Making the most of a two vote ballot:
Voter adaptation to a more complex electoral system

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Abstract. Split voters in mixed systems have been alternately cast as sophisticated strategists abandoning uncompetitive constituency candidates; confused coalition-supporters mistakenly splitting their votes to express an equal preference for two parties; or as personal devotees of popular candidates, selecting the most appealing local representative regardless of their party preference. This paper analyses data from the 2002 New Zealand Election Survey, revealing evidence to support all three scenarios and demonstrating that the majority of split voters divide their votes between ideologically compatible, electorally viable candidates and parties. Multinomial logistic regression is used to identify which voters are most likely to cast a straight-ticket vote, and which voters are most likely to split their votes instrumentally and expressively.

Changing from a single member plurality (SMP) electoral system to a mixed system has required voters in New Zealand to adapt to a more complex ballot paper and a more complex electoral formula for the translation of votes into seats. In the new Mixed Member Proportional (MMP) system, voters must cast two votes: one for their district candidate of choice and one for their preferred political party. New Zealanders have welcomed the opportunity to 'split' their votes by giving their party vote to one party and their district vote to a candidate from another. In each of the three elections held to date under MMP, more than one in three voters has chosen to split their ballot in this way. Analysing split voting provides an opportunity to assess whether voters understand the role of the two votes in this compensatory mixed system, or whether greater voter choice has come at the cost of increased confusion.

Earlier research on voting behaviour in mixed systems has interpreted split voting variously as a form of strategic voting (Barnes *et al.*, 1962; Fisher, 1972; Cox, 1997; Bawn, 1999), evidence of voter ignorance about the function of the two votes (Smith, 1987; Jesse, 1988; Schoen, 1999; Trefs, 2003), or as simply indicative of different voter preferences between the parties and the local candidates (Karp *et al.*, 2002; Blais, Loewen and Bodet, 2004). This study uses data from the 2002 New Zealand election to demonstrate that these explanations for split voting in mixed systems should not be considered mutually exclusive. While the existing literature documents a debate between scholars convinced of the superior explanatory power of one model over the others, analysis of the New Zealand data supports all three explanations. The majority of New Zealand split voters divide their votes in ways that suggest they understand the new system, but there is also evidence of voter confusion and the influence of the popularity of individual candidates. Multinomial logistic regression helps to distinguish which voters are more likely to cast an instrumentally or expressively split vote.

New Zealand has been selected as a case study because of the high incidence of split voting in that country. To compare, the proportion of voters choosing to split their ticket under MMP in Germany has ranged from 4.4 per cent in 1961 to 22 per cent in 2002. In the 2003 Scottish Parliament and Welsh Assembly elections, 28 per cent of Scottish voters and 17 per cent of Welsh voters split their votes. In contrast, 37 per cent of New Zealand voters split their votes in the 1996 election, 35 per cent in 1999 and 39 per cent in the 2002 election that

provides the data for this study. The New Zealand experience of adaptation from SMP to a more complex electoral system is also of particular relevance in Canada today, with two-vote mixed systems being recommended recently at the provincial level by the Prince Edward Island Electoral Reform Commission (2003) and the New Brunswick Commission on Legislative Democracy (2004), and at the federal level by the Law Commission of Canada (2004).

Explanations for split voting

Both the 'strategic split voter' and the 'confused split voter' hypotheses assume that rational voters will seek to avoid wasting either of their votes by voting for a party or a candidate with little chance of electoral success. If voting patterns conform to the scholar's definition of rational voting behaviour then split voting is classified as strategic; if they do not then this is interpreted as evidence of voter confusion. In contrast, explanations of split voting that point to the cross-party appeal of popular local representatives or the desire to make a statement of political belief regardless of the electoral viability of the party or candidate are grounded in a perception of voting as expressive rather than instrumental behaviour.

a) Strategic split voting

The 'strategic split voter' theory draws on Duverger's 'wasted vote' thesis.

> In cases where there are three parties operating under the simple-majority, single-ballot system, the electors soon realize that their votes are wasted if they continue to give them to the third party; whence their natural tendency to transfer their vote to the less evil of its adversaries in order to prevent the success of the greater evil (1954: 226).

The goal of short-term instrumentally rational voters is to make their votes count by affecting the outcome of the current election (Cox, 1997). To do so, they will evaluate the capacity of their preferred party to win seats in the legislature, and the likelihood of their preferred candidate winning a plurality of the vote in the district. If a voter suspects that either the party or the candidate is destined for electoral failure then the voter will defect to the most ideologically proximate viable option. Thus, for a split vote to be rational, both the party and candidate must be perceived as capable of entering the legislature and the two votes should be ideologically compatible. Ideological compatibility is important because it is assumed that the voters' ultimate goal is a government that reflects their ideological preferences.

Research on split voting in Germany by Barnes *et al.* (1962), Fisher (1973) and Bawn (1999) argues that split voting reflects a strategic decision by minor-party supporters to cast their *Zweitstimme* (second or party vote) for their preferred party, but to support the most politically sympathetic major-party candidate with their *Erststimme* (first or district vote). Most recently, Bawn (1999) has demonstrated that in the six federal elections held from 1969-1987 between two to eight times as many split ballots fit the strategic pattern of major-party first vote, minor party second vote than vice versa. Similarly, Karp *et al.* (2002) conclude that New Zealand split voters cast votes in rational patterns. Research on strategic voting in SMP electoral systems, or mixed systems with a SMP component, shows that voters who are better educated, more politically informed, and have weaker partisan attachments are more likely to vote strategically (Roberts, 1988; Bowler and Lanoue, 1992;

Lanoue and Bowler, 1992; Niemi, Whitten and Franklin, 1992; Johnston and Pattie, 2002; Karp *et al.*, 2002; Blais, Loewen and Bodet, 2004).

b) Confused split voting

The second hypothesis proposes that split voting is the result of voter confusion over the relative importance of the district and party votes for determining the composition of the legislature. In MMP electoral systems, a party's total share of seats is allocated according to its proportion of the party vote. Any district seats won are subtracted from this number and the remaining allocated seats are filled by candidates on a party list.   Except in rare cases of 'overhang', where parties win more district seats than their proportion of the party vote would entitle them to, the district vote generally does not increase seat share. Smith (1987), Jesse (1988) and Schoen (1999) argue that split voters are trying to express a preference for two parties in the mistaken belief that this contributes to the seat share of both parties. Studies of split voting typically quote Smith's description of this behaviour as being "a nice touch of sophistication based on ignorance" (1988: 134). Analysing German federal elections between 1953 and 1990, Schoen finds that only 30 per cent of German split-ticket voters split their votes in an entirely rational way, accurately assessing the electoral prospects and coalition building potential of their two choices (1999). Jesse points to opinion poll data showing that fewer than half of German voters can correctly identify the *Zweitstimme* or party vote as most important in determining the number of seats each party holds in the Bundestag (1988).

While advocates of the confused split voter hypothesis are dismissive of the suggestion that voters can express a preference for a coalition government by splitting their votes between two coalition partners, Bawn (1999) argues that as long as the vote is split rationally – by supporting a major party district candidate and a minor party list rather than vice versa – this *is* effectively a vote for a coalition, because the greater proportion of party votes received by minor parties reduces the chance of a major party being able to form a single-party government. Roberts (1988) states that the desire to prevent single-party government or to support a particular coalition continue to be the principal grounds for voting for the pivotal German Free Democratic Party (FDP), especially when voters support the FDP list and either a Christian Democrat or Social Democrat local candidate. Depending upon the way in which a voter has split his or her district and party vote, split voting to support a coalition government can be interpreted as evidence of either strategic or confused split voting.

c) Personal split voting

Personal vote explanations suggest that the individual qualities of the district candidate influence split voters more than the candidate's electoral viability or partisan affiliation. Blais, Loewen and Bodet argue that split voting in New Zealand is "clearly distinct" from strategic voting and is driven primarily by voters' personal preferences for a local candidate who is not representing their preferred party (2004: 77*).* Karp *et al.* (2002) explain that MMP makes a pure personal vote possible because voters are free to express their preference for local candidates on the basis of their personal appeal or record of district service, safe in the knowledge that the partisan composition of parliament is determined by their party vote. They find that the effect of candidate appeal on defection from the party candidate is very strong. While Cox (1997) and Bawn (1999) have suggested that personal voting may also

occur in Germany, this is rejected by other scholars who either describe German candidates as "unknown to, and disregarded by the voters" (Miller and Niemi, 2002: 186) or point out that this would suggest that only the two larger parties ever have attractive candidates (Barnes *et al.,* 1962; Fisher, 1973) as no candidate from a minor party won a district seat between the late 1950s and 1994. Trefs argues that "the first [district] vote is not generally cast with regard to a candidate's personality but according to his party affiliation" (2003: 100).

Expressive voters may consider it more important to make a sincere statement of support for a particular candidate, party or ideology than to affect the outcome of the election. Cox and Schoppa (2002) use data from the 1996 Japanese Lower House election to demonstrate that minor parties attract a greater proportion of the party vote in districts where they stand candidates than in districts where they do not. Even if the candidate has little chance of winning the seat, parties use the "human face" of their candidates to encourage expressive voters to cast both votes for the minor party (Cox and Schoppa, 2002: 1031). While this particular example pertains to voters who cast both votes for the same party, it also demonstrates that the personal appeal of candidates may motivate the voting decision for some voters more than a strategic evaluation of the candidates' electoral prospects. Cox and Schoppa describe societies as being composed of a "continuum of voter-types" ranging from strategic voters at one end to expressive voters at the other, with a group in between who could "go either way" and vote instrumentally or expressively (2002: 1031). As the analysis below demonstrates, New Zealand voting behaviour provides ample illustration of this continuum.

Electoral competition in New Zealand

Nineteen countries currently use a form of mixed-member system with two votes for national elections, eleven of which use parallel mixed systems and eight of which use compensatory mixed systems (Massicotte and Blais, 1999). In compensatory mixed systems, such as the Mixed Member Proportional system (MMP), the constituency vote elects a local representative in single-member districts, while the party vote determines the overall partisan composition of the legislature and is used to compensate for any disproportionality in the number of single-member districts won by each party. The New Zealand MMP model translates district votes into seats using the single member plurality (SMP) electoral system, and translates the party votes into seats using the Sainte-Laguë formula. Compensatory seats allocated on the basis of the party vote are filled by representatives from closed national party lists. A party can enter the New Zealand Parliament either by winning a district seat, or by winning at least 5 per cent of the nation-wide party vote and therefore qualifying for party list seats (See Boston *et al.*, 1996). In practise this has meant that the two major parties win the majority of local district seats, while most representatives from minor parties gain entry to the legislature via the party lists.

Since the change from an SMP to MMP electoral system in 1993, the number of parties winning seats in the House of Representatives has expanded considerably (Barker and McLeay, 2000). Having once exemplified the two-party, 'first past the post' system (Lijphart, 1984; Taagepera and Shugart, 1989), the adoption of proportional representation has contributed to development of a multiparty system where coalition and/or minority governments are now the rule. When the New Zealand Parliament was dissolved prior to

the 2002 election, eight parties held parliamentary seats: two major parties and six minor parties, spanning the traditional left-right spectrum, as summarised in Figure 1.

(Figure 1. Left-right placement of New Zealand political parties at the 2002 election)

Under MMP, the 120 seat legislature comprises both local district MPs and list MPs, at a ratio of roughly 60:40. In 2002, there were 69 electoral districts, including 7 Maori districts reserved for those members of New Zealand's indigenous population who chose to register on the Maori electoral roll.[1] Thus, 51 seats were filled by representatives from party lists. The two major parties, Labour on the centre-left and National on the centre-right, dominated party competition under the SMP system and continue to dominate electoral competition within New Zealand's electoral districts, which remain elected by the same 'first-past-the-post' formula. Both major parties stood candidates in all districts and succeeded in winning all but three. In contrast, none of the six minor parties seeking to return to parliament in 2002 contested all districts, and each was only considered to be competitive in one district (Vowles *et al.*, 2004).[2] Table 1 summarises the district success of each of the parties. However, as the composition of Parliament is determined by the proportion of the party vote won by all parties exceeding the electoral threshold of one district seat or 5 per cent of the national vote, minor party campaigns in New Zealand tend to place more emphasis on the party vote than the district vote.

(Table 1. Summary of party candidates' performance in districts, 2002)

In such an electoral context, there is a significant strategic incentive for minor party supporters to split their votes, particularly those voters who do not live in the one district where their party's candidate has a chance of winning or who live in a district where their party has chosen not to stand a candidate. For minor party supporters eager not to waste their votes, it will be rational in most districts to cast their party vote for their preferred minor party and their district vote for the candidate from the ideologically closest major party. Supporters of left-wing minor parties will vote for the Labour Party candidate, supporters of right-wing minor parties will vote for the National Party candidate, and supporters of the two centre parties could vote for either candidate, depending on their personal preference for either a centre-left or centre-right coalition.

It is not surprising, therefore, to see the dramatic difference in the percentage of split votes between voters who cast their party vote for a major party and those who voted for a minor party. Fewer than 20 per cent of major party voters cast their district vote for a candidate from a different party, in contrast to the substantial majority of minor party voters (see Table 2). Of course, for minor party supporters in districts where their preferred party was not standing a candidate, split voting was the only option available.

(Table 2. Proportion of split-ticket voting by party vote in 2002)

Testing the strategic, confused and personal split voter hypotheses

To test which of these three explanations for split-ticket voting holds greatest explanatory power in the New Zealand context I have designed a model incorporating the independent

variables identified as contributing to split-ticket voting in each case (see Appendix A for detailed definition of the variables).

Strategic split voters are expected to be minor party identifiers who are sufficiently politically informed to evaluate the electoral prospects of the candidates in their district, and with a sense of party identification that is weak enough to permit them to vote for a more electorally competitive candidate from another party. While major party candidates may not be perceived as viable in all electoral districts, leading some major party supporters to vote strategically in favour of another candidate, this form of strategic voting is more likely among minor party supporters as minor party candidates are less likely to be electorally competitive (see Table 1). Strong partisan identification is assumed to distort the capacity of voters to evaluate the viability of their party's candidate in a local district (Campbell *et al.*, 1964). Therefore, the model includes independent variables measuring whether or not an individual *identifies themselves with a minor party*, his or her *exposure to political news and advertising during the campaign*, and the *strength of any party identification.* The strategic split voter hypothesis predicts a positive relationship between both support for a minor party and exposure to political information and split voting, and a negative relationship with strength of party identification.

Confused split voters are predicted to split their votes to indicate an equal preference for two parties and to not understand the importance of the party vote for determining the composition of the legislature in an MMP system. The model includes variables indicating whether an individual prefers coalition government over single party government and measuring whether respondents identified a statement that 'the party votes usually decide the total number of seats each party gets in Parliament' as true or false. The confused split voter hypothesis predicts a positive relationship with *preference for coalition government*, and a negative relationship between *understanding the importance of the party vote* and split voting.

Personal split voters are assumed to prefer a candidate from another party, regardless of the candidate's party affiliation or chance of being elected. To this end, the model includes a variable identifying whether or not respondents identified the candidate that they "personally most liked" as being from a party other than that for which they cast their party vote. The personal vote hypothesis predicts that *preference for a candidate from a different party* will have a positive influence on the likelihood of split voting.

This model is tested using data from the 2002 New Zealand Election Survey (NZES).[3] When respondents who did not vote or who reported only casting a party vote are excluded, the NZES sample matches the proportion of split voters in the actual voting population, with 39 per cent of respondents indicating that they had split their votes. The binary dependent variable is coded 1 for a split-ticket vote and 0 for a straight-ticket vote.

(Table 3. Estimating the likelihood of casting a split vote: logistic regression coefficients)

As can be seen, the direction of the relationships lends support to all three hypotheses and all independent variables have a statistically significant effect on the probability of split voting. This regression also reveals the very different characteristics of straight-ticket and split voters.[4] For a voter who identifies themselves with a minor party but lacks a strong partisan preference, is highly politically informed, prefers coalition government and a local

candidate from another party, and does not understand the importance of the party vote, the probability of casting a split vote is 97 per cent, while the probability of casting a straight-ticket vote is just 3 per cent. Conversely, an uninformed major party identifier with a strong sense of party identification, who understands MMP and prefers both single party government and the district candidate representing his or her party has a 98 per cent probability of casting a straight-ticket vote.

The contrast between the profiles of the split-ticket and straight-ticket voter is not surprising. Essentially, the voters whose electoral preferences were best served by an SMP electoral system – voters who strongly identify with either of the two major parties and prefer single party majority governments – will continue to vote as they did under the old system by casting both votes for the same major party. Such a voter has little incentive to investigate the opportunities to change their voting behaviour provided by the two vote MMP system because his or her voting preferences would be equally accommodated by having only one vote. In contrast, voters whose preferences for a minor party or for coalition government were consistently thwarted by the SMP system, or who does not like the local candidate representing their party, have more incentive to explore the split voting opportunities provided by MMP.

This equation is less useful for assessing the validity of the three different explanations for split-ticket voting provided above. At first glance, the split voter appears to be driven by an inconsistent combination of voting factors that can be interpreted to support all of the hypotheses. It is more illuminating to compare the independent effect of each of these variables on the probability of split-ticket voting. To do so, the values for all variables are kept constant at their means. The value of each variable is then shifted from its minimum to its maximum value to simulate the effect of this variation in this variable alone on the probability of split-ticket voting. For example, holding all the other variables constant at their means, the likelihood of a voter casting a split ballot increases from 20 per cent to 64 per cent if that voter supports a minor party rather than a major party. The results are summarised in Table 3 above.

Clearly, preferring a candidate from a party other than that for which the voter has cast their party vote has the greatest impact on split-ticket voting, increasing the probability of a voter splitting their vote from 11 to 78 per cent. Not surprisingly, 70 per cent of the split ticket voters in the sample reported that they had personally most liked the candidate from another party. However, given that this data was drawn from a post-election survey, this figure may have been inflated by respondents' desire to justify their decision retrospectively. As discussed above, supporting a minor party also has a significant effect on the probability of split-ticket voting. The influence of the four remaining variables is not as substantial. Their influence on the probability of split voting ranges from a 9 percentage point increase in the probability of splitting for voters who prefer coalition to single-party government, to a 16 percentage point increase among voters who are highly politically informed.

Relying solely on a binomial logistic regression leads to the conclusion that split-ticket voting is predominantly motivated by voters having separate preferences for the candidate they would most like to represent their district and by voters' identification with a minor party. While the statistical significance and direction of the relationships between all the independent variables and split voting provide some support for all three explanations, this

initial interpretation would suggest that the personal split voter hypothesis has the greatest explanatory value of the three in the New Zealand context, followed by the strategic split voter model.

Categorising split voting patterns

Considerable variety in the candidate-party combinations of split ticket ballots may explain why the initial regression provides some evidence to support all three explanations for split ticket voting. Analysis of the split votes cast by respondents to the NZES shows that some votes are split in ways that make sense, politically or technically, and some are not. Previous analysis of German federal election ballots distinguishes between two broad patterns of split voting (see for example Schoen, 1999 and Trefs, 2003). *Instrumentally* split ballots not only combine a vote for a viable candidate with a vote for a viable party, but the two votes are cast for ideologically compatible choices. Such split voting supports the strategic voter hypothesis, where voters split their ballot to avoid 'wasting' a vote on a candidate or party with little chance of electoral success. In contrast, *expressively* split ballots include votes cast for candidates with little chance of winning the electoral district, parties which are unlikely to pass the electoral threshold for the allocation of list seats, or for an ideologically incompatible combination that would be highly unlikely to form a coalition. Such voting may either be motivated by the desire of voters to express their genuine primary preferences, regardless of the candidate or party's chance of success, or by confusion over the role of the two votes.

To determine whether different factors drove New Zealand voters to split their votes instrumentally and expressively, I recoded the dependent variable to distinguish between votes that were split between electorally viable, ideologically compatible candidates and parties, and votes that were not. This first required assessing the likelihood that each party competing in the 2002 election would pass the threshold for the allocation of party votes by winning at least 5 per cent of the nationwide party vote or at least one electoral district. Although all of the minor parties, with the exception of the Green Party, had polled at under 5 per cent at some periods during the 2002 election campaign, the certainty of three minor party leaders – Jim Anderton (Progressive Coalition), Winston Peters (New Zealand First), and Peter Dunne (United Future) – winning their districts was never in doubt (Vowles, 2004). Alliance Party leader Laila Harré came a close second in the Waitakere district, losing by only 2,333 votes, the sixth smallest margin in the country, and could reasonably have been perceived as having a credible chance at helping her low-polling party cross the electoral threshold. Having reached heights of nearly 10 per cent support in the final two weeks of the campaign, ACT was also an electorally viable party. Therefore eight parties are defined as electorally viable: Labour, National, ACT, New Zealand First, United Future, the Green Party, the Alliance and the Progressive Coalition. Electorally viable candidates were defined as the top two polling candidates in each district. These were the Labour and National candidates in all but eleven districts. Thus, split votes were coded as instrumental splits if they combined a vote for one of the top two polling candidates in any district with an electorally viable party that was ideologically compatible with the voter's candidate of choice. Ideological compatibility is defined as proximity on a left-right spectrum: parties are ideologically compatible with other parties at the same point on the spectrum, or parties to their immediate right or left (see Figure 1).

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All other split votes, including any vote for an electorally non-viable candidate or party, or votes split between ideologically incompatible parties, were initially identified as expressively split votes, potentially influenced by voter confusion. From this category, I sought to identify a sub-group of expressively split votes most likely to have been influenced by the personal appeal of a particular district candidate. These were the votes split between one major party and the candidate representing the other major party. Reasoning that major party supporters would have little strategic incentive to abandon their own party's candidate, I created a third split vote category for votes split between one major party and the candidate representing the other major party. While a poll in early June 2002 reported that 36 per cent of National party supporters would consider giving Labour their party vote in order to keep the Greens out of government (Miller and Karp, 2004), analysis of voting patterns suggests that the personal vote played a significant role in the decision by major party supporters to vote for the other major party candidate. For example, the two districts in which this type of split-vote pattern appeared most frequently in the sample are New Plymouth and Nelson, both represented by MPs with considerable personal support. In the New Plymouth district Labour MP Harry Duynhoven was elected by the second largest margin of votes in the country (surpassed only by the Prime Minister, Helen Clark) and his 20,905 district votes far exceeded the 12,065 party votes cast for the Labour Party. In Nelson, National MP Nick Smith won more than twice as many district votes (15,779) as party votes cast for the National Party (6,517) (Elections New Zealand, 2002).

Having excluded all votes where survey respondents reported not voting or casting only a party vote, the breakdown of the sample between straight-ticket votes, instrumentally split votes, expressively split votes and personal split votes is presented in Table 4. Of the split-ticket votes, 53 per cent were split instrumentally, 37 per cent were split expressively and 10 per cent were split between a one major party and the other major party candidate.

(Table 4. Classification of voting patterns in the 2002 New Zealand election)

Identifying distinct groups of split voters

Applying this new four-category dependent variable allows me to model the extent of the influence of the independent variables on split voting (the comparison group is straight-ticket voters.)

(Table 5. Estimating the likelihood of casting a instrumental, expressive or personal split vote: multinomial logistic coefficients)

Two variables – identifying as a minor party supporter and preferring a candidate from a different party – influence the probability of casting all three types of split vote. Not surprisingly, given my coding of ballots split between the two major parties as personal split votes, support for a minor party increases the likelihood of casting an instrumentally or expressively split vote but decreases the likelihood of casting a personal split vote. Preferring a candidate from a different party increases the likelihood of casting all three types of split vote.

The value of recoding the dependent variable to distinguish between the three types of split ballot can best be seen when we look at the independent variables that influence some types

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of split voting but not others. In particular, preference for coalition government and understanding the importance of the party vote have a statistically significant impact on the likelihood of casting only an expressively split vote. Preferring a coalition government increases the probability the probability of expressive splitting, while understanding the role of the two votes decreases the likelihood of this non-instrumental voting behaviour. Voters who understand the importance of the party vote are less likely to split their votes in favour of non-viable candidates or parties, or incompatible coalition partners. Strength of party identification has a statistically significant effect on expressive and personal splitting, but not instrumental splitting, reducing the probability of casting both types of ballot as partisan feeling increases. As predicted, higher levels of exposure to campaign coverage and political advertising increases the probability of instrumental splitting, but it also increases the probability of casting an expressively split ballot.

Factors contributing to different types of split voting behaviour

It is possible to further distinguish between the influence of each variable on the different forms of split voting by comparing the size of the effect of the statistically significant variables on the probability of casting each of type of split ballot. To do so, I compare the effect of each variable at its minimum and maximum values, holding the other variables constant at their means (see Table 6).

(Table 6. Probability of casting each type of split vote at minimum and maximum value of each independent variable)

This demonstrates, for example, that while supporting a minor party influences the probability of all three types of splitting, it has by far the greatest effect on the likelihood of casting an instrumentally split vote. Identifying as a minor party supporter increases the probability of expressive splitting by only 6 percentage points, from 11 per cent to 17 per cent, but increases the probability of instrumental splitting by 38 percentage points, from 4 per cent to 46 per cent. Of the variables that influence instrumental splitting, minor party identification has the greatest influence on casting this type of vote. In contrast, preferring a candidate from a different party has the greatest effect of the variables affecting the likelihood of expressive and personal splitting. This variable increases the likelihood of an expressive split by 30 percentage points, while minor party support, strength of party identification, preference for coalition government and understanding the role of the party vote all change the probability of this type of voting by 6 to 10 percentage points.

Minor party supporters have considerably more incentive to strategically split their votes given that few minor party district candidates have much chance of electoral success. Attention to campaign news and advertising also influences the probability of casting an instrumentally split vote. In their study of split voting under MMP in Scotland, Wales and New Zealand, Johnston and Pattie conclude that "electors will only vote a split ticket when convinced to do so by campaign information" (2002: 598). They argue that it is the campaign information distributed by local candidates that is essential in convincing voters to split their votes. In districts where parties have spent more money on local campaigns, the candidates have more success at preventing their own party supporters from voting for other candidates and persuading supporters of other parties to split their vote in the candidates' favour. This conclusion assumes that voters will automatically cast a straight-ticket vote for

their preferred party, regardless of the viability of the party's candidate, unless convinced to do otherwise by a well-funded local campaign on behalf of another candidate. Assuming straight-ticket voting as the 'default' voting option is perhaps more valid in Scotland and Wales than in New Zealand where, as discussed above, voters are nearly twice as likely to cast a split vote.

In New Zealand split ticket voting may not only be encouraged by campaign information emphasising the merits of competing local candidates, but by minor party campaign material emphasising the importance of the party vote. While major party campaign material focuses on both the constituency and the party vote, minor parties have placed far more emphasis on targeting the party vote. Some minor parties even explicitly endorse major party candidates in their campaign material. For example, in the 1999 New Zealand election ACT campaign literature advised ACT voters to cast their party votes for ACT and their constituency votes for the National party candidate in all but the two districts where ACT candidates were considered to be competitive (Pearse, 1999). This may explain why understanding MMP does not have a statistically significant effect on the probability of casting a strategically split vote. Politically informed minor party supporters do not need to understand the function of the two votes in an MMP system as long as they follow the voting instructions promoted by the party's campaign advertising.

That a preference for coalition government and a lack of understanding of the electoral system only have a statistically significant effect on the probability of casting an irrationally split vote gives some support to the suggestion that confused voters split their votes between two parties to express a preference for coalition government without realising the relevance of which vote is allocated to which party. The dangers of single-party government were debated extensively during the campaign, and exposure to campaign coverage also increased the likelihood of casting an expressively split ballot. Miller and Karp (2004) describe the 2002 election as a referendum on coalition government. Labour had consistently polled above 50 per cent in the year prior to the election and entered the campaign with a significant chance of forming a single party majority government, although Prime Minister Helen Clarke had publicly committed to allocating a Cabinet position to Progressive Coalition leader Jim Anderton regardless of whether Labour won a majority or minority of seats. Following conflict over the issue of genetically modified agriculture, the Green Party campaigned strongly on the need to vote Green to "keep Labour honest" by depriving Clarke of a single-party majority government (Geddis, 2004). It is possible that the ballots combining a party vote for the Labour Party and a district vote for a non-viable Green Party candidate (ten per cent of expressively split ballots) were cast by voters responding to this call, but who lacked sufficient understanding of the electoral system to cast their party votes for the Greens.

While monitoring research undertaken by the New Zealand Electoral Commission found that 72 per cent of respondents understood the function of the party vote after extensive public education on the new electoral system in 1996 (Harris, 1997), only 56 per cent of respondents in the NZES could correctly identify the party vote as the most important vote in deciding which party will get the largest number of seats in Parliament. However, as 41 per cent of expressively split votes in the sample were divided between minor parties, none of which commanded enough support to form a governing coalition without the participation of a major party, it seems that this voting behaviour may also be largely

motivated by the affective desire to vote sincerely, regardless of the candidate's electoral viability or the party's capacity to form a government.

Conclusion

Multinomial logistic regression distinguishes between three distinct groups of split voters in the 2002 New Zealand election. Preferring a candidate from a different party has the greatest effect of all the independent variables on expressive and personal split voting, while party identification with a minor party is the most influential factor for instrumental splitting. Minor party supporters who pay a great deal of attention to the media and political advertising during the campaign are most likely to split their votes instrumentally. Supporters of both major and minor parties who prefer coalition government but do not understand the importance of the party vote in determining the composition of the legislature are more likely to split their votes expressively. Preference for a candidate from another party influences the behaviour of all three groups, but the links identified between certain factors and particular types of split voting demonstrate the need to analyse split voters as a heterogeneous group with diverse motivations for their voting behaviour.

Split voters, like the voting population more generally, represent multiple positions on a continuum of voting behaviour. The electoral environment may influence the proportion of split voters at the strategic and confused ends of the continuum. A new electoral system, a close election, or a particularly informed electorate may propel the voters that, according to Cox and Schoppa (2002), can veer toward one end of the spectrum or the other. Rather than debating the merits of alternative explanations for split-ticket voting, we should seek to identify the factors that change the distribution of voters on this continuum of voting behaviour. Further qualitative research, such as interviews or focus groups discussions with voters, would be useful to explore voters' motivations in choosing to cast a split vote. Without such information it is difficult to determine, for example, whether voters choose to cast votes for non-viable candidates and parties, or for ideologically incompatible combinations, because they do not understand the system, are not sufficiently informed to assess electoral viability or because they prefer to express their primary preferences with both votes rather than defect to a more strategically advantageous option.

While we should be cautious in drawing parallels between New Zealand and Canada, the New Zealand experience suggests that Canadian advocates of two-vote mixed systems are not over-estimating the intelligence of the Canadian electorate in their quest for greater voter choice. The correlation between failure to understand the role of the party vote and expressive splitting does indicate the need for ongoing voter education on the importance of the party vote. Nevertheless, the popularity of split voting in New Zealand and the fact that the majority of split voters divide their ballots in ways that suggest they understand the new system both demonstrate the capacity of voters to adapt from the SMP system to a more complex alternative.

Table 1.
Summary of parties' performance in districts 2002

Party	No. electorates Contested	First place	Second place	Third and beyond
Labour	69	45	23	1
National	69	21	38	10
United Future NZ	63	1	0	62
Progressive Coalition	60	1	0	59
Alliance	59	0	2	57
Green	57	0	1	56
ACT	56	0	0	56
New Zealand First	24	1	1	22
Mana Maori	7	0	3	4

Table compiled from detailed district election results, available on-line at:
<http://www.electionresults.govt.nz>

Table 2.
Proportion of split voting by party vote in 2002

Party	Percentage of district votes*	Percentage of party votes	Percentage of split votes by party vote	n
Labour	45	44	19	2,202
National	26	19	19	952
Green	5	7	63	361
Alliance	1	1	68	63
Other minor parties	5	3	70	142
United Future NZ	4	8	73	382
New Zealand First	5	10	74	489
ACT	3	7	82	335
Progressive Coalition	1	1	83	69
Total	95	100	Mean=39	4,995

*This column sums to 95 rather than 100 per cent, as 5 per cent of respondents reported that they had only cast a party vote with no vote for a local candidate.

Table 3.
Estimating the likelihood of casting a split vote: logistic regression coefficients

	Coefficient *(s.e.)*	*Probability of splitting* *Min*	*Max*
Minor party ID	1.93**	.20	.64
	(.14)		
Strength of party ID	-.17*	.40	.29
	(.07)		
Politically informed	.18**	.28	.44
	(.07)		
Prefer coalition government	.38**	.30	.39
	(.13)		
Understand party vote	-.16*	.42	.31
	(.08)		
Prefer candidate from different party	3.37**	.11	.78
	(.14)		
Constant	-2.99**		
	(.24)		
Log pseudo-likelihood: -759.78997			
Pseudo R^2: 0.5138			
n: 2297			

Source: New Zealand Election Study (2002). Standard errors are in parentheses. Probability of vote splitting given minimum and maximum value of independent variable holding all other independent variables constant at their means. **$p<0.01$; *$p<0.05$

Table 4.
Classification of voting patterns in the 2002 New Zealand election

Type of voting pattern	n	Percentage of sample
Straight-ticket vote	2,955	61
Tactical split vote	990	21
Expressive split vote	677	14
Personal split vote	187	4
Total	4,809	100

Table 5.
Estimating the likelihood of casting a instrumental, expressive or personal split vote:
multinomial logistic coefficients

	Instrumental split	*Expressive split*	*Personal split*
Minor party identification	3.26**	1.27**	-32.07**
	(.19)	(.17)	(.18)
Prefer candidate from different party	3.45**	3.08**	4.05**
	(.19)	(.18)	(.36)
Strong party identification		-.18*	-.49**
		(.08)	(.13)
Politically informed	.22**	.19*	
	(.08)	(.08)	
Prefer coalition government		.80**	
		(.17)	
Understand importance of party vote		-.27**	
		(.10)	
Constant	-5.04	-3.60**	-3.82**
	(.33)	(.30)	(.50)
Log pseudo-likelihood: -1352.641 Pseudo R^2: 0.4173 N: 2203			

Source: New Zealand Election Study (2002). Straight-ticket voting is the comparison group. Standard errors are in parentheses. Only statistically significant coefficients and standard errors are reported. **p≤.01; *p≤.05

Table 6.
Probability of casting each type of split vote at minimum and maximum value of each independent variable

	Instrumental split		Expressive split		Personal split	
	Min	*Max*	*Min*	*Max*	*Min*	*Max*
Minor party identification	.04	.46	.11	.17	.05	.00
Prefer candidate from different party	.03	.34	.05	.35	.01	.21
Strong party identification			.18	.12	.21	.02
Politically informed	.08	.17	.12	.20		
Prefer coalition government			.10	.20		
Understand importance of party vote			.22	.11		

Source: New Zealand Election Study (2002). Only statistically significant independent variables reported. Probability of vote splitting given minimum and maximum value of independent variable holding all other independent variables constant at their means.

Figure 1.
Left-right placement of NZ political parties at the 2002 election
(Major parties in bold, non-parliamentary parties are italicised)

Green Party	United Future	
Progressive Coalition -------- **Labour** -------- NZ First -------- **National** --------- ACT		
Alliance	*Mana Maori*	*Christian Heritage*

Appendix A
Definition of the Independent Variables

· *'Minor party identification'* is a dummy variable coded 1 for respondents who identified themselves with a minor party. In coding the data, I have classified the two large, traditional political parties, Labour and National, as 'major' parties, and all other parties as 'minor' parties. In the 120 seat Parliament, Labour won 52 seats, National won 27 seats and the minor parties won an average of just over 8 seats each. Respondents who did not identify with any political party, or who supported an independent were also coded as 0.
2002 NZES Question D1: "Generally speaking, do you usually think of yourself as National, Labour, Act, Greens, New Zealand First or some other, or don't you usually think of yourself in this way?"

· **'***Prefer candidate from different party'* is a dummy variable codes 1 for respondents who identified the candidate that they personally most liked as being from a party other than that for which they cast their party vote.
2002 NZES Question D17: "Regardless of the parties they were standing for, and their chances of getting elected, which party's electorate candidate, if any, did you personally most like on election day?"

· *'Strength of party identification'* is an ordinal variable, coded 0 for respondents who do not identify themselves with any political party, 1 for respondents who do identify with a party but "not very strongly", 2 for respondents who identify "fairly strongly" and 3 for those who identify themselves "very strongly" with a political party.
2002 NZES Question D1: "Generally speaking, do you usually think of yourself as National, Labour, ACT, Green, New Zealand First, or some other, or don't you usually think of yourself in this way?
If you ticked a party box, how strongly do you think of yourself as that party?"

· *'Prefer coalition government'* is a dummy variable coded 1 for all respondents who indicated that they preferred coalition government to single-party government.
2002 NZES Question E7: "Generally speaking, do you prefer a government made up of a single party, a coalition government made up of more than one party, don't know?"

· *'Politically informed'* is a composite variable measuring the frequency with which respondents paid attention to political news and advertising during the election campaign. For each of the five sources of information, a response of "not at all" was coded 0, "rarely" 1, "sometimes" 2, and "often" 3. These scores were then combined and then divided by five to create a scale from 0 (not at all informed) to 3 (highly informed).
2002 NZES Question A3: "During the election campaign, how often did you follow political news, discussions and advertising on television, newspapers and radio?"
The five sources of information in the survey are TV1, TV3, newspapers, National Radio and talkback radion.

· *'Understand importance of party vote'* is a dummy variable measuring whether respondents can correctly identify that the party vote determines the composition of the legislature. Correct responses are coded 1, incorrect responses and 'don't know' are coded as 0.

2002 NZES Question E12: "The party votes usually decide the total number of seats each party gets in Parliament. True or False?"

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Notes

[1] Four electoral districts were first established for Maori voters in 1867, in recognition that the Maori tradition of communal land ownership prevented most Maori from fulfilling the property requirement for voting at the time. In 1975, the Labour government introduced a Maori electoral option, to be held at the same time as the national census, giving Maori the option of enrolling to vote in the Maori or general electoral districts. Since 1993, the number of Maori electoral districts has been allowed to increase or decrease according to number of Maori voters choosing to take up the Maori electoral option. The number of Maori electoral districts has subsequently increased from four to seven. In 2001, 51 per cent of registered Maori voters were enrolled on the Maori electoral roll and 49 per cent were enrolled on the general electoral roll. (See Atkinson, 2003 for greater detail).

[2] The districts considered viable for each minor party were: Coromandel (Green Party), Epsom (ACT), Ohariu-Belmont (United), Tauranga (New Zealand First), Waitakere (Alliance) and Wigram (Progressive Coalition). Only three of the parties were successful: United, New Zealand First and the Progressive Coalition.

[3] The 2002 New Zealand Election Study was directed by Jack Vowles, Peter Aimer and Raymond Miller at the University of Auckland. The study was conducted by telephone and mail questionnaire, with post-election questionnaires being completed within a period of one week to one month following the election. The total sample size of the study is 5,780. The dataset is available from the Australian Social Science Data Archive, Australian National University. More information about the NZES is available on-line at <http://www.nzes.org>

[4] The following probabilities are calculated using 'Clarify: Software for Interpreting and Presenting Statistical Results,' developed by Gary King, Michael Tomz and Jason Wittenberg at Harvard University. To calculate the mean probabilities and the 95 per cent confidence intervals cited in this study, the software programme randomly draws 1,000 values from the sample and uses these to approximate features of the distribution (King, Tomz and Wittenberg, 2000).