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The Origins and Impact of Votes for Third-Party Candidates: A Case Study of the 1998 Minnesota Gubernatorial Election

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We estimate a multinomial probit model of vote choice and turnout to examine the 1998 Minnesota gubernatorial election. Like supporters of recent third-party presidential candidates, voters who elected Jesse Ventura tended to be young, male, lower in education, liberal on social issues, and fiscally conservative. Ventura support was not due to a general dissatisfaction with U.S. government, but it was correlated with voter dissatisfaction with Minnesota state government. Ventura was the Condorcet winner in the election; Hubert H. Humphrey was the Condorcet loser. With Ventura out of the race, Norm Coleman would have beaten Humphrey by approximately ten percentage points. Coleman voters overwhelmingly preferred Ventura to Humphrey, but Humphrey voters preferred Ventura to Coleman by a slim margin. Ventura's candidacy added seven percentage points to the turnout rate. Under full turnout, the vote shares of the candidates would not have changed significantly.

Strong third-party candidacies are becoming commonplace in U.S. national elections, particularly at the presidential level. In four of the eight presidential elections between 1968 and 1996, a third-party candidate won at least 5 percent of the popular vote. No other thirty-year period in U.S. history has witnessed such third-party performance.¹ Ross Perot's popular vote of close to 20 percent in 1992 was the highest ever recorded by a third party candidate who had no prior political experience, and his nearly 9 percent of the popular vote in 1996

¹ From 1892 to 1924, four third-party candidates exceeded 5 percent of the vote in three elections: John Weaver (1892), Theodore Roosevelt (1912), Eugene Debs (1912), and Robert LaFollette (1924).

NOTE: We thank Rob Daves and Denise Brownfield of the Minneapolis *Star Tribune* and Steve Frank of St. Cloud State University for providing data. The Voter News Service data were obtained through ICPSR. Dean Lacy wishes to acknowledge the 2001-02 support by the National Fellows Program at Stanford University's Hoover Institution.

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was the highest recorded by a repeat third party candidate. In 2000 the impact of third-party candidates became even more significant: even though Ralph Nader polled barely 2 percent of the popular vote, his candidacy likely took enough potential Gore votes to give George W. Bush an Electoral College victory.

Third-party success at the presidential level pales in comparison to third-party success in recent gubernatorial elections. While the 1998 election of Jesse Ventura in Minnesota may seem unusual, three other third-party candidates won gubernatorial elections in the 1990s: Walter Hickel in Alaska (1990), Lowell Weicker in Connecticut (1990), and Angus S. King, Jr., in Maine (1994 and 1998). At the presidential level, only Ross Perot's short-lived lead in the polls during the summer of 1992 approaches the success of third-party candidates in gubernatorial elections.

Third-party candidacies in gubernatorial elections are an understudied phenomenon in American electoral politics. The existing research on third-party candidates in US elections has focused on the presidential level (e.g. Abramson et al. 1995; Alvarez and Nagler 1995, 1998; Gold 1995; Herron 1998; Lacy and Burden 1999, 2000; Rosenstone, Behr, and Lazarus 1996) while recent third-party gubernatorial and congressional candidacies have received relatively little attention. Beiler (1999) and Frank and Wagner (1999) examine the candidacy of Jesse Ventura in the 1998 Minnesota gubernatorial election. Reiter and Walch (1995) describe voter support for James Longley (elected Governor of Maine in 1974), Lowell Weicker, and Bernard Sanders (elected to the U.S. House from Vermont in 1990). Donovan, Bowler, and Terrio (2000) study voter support for minor-party candidates in the 1994 California gubernatorial and senatorial elections, and Magleby, Monson, and Walters (2000) examine support for Merrill Cook's 1994 independent run for Congress in Utah. However, none of these studies have examined the impact of the third-party candidates on the vote shares of the other candidates or on turnout.

We examine Jesse Ventura's victory in the 1998 Minnesota gubernatorial election in order to compare the electoral origins and impact of his support to that of third-party presidential candidates. Using recent advances in the study of voting with three or more candidates (Alvarez and Nagler 1995, 1998; Lacy and Burden 1999, 2001), we develop a unified multinomial probit model of vote choice and turnout to answer four questions central to the literature on third-party candidacies. First, were the voters who supported Jesse Ventura similar to voters who supported recent third-party presidential candidates? Second, was Jesse Ventura the Condorcet winner in the election? Third, what would the outcome of the election have been without Jesse Ventura in the race? Fourth, to what extent did Jesse Ventura's candidacy increase voter turnout?

THE 1998 MINNESOTA GUBERNATORIAL ELECTION

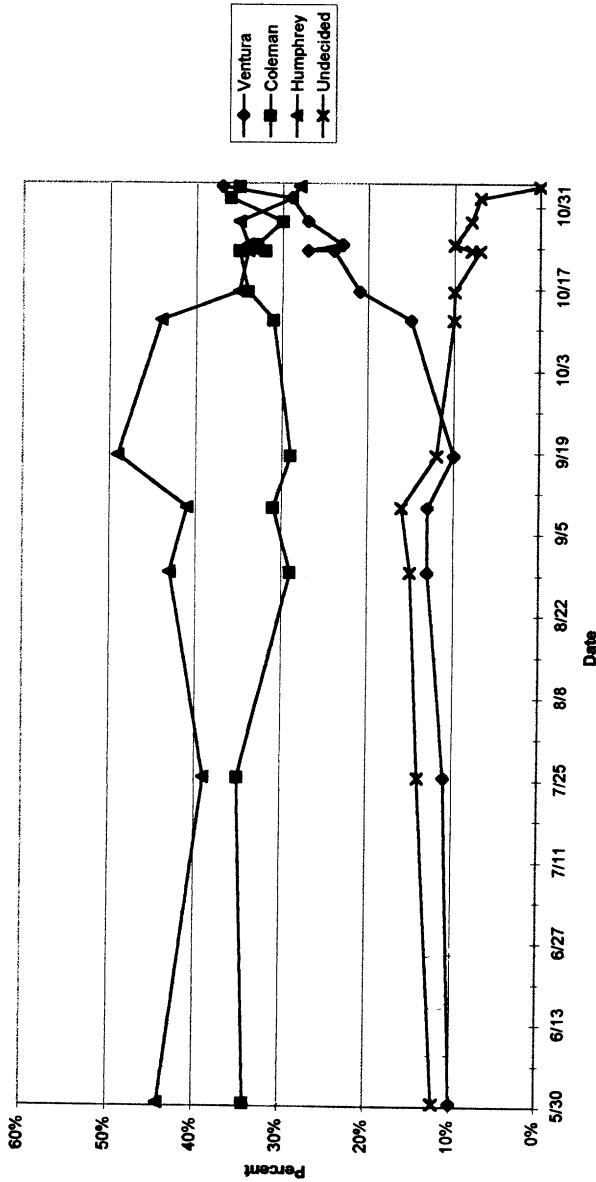
The 1998 general election for governor in Minnesota matched the Reform Party candidate Ventura against Republican Norman Coleman and Democrat-

Farmer-Labor (DFL) candidate Hubert “Skip” Humphrey III. Coleman was the incumbent mayor of St. Paul. Humphrey, in addition to his well-known family, had served previously as Minnesota’s Attorney General. Though, strictly speaking, Jesse Ventura’s previous political experience as mayor of Brooklyn Park did not qualify him for the label of “political amateur” under one scholar’s definition (see Canon 1990), Ventura certainly fits under the banner of actor/athlete with his background in professional wrestling.

Ventura’s pro-wrestling notoriety, his experience as mayor, and his job as radio talk show host combined to give him an instant presence in early pre-election polls. In Figure 1 we present a time-series of publicly available pre-election polling data throughout the campaign. Early polls showed Ventura with just over 10 percent of the electorate’s support, which remained relatively static through the September 15 primary election until sometime in mid-October. At that point his stock began to rise among voters. A poll conducted by the Minneapolis *Star Tribune* in mid-October put him over the 20 percent mark for the first time and enabled Ventura to secure an important campaign loan. He steadily rose in the polls through Election Day, while support for Humphrey declined. In the final published poll, released the Sunday before the election, the *Star Tribune* proclaimed in a front page story that “. . . Hubert Humphrey III, Norm Coleman, and Jesse Ventura each has a real chance of claiming the governor’s office on election day Tuesday” (Smith 1998). Even though he never officially led in the pre-election polls, the signal communicated to voters through the press was that Ventura was in a position possibly to win. In the close three-way race this significantly reduced the incentives to vote strategically. Third party candidates face a perpetual problem of losing their supporters to strategic voting: third party voters often defect to their second most preferred candidate in order to avoid electing their least preferred candidate. With his momentum in the polls and eventual victory, Ventura overcame the usual trend that “third-party support fades as the election approaches” (Rosenstone, Behr, and Lazarus 1996: 41).

Several contextual factors aided Ventura’s rise in the polls. First, Ventura enjoyed visibility and name recognition from his pro-wrestling and subsequent radio talk show days. His radio talk show had frequent political guests, particularly the 1996 Reform Party nominee for U.S. Senate. This gave him some limited exposure, as well as practice in turning his formidable charisma toward political topics. His experience speaking on political issues served him well in a series of much-publicized debates toward the end of the campaign. Another important feature of the campaign that aided Ventura was that both major party candidates had crowded and competitive primaries to work through before they could turn their focus to the general election. This was particularly true for the DFL primary, which featured five candidates, three of whom were sons of prominent political families: Humphrey, son of former U.S. Senator and Vice President Hubert H. Humphrey; Ted Mondale, son of former U.S. Senator and Vice President Walter

FIGURE I.
PUBLIC PRE-ELECTION POLLS



Sources: McGrath, Dennis L. 1998. "Humphrey's Lead over Coleman Shrinks to 4 Percentage Points" *Star Tribune* 31 July, p. 21A; Whereatt, Robert, and Dane Smith. 1998. "Poll Indicates Humphrey has Strong Lead Over Coleman" *Star Tribune* 23 September, p. A1; Associated Press. 1998. "Humphrey Holds 13-Point Lead Over Coleman in Latest Gubernatorial Poll." *Star Tribune* 16 October, p. B4; Whereatt, Robert. 1998. "Suddenly, it's a Dead Heat" *Star Tribune* 20 October, p. 1A; Smith, Dane. 1998. "Humphrey's Big DFL Lead Shrinks a Bit; Dayton, Freeman Build Support, but Voters Still Hedging." *Star Tribune* 13 September, p. 1A; Associated Press. 1998. "Humphrey Continues to Lead, Dayton Pulls into Second." 1 September; Peterson, David. 1998. "There Were Signs, but Switch to Ventura Surprised Pollsters." *The Star Tribune*, 6 November, p. 21A; von Sternberg, Bob. 1998. "Exit Polling Shows Ventura Fueled Surprising Turnout." *The Star Tribune*, 4 November, p. 1A.

Mondale; and Mike Freeman, son of a former Minnesota governor and Kennedy administration cabinet member. In addition, the primary election was not held until September 15, further delaying the time that the eventual major-party nominees could direct toward the general election.

Minnesota is one of a few states that allows Election Day voter registration, a significant factor since, as Rosenstone and Wolfinger (1978: 22) point out, "Registration is often more difficult than voting." Furthermore, they show that the rule that most depresses turnout is the time between the registration closing date and the election. Turnout was very high compared to previous non-presidential years, and much of the increase can be attributed to first-time voters turning out in large numbers. The post-election report issued by the Minnesota Secretary of State confirms that turnout (computed as the number of voters divided by the voting age population) was 60 percent in 1998 compared to 53 percent in 1994, and 57 percent in 1990. In addition, 15 percent of voters registered to vote on Election Day in 1998, compared to 10 percent in 1994, and 11 percent in 1990 (Minnesota Secretary of State 2000).

Minnesota is also one of several states with public funding for statewide campaigns. While the major party candidates obtained their public funding early in the election cycle based on each party's large vote share in previous elections, Ventura had to wait until after the election to receive his share. However, based on his strong showing in pre-election polls, he was able to secure a substantial loan using the expected public funding and an insurance policy taken out to protect against a sharp drop in his standings as collateral. The public funding provided the necessary resources for a last minute media barrage in the closing days of the campaign. Although his total expenditures were just over \$600,000, and his opponents each spent more than \$2 million (Frank and Wagner 1999: 23), Ventura secured enough financing to purchase a significant amount of advertising late in the campaign and become visible just as voters were turning their attention to the general election. In sum, a unique set of circumstances, both within and outside of the control of the candidates, combined to allow Jesse Ventura to beat the obstacles facing most third-party candidates.²

DATA AND METHODOLOGY

To assess the origins and impact of support for Jesse Ventura, we turn to data collected by the Minneapolis *Star Tribune* and the Voter News Service. The *Star Tribune* poll comprises three polls conducted in the closing days of the campaign. Data collected on Wednesday, October 27th through Saturday, October 30th

² There are several good analyses of the election. For more background on the election context see especially Beiler (1999); Daves (1999); Frank and Wagner (1999); Smith and Barkley (1998); and Von Sternberg (1998).

($n = 1004$) were reported in the Sunday *Star Tribune* as the final pre-election vote estimates. However, recognizing that Ventura was gaining momentum, the *Star Tribune* gathered data from two additional samples—one on Sunday, October 31st ($n = 259$) and one on Monday, November 1st ($n = 257$). We have combined all three samples for the analysis performed here.³ The *Star Tribune* and the Voter News Service also collaborated on an Election Day exit poll.

We utilize both surveys, the *Star Tribune* pre-election poll and the VNS exit poll, in our analyses, though each data source has a weakness. The *Star Tribune* sample shows Coleman leading the race primarily because it misses Ventura's surge among Election Day registrants. While the VNS exit poll matches the election outcome in its vote shares for the three major candidates, it does not include data for non-voters, thereby precluding us from examining how Ventura voters differed from non-voters and also preventing us from analyzing Ventura's effect on turnout.

Using data from the *Star Tribune* pre-election poll first, we estimate a unified multinomial probit (MNP) model of vote choice and turnout (see Appendix for details). Estimating a unified model of vote choice and turnout has several advantages over estimating a standard vote choice model. A well-specified model should include all of the choices available, and abstention is obviously a popular choice in any election, particularly in the U.S. Deleting abstention, and abstainers, from a vote-choice model potentially biases the results (Herron 1998; Lacy and Burden 1999; Sanders 1999). Furthermore, since part of our substantive focus is on the outcome of the election in the absence of Ventura and under increased turnout, we must include abstention as a choice in order to predict the percentage of Ventura supporters who might have abstained if Ventura had not been on the ballot.

The dependent variable in our multinomial probit model utilizes the responses to two questions in the *Star Tribune* data. First, respondents were asked, "How likely is it that you will vote in the November general election? Would you say you definitely will vote, probably will vote, probably won't vote or definitely won't vote?" Respondents who indicated that they would probably or definitely not vote are coded as "abstainers," comprising about one in ten respondents.⁴ Supporters of Ventura, Coleman, and Humphrey are identified by

³ Each sample was a stratified area probability RDD telephone sample. Within each household, an adult respondent was selected using the "most recent birthday" technique. Another pre-election survey was conducted October 18-29 ($n = 629$) by Professor Steve Frank at St. Cloud State University. In addition, an exit poll jointly sponsored by Voter News Service and the *Star Tribune* was conducted on Election Day. We chose to use the *Star Tribune* pre-election data over the St. Cloud State data for our MNP estimates because of its proximity to the election, capturing the dynamics of Ventura's late surge in the polls, and because its sample size is much larger.

⁴ While previous work of this type has used post-election surveys in which the abstainers are clearly identified as self-reported non-voters, the validity of our coding using pre-election data can be

responses to the separate question: “If the general election were held today would you vote for [list of candidates]?” Those responding “don’t know” or refusing to answer this question were also coded as abstainers in order to increase the size of the abstention category to reflect more closely the actual turnout rate.

Independent variables in the model can be classified into broad categories that exhaust the normal predictors of vote choice in state and national elections. Demographic variables—education level, age, income, gender, and whether one lives in Minneapolis/St. Paul counties—capture group-related benefits a person expects from each of the candidates as well as familiarity with the candidates. While both major party candidates had the resources to run statewide campaigns, Ventura’s small budget drove a strategic decision for his campaign to focus virtually all its resources in the Minneapolis/St. Paul metropolitan area. The Ventura campaign spent almost its entire budget for media in the Minneapolis/St. Paul television and radio markets, and Ventura rarely traveled beyond Minneapolis/St. Paul during the campaign. Demographic variables also help capture differential rates of mobilization and civic skills related to abstention (Rosenstone and Hansen 1993; Rosenstone and Wolfinger 1978; Verba, Schlozman, and Brady 1995; Wolfinger and Rosenstone 1980).

A respondent’s party identification and ideology are indicators of long-standing predispositions toward the parties as well as general political ideology. The model includes dummy variables that indicate whether the voter is a Democrat or a Republican; Independents are the baseline category. The model also includes whether a respondent voted in the 1994 gubernatorial election in order to capture past behavior similar to the information provided by a person’s party identification.

A limited number of theoretically interesting issue questions are available for inclusion in the model. Among them are two questions measuring the respondent’s perception of whether the United States and Minnesota are on the “right track” or “wrong track.” Responses to these questions tap whether support for Ventura is associated with general dissatisfaction with national politics (the “angry voter” hypothesis often mentioned as a predictor of Perot support) or state politics. A respondent’s opinion on abortion is included not only to assess the impact of abortion on voter choice but also to represent a respondent’s position on social issues more generally. We estimate the impact of economic ideology on electoral behavior using the only relevant item on the survey: a respondent’s assessment of Humphrey’s ability to manage state taxes and social spending. While admittedly not an ideal indicator of economic ideology, no other questions about preferences on taxes, welfare spending, or the general size of state government appear on the survey.

justified on empirical grounds. Research on likelihood of voting models for pre-election surveys demonstrates that self-reported likelihood of voting is a strongly related to validated turnout (Monson 1998).

We seek to include as many respondents in our sample as possible. As with any survey, on any given variable a certain level of item non-response exists. In response to the vote intention question, a very small number favor minor party candidates and are omitted from the analysis. Four variables present difficulty with item non-response: respondent's ideology (10 percent of respondents missing), opinions on abortion (8 percent missing), assessments of Humphrey's fiscal responsibility (14 percent missing), and respondent's income (14 percent missing). Respondents who have missing values on any one of these variable are typically non-voters and have missing values on several of the variables. We employ strategies for preserving observations that might otherwise be lost due to missing. For ideology, we create a series of dummy variables for conservatives, liberals, moderates, and those who answer "Don't know ideology" or "Refused." The abortion question creates a scale of strongly agree to strongly disagree that abortion should be a woman's right, but the scale does not include a neutral point. We code missing values as the midpoint of the scale in order to capture our belief that someone who does not answer the question is probably indifferent or highly conflicted between pro-choice and pro-life positions. We employ a similar strategy with assessments of Humphrey's fiscal responsibility, coding "don't know" as a neutral point. For the income variable, we generate predicted incomes for respondents who did not answer the question. Regressing the incomes of respondents who answered the question on their gender, age, education, race, party identification, and voter registration status produces the predicted values. While we preserve these observations in order to boost the numbers of non-voters in the sample, we find that the missing values are innocuous: We estimated the model with all of the missing values set to their maximum values on each scale and then to their minimum values on each scale, finding that the results—coefficient estimates and vote share predictions—do not change significantly.⁵ The exact question wording and coding for all of the variables are in the Appendix.

The VNS exit poll provides data for a separate model. In the VNS data, we adopt the same coding conventions for party identification, ideology, and the demographic variables that we use for the *Star Tribune* data. The VNS exit poll contains a question asking voters which of the following issues is most important to them—farm policy, gun control, abortion, crime and drugs, state taxes, education, or the economy. Of the 1508 respondents who voted for one of the three major candidates in the election, only 1160 picked an issue. We code a separate dummy variable for each issue, leaving as the baseline category people who did not pick one of the issues.

⁵ Our coding conventions leave 1496 of the 1526 respondents to the *Star Tribune* poll—only the supporters of minor party candidates are omitted, and there are too few to include as a separate choice in our MNP model. We retain 1508 of 1511 respondents to the VNS exit poll, with the 3 omitted voting for a minor party candidate.

EMPIRICAL RESULTS

Results from the MNP model using the *Star Tribune* pre-election survey data appear in Table 1. The coefficients for Ventura have been normalized to zero. A negative coefficient indicates a higher probability of voting for Ventura compared to the choice in the column header, while a positive sign indicates a higher probability of choosing the candidate in the column header. Before turning to the substantive results, we note that the bottom of the table includes estimates of the error standard deviation for abstention, and the error correlations between three pairs of choices (see Appendix for details). Since all other error standard deviations in the model are fixed at 1 to achieve identification (an assumption we first tested), the 1.18 standard deviation for abstention indicates a slightly larger, though not statistically significant (compared to 1.0) standard deviation for the errors for abstention than for the choice of candidates. Two of the error correlations are statistically significant (Coleman-Humphrey and Coleman-Abstain). In order to identify the model and establish a baseline for comparison, we fix at 0 the error correlations between Ventura and all other choices. This is merely a normalization that does not affect the substantive results.

Not surprisingly, being a Republican increases one's probability of voting for Coleman while identifying as a Democrat increases one's probability of voting for Humphrey. Also as expected, prior voters—those who were eligible and voted in 1994—are less likely to abstain in 1998 than to vote for Ventura.

The demographic variables paint an interesting picture of Ventura's supporters. Older and more educated respondents are more likely to vote for Coleman or Humphrey, or even to abstain, than to vote for Ventura. Higher income makes one more likely to vote for Ventura than to abstain, but income does nothing to distinguish support for Ventura from support for Humphrey or Coleman. Women are more likely to vote for Humphrey or Coleman or even to abstain than to vote for Ventura. Finally, residents of the Minneapolis/St. Paul area are more likely to vote for Ventura than for either Humphrey or Coleman, suggesting that Ventura could have polled even more votes by campaigning in the rest of the state.

Issue positions and ideology also play a clear role in predicting whether or not a person votes for Ventura. While many journalists and pundits have implied that Ventura's victory sprang from his personality and that his supporters were not issue-oriented, there is clearly an ideological and issue content to his support. Self-described liberals are more likely to vote for Ventura than for Coleman, and conservatives and people who do not answer the ideology question are more likely to abstain, compared to the baseline moderates. On issues, a pro-choice position on abortion increases the probability a person votes for Ventura over both Coleman and Humphrey. Pro-choice respondents are also more likely to vote for Ventura than to abstain. People who believe Humphrey would be fiscally irresponsible are more likely to vote for Ventura than to abstain or vote for

≡ TABLE 1.

MNP MODEL OF ELECTORAL BEHAVIOR IN THE 1998 MINNESOTA GUBERNATORIAL ELECTION: *STAR TRIBUNE* PRE-ELECTION SURVEY

Independent Variable	Coleman (R)	Humphrey (D)	Abstain
Constant	-.90* (.48)	-.82 (.48)	.10 (.42)
Republican	.86* (.16)	0.0 —	0.0 —
Democrat	0.0 —	.77* (.16)	0.0 —
Voted in 94 gubernatorial election	0.0 —	0.0 —	-.64* (.18)
Education	.10* (.05)	.11* (.05)	.11* (.05)
Age	.02* (.004)	.03* (.004)	.02* (.004)
Income	-.007 (.04)	-.04 (.04)	-.13* (.05)
Female	.51* (.13)	.63* (.13)	.71* (.17)
Pro-choice on abortion	-.26* (.04)	-.15* (.05)	-.20* (.05)
Humphrey will be fiscally irresponsible	-.008 (.12)	-1.01* (.11)	-.38* (.13)
Minneapolis/St. Paul counties	-.28* (.13)	-.23 (.14)	-.13 (.14)
Conservative	.17 (.14)	-.10 (.17)	.21 (.17)
Don't know/Refused ideology	.47 (.30)	.41 (.32)	1.16* (.35)
Liberal	-.44* (.18)	-.18 (.18)	-.28 (.20)
MN on right track	.33* (.14)	.33* (.16)	.21 (.16)
U.S. on right track	-.14 (.14)	.07 (.16)	-.24 (.16)

TABLE 1. (continued)

Independent Variable	Coleman (R)	Humphrey (D)	Abstain
$\hat{\sigma}$ (Abstain)	1.18 (.40)		
$\hat{\rho}$ (Coleman, Humphrey)	.54* (.19)		
$\hat{\rho}$ (Coleman, Abstain)	.60* (.22)		
$\hat{\rho}$ (Humphrey, Abstain)	.46 (.30)		
Number of cases	1496		
$-2 \times \text{Log-Likelihood}$ (degrees of freedom)	2858.11 (46)		

*indicates coefficient is statistically significant, $p < .05$, two-tailed.

Humphrey. As expected, Ventura's supporters are libertarian-leaning: liberal on social issues, yet fiscally conservative.

A person's assessment of whether Minnesota and the United States are "on the right track" clearly indicates that Ventura's electoral success was due to dissatisfaction with Minnesota government rather than a reaction to national conditions. People who believe Minnesota is on the right track are more likely to vote for the major-party candidates than for Ventura. But, believing that the U.S. is on the right track has no effect on Ventura support. Ventura's vote did not arise from generally "angry voters."

The substantive effects of the independent variables on the probability of choosing Ventura can be seen more clearly in Table 2, which presents the change in the predicted probability of voting for Ventura given changes in the independent variables. We calculate the baseline probability of choosing each of the four alternatives for a person who has roughly the modal values on each of the independent variables. The baseline is a 49-year old Independent, moderate, female, high school graduate with an annual household income of \$40-50,000 per year, from Minneapolis/St. Paul, who voted in 1994, who is moderate on abortion, believes Humphrey would be fiscally irresponsible, and who believes the U.S. and Minnesota are on the right track. The model predicts that such a voter has a .30 probability of voting for Coleman, a .26 probability of voting for Humphrey, a .25 probability of voting for Ventura, and a .16 probability of abstaining.

Entries in the table represent the predicted probability of choosing each alternative when the variable in the row heading is changed while all other

TABLE 2.
 PREDICTED BEHAVIOR IN THE 1998 MINNESOTA GUBERNATORIAL ELECTION

Independent Variable	Coleman (R)	Humphrey (D)	Ventura (I)	Abstain
Baseline	.30†	.26	.25	.16
Republican	.66†	.11	.15	.06
Democrat	.15	.55†	.18	.10
Did not vote in 94 gubernatorial election	.20	.19	.20	.35†
25 years old	.26	.17	.39†	.16
Graduate Degree	.30†	.29	.17	.20
Male	.28	.19	.41†	.10
Pro-choice on abortion	.20	.27	.36†	.15
Humphrey will be fiscally responsible	.28	.33†	.13	.22
Not from Minneapolis/St. Paul counties	.35†	.28	.21	.14
Conservative	.35†	.19	.23	.20
Don't know/Refused ideology	.22	.19	.12	.39†
Liberal	.20	.29	.32†	.16
Minnesota not on right track	.25	.22	.33†	.17
US not on right track	.32†	.20	.23	.21

Source: Minneapolis *Star Tribune* Survey

Note: Baseline probability calculated for Independent, voted in 1994, 49 years-old, high school graduate, female, moderate on abortion, believes Humphrey is fiscally irresponsible, from Minneapolis/St. Paul, moderate, believes U.S. and MN are on right track, \$40-50,000 per year household income. †indicates choice with highest probability.

variables are held constant at the baseline. For example, changing the baseline respondent to a Republican increases the probability of voting for Coleman to .66, of voting for Humphrey to .11, of voting for Ventura to .15, and of abstaining to .06. A (†) indicates the choice with the highest probability of being chosen. The table demonstrates that while the baseline voter has a roughly equal probability of choosing each of the candidates, changing the baseline to a Republican, a person with a graduate degree, a conservative, someone who believes the U.S. is on the wrong track, or a resident of a non-Twin Cities area of Minnesota makes a person more likely to vote for Coleman. A vote for Humphrey is most likely from a Democrat or a person who believes Humphrey is not fiscally irresponsible. A vote for Ventura is most likely from a 25-year-old, a male, or a person who believes Minnesota is on the wrong track. Also, contrary to expectations, a

self-described liberal is most likely to vote for Ventura, as is a person who is pro-choice on abortion. Finally, a person who did not vote in 1994 or who does not know his or her ideology is most likely to abstain. While the largest increases in the probability of supporting Coleman or Humphrey are due to party identification, the largest increases in the probability of supporting Ventura are due to being young or male.

Applying the MNP model to the VNS exit poll data provides a remarkably similar picture of Ventura's supporters. As shown in Table 3, Democrats are more likely to vote for Humphrey; Republicans for Coleman. Interestingly, people who cast a vote for Perot in 1996 (as 8.9 percent of the sample claimed to do) are significantly more likely to vote for Ventura. The Reform Party held together as a voting force from the 1996 presidential election to the 1998 gubernatorial election. Younger voters, less educated voters, and Minneapolis/St. Paul residents are more likely to support Ventura. White voters are also more likely to vote for Ventura than either major party candidate, though the result is not statistically significant. People who do not know their ideological position are more likely than ideological moderates to support either Humphrey or Coleman, suggesting that Ventura's supporters are more ideologically sophisticated than initially believed by many observers. On the issues, people who mention taxes as the most important issue are more likely to support Ventura than Humphrey or Coleman. People who mention crime are also more likely to support Ventura over Humphrey, while the result is not statistically significant for Coleman. Voters who name farm policy or education as the most important issue are more likely to support Humphrey over Ventura. Those who believe abortion is the most important issue are more likely to support either Coleman or Humphrey than Ventura. Surprisingly, both the VNS and *Star Tribune* data confirm that pro-choice voters are more likely to vote for Ventura than for the Democrat Humphrey.

In many respects Ventura's support in Minnesota in 1998 is similar to the electoral support of third-party presidential candidates since 1968. Lacy and Burden (1999, 2001) demonstrate that votes for George Wallace (1968), John Anderson (1980), and Ross Perot (1992, 1996) were cast by white males and younger age groups (see also Alvarez and Nagler 1995, 1998 for analysis of the Perot candidacies). Excluding Wallace's voters, supporters of third-party candidates at the national level have also tended to be socially liberal yet fiscally conservative. Ventura's successful third-party candidacy appears to be part of a larger picture of young, male, libertarian-leaning voters abandoning the Democratic and Republican parties for third-party alternatives. We also suspect that Governor Angus King's vote in Maine and former Governor Lowell Weicker's vote in Connecticut emerged primarily from libertarian-leaning voters who were closer to Democrats on social issues and closer to Republicans on economic issues. We do not have data to verify our suspicion, but the general ideological and policy positions of King and Weicker are similar to those of Ventura.

≡ TABLE 3.
MNP MODEL OF VOTER CHOICE IN THE 1998 MINNESOTA GUBERNATORIAL
ELECTION: VNS ELECTION DAY EXIT POLL

Independent Variable	Coleman (R)	Humphrey (D)
Constant	-1.76* (.35)	-2.04* (.37)
Republican	.92* (.14)	0.00 —
Democrat	0.00 —	1.02 (.17)*
Voted for Perot in 1996	-1.42* (.22)	-1.32* (.23)
Education	.25 (.06)	.26* (.06)
Age	.17* (.03)	.23* (.03)
Income	.05 (.05)	.004 (.05)
White	-.04 (.23)	-.30 (.24)
Female	-.005 (.11)	.28* (.12)
Liberal	-.62* (.17)	-.28 (.16)
Conservative	.29* (.13)	-.11 (.15)
Don't Know/Refused Ideology	.70* (.28)	.89* (.28)
Minneapolis/St. Paul resident	-.28* (.12)	-.42* (.13)
State Taxes most important issue	-.22 (.15)	-.53* (.18)
Economy/Jobs most important issue	-.16 (.20)	0.01 (.20)
Crime/Drugs most important issue	-.39 (.26)	-.51 (.27)

TABLE 3 (continued)

Independent Variable	Coleman (R)	Humphrey (D)
Abortion most important issue	1.63* (.24)	.74* (.27)
Gun control most important issue	-.24 (.29)	.10 (.32)
Farm policy most important issue	.15 (.31)	.32 (.18)
Education most important issue	-.05 (.20)	.68* (.17)
$\hat{\rho}$ (Coleman, Humphrey)	.57* (.14)	
Number of cases	1508	
$-2 \times \text{Log-Likelihood}$ (degrees of freedom)	1018.8 (39)	

*indicates coefficient is statistically significant, $p < .05$, two-tailed.

The common roots of voter support for third parties across state and national elections and across time portray third-party challenges as driving a wedge between the Democratic and Republican Parties. Increasing polarization between the major parties is opening a hole for third parties to enter elections successfully. As the Republican Party has moved increasingly toward social conservatism at the state and national level, many potential Republican voters have found third-party candidates appealing. Similarly, as the Democratic Party has promoted increased taxes and spending programs, fiscally conservative voters have turned to third parties. It is not surprising that the successful third-party gubernatorial candidacies in recent years have all originated in the Midwest, Northeast, and Alaska, areas that are typically more liberal on social issues than the South, which has become the cradle for conservative Republicans. If the success of third-party gubernatorial candidates is a model for presidential candidates, then future third-party challenges at the national level are likely to emerge from libertarian-leaning moderate Republicans or Democrats.

VOTE-STEALING AND TURNOUT EFFECTS

The MNP results in Tables 1 and 3 provide a means to estimate the vote-stealing and turnout effects of Jesse Ventura. The vote-stealing effect of a third-party candidate is the extent to which that candidate draws votes disproportionately from one major party candidate. We do not use the term “vote-stealing”

pejoratively. A common concern in races with a third-party is whether the third-party candidate draws votes from one major party candidate more than the other, causing a reversal in the election outcome. In 1980, 1992, and 1996, the third party presidential candidates did not change the outcome of the election. In 2000, however, Ralph Nader's candidacy drew disproportionately from potential Gore supporters, giving Bush a victory in the Electoral College (Lacy and Burden 2001). In the 1998 Minnesota gubernatorial election, the term "vote-stealing" is misleading since the third party candidate won the election.

In order to calculate whether Humphrey or Coleman would have won the election had Ventura not entered the race, one must also determine the percentage of Ventura's supporters who would not have voted if Ventura were not on the ballot. A candidate's turnout effect is then the percentage point increase in abstention if that candidate were not in the race (Lacy and Burden 1999).

To calculate the outcome of the election with a choice removed from the set, we calculate each respondent's utility ($\beta_j'x_i$) for each of the four choices. A respondent's utility for Ventura is normalized to 0, thus all other utilities are either higher (positive) or lower (negative) than a respondent's utility for Ventura, producing a utility ranking of the choices for each respondent. These utilities can then be expressed as probabilities of choosing each alternative by using the estimates of s and r from the model as well as the estimated utilities to calculate the area under a trivariate normal distribution. For each respondent, we rescale these probabilities after Ventura is removed from the choice set by recalculating the area under a bivariate normal distribution for each person's remaining utilities. For further details, see Alvarez and Nagler (1995) or Lacy and Burden (1999, 2001).

Table 4 presents the calculated outcomes of the election with Ventura removed from the choice set. The first data column in the table represents the predicted vote intention of the respondents in the sample, along with a 95 percent confidence interval. These predicted vote shares are identical to the actual vote of the sample. The predicted election outcome deviates slightly from the actual outcome, due primarily to the surge in Ventura support in the final days of the campaign. Note, however, that the confidence intervals for these predicted vote shares demonstrate that the model predicts a close race.

Once Ventura is removed from the election, the race is no longer close, as Norm Coleman beats Hubert Humphrey by a predicted margin of nearly 10 points. Coleman's vote share increases by nearly 20 percentage points, while Humphrey's increases by barely 10 percentage points.

The model also allows us to calculate the turnout effect of Jesse Ventura. With Ventura out of the race, we see that 23 percent of the sample is predicted to abstain, compared to the 15.6 percent predicted to abstain with Ventura in the race. Ventura's turnout effect was 7.4 percentage points, which is nearly three times the national turnout effect of Ross Perot in the 1992 or 1996 presidential elections (Lacy and Burden 2001). Since turnout in the 1998 gubernatorial

TABLE 4.
PREDICTED ELECTION OUTCOMES

Candidate (actual vote)	Minneapolis Star Tribune Poll (Oct. 27 – Nov. 1)			Voter News Service Exit Poll (Nov. 3)		
	Sample	Outcome without Ventura	Behavior of Ventura Voters without Ventura ^a	Sample	Outcome without Ventura	Behavior of Ventura Voters without Ventura ^a
Humphrey (28.1%)	34.3 (32.0, 36.6)	45.2 (43.4, 47.0)	32.8 (30.0, 35.6)	28.4 (25.9, 31.0)	44.7 (41.8, 47.6)	43.9 (39.4, 48.5)
Coleman (34.3%)	35.3 (33.0, 37.7)	54.8 (53.0, 56.6)	67.2 (64.2, 70.1)	34.7 (32.1, 37.3)	55.3 (52.4, 58.2)	56.1 (51.6, 60.7)
Ventura (37.0%)	30.4 (28.2, 32.6)			37.0 (34.7, 39.3)		
Abstention Rate	15.6 (13.8, 17.4)	23.0 (22.1, 23.9)	25.7 (24.0, 27.4)	—	—	—

^aThe abstention rate is the percentage of third-party voters who would have abstained, while the vote shares represent the vote among the third-party voters who would have remained in the electorate.
Note: Entries are the sample mean probability of choosing each alternative, with 95 percent confidence interval in parentheses.

election in Minnesota was seven percentage points higher than in 1994, our results suggest that Ventura's candidacy accounted for the increase in turnout. Ventura, unlike Perot, mobilized a sizable portion of the electorate who would not have voted otherwise. This large turnout effect is likely due, in part, to the same day registration laws in Minnesota, which are unlike laws in most other states requiring a voter to register at least 30 days before the election. Ventura's candidacy also made the race closer and more interesting. As media coverage of the tight race increased, more people may have decided to vote.

The third data column in the table presents the predicted behavior of Ventura voters, had Ventura not entered the race. One-quarter of Ventura's supporters would not have voted without Ventura on the ballot. Of his supporters who would have voted, over two-thirds would have voted for Coleman. This vote-differential among Ventura's supporters is larger than the two-party vote differential among any of the third-party presidential candidates since 1968, as calculated by Lacy and Burden (2001).

The last three columns present similar calculations using the VNS exit poll data. Since the VNS exit poll contains no abstainers, we cannot calculate the abstention rate without Ventura in the race, nor can we calculate the outcome under full turnout. The sample vote shares are calculated from the area under a bivariate normal distribution. To predict the outcome without Ventura in the election, we remove Ventura as a choice and recalculate Humphrey's and Coleman's vote shares under a univariate normal distribution. The results are similar to the predictions based on the *Star Tribune* data. Without Ventura in the election, Coleman beats Humphrey by a vote of 55 percent to 45 percent.

However, the VNS data show that Ventura's supporters, assuming all would have voted, preferred Coleman over Humphrey by 56 to 44 percent. This result differs from our prediction based on the *Star Tribune* data that Ventura's supporters would have split 67 to 33 percent in favor of Coleman. Why such a difference between the two samples? One answer may be that the VNS data cannot account for possible abstention among Ventura voters. The potential Humphrey supporters among Ventura's voters may have abstained at higher levels than the potential Coleman supporters, leading the VNS data to overestimate the Humphrey support among Ventura voters. The different dates of the surveys may offer a similar explanation for the difference in Coleman support between the two polls. The *Star Tribune* could not pick up the final Election Day surge in Ventura support facilitated by Election Day registration. Perhaps a larger percentage of the Ventura voters who registered on Election Day were potential Humphrey supporters than Coleman supporters. If this explanation is correct, then the *Star Tribune* data underestimate the potential Humphrey support among Ventura's voters.

A question in the VNS exit poll provides yet another perspective on the outcome of the race without Ventura. Voters were asked, "If these [Coleman and Humphrey] were the only two candidates for Governor on the ballot today, who

would you have voted for?" The response rate to the question is low (1288 out of 1511 interviews), leaving us with some doubts about its accuracy. Among the voters who answered the question, 47.7 percent said they would have voted for Coleman, 39.3 for Humphrey, and 13 percent said they would not have voted. These percentages produce a two-party vote share of 54.8 percent for Coleman and 45.2 percent for Humphrey, within the range of our predictions using the MNP results from either the VNS exit poll or the *Star Tribune* poll. Among the Ventura voters who answered the question, 37.0 percent said they would have voted for Coleman, 28.9 for Humphrey, and 34 percent would have abstained. Among the Ventura voters who would have voted, the data show a two-party split of 56.1 percent Coleman and 43.9 percent Humphrey, identical to our calculations using the results from the VNS exit poll MNP model. With MNP results from two separate surveys showing the same outcome as the VNS question, we can conclude with confidence that Coleman would have won the election with Ventura out of the race.

These results settle a puzzle remaining from Figure 1. Ventura's rise in the polls accompanies a decline for Humphrey, pointing to the conclusion that Ventura picked up more potential Humphrey votes than Coleman votes. This conclusion is incorrect. While late converts to Ventura may have come disproportionately from the Humphrey camp, Ventura's overall support gushed more from potential Coleman voters, Reform Party voters, and people who would not have voted without Ventura in the race.

WAS VENTURA THE CONDORCET WINNER?

Thus far we have focused on the outcome of the election without Ventura. Equally interesting is the outcome of the election with either Humphrey or Coleman removed from the choice set. In a race with three or more candidates, the Condorcet winner is the candidate that beats all others in two-person contests. Unfortunately, the VNS questionnaire did not ask respondents directly which candidate they would prefer in pairwise contests between Ventura and Coleman or Ventura and Humphrey.

We can use the results from the MNP model to calculate how Humphrey and Coleman voters would have behaved with their candidate removed from the choice set. This method is particularly useful in cases where survey data do not provide voters' preference rankings for candidates.⁶ Among Coleman voters in the Minneapolis *Star Tribune* sample, 45.8 percent would have voted for Ventura

⁶ Some researchers use feeling thermometer scores to construct preference rankings (Abramson et al. 1995). Neither the VNS nor *Star Tribune* surveys included feeling thermometers. A pre-election poll conducted by Steve Frank at St. Cloud State University does include feeling thermometers. Constructing preference rankings from these thermometer scores reveals that a majority of likely voters preferred Ventura to Coleman and to Humphrey.

with Coleman out of the race, while only 18.3 percent would have voted for Humphrey. The remaining 36 percent of Coleman's supporters would have abstained. Among Humphrey voters, 29.4 percent would have voted for Coleman with Humphrey out of the race, yet 34.2 percent would have voted for Ventura. Thirty-six percent would have abstained. Since Ventura beat Coleman in the election, and since more Humphrey supporters would have voted for Ventura than for Coleman with Humphrey out of the race, we can predict that Ventura would have beaten Coleman in a two-way race. These results confirm that Coleman supporters overwhelmingly preferred Ventura to Humphrey, while Humphrey voters marginally preferred Ventura to Coleman.

The VNS exit poll data tell a similar story. Among the Coleman voters in the sample, the MNP model reveals that 60 percent would have voted for Ventura in a Ventura-Humphrey contest. Among Humphrey's voters, 55 percent would have voted for Ventura if Ventura and Coleman had been the only candidates on the ballot. Since the VNS data do not include abstainers, the MNP model cannot tell us what percentage of Coleman or Humphrey voters would have abstained without their candidate on the ballot. Nevertheless, the results indicate that Ventura was the Condorcet winner and would have beaten either Humphrey or Coleman in a two-person race.

THE EFFECT OF FULL TURNOUT ON ELECTION OUTCOMES

The MNP results also allow us to determine the election outcome under full turnout. A vast literature examines the effect of increased turnout on election outcomes, reaching the general conclusion that increased turnout would have little effect on the vote shares of the major parties in most national elections. However, few researchers have examined the effect of full turnout on the vote shares of third-party candidates. Lacy and Burden (2001) demonstrate that in the 1968, 1980, 1992, and 1996 presidential elections, the vote shares of all third-party candidates increase somewhat under full turnout, while the vote shares of Democratic candidates increase in all elections except 1980.

Our estimate of the 1998 Minnesota gubernatorial election outcome under full turnout is in the fourth data column of Table 4. We find that full turnout would have had no significant effect on the outcome of the election. Ventura's vote share under full turnout is nearly identical to his sample vote share, while Coleman would add a statistically insignificant 1.6 percentage points to his vote share. Unlike recent third party candidates for president, Jesse Ventura would not have added to his vote share under full turnout.

CONCLUSIONS

Jesse Ventura is both exceptional and unexceptional as a third-party candidate and governor. His victory at first appeared "accidental" due to his last-minute

surge in a tight three-way race in a plurality-rule election. Many political observers seem to have written off Ventura's victory as unlikely to be repeated, in Minnesota or elsewhere. However, closer inspection of Ventura's electoral support reveals that his victory fits into the larger picture of growing third party success in executive-level elections.

The Ventura vote has clear similarities to the Perot vote in 1992 and 1996, to the Anderson vote in 1980, and to the victories of third-party candidates in gubernatorial elections in Maine, Connecticut, and Alaska. Libertarian-leaning voters, younger voters, and men provided Ventura's base of electoral support. Ross Perot's supporters from the 1996 presidential election also voted for Ventura. Ventura appealed to them on issues and ideology as well as, from other accounts, personality. Like Perot and Anderson supporters, Ventura supporters are liberal on social issues, conservative on economic issues.

Not only was Ventura the plurality winner, he was also the Condorcet winner. He pulled votes disproportionately from Republican Norm Coleman, who would have won the race had Ventura not been on the ballot. Interestingly, Hubert Humphrey originally supported Ventura's presence in the gubernatorial debates, which now appears as a wise move if his purpose was to prevent the election of Coleman. Ventura was able to stage a last-minute surge in support as people who typically vote at low rates – the young, lower income, and less educated—were able to register on Election Day. These voters tended to vote for Ventura, who accounted for at least a seven percentage point increase in voter turnout over what it would have been without his candidacy. Compared to third-party candidates for President, Ventura's turnout effect is much larger, due primarily, we suspect, to Election Day registration and to the closeness of the race. Under full turnout, Ventura would still have won the governor's race, though he would not have added to his vote share as third-party presidential candidates typically would. Given the closeness of the race, Ventura avoided the pitfall of having his supporters defect for strategic reasons.

The results in this article provide a piece of a larger puzzle of third-party success in recent U.S. elections. Third-party appeals are growing as moderate candidates squeeze into elections between the social conservatism of Republicans and the economic liberalism of Democrats. Moderate, Libertarian-leaning, potential third-party voters have emerged with an occasional voice in state and national elections for several decades. Witness Anderson's vote share in 1980 and Perot's support in the 1990s. The Anderson and Perot vote shares underestimate the extent of potential third party support due to the strategic defection of third party voters when it became clear that their candidates had no chance to win the elections. Jesse Ventura's candidacy and victory may provide a signal of future third-party success in state elections, although this success may have retreated in national elections in the wake of Reform Party nominee Pat Buchanan's poor showing in 2000 that has resulted in the disqualification of the Reform Party

from matching federal funds in the next election. Further adding to the Reform Party's woes, Ventura no longer associates with the party. Nonetheless, under the right conditions, third party candidates can win elections. Minnesota's public financing of campaigns and Election Day voter registration combined with Ventura's name recognition and experience as a communicator to pull his candidacy into a tight three-way race. Once the race was clearly a toss-up, Ventura avoided the strategic defections that plagued prior third party candidacies.

APPENDIX MODEL SPECIFICATION AND ESTIMATION

Including Abstention

Abstention may be included in a vote choice model in at least one of two ways. First, one might include turnout as a separate choice prior to vote choice. Vote choice is then modeled as conditional on the choice of turning out to vote in a nested model or selection model (Born 1990; Dubin and Rivers 1990; Herron 1998). Second, one might include abstention as one of the alternatives—along with each of the candidates—in a multinomial model, though the set of predictors for choosing abstention may be different from the set of predictors for choosing the candidates (Lacy and Burden 1999). The argument for a nested or selection model with a turnout equation followed by a vote-choice equation is that the decision to turnout is causally prior to the decision for whom to vote, and the decision to turnout is fundamentally different from the decision for whom to vote. However, it is entirely plausible that a person decides which candidate she prefers before deciding whether her preference for that candidate is enough to motivate her to vote. This is especially true when a third-party candidate mobilizes many habitual abstainers who do not decide to vote until after they have decided to support the third-party candidate. Therefore, it is tenuous to assume that for all people the decision to vote is prior to the decision for whom to vote.

Since many of the predictors of candidate choice also predict turnout—education, income, gender, race, issue positions, satisfaction with government, to name a few—we prefer to include these in a multinomial model in which abstention is modeled as a choice similar to choosing among the candidates. The major drawback to including abstention in a multinomial model is that errors in predicting turnout may be correlated with the errors predicting candidate choice, but we avoid this problem by estimating a multinomial probit model that allows correlated errors.

The Multinomial Probit Model

MNP is a generalization of the traditional binary probit model used for dichotomous dependent variables (see Aldrich and Nelson 1984; Greene 2000;

King 1989), and the MNP model does not suffer from the “independence of irrelevant alternatives” restriction of MNL (see Alvarez and Nagler 1995, 1998; Lacy and Burden 1999). In the case of estimating the effect of a third-party candidate on an election, the IIA restriction is substantively disturbing since it precludes the possibility that the absence of third-party candidate would have changed the relative probabilities of an individual’s choosing the Democratic and Republican candidates. By allowing one to estimate the standard deviations and correlations in errors across choices, MNP avoids the IIA assumption that is hard-wired into multinomial logit. MNP is not the only model that relaxes the IIA assumption. Heteroskedastic extreme value (HEV), generalized maximum entropy, and random parameters logit, among others, also circumvent IIA. However, we have found MNP to be the most flexible and easiest to implement of these estimators, especially if one’s primary concern is the removal of alternatives from the choice set.

Formally, the multinomial probit model is a random utility model in which the utility of individual $i \in \{1, \dots, I\}$ for alternative $j \in \{1, \dots, J\}$ is:

$$U_{ij} = \beta'_j x_i + \epsilon_{ij}$$

The structural equations of the model are then:

$$U_j = \beta'_j x + e_j, j=1, \dots, J, [\epsilon_1, \dots, \epsilon_J] \sim N[0, \Sigma]$$

The model is identified by normalizing $U_J = 0$, thus all utilities for $j \neq J$ are comparisons to the baseline choice, J . Estimates of Σ are generally obtained one of two ways. First, one could construct the Cholesky decomposition of Σ , LL' , and estimate L . This approach poses some difficulties when unpacking estimates of L to obtain values of Σ to be used when simulating the outcome with a choice removed.

An alternative approach, discussed in Greene (2000: 872), is to estimate a matrix of error correlations, R , and a diagonal matrix of error standard deviations, $S = \text{diag}(\sigma_1, \dots, \sigma_{J-1}, 1)$. The estimates of the error correlations ($\hat{\rho}$) and standard deviations ($\hat{\sigma}$) are easily computed once identification is achieved by setting $\hat{\sigma}_J = 1$, and one row of correlations contains only 0’s. Then, $\Sigma = S'RS$. In our models, the error standard deviation for the choice of Ventura is set to 1, and the error correlations between Ventura and all other choices are set to 0.

To estimate the MNP models, we used LIMDEP 7.0 with NLOGIT 1.1. We first estimated an independent probit model (Hausman and Wise 1978) in which all correlations are constrained to 0, the standard deviation on the error for Ventura support normalized to 1, and all other standard deviations are free. After finding a large standard deviation for abstention, we then estimated the model with the error standard deviation on abstention free, the error standard deviation on all other choices constrained to 1, and three error correlations free. We set to 0 the correlations between Ventura support and all other choices. This constraint is merely a normalization necessary to achieve identification.

In order to avoid “fragile identification” in the MNP model, the model must include restrictions in the matrix of parameters on the independent variables (Keane 1992). In each model estimated, we include a respondent’s party identification as a variable affecting only the respondent’s choice of the candidate from her own party relative to Ventura. We also include a variable indicating whether the respondent voted in the previous election, but the coefficient for this variable is estimated only for the choice of abstention relative to Ventura.

To simulate the results of the election with a choice removed, we read the utilities from the LIMDEP model into STATA 5.0. STATA’s `-binorm-` command was used to calculate the areas under a bivariate normal distribution with a variance-covariance matrix derived from the estimates of *S* and *R* with the error correlations and standard deviations for the omitted choice removed.

VARIABLES AND CODING FOR MINNEAPOLIS *STAR TRIBUNE* SURVEY

Independent Variables	Coding	Question Wording
Republican	1 = Republican, 0 = otherwise	“In politics, do you consider yourself a Republican, a Democrat, or an independent?”
Democrat	1 = Democrat, 0 = otherwise	
Years of education	1 = grade school or less, 2 = some high school, 3 = high school graduate, 4 = vocational or technical school, 5 = some college, 6 = college graduate, 7 = post graduate	“Of the following, which is the highest level of education you yourself have completed?”
Age	Age in years, 18-90	“What year were you born?”
Income	1 = < \$10K, 2 = \$10K–\$20K, 3 = \$20K–\$30K, 4 = \$30K–\$40K, 5 = \$40K–\$50K, 6 = \$50K–\$60K, 7 = > \$75K	“I’m going to read some income categories. Please stop me when we get to the one that includes your total household income before taxes in 1997.”
Female	1 = female, 0 = male	Coded by interviewer
Pro-choice on abortion	0 = disagree strongly 1 = disagree not strongly, 2 = DK/Refused, 3 = agree not strongly, 4 = agree strongly	“Do you agree or disagree that every woman should have the right to decide for herself whether or not to have an abortion? Do you feel strongly or not so strongly about that?”

Independent Variables	Coding	Question Wording
Humphrey fiscal responsibility	0 = "Hubert Humphrey the Third will responsibly manage the state's taxes," 1 = DK/Refused, 2 = "Hubert Humphrey the Third will create higher taxes and un-needed social programs"	"Which statement comes closer to your belief . . . [rotated]"
Minneapolis/St.Paul counties	1 = Hennepin, Ramsey, Anoka, Washington, or Dakota counties, 0 = otherwise	Respondent's county of residence coded by the <i>Star Tribune</i> Poll.
Conservative	1 = conservative, 0 = otherwise	"When it comes to politics, do you consider yourself a liberal, a moderate, or a conservative?"
Don't know/Refused ideology	1 = Don't Know or Refused, 0 = otherwise	
Liberal	1 = liberal, 0 = otherwise	
US on right track	1 = right track, 0 = otherwise	"Do you think things in [the United States/Minnesota] are
MN on right track	1 = right track, 0 = otherwise	generally going in the right direction or do you think things are pretty seriously off on the wrong track?"
Voted in 94 gubernatorial election	1 = voted 0 = otherwise	"Now, thinking back to the 1994 gubernatorial election. Did you vote in the general election in November when Arne Carlson and John Marty ran for governor, or did something come up that kept you from getting to the polls that day?"

VARIABLES AND CODING FOR VOTER NEWS SERVICE EXIT POLL

Independent Variables	Coding	Question Wording
Republican	1 = Republican, 0 = otherwise	"No matter how you voted today, do you usually think of yourself as a Democrat, Republican, Independent, Something else."
Democrat	1 = Democrat, 0 = otherwise	
Voted for Perot in 1996	1 = Voted for Perot, 0 = otherwise	"In the 1996 election for President, did you vote for Bill Clinton (Dem), Bob Dole (Rep), Ross Perot (Ref), Someone else, or did you not vote for President in 1996."
Level of education	1 = not a high school graduate, 2 = high school graduate, 3 = some college, 4 = college graduate, 5 = postgraduate	"What was the last grade of school you completed?"
Age	1 = 18-24, 2 = 25-29, 3 = 30-39, 4 = 40-44, 5 = 45-49, 6 = 50-59, 7 = 60-64, 8 = over 64	"To which age group do you belong?"
Income	1 = < \$15K, 2 = \$15K-\$30K, 3 = \$30K-\$50K, 4 = \$50K-\$75K, 5 = \$75K-\$100K, 6 = >\$100K	"1997 total family income: Under \$15,000, \$15,000-\$29,999, \$30,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000 or more."
Female	1 = female, 0 = male	"Are you: Male, Female"
White	1= white, 0 = otherwise	"Are you: White, Black, Hispanic/Latino, Asian, Other."
Most important issue	1 = issue mentioned as most important, 0 = issue not mentioned	"Which one issue mattered most in deciding how you voted for Governor? (check one only): Farm Policy, Gun control, Abortion, Crime/ Drugs, State taxes, Education, Economy/Jobs"

Independent Variables	Coding	Question Wording
Minneapolis/ St. Paul counties	1 = Twin Cities or Twin cities metro area, 0 = otherwise	Geocode provide by VNS
Conservative	1 = conservative, 0 = otherwise	"On most political matters, do you consider yourself: Liberal, Moderate, Conservative."
Don't know/ Refused ideology	1 = No Answer, 0 = otherwise	
Liberal	1 = liberal, 0 = otherwise	

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