

ALPHABETICAL BALLOT SHEETS:

WHY I'D RATHER BE ATHOLL THE ARDVARK THAN ROCKY THE RACCOON

A request has been made to review the decision taken to run a random order ballot paper in the DHB elections this year. I believe that the information contained in this paper is relevant to any consideration of a change to the Boards policy. It discusses the impact of the "donkey vote" on voting outcomes and presents data that demonstrates that this was a very significant factor in determining who was elected to DHB's in 2004. It contrasts the outcomes in DHB's that used an alphabetical ballot paper versus those (like Otago) that used a randomised ballot paper. That analysis supports strongly the case for randomisation.

The term "donkey vote" is one that is frequently used in Australian elections. Australia uses preferential voting (like STV as used in DHB elections). In Australia voting is compulsory. This has led to some voters (either through lack of information or as a protest) simply ranking some or all candidates in the order that they occur on the ballot paper. Generally this occurs from the top down but it may also be from the bottom up. A range of academic papers estimate that the impact of this on the outcome is between 1.5% and 4% of the vote. It is estimated that this accounts for the outcome of approximately 10% of federal seats. EG King & Leigh in their paper "ballot order effects under compulsory voting" (2006) states:

" It has long been suspected that the order in which candidates' names are placed on a ballot somehow influences the decision-making process of voters. Theories of ballot position have suggested, variously, that candidates benefit from being placed first on the ballot, due to a 'primacy effect', or last on the ballot, due to a 'recency effect' (Jacob, Kalmus and Luttmmer 2004; Koppell and Steen 2004).

These theories are based on the notion that voters are less likely to make rational decisions when presented with a choice of candidates about whom they have little information. When voters are ignorant about a series of candidates they seek other cues, such as name familiarity or a candidate's political party, to assist the decision-making process (Miller and Krosnick 1998). In the absence of any such cues, or where voters are ignorant about or ambivalent towards the candidates presented, it has been shown that the ordering of candidates on the ballot influences a voter's decision (Upton and Brook 1975; Bakker and Lijphart 1980; Darcy and McAllister 1990; Brockington 2003; Koppell and Steen 2004; Alvarez, Sinclair and Hasen 2006).

These studies have not uniformly agreed on the size of the ballot order effect, nor on whether the benefit accrues only to those at the top of the ballot. The type of election may also matter. Ho and Imai (2004) suggest that if a ballot order effect does exist, it tends to affect only local, relatively unpublicised elections or those elections where the candidates are non-partisan or are largely unknown to the voting public.

In the majority of studies however, the 'primacy effect' of first place on the ballot has been shown to deliver the greatest benefit to candidates. Analysing Ohio state elections, Miller and Krosnick (1998) suggest that first place increases a candidate's percentage of votes earned by 2.3 percentage points compared with last place on the ballot. Ho and Imai (2004) alternatively show that candidates in non-partisan elections increase their vote share by 3.3 percentage points when listed first on the ballot, while candidates in Democratic or Republic primary races boost their vote by between 2 and 4 percentage points when listed first"

I believe that there is a strong argument that can be made that DHB elections strongly fit the categorisation of non-partisan, local, and in which the candidates are largely not well known to the voting public. It is also likely to be the case that some names will be well known and a large number not. In such a situation in a ranking system election you could hypothesise that voters are likely to rank those names known to them first. They will then do one of three things to the balance:

- Carefully consider whatever information has been provided with the ballot papers and continue ranking.
- Decide to rank only those names that they feel some confidence in and not rank at all those candidates that they do not feel a confidence in or do not feel they know enough about to rank.
- Rank those they know or value as above and then complete ranking the others regardless. It is in this kind of situation that there is an increased likelihood that remaining candidates will be ranked in the order that they appear on the ballot paper.

If one feels that this is important and distorts election outcomes in a non sensible manner then you will find the randomisation option a sensible precaution that removes this impact Whilst there is overseas evidence that this occurs one might decide that the impact is sufficiently small or unproven and ignore it. A justification for this might be that alphabetical listing is the simplest to find candidates names on and is what people are used to seeing, so there would have to be a strong reason for doing it differently. In my view the answer to that question is best provided by analysis of what happened in New Zealand in 2004. The answer to that question is startling in my view.

EMPIRICAL ANALYSIS OF 2004 RESULTS

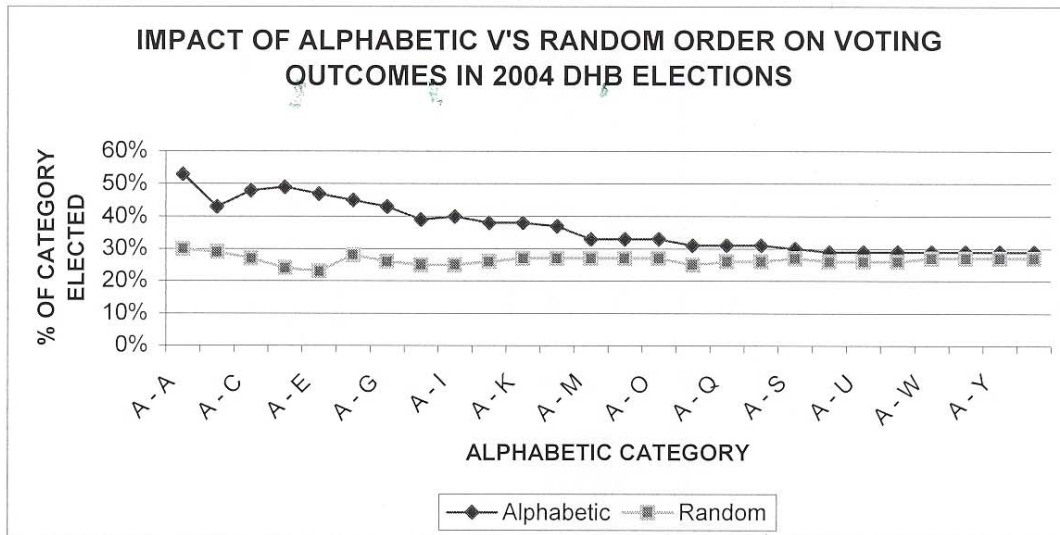
In 2004 five Boards (including Otago) used a randomised ballot paper. Sixteen Boards used an alphabetical listing. The difference between outcomes in those two groupings is large and shows, both within and across samples, that the choice of option significantly

affects who gets elected. Some examples just to illustrate: (To assist with interpretation you should know that in alphabetical listing Boards 29% of candidates were successful and in random list Boards 27% were successful. This is because the relative number of positions available versus candidates standing was slightly different in each case)

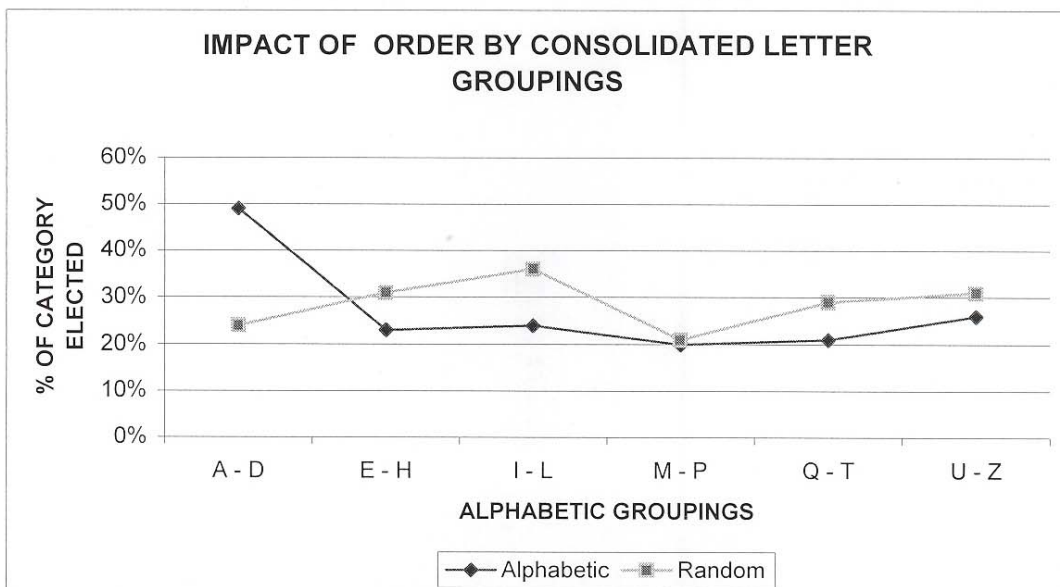
- In those DHB's where names were listed alphabetically, 53% (8 out of 15) of candidates whose name started with "A" were elected (versus the average of 29%). In those who used randomisation 30% (3 out of 10) were elected (versus the average of 27%). But that is a small sample size you might say.
- OK. Lets look at those candidates whose names were from A to D. Alphabetically listed elections returned 49% (49 out of 99) of those as successful candidates, compared with the average across all names of 29%. This is almost 70% more than you would expect. In randomised ballot papers 24% (9 out of 38) of candidates were successful versus the 27% average.
- If your name was Atholl the aardvark you had more than twice as much chance of being elected in an alphabetical listing Board than poor old rocky the Raccoon. His group (names from Q to T) only got 21% (14 out of 68) of their members elected. If Rocky had been sensible and stood in a random listing Board he would have increased his chances to pretty much bang on the national average for randomised Boards (29%, 8 out of 28, versus the average of 27%).

I could go on, but perhaps the best way to see how alphabetic listing has distorted the outcomes is to look at the following two graphs.

The first graph shows the impact of alphabetic position on the overall results. I hypothesised that if there was an impact due to order it would be strongest in names at the beginning of the alphabet and would progressively diminish as names started with later numerals. One test of this is to add each letter of the alphabet progressively to the mix. First look at A's only, then look at A's + B's, then A's to C's etc. (it would obviously also be good to look at each letter alone but this results in too small a sample size to give a reliable result for most letters). As can be seen from the graph below the effect of position is very powerful in Boards that use alphabetical listing. However, there is no effect in Boards that use a random list.



The second graph shows the impact of position in the alphabet on likelihood of being elected by breaking the alphabet down into four letter groups (6 for the last group – but there aren't any x's or z's so it is effectively 4) and comparing each groups success rate in the two systems.



Both graphs show an extremely strong impact, due to position on the ballot paper, on likelihood of election. Those candidates that are listed high on the paper have up to twice as much chance of being elected than those placed further down the ballot paper. This effect is removed when names are randomised.

CONCLUSIONS

There is no logical reason that I can think off why Atholl the Aardvark is a better candidate than Rocky the Raccoon simply because of their name. Yet Atholl is twice as likely to be elected as Rocky purely because of their name. If that is how democracy should be determined then the world is an even sillier place than I have credited it to be. There may be some logical reason why Aadvarks make better Board members than Racoons. There may be even a reason why Racoons are better governors than Aadvarks. People should be able to make their own decision and vote accordingly. They ought to be able to do so knowing that their considered opinion will not be upset by donkey voting distorting the outcome. In 2004 Rocky would have needed to get almost twice a many deliberate, considered, votes than Atholl in order to get elected simply because Atholl got considered votes and the donkey vote. The figures clearly demonstrate that. It is not a small impact. It is a large impact. In DHB elections that used random ballot papers these effects did not occur. Rocky or Atholl got elected because people wanted them to be and voted for them deliberately. That seems like a pretty sound system to me and a close approximation to what is supposed to happen in a democratic election. Instead of considering changing back to a flawed system we should probably be asking for an investigation into how deeply flawed the 2004 elections were in 16 other DHB's

Richard Thomson