefficients were examined in these analyses because standardized regression coefficients or correlations confound between-group differences in the magnitude of associations with between-group differences in the variances of the individual variables (Duncan, 1975).

It is clear that the figures in Table 2 conform closely to theoretical expectations and to previous findings. Among respondents who liked a candidate a great deal, there were large positive coefficients, which have been interpreted as indicating substantial positive projection. And among voters who disliked a candidate the most, there were large negative coefficients, which have been viewed as showing substantial negative projection. In three cases, the lowest liking group's coefficient was equivalent to the highest liking group's, but in the other three cases, the lowest liking group's coefficient was notably weaker than the highest liking group's. Thus, these results are consistent with previous ones that have been viewed as supporting the asymmetry hypothesis. In the lowest sentiment group, these associations were somewhat stronger for Mondale than for Reagan, and somewhat stronger for the Central America issue than for the other two issues, on which respondents had more accurate candidate perceptions. However, these patterns did not appear among the other sentiment groups.

Table 3 displays the results of analyses assessing whether these associations varied according to political knowledge. Here, the regression coefficients for the

Table 2. Unstandardized Regression Coefficients from Traditional Cross-Sectional Projection Analysis (Wave 1 Only)

Issue	Liking for Candidate			
	Highest	High	Low	Lowest
Government spending				
Reagan	.42**	.09*	−.26**	−.26**
	(641)	(532)	(369)	(238)
Mondale	.43**	−.04	.24**	−.41**
	(383)	(527)	(550)	(200)
Central America				
Reagan	.37**	.08	−.13*	.39**
	(564)	(479)	(345)	(223)
Mondale	.40**	.03	−.21**	.39**
	(341)	(433)	(463)	(162)
Guaranteed job				
Reagan	.51**	.26**	.08	.08
	(631)	(534)	(378)	(240)
Mondale	.47**	.09**	−.12**	.33**
	(398)	(530)	(546)	(192)

Note. The numbers in parentheses indicate the number of cases on which each coefficient is based.
*$p < .05$
**$p < .01$

Table 3. Unstandardized Regression Coefficients from Traditional Cross-Sectional Projection Analysis for High and Low Knowledge Groups (Wave 1 Only)

Issue	Highest liking		Lowest liking	
	Highest knowledge	Lowest knowledge	Highest knowledge	Lowest knowledge
Government spending				
Reagan	.28**	.58**	.03	−.25
	(158)	(94)	(55)	(35)
Mondale	.25*	.54**	−.25*	−.63**
	(64)	(72)	(64)	(32)
Central America				
Reagan	.33**	.33**	−.15	−.62**
	(141)	(79)	(55)	(34)
Mondale	.41**	.46**	−.44**	−.40**
	(63)	(53)	(58)	(25)
Guaranteed job				
Reagan	.49**	.41**	−.05	−.07
	(160)	(95)	(55)	(36)
Mondale	.30**	.51**	.30*	−.49**
	(68)	(74)	(66)	(28)

Note. The numbers in parentheses indicate the number of cases on which each coefficient is based.
*$p < .05$
**$p < .01$

highest and lowest liking groups are displayed for respondents in the highest and lowest knowledge groups. This evidence would be viewed by traditional analysts as indicating that projection was more common among political novices than among more knowledgeable individuals. In 9 of the 12 comparisons, the novices' coefficient is stronger (i.e., more extremely positive or negative), and sometimes substantially so. Thus, lower levels of accuracy among political novices might seem to coexist with (and perhaps result from) greater associations that might indicate stronger positive and negative projection.

Table 4 displays the comparable figures for attitude importance, but the story here is quite different. The high importance group's coefficient was stronger (again, more extremely positive or negative) than the low importance group's in only 5 of the 12 cases, and most of these differences were small. Furthermore, in several other cases, the low-importance group had a considerably stronger coefficient than the high-importance group. This evidence would therefore be viewed by traditionalists as suggesting that the amount of projection is unrelated to issue importance. This is a troubling finding, given the strong theoretical basis for expecting importance to regulate the magnitude of projection. Therefore, what may appear to be projection effects here may not in fact be so.

Table 4. Unstandardized Regression Coefficients from Traditional Cross-Sectional Projection Analysis for High and Low Importance Groups (Wave 1 Only)

	Highest liking		Lowest liking	
Issue	Highest importance	Lowest importance	Highest importance	Lowest importance
Government spending				
Reagan	.33**	.34**	− .14	.33
	(157)	(231)	(91)	(42)
Mondale	.38**	.47**	.42**	.46**
	(125)	(99)	(65)	(59)
Central America				
Reagan	.31**	.36**	− .27**	.60**
	(109)	(262)	(68)	(81)
Mondale	.39**	.27**	.39**	.23
	(86)	(143)	(39)	(63)
Guaranteed job				
Reagan	.55**	.42**	− .07	.00
	(101)	(269)	(92)	(58)
Mondale	.41**	.41**	.40**	.38**
	(120)	(111)	(35)	(72)

Note. The numbers in parentheses indicate the number of cases on which each coefficient is based.
*$p < .05$
**$p < .01$

Longitudinal Linear Analysis of Projection

As explained above, the traditional analytic method used to produce the figures in Tables 2–4 is flawed because it confounds many other psychological processes with projection. Consequently, it is impossible to be certain that the patterns apparent in those tables can be attributed to projection. Fortunately, though, problems inherent in that method can be overcome by conducting longitudinal regressions predicting changes in candidate perceptions. Voters' perceptions of a candidate's stand measured during the postelection interview can be regressed on voters' perceptions of the candidate's stand measured during the preelection interview and on voters' own stands measured during the preelection interview. Again taking the traditional approach, a positive regression coefficient for voters' own attitudes would be viewed as indicating positive projection, and a negative coefficient would be viewed as indicating negative projection.

When this method was used to estimate projection effects, the picture changed dramatically. The relevant regression coefficients, displayed in Table 5, reveal no evidence consistent with positive projection at all. Of the 12 coefficients for the two highest liking groups, 2 were significantly negative, 1 was marginally significantly positive, and none was significantly positive, despite

Table 5. Unstandardized Regression Coefficients from Linear Longitudinal Projection Analysis

	Liking for Candidate			
Issue	Highest	High	Low	Lowest
Government spending				
Reagan	.08	.12*	.11	.02
	(266)	(214)	(143)	(86)
Mondale	− .03	.03	.10*	.21*
	(143)	(207)	(210)	(89)
Central America				
Reagan	.05	.09	.10	.06
	(227)	(197)	(138)	(85)
Mondale	.11	− .11*	− .12*	− .24*
	(121)	(179)	(169)	(65)
Guaranteed job				
Reagan	.01	.02	.00	− .09
	(269)	(218)	(147)	(87)
Mondale	.09	.10*	.13*	.29**
	(149)	(220)	(202)	(91)

Note. The numbers in parentheses indicate the number of cases on which each coefficient is based.
*$p < .10$
**$p < .05$
***$p < .01$

large sample sizes. In contrast, there appears to be evidence consistent with negative projection effects here. Of the 12 coefficients for the two lowest liking groups, 3 were marginally significantly negative, 3 were significantly negative, and none was significantly positive. Thus, a new sort of asymmetry seems to appear here: negative projection but no positive projection. Furthermore, the negative projection effects appear to be substantial in perceptions of Mondale, and invisible in perceptions of Reagan, a result consistent with the claim that Mondale was less well-known among voters. When these regression equations were estimated at various levels of political knowledge and issue importance, there was again no evidence that importance regulated the magnitude of the associations (results not shown). However, the association that apparently indicated negative projection in perceptions of Mondale was greater among less knowledgeable respondents.

Longitudinal Nonlinear Analysis of Negative Projection

Although the longitudinal regression method used above overcomes nearly all of the problems inherent in traditional analytic methods, there is still one remaining problem. As explained earlier, although linear regression does accurately represent the positive projection hypothesis, it does not accurately represent the negative projection hypothesis. Instead of proposing that the largest negative projection effects should appear among voters whose attitudes are most similar to the candidate's true attitude, linear measures of association propose greater negative projection among voters whose attitudes are most different from the candidate's. Therefore, it is clearly inappropriate to interpret the negative coefficients in Table 5 as supporting the negative projection hypothesis.

In order to test that hypothesis more adequately, the regressions among voters who disliked each candidate were recomputed after recoding the variable representing voters' own attitudes. The recoding turned this variable into contrast weights capturing the amount of misperception expected among various groups of respondents. In order to calculate these contrast weights, it was necessary to decide what each candidate's true attitude was on each issue. As described above, the full sample's average perceptions of Reagan placed him about one point off the scale midpoint in the conservative direction on each issue. Similarly, on average, the full sample perceived Mondale to be about one point off the scale midpoint in the liberal direction on each issue. These were therefore assumed to be the candidates' true attitudes, an assumption that many other investigators facing this task have made (e.g., Markus, 1982; Markus & Converse, 1979; Page, 1978).

Given this assumption, contrast weights were generated for voters who disliked each candidate and whose own attitudes fell at each point along the attitude scale. These weights were specified separately for each attitude as follows (see Fig. 1). Respondents to the right of Reagan (on the scale in Fig. 1) would be expected to displace their perceptions of his attitude to the left, so their contrast weights have negative signs. Respondents to the left of Reagan would be expected to displace perceptions of his attitude to the right, so their weights have positive signs. Among voters who disliked Reagan, those whose attitudes were more similar to Reagan's true attitude would presumably feel more discomfort from near agreement than voters who disagreed with him more. Consequently, we could expect greater displacement among voters whose attitudes were closer to Reagan's true attitude. The magnitudes of the weights were set to reflect this hypothesis; the closer a respondent is to Reagan's true attitude, the larger his or her weight is. Among voters who exactly share Reagan's presumed attitude on the issue, negative projection could occur by displacing him in *either* the liberal or the conservative direction. Because we cannot predict in which direction these individuals would displace Reagan's attitude, they were dropped from the analysis. As an illustration, the weights for perceptions of Reagan on the government spending scale are shown in Fig. 1. Given this specification of weights, a *positive* association between the new contrast weight variable and placements of Reagan would indicate negative projection.

When the new contrast weight variable was substituted in the previous regression analyses, the coefficients shown in Table 6 were produced. As compared to the results in Table 5, these figures indicated hardly any negative projection at all. Only 3 of the 12 coefficients were positive, and only 1 of them was even marginally significant. Eight of the coefficients were negative, 2 being statistically significant. Thus, the balance of the evidence here is clearly against the negative projection hypothesis. When these regressions were computed separately for high- and low-knowledge and high- and low-importance respondents, there was no indication of reliable contrast effects in any subgroups (results not shown). And when all of these negative projection analyses were repeated using a variety of other plausible values for the candidates' true attitudes, the results

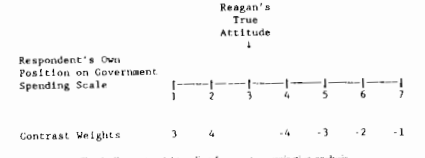

Fig. 1. Contrast weight coding for negative projection analysis.

Table 6. Unstandardized Regression Coefficients from Longitudinal Projection Analysis Using New Nonlinear Method

Issue	Liking	
	Low	Lowest
Government spending		
Reagan	.09**	−.04
	(176)	(212)
Mondale	.01	.04
	(161)	(112)
Central America		
Reagan	.07	−.02
	(174)	(194)
Mondale	.02	.11**
	(148)	(102)
Guaranteed job		
Reagan	−.02	.00
	(167)	(222)
Mondale	.06*	−.06
	(190)	(128)

Note: The numbers in parentheses indicate the number of cases on which each coefficient is based.
*$p < .10$
**$p < .01$

continued to support the same conclusion: no negative projection. It therefore seems most prudent to interpret these results as revealing that the findings in Table 5 appearing possibly to be negative projection effects are results of psychological processes other than negative projection. Analyses using the most appropriate methods reveal no evidence of either positive projection or negative projection.

Discussion

These findings paint a different portrait of American citizens than the existing literature on candidate perceptions would suggest. First and foremost, it appears that voters are fairly accurate in their perceptions of where presidential candidates stand relative to one another on controversial policy issues. Immediately before and after the 1984 presidential election, only a small portion of Americans perceived Mondale to be more conservative than Reagan on the three issues examined here. This result is inconsistent with the usual claims that the vast majority of citizens are only minimally informed about political affairs and that voters' perceptions are largely distorted by motivational forces.

This contradiction is further reinforced by the assessments of positive and negative projection reported here. Although analyses using traditional methods

replicated the usual finding, which is normally interpreted as showing strong positive projection and slightly weaker negative projection, more appropriate analyses revealed no evidence of projection. Reinforcing this conclusion as well is the finding here that, when the (almost certainly misleading) longitudinal analyses using *linear* measures of association suggested negative projection effects had occurred, the strength of these effects did not vary with attitude importance. Given the strong theoretical basis for expecting projection effects to vary with importance, this suggests that what appeared to be negative projection in those analyses probably was due to other influences.

It is important to acknowledge that the present data cannot be viewed as completely ruling out the possibility of projection in 1984. The first wave of the panel data analyzed here was collected only just before the election. It is therefore possible that projection occurred during the earlier part of the presidential campaign, prior to the respondents' preelection interviews. This could explain the results in Tables 2–4 that appear to be consistent with the projection hypothesis.

However, it seems more likely that these results are instead the product of other psychological processes. In addition to projection, cognitive inconsistencies involving perceptions of a political candidate can be resolved either by changing one's sentiment toward the candidate or by changing one's own attitude toward the policy (as described earlier). Krosnick (1988a) recently documented powerful similarity-based evaluation of political candidates, and numerous studies have documented persuasion by politicians (Abramowitz, 1978; Page & Shapiro, 1984; Shaffer, 1981; Shapiro & Page, 1988). These processes therefore seem likely to explain the illusory appearance of projection effects in traditional analyses.

Only future studies using longitudinal data and appropriate analytic techniques can effectively test these assertions. But in the meantime, the present findings make it clear that cross-sectional findings and longitudinal findings regarding projection do not always correspond, and that future research should attempt to explain this inconsistency. Research should make use of long-term panels that involve data collection beginning early in a political campaign. And when assessing projection effects, this research should use methods that appropriately test cognitive consistency theories' predictions, such as the method used here.

The present results validate the general assertion that subgroups of the population often differ from one another in terms of their political attitudes and beliefs. In particular, although accuracy levels were generally high for the entire sample analyzed here, they were higher for politically knowledgeable individuals and ones for whom a particular issue was personally important. Thus, it appears that greater attention to the flow of political information and the flow of issue-specific information increases the accuracy of voters' candidate perceptions.

These findings can be added to the growing list of correlates of attitude importance (see Krosnick, 1990a) and political expertise (see Krosnick, 1990b).

The present findings contribute also to two growing bodies of research in social psychology. First, they augment the evidence supporting the general accuracy of social perception in everyday life (Funder, 1987; Jussim, 1989; Kenny & Albright, 1987; though see Kruglanski, 1989). Second, the most important finding of this paper, the failure of the projection hypothesis, advances understanding of social perception in general—although by telling what does not occur instead of what does occur. Thus, instead of providing evidence for a new process through which expectancies are formed, the present findings discredit a process that heretofore has been assumed to operate. From a general perspective, this evidence should encourage expectancy researchers to explore more thoroughly the processes through which expectancies are formed and, specifically, the impact of the self on expectations regarding others.

This finding should certainly not be viewed as indicating that projection never occurs in social perception. The theoretical justification for the projection hypothesis is quite compelling and certainly justifies keeping open the possibility that projection may occur in other contexts. Furthermore, the present results do not constitute grounds for asserting that projection never occurs in political perception. However, these results do suggest that most past investigations of projection in candidate perception used analytic methods that led to the illusory appearance of projection effects. And at least with regard to three important issues in the 1984 American presidential election, projection appears not to have occurred. Nonetheless, given the strong theoretical justification for the hypothesis, it seems appropriate for investigators to use improved analytic methods to continue the search for projection effects in candidate perception and in other sorts of perception as well. However, until this search succeeds, the present results cast significant doubt on the hypothesis in the case of political candidate perception.

Political Implications

The present findings have interesting normative implications regarding the operation of democratic governments. According to democratic theorists, elected representatives in democracies obey the policy wishes of their constituents, so the wisdom of government action depends upon how well informed the electorate is. Voting for elected representatives is one of the most important means by which constituents' policy wishes are communicated to government, and citizens' vote choices are presumably based partly on their expectations about what each candidate will do once elected. If these expectations are largely accurate, that bodes well for the operation of democracy, for then the policies implemented by a government will be the ones preferred by its citizens. But if these expectations are highly inaccurate because of motivational forces to maintain cognitive consistency in voters' minds, democratic governments may find themselves frequently implementing policies that the public opposes. As a result, public support for the government may slowly fade over time.

The accuracy of citizens' perceptions of candidates also has implications regarding a government's effectiveness at solving important national problems. If citizens are generally uninformed and misguided about how social problems can best be addressed, public opinion might often endorse foolish policies and thus interfere with government's ability to solve important social problems. It might therefore seem reasonable for political elites to argue that they know best what policies government should implement. These individuals might claim that public opinion should not constrain government policymaking, or they might assert that sizable and costly public education campaigns should be implemented to improve the public's political wisdom.

In light of these issues, the evidence reported here that candidate perceptions are generally accurate is reassuring. Given this finding, it seems less likely that the legitimacy of the American government will be eroded by public frustration with policymaking outcomes that do not correspond to citizens' desires. Even though voters are generally well informed about candidates, policymaking may still go astray from the public's wishes, but that trajectory cannot be attributed primarily to voters' ignorance about candidates. Furthermore, the present evidence does not provide any basis for claiming that the American public is in need of massive political education nor of politicians who govern without regard for public sentiment.

It is important to recognize that accuracy rates are noticeably lower among some individuals. This might be troubling to democratic theorists, who might believe that the integrity of democracy is threatened by an uninformed electorate. However, the present data suggest that the individuals with the lowest accuracy levels are people low in political knowledge generally, or ones who feel that the issue in question is unimportant to them. These individuals are the least likely to attempt to influence government or to use their candidate perceptions in deciding how to vote in elections (see Krosnick, 1990a, 1990b). Therefore, the relatively lower accuracy levels among these citizens are not likely to have significant adverse effects on the American government's ability to solve significant social problems efficiently.

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