樂隊花車，投射效應及策略性投票——一九九二年美國總統大選個案研究

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《本文摘要》

　　本研究著眼於探究美國選民對候選人之喜好程度和對候選人受支持程度之臆測間之互動關係，同時嘗試瞭解在其他因素被控制下，這兩項因素如何影響選民之投票取向。另外，選民的政治興趣、對民調結果的注意程度，和對民意分布之認知三者間的關係亦是本研究的興趣所在。

　　樣本抽樣自美國威斯康辛州首府所在地之丹郡，美國威斯康辛大學大眾傳播研究中心在1992年美國總統大選前兩週，以隨機抽樣方式電話訪問了421名合格選民。

　　結果顯示：(1)政治興趣愈高者，對民調結果愈注意。女性、教育水準較低者，或政黨屬性較強之民眾較為注意民調結果。(2)對民調結果較為注意者，通常較能正確瞭解選情。(3)民眾傾向於低估喜好之候選人的主要對手之受歡迎程度，這也驗證了認知不和諧理論中之心理現象。(4)選民對候選人之喜好程度對投票傾向有重大影響，對候選人是否有勝選機會之臆測相形之下並不重要，然而對於落後之布希及裴洛之受歡迎程度之臆測使支持者產生某種程度的策略性投票心理。

關鍵詞：樂隊花車效應、投射效應、策略性投票、美國總統大選、投票行為、政治心理學

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Bandwagon, Underdog, and Strategic Voting :
A Case Study of the 1992 U. S. Presidential Election

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During the last 50 years, as election polls in the U.S. and in most other countries have proliferated, there has been an ongoing controversy over their electoral effects. Their perceived influence on election outcomes has been sufficient to lead to calls for legislation restricting the publishing of opinion polls during a campaign, restrictions that already exist in countries as diverse as Germany, Japan, France, South Korea, and Brazil (McAllister and Studlar 1991 ; Mutz, 1992) .

These restrictions suggest that pre-election polls have some effects on election outcomes, or at least that some people suspect some effects and think the results could, more or less, hurt the fairness of an election. Counter arguments conclude that perception of public opinion has little impact on vote preference (Asher 1992, Marsh, 1983 ; Merkle 1991) . Many believe that traditional factors such as affect, candidates, issue, party, etc., are the factors that determine vote preference rather than the perceptions of public preference (Niemi and Weishberg, 1993) . Despite these arguments, evidence from surveys and experimental studies remains inconclusive. One of the earliest discussions of polls' effect on voting, by Lazarsfeld, Berelson, and Gaudet (1948) , found many voters attempting to sense the direction of public opinion and the outcome in order to vote " with the winner. " Follow-up work (Berelson, Lazarsfeld, and McPhee, 1954) revealed that a bandwagon effect (perception guiding preference) and a projection explanation (preference guiding perception) carried about equal weight in presidential election voting. Some laboratory studies of artificial elections coupled with bogus poll results produced an " underdog " effect of people shifting to the minority rather than majority view (Ceci, 1982, Fletias, 1971) . Evidence from the 1988 NES Super Tuesday Study showed that some voters vote for their second (or even lower) choice rather than their most preferred candidate in order to stop another candidate they like even less (Abramson et. al, 1992) .

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Purpose of this Study

Though many previous studies have examined the polling effect on voting behavior and also provided important data concerning the consequences of exposure to public opinion polls, they seldom have offered insight regarding the effect of different perceptions（such as perceptions of state and trend）and the possible interactions between perceptions of public preference and other potential variables（such as affect, issue, party, etc.）on vote preference. This might be the reason why their findings are quite different and remain controversial.

However, this paper is particularly interested in seeing how affect and perceptions of candidates' state and trend might influence each other and, in turn, influence vote preference while other possible influences are controlled for. Also under focus are the influence of political interest on voters' attention to polls and the connections between attention to polls and public preference perception accuracy.

Theoretical Framework and Hypotheses

Political Interest, Poll Attention, and Perception Accuracy

Research on the 1988 campaign study using survey data has indicated that political interest is highly positively related to public affairs media exposure and attention（McLeod et al, 1988）. McLeod and McDonald（1985）also found that political interest accounted for significant increments of variance in attention to TV public affairs. Chaffee and Schleuder（1986）reported the results of a panel study of adolescents in which attention to news media accounted for most of the effects of political knowledge learning. Chaiken （1980）noted that people with a keener interest in politics notice more of the political information they encounter and think more seriously about its content. Popkin（1991）, analyzing a 1984 CBS poll, concluded that voters clearly pay attention to news about primary winners and also absorb information about the "horse race" for party nominations very quickly. In the 1992 election, Clinton was leading all the way through the campaign with a pretty safe margin, even though there were still fluctuations in points in the major poll

results. Ross Perot, though never estimated to be in a leading status, successfully adopted the strategy of direct appeal to the public through TV talk shows and advertising and rapidly grew in popularity from a virtually unknown "Texas billionaire" to a candidate capable of influencing the election situation. Given the above mentioned findings and assertions, two hypotheses were tested :

H1 : Those individuals who have greater political interest are more likely to pay greater attention to election polls.

H2 : The greater attention individuals pay to election polls the more likely they will be to see Clinton as leading and Perot as gaining.

Affect, Poll Attention, and Perception Accuracy

There is a long tradition that places the self not only as central to social psychology, but also central to individuals' perceptions of the social world (Hall, 1889 ; McDougall, 1921) . Research in social cognition provides a general and powerful framework for understanding the projection effect. The projection effect refers to the possibility that people tend to project their preferences onto their perceptions while the bandwagon effect refers to the possibility that people's preference could be influenced by their perceptions. Heider's balance theory (1946) concluded that individuals will tend to either change their attitude toward another person or change their attitude toward a subject in order to avoid the stress which results from the imbalance between their attitude toward that person and their attitude toward that subject. Furthermore, Conover (1989) suggested that the projection effect can be explained as stemming from a "need" for cognitive balance. For instance, in order to avoid the cognitive imbalance, people might tend to believe that their favorite candidate is more popular than others and/or that the candidate they dislike has little public support. Conover (1989) also pointed out that projection effects may be a result of inference from a voter's own positions ; that is, voters tend to use self-relevant categories in assessing others. Such self-based inferences can make people perceive that others utilize the same criteria to judge candidates and thus project their own preferences onto others. For instance, one who thinks that ability and experience in international affairs is the top priority criterion for choosing a president might think others also use the same criterion and

therefore think others are as likely to support Bush as that person is.

Meanwhile, some empirical studies have found that individuals tend to see others as they see themselves. Mintz（1956）demonstrated that children's estimates of the age of Peter Pan were positively related to their own ages. Fields et al.（1976）and Ross et al.（1977）also concluded that people tend to see their own positions on issues as relatively common among groups of others.

Some relatively early research showed that voting intentions are also subject to the projection effect. Hayes（1936）reported the results of a survey of 8,419 adults carried out in October 1932 in which respondents indicated their voting intentions and also whom they expected to win a majority of votes among voters from five different occupational groups. Both Republicans and Democrats expected their candidate to win the support of each of the occupational groups. Thus two major hypotheses were tested and the following predictions made：

H3： The greater affect individuals have toward a candidate, the more likely they will be to perceive that candidate as leading and gaining.

H4： The greater affect individuals have toward a candidate, the more likely they will be to perceive the major rival of that candidate as trailing and losing.

In order to more clearly distinguish the projection effect from the bandwagon effect, we will look at the interaction effect between attention to polls and affect toward candidate on perceptions of the individuals favorite candidate's trend and state. The relationship between individuals' own beliefs and their perceptions of the prevalence of those beliefs appears to be a function of individuals' knowledge of, or information about, the distribution of opinion among the aggregate（e. g., Juddand Johnson, 1981）. Thus, if we could find that the effect of affect on voters' perceptions of whether a candidate is leading and gaining is not weaker for those who pay very little attention to polls than for those pay very high attention to polls, then we could more positively believe there is a projection effect rather than a bandwagon effect.

Affect, Perceptions, and Vote Preference

The relationship between affect, perceptions, and vote preference is complicated and

mutually intertwined. Bandwagon effect, underdog effect, projection effect, and strategic voting are all frequently cited as potential explanations for this complexity.

Most researchers who support the bandwagon effect assert that voters gain additional utility simply by voting for the winning candidate (e. g., Brams & Riker 1972, Straffin 1977). The notion underlying the traditional bandwagon idea on the behavioral level is that " affiliating with the winning team is intrinsically gratifying " (Mutz, 1992). This is also known as a " rally-around-the-winner " motive (Ginsberg 1986). Skalaban (1988) found a small bandwagon effect among voters with weakly-held opinions, even after controlling for projection effects.

These findings suggest that voters may derive some psychological satisfaction from supporting a candidate who appears to be winning the election. Such findings also imply that people's voting behaviors are not merely a projection of the perceptions of the gaining／ losing status；instead, they take the overall status of the candidates into account. Thus, for instance, even though people noticed that Perot was gaining and Clinton was losing support, and even though they shifted their preference in line with this trend, they still didn't necessarily support Perot more than Clinton. When they make a choice between the two candidates, voters will still simply follow the absolute majority's view in order to enjoy the bandwagon gratification.

On the other hand, going beyond the conventional bandwagon theory which refers simply to voters' joining the leading side, Atkin (1969) introduced a new idea-- " relative majority " --and argued that the bandwagon effect will have an effect on voters' " joining the gaining side. " From a psychological viewpoint, it is plausible that a message revealing that a candidate is gaining serves as a heuristic cue implying a tendency for more people to shift or switch their preference toward that candidate；this leads people to mentally rehearse the possible reasons that others might have for supporting a candidate.

Compared to mere perceptions of public preference, affect toward candidates usually plays a more important role in vote preference. Rahn et al. (1993), in their candidate appraisal model, posit that voters' feelings about candidates, as a summary of perceptions of competence, personal qualities, party, political ideology, and issues, are the key proximal determinants of voting behavior. Kelley and Mirer (1974) concluded that one votes for the candidate one likes best (or dislikes least) since overall affect about the candidates includes judgments and feelings about issues, parties, and the competence and personal qualities of

the candidates. Many scholars have thought of "feeling thermometer scores" as proximate causes of the vote (Bartel, 1988.). Page and Jones (1979) found that more than 95 percent of the respondents in the 1972 and 1976 NES surveys who rated one presidential candidate higher than the other on the thermometer scale reported voting for that candidate.

Summarizing from these findings and assertions, I expect to find a general pattern between these three variables : affect is usually the strongest predictor of vote preference ; perception of leading the second ; perception of gaining is the third. Thus, a hierarchical combination of these three variables is expected to be as follows :

H5 :

Affect	Perceive Leading	Perceive Gaining	The Odds of Voting
Hi	Yes	Yes	Highest
Hi	Yes	No	2nd
Hi	No	Yes	3rd
Hi	No	No	4th
Lo	Yes	Yes	5th
Lo	Yes	No	6th
Lo	No	Yes	7th
Lo	No	No	Lowest

In addition, voters might vote for a second-best candidate who does have some chance if their favorite candidate has no chance to win, especially in the primaries (Bartels, 1988). The same phenomenon has been studied under the rubric of "sophisticated voting" in Great Britain (for example Niemi et al. 1991). In the 1992 election, Perot had the second highest average affect score in the survey but the fewest people expressed their vote preference for him (see Appendix J). This leads us to suspect strategic voting, wherein people take electability into account when they are facing the choice of voting or not voting for Perot. Thus, we expect to find not only strong connections between affect, perceptions, and vote preference, but also an interactive effect involving the joint impact of thermometer ratings, perceptions of state, and perceptions of trend.

Method

Data

The data examined are taken from a cross-sectional survey using a probability sample of 421 adult residents of Dane County, Wisconsin, who were interviewed over telephone by students from a Mass Communication Research Methods class at the University of Wisconsin-Madison during the last two weeks before the 1992 election. The analysis in this paper included only those respondents who had already chosen their candidate (n = 361) when interviewed.

Dependent Variables

Attention to Polls was indexed by two attention questions that used a 10-point scale (from little to very close) asked separately for newspaper and TV. The two questions were combined to form a single measure. Means, standard deviations, and ranges for all variables used in this paper are shown in Appendix Table A.

Perception of Trend for each candidate was measured with a single question : " Overall, do you think Bush (Clinton, Perot) is gaining, staying the same, or losing public support now ? " A dummy-coding was used to recategorize 1 as " gaining " and 0 as " not gaining " (including " staying the same " and " losing ") .

Perception of State. The question for measuring respondents' perceptions about candidate's leading state was : " If the Presidential election were held today, what percentage of people in the U.S. do you think would vote for Bush (Clinton, Perot) ? " The percentage score for a candidate was examined only at the level of hierarchy and extremity, where scores were treated as categorical data and coded 1 if " leading, " 0 if " not leading. " Equal scores for more than one candidate were coded as both (all) leading.

Vote Preference. To compare affect, perceptions of public opinion and anticipated behavior, respondents were asked : " If the presidential election were held today, for whom would you vote, Clinton, Bush or Perot ? " Answers of " other " and " don't know " were excluded from the analysis.

Independent and Control Variables

Political Interest was measured on a 10-point scale ranging from " not at all interested "

to "very interested" with respect to "politics in general apart from this campaign."

Affect toward candidates was obtained from the NES feeling thermometer ratings of the three candidates. The question was worded : " Next, let's say that we're using a thermometer to measure your overall feelings toward each of the candidates, so that zero degrees means cold or unfavorable and 100 degrees means warm or favorable. If you don't have either favorable or unfavorable feelings toward a candidate, you can give him 50 degrees. You can choose any number between 0 and 100 to indicate your feelings. What's the number describing your feelings toward······ ? "

Four demographic variables--gender, age, education in terms of number of years of school completed, and annual household income measured in successive $ 10,000 increments--as well as party identification served as controls in all analyses. Party identification was ascertained by two forms with different analytical purposes : party1 and party2. party1 is coded as 1 if the respondent was reported as being either a Republican or a Democrat, and 0 otherwise. Party2 was categorized by two dummy variables (Democrats vs. Republican and Independents vs. Republican) .

Results

Political Interest and Attention to Polls

Hypothesis One predicted relationships between political interest and attention to polls-- specifically, that political interest would be positively related to attention to polls. The expected strong connection between political interest and attention to polls is shown in Table 1.

Attention to Polls and Perception Accuracy

Table 2 indicates that perceptions about Clinton as leading (vs. not leading) are strongly positively related to affect toward Clinton and negatively related to affect toward Bush. This result shows a potential projection effect in that people tend to perceive their most favorite candidate as leading and that candidate's major rival as not leading. As expected, attention to polls is positively related to accurately perceiving Clinton as leading.

For a one-unit increase in poll attention, the odds of perceiving Clinton as leading multiply by 1.12. However, the interaction effect between affect toward Clinton and attention to polls are nonsignificant both in predicting Clinton's state and Clinton's trend as shown in Appendix A and B.

We find a similar story in the prediction of perceiving Clinton as gaining. Affect toward Clinton is significantly positively related to perceiving Clinton as gaining, while affect toward Bush is marginally significant negatively in predicting perceiving Clinton as gaining. For a one-unit increase in affect toward Clinton, the odds of perceiving Clinton as gaining multiply by 1.02 ; conversely, the odds multiply by.99 with each one-unit increase in affect toward Bush.

The expected strong connection between affect toward Bush and perceiving Bush leading and gaining is shown in Table 3. As affect toward Bush increases one unit, the odds of perceiving Bush as leading and the odds of perceiving Bush as gaining both multiply by 1.03. In addition, the odds of perceiving Bush as gaining multiply by.99 when affect toward Clinton increases one unit. The data in Table 3 and Appendix C & D show little evidence of the connections between poll attention and perceiving Bush as leading and gaining and the interaction effect between attention to polls and affect toward Bush.

The significant interaction effect provides more interesting insights regarding the dynamic relationship between perceptions about Perot's trend, attention to the poll and affect toward Perot. The high odds of perceiving Perot as gaining, ranging from 1.55 ($e^{0.44}$) to 4.74 ($e^{1.55}$) as shown in Table 5, indicate that people with very high attention to polls (attention = 10) tended to strongly believe Perot was gaining. In general, the odds of perceiving Perot as gaining are contingent upon the respondents' affect toward Perot ; the higher the affect toward Perot, the higher the probability for them to perceive Perot as gaining. On the other hand, people who never paid attention to polls (attention = 0) had a large range of different perceptions. The odds of their perceiving Perot as gaining ranged from 12.18 ($e^{2.5}$) for those showing very strong affect toward Perot (affect = 100) to 0.08 ($e^{-2.56}$) for those totally disliking Perot (affect = 0) . Figure 1 also shows that among those whose affect score (for Perot) was higher than 75.9, those who never paid attention to polls tended to have higher odds of perceiving Perot as gaining than those who paid very high attention to polls. Conversely, people whose affect score was below 75.9 show the opposite pattern.

Meanwhile, the slope of line A and line B（in Figure 1）shows that for those who paid little attention to polls, their odds of perceiving Perot as gaining multiply by 1.05（$e^{0.5}$）for one unit increase in affect score for Perot, while the odds multiply by 1.01（$e^{0.1}$）for those who paid very high attention. That is, the effect of affect toward Perot on perceiving Perot as gaining is stronger for those who never paid attention to polls than for those who paid very close attention. This evidence tends to suggest that the projection effect rather than the bandwagon effect is operating here. On the other hand, the data in Table 4 indicates that the odds of perceiving Perot as leading multiply by 1.04 per one-unit increase in affect toward Perot. Given that Perot was far from leading in major poll results during the entire campaign period, this result might be regarded as another indication of the projection effect.

Vote Preference, Affect and Perceptions

Clinton

Unsurprisingly, the results show a very strong positive connection between affect toward Clinton and the odds of voting for him and very strong negative correlation for those who like Bush or Perot. Meanwhile, the high positive correlation between perceiving Clinton as leading and the odds of voting for him might provide one of the possible explanations for the bandwagon or the projection hypotheses. The e^b, equal to 16.78, suggests that the odds of voting for Clinton are 16.78 times higher for those who perceived Clinton as leading than for those who didn't. On the other hand, the odds of voting for Clinton are .21 times lower for those who perceived Perot as gaining than for those who didn't. This suggests that those who perceived Perot as gaining tended to vote for Perot or Bush after other variables are controlled for. As the data suggest no interaction effect among affect, state perceptions and trend perceptions, the additive effect indicates that, between any two-voters（A and B）if A's affect score for Clinton is at least 15.08 points higher than B's, A's odds of voting for Clinton will be higher than B's regardless of their differences in perceptions of Clinton's state and trend（see note 3 of Table 6）. That is, the affect effect will outweigh the perception effect. In sum, where the higher affect score was at least 15.08

points higher than the lower affect score, one with a higher affect who perceived Clinton to be both leading and gaining had the highest odds of voting for Clinton ; one with higher affect who perceived Clinton as leading and not gaining had the second highest odds ; one with higher affect who perceived Clinton to be not leading but gaining was the third ; one with higher affect, perceiving Clinton not leading and not gaining was the fourth ; similarly, the four combinations of perceiving leading or not and gaining or not show the same pattern among those people who showed lower affect toward Clinton and rank from the fifth to the last.

Bush

Table 7 shows that affect toward Clinton, Bush and Perot are important in predicting vote preference for Bush. The negative effect of affect toward Clinton and Perot on vote preference for Bush exhibits the mutually exclusive nature of impact of affect on vote preference among the three candidates. However, little evidence was found to substantiate the assertion that the perceptions about Bush's state and trend have either direct or interaction effect on vote preference for Bush.

Interestingly, the interaction between " perceive Perot as leading " and " perceive Perot as gaining " are shown as significant predictors ($b = -7.48$, $p < .05$) in influencing vote preference for Bush. Figure 2 shows that for those who perceived Perot as leading, the more they perceived Perot as gaining, the less likely they were to vote for Bush. Conversely, for those who perceived Perot as not leading, the more they perceived Perot as gaining, the higher the odds were that they would vote for Bush.

Regarding the log odds shown in Table 8, all those negative log odds indicate that among those who perceive either Perot as gaining (or not gaining) or leading (or not leading) , controlling for all other variables (including affect toward Bush) , their odds of vote preference for Bush are pretty low (from $1.3 * 10^{-4}$ ($e^{-8.92}$) to .11 ($e^{-2.19}$)) .

What will happen to our predictions of vote preference for Bush if we take into account perceptions about both Bush's and Perot's trend and state ? Table 9 and Figure 3 might provide some suggestions even though some of the variables are not significant predictors. The interaction effect indicates that other than those who perceived Perot as leading (and who obviously live in a self-constructed world) , people who perceived Bush as leading still have higher odds of voting for Bush than those who perceived Bush as not leading.

Conversely, people who perceived Bush as not gaining have higher odds of voting for him. In general, people who perceived Bush as neither leading nor gaining and Perot as leading but not gaining；who perceived Bush as leading and not gaining and Perot as not leading but gaining；who perceived Bush as not leading but gaining and Perot as leading but not gaining；and who perceived Bush as both leading and gaining and Perot as not leading but gaining have relatively higher odds of voting for Bush than do people with other combinations of perceptions.

Perot

The three interaction effects（Table 10）--affect toward Clinton and perception of Clinton as leading；affect toward Bush and perception of Bush as leading；and affect toward Perot and perception of Perot as leading--all show marginal to strong predicting ability on vote preference for Perot. However, the two negative coeffients（-0.7 for AfC ＊CLead and -.06 for AfB ＊ BLead）indicate that the interactions between affect toward Clinton（Bush）and perception of Clinton（Bush）as leading are negatively correlated with vote preference for Perot.

Table 11 and Figure 4 show that the effect of affect toward Perot strongly outweighs the effect of perceptions about Perot's state in predicting vote preference for Perot. When people's affect score for Perot was higher than 33.2, the odds of their voting for Perot are higher for those who also perceived Perot as leading than for those who didn't. The pattern is opposite for those with affect scores lower than 33.2, The slope of line A（.23）and line B（.12）shown in Figure 4 indicates that the odds of voting for Perot multiply by 1.25 （$e^{.23}$）for one unit increase in affect score among those who perceived Perot as leading and multiply by 1.13（$e^{.12}$）among those who perceived Perot as not leading.

Table 12 and Figure 5 reveal some strategic voting. When people's affect score for Clinton wase higher than 25.9, the odds of their voting for Perot were higher for those who also perceived Clinton as not leading than for those who didn't. Conversely, those people with an affect score toward Clinton lower than 25.9, who also perceived Clinton as leading tended to have higher odds of voting for Perot than if they didn't perceive Clinton as leading. The slope of line A（-.019）and line B（-.093）shown in Figure 5 indicates that the odds of voting for Perot multiply by.98（$e^{-.019}$）for a one-unit increase in affect score among those who perceived Clinton as not leading and multiply by.91（$e^{-.093}$）among those

who perceived Clinton as leading after other variables are controlled for.

The interaction effect shown in Table 13 and Figure 6 also suggests some potential strategic voting behaviors. People whose affect score toward Bush was greater than 58.2 had greater odds of voting for Perot if they perceived Bush as not leading rather than leading. But if a person's affect score toward Bush was lower than 58.2, he/she had lower odds of voting for Perot if he/she also perceived Bush as not leading rather than otherwise.

The slope of line A (-.114) and line B (-.052) shown in Figure 6 indicates that the odds of voting for Perot multiply by .89 ($e^{-.114}$) for a one-unit increase in affect score toward Bush among those who perceived Bush as leading and multiply by .95 ($e^{-.052}$) among those who perceived Bush as not leading.

Discussion

As previous studies have suggested, political interest has a strong positive influence on attention to polls. Meanwhile, people with party affiliation and lower education tend to pay more attention to election polls. Women pay more attention to polls than men do. The hypothesis that high attention to polls will lead to more accurate perceptions is also confirmed. The results show that the more attention individuals pay to polls, the more likely they will be to see Clinton as leading. The interactive effect involving the joint impact of affect toward Perot and poll attention also provides significant evidence in predicting Perot's gaining. This interactive effect shows that the impact of affect toward Perot on perceiving Perot as gaining is stronger for those who never pay attention to polls than for those who pay very close attention to polls ; this finding tends to support the projection hypothesis that people will project their affect onto their perceptions. However, the main effect of affect toward Clinton on perceiving Clinton as leading and gaining, of affect toward Bush on perceiving Bush as leading and gaining, and of affect toward Perot on perceiving his gaining could be seen as evidence of either the bandwagon or the projection effect.

The expectation that people tend to see their favorite candidate's major rival as not leading and not gaining in order to restore their cognitive imbalance or maintain their cognitive balance is mostly supported by the evidence. People who liked Bush tended to perceive Clinton as not leading and not gaining while people who liked Clinton tended to see

Bush as not gaining. In the 1992 election campaign, where Clinton was leading all the way through in the major polls, those Bush supporters who perceived Clinton as not leading were either apathetic knownothings or were projecting their affect or expectations onto their perceptions.

As we anticipated, affect generally has stronger impact on vote preferences, and its impact usually outweighs the impact of perceptions. Between the two dimensions of perceptions--state and trend--perception of leading or not tends to have more influence on vote preference than does the perception of gaining. Their additive effect seems to support our hypothesis 5.

However, the complicated interaction effect involving the joint impacts of perceptions of Perot's trend and state on vote preferences for Bush and the joint impacts of affect toward Perot, Clinton, and Bush and perceptions about their state on vote preference for Perot do provide different pictures of the psychology of momentum. There is little or no strong evidence for or against any specific form of momentum--only for a general connection between affect, perceptions of public support, and vote preference.

The interactive effect of perceptions about Perot's trend and state shows that for those who perceived Perot as leading, the more they perceived Perot as gaining, the less the odds were that they would vote for Bush. This might imply that among those who perceived Perot as leading, most could be Perot admirers who strongly projected their preferences onto perceptions regardless of the opposite reality. Those who also perceived Perot as gaining (even stronger Perot admirers) tended to have less odds of voting for Bush, compared to those who thought Perot to be leading but not gaining. Conversely, for those who perceived Perot as not leading, the more they perceived Perot as gaining, the higher the odds were that they would tend to vote for Bush. This might imply that people who perceived Perot as gaining might benefit Bush and therefore had a relatively higher motivation to vote for Bush, who might be their less disliked one, in order to vote against Clinton.

The combination effect of perceptions about Bush's state and trend and Perot's state and trend also reveal some possible strategic voting. Those who perceived Bush as not leading but gaining and Perot as not leading but gaining and those who perceived Bush as not leading and not gaining and Perot as not leading but gaining both have higher odds of voting for Bush than those who perceived Perot as not leading and not gaining but perceived Bush as either not leading but gaining or not leading and not gaining. This might suggest that there are

voters who thought Perot's gaining could close the distance between Bush and Clinton ; thus they tended to vote for Bush in order to vote against Clinton.

The three interactive effects involving the joint impact of affect and perceptions toward the three candidates are all shown as significant predictors for preference for Perot. These results provide fairly clear answers to at least some of the strategic voting hypotheses raised earlier. First, compared to those who perceived Perot as leading, people who perceived Perot as not leading did need to have stronger affect toward Perot in order to vote for him. Further, those who didn't like Clinton had little motivation to vote for Perot, which might imply that people were inclined to vote for Bush because he had a better chance of beating Clinton. It is somewhat surprising that those who strongly disliked Clinton (affect score < 5.4) but perceived Clinton as leading showed their odds of voting for Perot as greater than 1. They might be people who also didn't like Bush or strongly liked Perot or wanted to send a message regardless of Perot's near-impossible chances of winning. In addition, I was surprised that people who didn't like Bush and perceived Bush as leading have odds of higher than one of voting for Perot. Perhaps these people no longer vote strategically because Perot admirers are more loyal supporters.

This resarch does show some support for various models of voting psychology ; nevertheless, we should caution that most of the evidence of affect and perception effects were limited to showing connections rather than causal directions. Only some interactive effects reveal a slightly better explanation of whether bandwagon or projection psychology has the stronger effect. This by no means implies that this finding has explored the subtle voting decision-making process. However, the puzzle of " jumping on the bandwagon or dreaming of the bandwagon " is hardly crystal clear, just as the chicken-egg enigma remains an open question to our limited human wisdom.

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Table 1： Predicting Attention to Poll by Political Interest

Attention to Poll

Variable	b	SE	Beta	T
Party 1	.59	.26	.11	2.25*
Education	-.12	.05	-.12	-2.30*
Age	-.01	.01	-.02	-0.58
Sex	.82	.27	.15	3.05**
Income	.08	.07	.06	1.10
Political Interest	.37	.60	.32	6.17**
R Square	.13			

N = 376 （Listwise deletion of missing data）

** = p<0.1　　* = p<0.5　　# = p<.10

Table 2：

Logit model：Predicting Perception of Clinton's State/Trend by Affect Toward Clinton and Attention to Polls

Variable	Perceive Clinton's Leading (vs. not leading)			Perceive Clinton's gaining (vs. not gaining)		
	b	e^b	b/s.e.	b	e^b	b/s.e.
Education	0.1	1.01	.17	-0.8	.92	-1.85*
Sex	-.74	.48	-2.51*	.55	1.72	2.30*
Age	-1.0	0.99	-1.53	-1.00	1.00	-.67
Income	.02	1.02	.36	.12	1.13	2.34*
Democrat (vs. Rep)	.28	1.33	.66	-.13	.88	0.33
Independent (vs. Rep)	-.12	.88	-.28	-.14	.87	-.33
Affect Clinton	.02	1.02	3.45**	.02	1.02	2.25*
Affect Perot	-.00	1.00	-.59	-.00	1.00	-.66
Affect Bush	-.02	.98	-3.78**	-.01	.99	-1.77#
Poll Attention	.11	1.12	2.01*	-.03	.98	-.57

N = 361 (Listwise deletion of missing data)
Log Likelihood (Clinton's Leading) =-165.68 (see Appendix A)
Log Likelihood (Clinton's Gaining) =-226.44 (see Appendix B)

Table 3：

Logit model：Predicting Perception of Bush's State/Trend by Affect Toward Bush and Attention to Polls

Variable	Perceive Bush's Leading (vs. not leading)			Perceive Bush's gaining (vs. not gaining)		
	b	e^b	b/s.e.	b	e^b	b/s.e.
Education	.03	1.35	.40	.12	1.12	2.07*
Sex	.52	1.67	1.43	-.18	.83	-.63
Age	.00	1.00	.20	-.00	1.00	-.45
Income	.01	1.02	.13	-.11	.89	-1.67#
Democrat (vs.Rep)	-.46	.63	-.85	.47	1.60	1.09
Independent (vs.Rep)	-.14	.87	.25	.05	1.05	.10
Affect Clinton	-.01	.99	-1.50	-.01	.99	-1.88*
Affect Perot	.00	1.00	.68	-.00	1.00	-.65
Affect Bush	.03	1.03	3.85**	.03	1.03	4.60**
Poll Attention	.00	1.00	.07	.07	1.08	1.36

N = 361 (Listwise deletion of missing data)
Log Likelihood (Bush's Leading) =-114.66 (see Appendix C)
Log Likelihood (Bush's Gaining) =-172.98 (see Appendix D)

Table 4：

Logit model： Predicting Perception of Perot's State/Trend by Affect Toward Bush and Attention to Polls

Variable	Perceive Perot's Leading (vs. not leading)			Perceive Perot's gaining (vs. not gaining)		
	b	e^b	b/s.e.	b	e^b	b/s.e.
Education	-.20	.82	-1.63	.10	1.11	2.14*
Sex	.63	1.94	1.14	-1.06	.35	-4.11**
Age	-.01	.99	.55	-.00	.00	-.49
Income	-.21	.81	-1.68#	-.04	.96	-.69
Democrat (vs.Rep)	-.67	.51	-.81	-.19	.83	-.45
Independent (vs.Rep)	-.16	.51	-.81	-.19	.83	-.45
Affect Clinton	-.01	.99	-.97	$-2*10^{-3}$	1.00	-.39
Affect Perot	.04	1.04	3.01**	.05	1.05	4.83
Affect Bush	-.01	.99	-1.11	$3.6*10^{-4}$	1.00	.06
Poll Attention	.96	2.61	1.00	.30	1.35	3.07

N = 361 (Listwise deletion of missing data)
Log Likelihood (Perot's Leading) = -59.28 (see Appendix E)
Log Likelihood (Perot's Gaining) = -198.1 (see Appendix F)

Table 5：

Log Odds of Perceiving Perot's Gaining by Affect Toward Perot and Attention to Polls

Log Odds of Perceiving Perot's Gaining	Attention to Polls (10)	Attention to Polls (0)
Affect Toward Perot (100)	1.55	2.50
Affect Toward Perot (0)	0.44	-2.56

Fig1： Predicting Log Odds of Perceiving Perot's Gaining By Attention to Polls and Affect Toward Perot
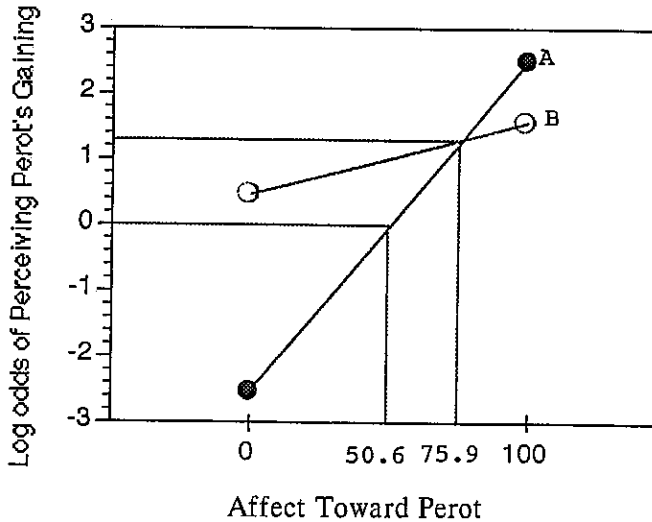
Note：(A)Attention to Poll = 0 （Y = .0506X-2.56 ）

(B)Attention to Poll = 10 （Y = .0111X + .44 ）

Table 6：

Logit model： Predicting Vote Preference （Clinton ） by affect Toward Candidates and Perceptions of Trend and State

Vote Preference （Clinton vs. Not clinton ）

Variable	b	e^b	b/s.e.
Education	.16	1.18	1.46
Sex	.25	1.28	.43
Age	.02	1.03	.94
Income	-.16	.85	-1.41
Democrat （vs.Rep ）	2.16	8.66	2.87**
Independent （vs.Rep ）	1.24	3.47	1.47
Poll Attention	-.10	.91	-.82
Affect Clinton	.11	1.18	5.64**
Affect Bush	-.07	.93	-4.43**
Affect Perot	-.06	.94	-4.43**
Perceive C Lead	2.82	16.78	2.88**
Perceive B Lead	-.26	.77	-.24
Perceive P Lead	1.27	3.57	.87
Perceive C Gain	.01	1.01	.02
Perceive B Gain	.69	1.99	.92
Perceive P Gain	-1.56	.21	-2.20*

Note：(1)N = 361 （Listwise deletion of missing data ）
　　(2)Log Likelihood （Vote For Clinton ）= -54.27 （see Appendix G ）
　　(3)1.18 （AfC ）>1.18 （Not Afc ）+16.78+1.01, so （AfC ）> （Not AfC ）+15.08

Table 7：

Logit model：Predicting Vote Preference （Bush） by affect Toward Candidates and Perceptions of Trend and State

Vote Preference （Clinton vs. Not clinton）

Variable	b	e^b	b/s.e.
Education	-.05	.95	-.36
Sex	-.54	.58	-.51
Age	-.02	.98	-.84
Income	.06	1.06	.29
Democrat （vs.Rep）	-.64	.53	-.66
Independent （vs.Rep）	-1.17	.31	-1.35
Poll Attention	.05	1.05	.33
Affect Clinton	-.06	.94	-3.07**
Affect Bush	.20	1.22	4.25**
Affect Perot	-.06	.94	-3.36**
Perceive C Lead	-1.68	.19	-1.59
Perceive B Lead	.48	1.61	.35
Perceive P Lead	2.63	13.87	1.07
Perceive C Gain	-1.07	.34	-.64
Perceive B Gain	-.82	.44	-.82
Perceive P Gain	.90	2.64	.93
CLead*CGain	.40	1.48	.21
BLead*BGain	.94	2.55	.52
PLead*PGain	-7.48	$5.70*10^{-4}$	-2.30*

N＝361 （Listwise deletion of missing data）

Log Likelihood （Bush）＝-34.69 （see Appendix H）

Table 8：Log odds of vote Preference for Bush

Log Odds of Vote Preference For Bush	Perceive Perot was Gaining	Perceive Perot was Not Gaining
Perceive Perot was leading	-8.92	-2.19
Perceive Perot was not leading	-5.04	-5.94

Fig 2： Predicting Log Odds of Vote Preference for Bush By perceptions about Perot's Trend and State.

Perceive Perot's Trend （ 0＝Not gain, 1＝Gain ）
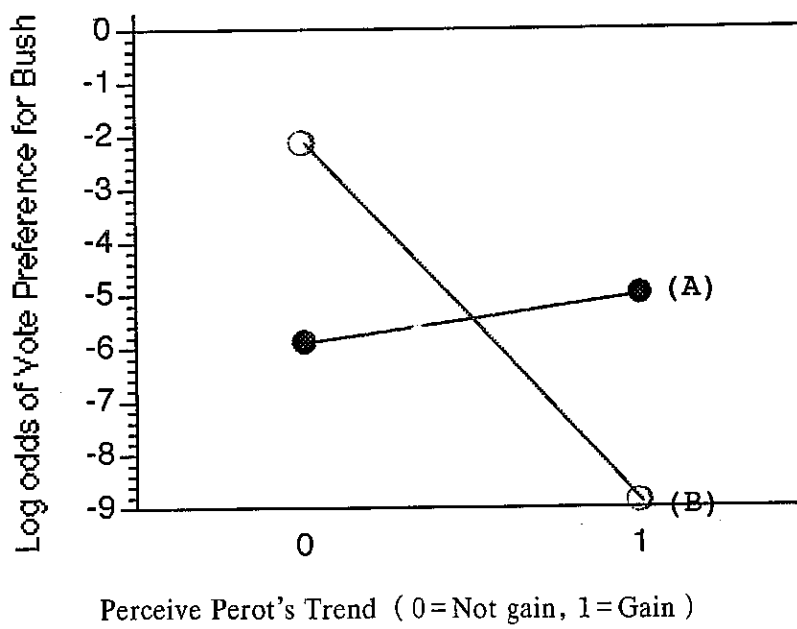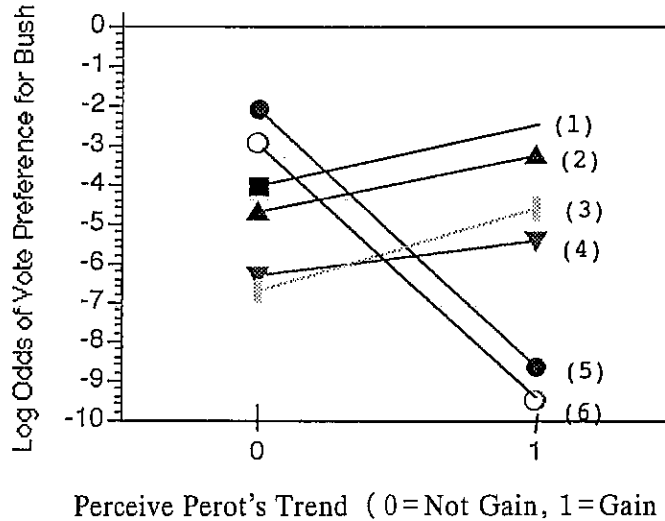
(A)：Perceive Perot as Not Leading

(B)：Perceive Perot as Leading

Table 9： Log odds of Vote Preference for Buish

Log Odds of Vote Preference For Bush	Perceive Perot was leading & gaining	Perceive Perot was leading & not gaining	Perceive Perot was not leading & gaining	Perceive Perot was not leading & not gaining
Perceive Bush was leading & gaining	N.A.	N.A.	-3.27	-4.71
Perceive Bush was leading & not gaining	N.A.	N.A.	-2.54	-3.9
Perceive Bush was not leading & gaining	-9.53	-2.95	-5.39	-6.28
Perceive Bush was not leading & not gaining	-8.71	-2.13	-4.57	-6.70

Fig 3： Predicting Log Odds of Vote Preference for Bush by Perceptions about Perot's and Bush's State & Trend

Perceive Perot's Trend （0 = Not Gain, 1 = Gain）

Note： (1)Perceive P（NL）& B（L, NG）(2)Perceive P（NL）& B（L, G）(3)Perceive P（NL）& B（NL, NG）(4)Perceive P（NL）& B（NL, G）(5)Perceive P（L）& B（NL, NG）(6) Perceive P（L）& B（NL, G）.（B：Bush, P：Perot, L：Leading, G：Gaining, NL：Not Leading, NG：Not Gaining）

Table 10：

Logit model： Predicting Vote Preference （Perot） by affect Toward Candidates and Perceptions of Trend and State

Vote Preference （Perot vs. Not Perot）

| Variable	b	e^b	b/s.e.
Education	.11	1.12	.93
Sex	-1.38	.25	-2.03*
Age	.02	1.02	1.04
Income	.19	1.20	1.30
Democrat （vs.Rep）	-.34	.71	-.39
Independent （vs.Rep）	1.41	4.09	1.70#
Poll Attention	-.03	.97	-.30
Affect Clinton	-.02	.98	-.76
Affect Bush	-.05	.95	-3.23
Affect Perot	.11	1.12	5.27
Perceive C Lead	1.78	5.95	1.16
Perceive B Lead	1.79	6.02	.91
Perceive P Lead	-6.60	.00	-1.46
Perceive C Gain	1.08	2.93	1.50
Perceive B Gain	-.43	.65	-.57
Perceive P Gain	1.21	3.35	1.56
AfC˙CLead	-.07	.93	-2.66**
AfB˙BLead	-.06	.94	-1.93#
AfP˙PLead	.12	1.13	1.08#

N = 361 （Listwise deletion of missing data）
Log Likelihood （Perot）= -49.92 （see Appendix I）

Table 11：

Log odds of Vote Preference for Perot （Affect Toward Perot* Perot's State）

Log Odds of Vote Preference For Perot	Affect Toward Perot (100)	Affect Toward Perot (0)
Perceive Perot was leading	9.39	-14.05
Perceive Perot was not leading	1.91	-9.29

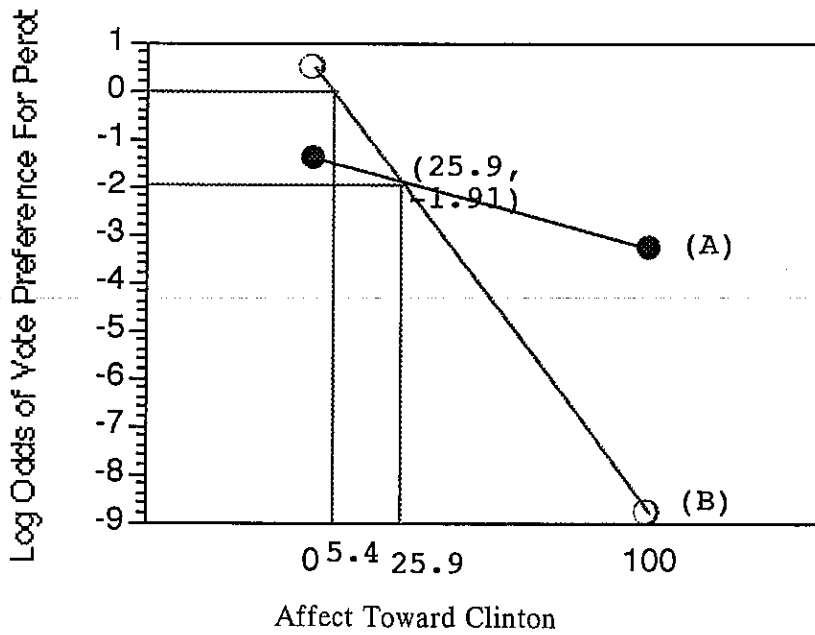Fig 4： Predicting Log Odds of Vote Preference for Perot By Affect Toward Perot and Perceptions about Perot's State
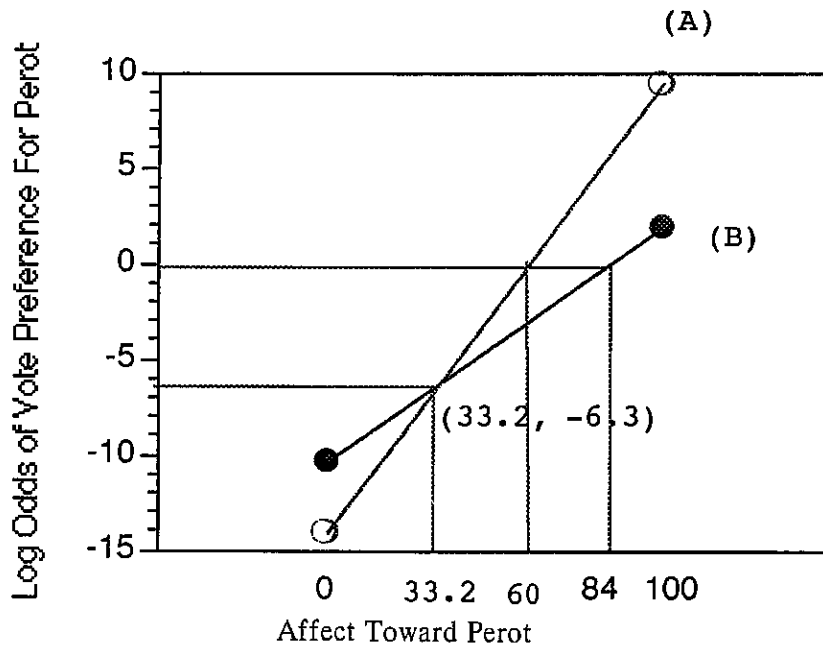
Note：(A)Perceive Perot Was Leading （Y = .23344x-14.05）

(B)Perceive Perot was Not Leading （Y = .1224x-10.33）

Table 12： Log odds of Vote Preference for Perot （ Affect Toward Clinton* Clinton's State ）

Log Odds of Vote Preference For Perot	Affect Clinton （ 100 ）	Affect Clinton （ 0 ）
Perceive Clinton Leading	-8.80	.50
Perceive Clinton Not Lead	-3.32	-1.42

Fig 5： Predicting Log Odds of Vote Preference for Perot By Affect Toward Clinton and Perceptions about Clinton's State
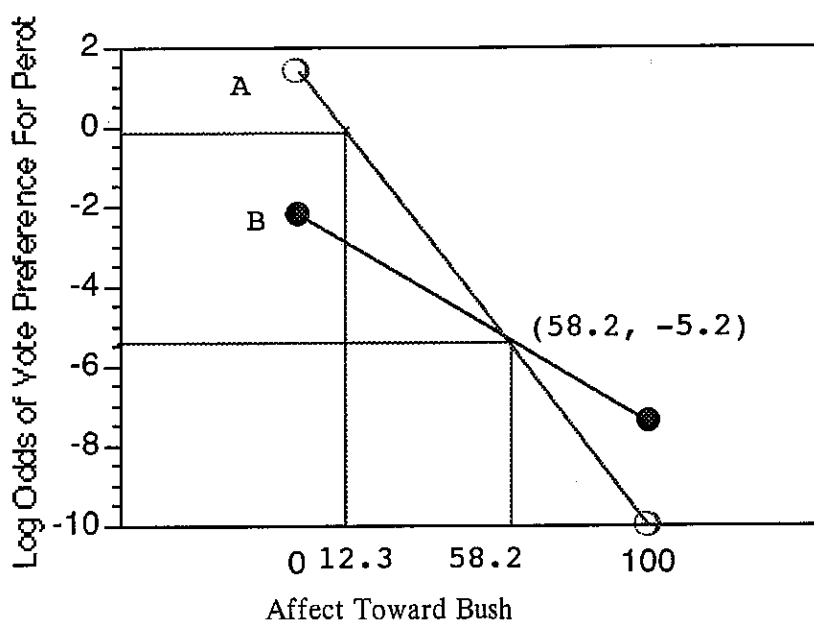

Note： (A)：Perceive Clinton Was Not Leading （ Y = -0.19X-1.42 ）

(B)：Perceive Clinton Was Leading （ Y = -.093X + .5 ）

Table 13： Log odds of Vote Preference for Perot （ Affect toward Bush* Perceive Bush's State ）

Log Odds of Vote Preference For Perot	Affect Toward Bush （ 100 ）	Affect Toward Bush （ 0 ）
Perceive Bush was leading	-10.00	1.40
Perceive Bush Was not leading	-7.41	-2.21

Fig 6： Predicting Log Odds of Vote Preference for Perot By Affect Toward Bush and Perceptions about Bush's State

Note： (A)Perceive Bush was Leading （ Y = -.114X + 1.4 ）

(B)Perceive Bush was Not Leading （ Y = -.052X-2.21 ）

Appendix A, Logit Model（Predicting Perceptions about Clinton's leading）Selection

Model	Log Likelihood	G^2 difference	$\triangle$ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll	-165.68		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll + AfClinton*attpoll	-165.66	.04（2vs. 1）	1

Note：(1)Cons（Constant），Sex, Ed（education），Income, Age, Democrat, Independent, Attpoll（Attention to Poll），AfPerot/AfP（Affect toward Perot），AfClinton/AfC（Affect Toward Clinton），AfBush/AfB（Affect Toward Bush），AfClinton* attpoll（Interactions between Affect Toward Clinton and attention to Poll），

AfBush* attpoll（Interactions between Affect Toward Bush and attention to Poll），Afperot*attpoll（Interactions between Affect Toward Perot and attention to Poll），PLead（Perceive Perot was leading），Clead（Perceive Clinton was leading），BLead（Perceive Bush was leading），PGain（Perceive Perot was gaining），CGain（Perceive Clinton was gaining），BGain（perceive Bush was gaining），AfP* PLead（Interactions between Affect Toward Perot and Perceive Perot was leading），AfC* CLead（Interactions between Affect Toward Clinton and Perceive Clinton was leading），AfB* Blead（Interactions between Affect Toward Bush and Perceive Bush was leading），AfP* PGain（Interactions between Affect Toward Perot and Perceive Perot was gaining），AfC* Gain（Interactions between Affect Toward Clinton and Perceive Clinton was gaining），AfB* BGain（Interactions between Affect Toward Bush and Perceive Bush was gaining），PLead*PGain（Interactions between Perceive Perot was leading and Perceive Perot was gaining），Clead*CGain（Interactions between Perceive Clinton was leading and Perceive Clinton was gaining），BLead* BGain（Interactions between Perceive Bush was leading and Perceive Bush was gaining）are thevariables used in this paper.

Appendix B, Logit Model（Predicting Perceptions about Clinton's Gaining）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll	-226.44		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll + AfClinton*attpoll	-226.09	.70（2 vs.1）	1

Appendix C, Logit Model（Predicting Perceptions about Bush's leading）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll	-114.66		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll + AfClinton*attpoll	-114.11	1.10（2 vs.1）	1

Appendix D, Logit Model（Predicting Perceptions about Bush's Gaining）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll	-172.98		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll + AfClinton*attpoll	-172.65	.66（2 vs.1）	1

Appendix E, Logit Model（Predicting Perceptions about Perot's Leading）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll	-59.28		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll + AfClinton*attpoll	-59.06	.44（2 vs.1）	1

Appendix F, Logit Model（Predicting Perceptions about Perot's Gaining）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll	-200.21		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + AfClinton + AfBush + AfPerot + Attpoll + AfClinton*attpoll	-198.11	4.2* (2 vs.1)	1

Appendix G, Logit Model（Predicting vote for Clinton）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain	-54.27		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain AfC*CGain + AfB*BGain + AfP*PGain	-52.67	3.20 (2 vs. 1)	3
(3)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain AfC*CLead + AfB*BLead + AfP*PLead	-51.97	4.60 (3 vs. 1)	3
(4)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + CLead + BLead + PLead + CGain + BGain + PGain + CLead*CGain + BLead*BGain + PLead*PGain	-52.89	2.42 (4 vs. 1)	3

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Appendix H, Logit Model（Predicting vote for Clinton）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain	-38.14		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain AfC*CGain + AfB*BGain + AfP*PGain	-34.75	6.78# (2 vs. 1)	3
(3)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain AfC*CLead + AfB*BLead + AfP*PLead	-35.18	5.93 (3 vs. 1)	3
(4)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + + CLead*CGain + Blead*BGain + PLead*PGain	-34.39	6.90# (4 vs. 1)	3
(5)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + CLead*CGain + Blead*BGain + PLead*PGain + AfC*CGain + AfB*BGain + AfP*PGain	-32.51	4.36 (5 vs. 4)	3
(6)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + AfCGain + AfBGain + AfPGain + AfC*CLead + AfB*BLead AfP*PLead	-32.48	4.44 (6 vs.4)	3

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Appendix I, Logit Model（Predicting vote for Perot）Selection

Model	Log Likelihood	G² difference	△ df
(1)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain	-59.98		
(2)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + AfC*CGain + AfB*BGain + AfP*PGain	-59.18	1.58（2 vs. 1）	3
(3)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + AfC*CLead + AfB*BLead + AfP*PLead	-49.92	20.10**（3 vs. 1）	3
(4)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + CLead*CGain + + Blead*BGain + PLead*PGain	-59.37	1.20（4 vs. 1）	3
(5)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + AfC*Lead + AfB*Lead + AfP*Lead AfC*CGain + AfB*BGainAfP*PGain	-49.67	.50（5 vs. 3）	3
(6)Cons + Sex + Ed + Income + Age + Democrat + Independent + Attpoll + AfClinton + AfBush + AfPerot + CLead + BLead + PLead + CGain + BGain + PGain + CLead*CGain + Blead*BGain + PLead*PGain + AfC*CLead + AfB*BLeadAfP*PLead	-48.15	3.54（6 vs. 3）	3

Appendix J, Descriptive Statistics

Variables	Mean	St. Dev	Min	Max
Votewho	1.55	.73	1	3
Sex	1.51	.50	1	2
Education	14.60	2.73	1	21
Income（in 10,000）	4.73	2.25	1.5	8.5
Age	42.50	16.80	18	96
Democrate（Rep）	.59	.49	0	1
others（Rep）	.14	.35	0	1
Attention to poll	4.23	2.64	0	10
Affect Clinton	57.60	29.15	0	100
Affect Bush	38.14	31.06	0	100
Affect Perot	45.25	26.55	0	100
Perceive Clinton was leading	.71	.46	0	1
Perceive Bush was leading	.15	.38	0	1
Perceive Perot was leading	.05	.22	0	1
Perceivr Clinton was gaining	.40	.49	0	1
Perceive Bush was gaining	.25	.43	0	1
Perceive Perot was gaining	.55	.50	0	1
Vote Clinton	.60	49	0	1
Vote Bush	.26	.49	0	1
Vote Perot	.14	.35	0	1

Note：Votewho（1＝Clinton, 2＝Bush, 3＝Perot）；Sex：1＝Male, 2＝Female

審委意見答覆

審委意見㈠

　　這篇論文所涵蓋的範圍粗看十分廣泛，不過兩個最主要也最有趣的問題是：㈠1992年美國選舉中，Projection effect 還是 Bandwagon effect 在產生效應？㈡選民是否有strategic voting 的現象？

對於第一個問題，評論者有幾點疑惑，建議作者再加以澄清：

　㈠關於 prejection effect 和 bandwagon effect 的比較，作者認為：" if we could find that the effect of affext on voters' perceptions of whether a candidate is leadingand gaining is not weaker for those who pay very little attention to the poll than for those pay very high attention to the poll, then we could more positively believe there is projection effect rather than a bandwagon effect " （ p. 6 ）但是我看不出以上這種比較的道理何在。

如果 affect 對選民的認知有顯著的效果，可能是 project effect. 可是為何不注意民調的選民此種傾向不弱（ not weaker ）時，則表示 projection effect 要大過 bandwagon effect 呢？令人不解。照字面的意思來看，好像應該反過來才對。如果選民十分注重民調顯示的趨勢，卻仍然感情用事，支持民調不看好的候選人，會不會才是 projection effect 呢？

　　我的主要問題是：不知作者如何界定和操作化 bandwagon effect？ 根據我的了解 bandwagon effect 應該是行為層面的效果，因此依我之見，也許要比較投票行為或傾向和 state and trend perception 的認知才看得出。作者在 p. 6最後一段似乎也認為 bandwagon effect 是行為層次的效果，他說：" … voters gain additional utility simply by voting for the winning candidate ". 可是他對於如何在操作化的層次去比較 projection effect 和 bandwagon effect 卻沒有加以說明，我猜想作者的意思是：注意民調就可能產生 bandwagon effect. 如果這是作者的操作化定義，顯然和一般的認知有一段差距。

　　同時，極有可能這兩種效果並不是互相對抗的。對某一候選人有好感因此認為他在領先，這是 projection effect. 可是由於相信他領先，也可能進一步跟著大多數人走，因此產生 bandwagon effect. 其實作者在文中似乎也有此意，他說：" … people's voting behaviors are not merely a projection of the perception of the gaining/losing

status；instead，they take the overall status of the candidate into account ”（ p. 7 ）.引申這句話的意涵是，我們對選情的認知其實是經常影響投票意向的，至少是因素之一。

在這裡更值得注意的是，民調客觀的數據不一定會直接對選民的認知產生影響，選民即使常接觸客觀的民調數據，仍然會主觀地加以過濾詮釋，因此到最後是這些 projection effect，而不是客觀的事實，產生了 bandwagon effect.果真如此，認知層面的 projection effect 不但不會和 bandwagon effect 相對抗，反而可能是它的原因之一了。因此即使在實際上某一候選人是落後的，他的忠實選民仍然可能做另外的詮釋，這固然是 projection effect，但也未必排斥了 bandwagon effect.

另外一點是，在這裡對於 leading 和 gaining 的認知要作更細的區分，造成兩種認知的心理機制以及其與 bandwagon 的關聯可能是不同的。

換句話說，在很多情況下，projection effect 和 bandwagon effect 之間有因果關係的可能，因此去比較它們並無意義。而在有些情況之下可以比較時，例如對民意的認知和對候選人的喜好衝突時（這應該是論文突顯的主題，而且是最有趣的部份，而且能在 Perot 的選民中最容易看到這種現象），最注意民調的人如果仍然跟著對候選人的 affect 走，才能顯現 projection effect 的效應。

以上所說，總括有以下幾點：

㈠作者比較 projection effect 和 bandwagon effect 是否合理？或者應該說明在什麼情況下兩者可能產生衝突？換言之，這篇論文的題目還不是十分清楚。這又涉及作者對 bandwagon effect 的定義（尤其是操作層次）十分模糊。

㈡比較的基礎何在？沒有提出強而有力的論證。我對作者提出的比較方式看法剛好相反， 請作者參考。

如果以上兩個疑點沒有解決，作者所作的主要分析和推論是站不住腳的（ 例如 p. 14，p. 19對 Perot 的結論，他的選民認為他領先，固然可能是 projection effect，但也不能說沒有 bandwagon effect ）.

關於第二個問題，也有類似的疏失。對於何謂 strategic voting 及如何測量未做詳細說明，因此往往難以看出其判定 strategic voting 的標準何在。

建議作者在概念和比較基礎上，再做說明。

除了以上的關鍵問題外，文中仍有些值得商榷之處，請作者參考：

⑴p. 14，為何以75. 9作為 cut-off point？ 少於75代表對 Perot 沒有好感嗎？

⑵P. 14在比較對 Perot 的 odd 時，1. 05和1. 01的差異其實看起來不大，如何能下結論說 projection effect 在作用？同樣的推理方式也出現在文中有些地方，例如 p.

19。

(3)表格中有些 typo，例如表4，poll attention 的數字3．07，Affect Perot 4．83應該
是有表示顯著的＊吧？

審委意見㈡

1.題目似可改爲 Bandwagon Effect and Strategic Voting。
2.p．7第二段似應加出處，顯明 finding 的來源。
3.此研究發現似可參考 William H．Flanigan and Mancy H．Zingale，Political
Behavior of the American Electorate，（ Washington，D．C．： A Division of
Congressional Quarterly Inc．,1994 ），並加以比較。

論文評審意見的答覆

感謝評審委員鉅細靡遺地閱覽拙作，並提出極爲精闢之觀點指導後進，在此僅就所
學及能力範圍所及，答覆您的指教如下：

㈠Bandwagon effect 大部份是指行爲層面的效果，然亦有不少研究將其衍伸至
cognition,preference， 以及 opinion 的層面，如 Bartels（ 985 ）研究選民的
preferenceand expectation ；Ceci and Kain（ 1982 ）研究 preference 的 switch
（從喜歡候選人甲轉至乙）及 shift（喜好之多寡變化），Navazio（ 1977 ）以 poll
result 的認知和 opinion 測量 bandwagon effect 。

有關 bandwagon 的操作型定義叙述於 P.6至 P.8，其中提及 " jioning the
leadingside " 或 " jioning the gaining side " 皆爲 bandwagon psychology。關
strategicvoting 的定義簡述於 P9中。

㈡根據評審委員之指教，作者僅於 P.6的 " Thus，if we …… " 之前加入 " The
relationship between individuals' own beliefs and their perceptions of the
prevalence of those beliefs appears to be a function of individuals' knowledge of,
or information about, the distribution of opinion among the aggregate （ e．g．,
Juddand Johnson，1981 ）．" 以更清楚地說明 poll attention 及 bandwagon,
projection 間的假設推理。

㈢誠如評審委員所指教，projection 及 bandwagon 之間確實有可能存在 simultaneous
或 nonrecursive 的關係，要解決此一問題，用 LISREL 可能是較佳之方式。然而由
於此研究樣本數不夠大且部份的 dependent variabe 是 categorical data，用
LISREL 出現了 empty cell 的問題，因此我採用了 Logit model 配合 interaction

effect，希望能提供一個較佳的解釋方式。

㈣P.14之所以以75.9 作爲 cut-off point 是因爲 Figure 1中兩方程式之交點求出，當 feeling score 大於75．9和小於75．9時，會出現兩個不同的 pattern。

㈤odds 1．05 和 1．01 之比，拙見以爲每增加一個 unit 的 affect score，odds ofperceiving gaining 就有1．05/1．01之差，應不可謂之不大。

㈥表四中之3．07和4．83未標記＊號（顯著），係因爲此 regression equation 中，interactioneffect 顯著，故其 interaction effect 以作解釋，其中牽涉到的 variables 單獨呈現的 maineffect，則無法依據數字去解釋其意義。

㈦p．7第二段後係解釋第一段所引述之發現。

㈧題目更改爲 " Bandwagon，Underdog，and Strategic Voting——A Case Study of the1992 U．S．Presidential Election "。