Tactical voting can still occur under the Alternative Vote, and it may lead to unexpected outcomes

*Next spring UK voters will get the chance to introduce the Alternative Vote system for Westminster elections. A commonly repeated claim is that the system would do away with the tactical voting that many voters resort to under the current First Past the Post system. Yet **Roger Mortimore** demonstrates that this received wisdom is not true. Instead new forms of tactical voting could open up under AV.*

Describing the referendum choice that the coalition government will offer UK voters in May 2011, LSE's Simple Guide to Voting Systems says that:

> *The key difference in the AV system from FPTP is that in each local contest voters fill in a ballot paper where they number the candidates in order of preference – that is, they put 1 for their first preference; 2 for their second choice; 3 for the party they like 3rd, and so on.*
>
> *We count all the first (top) preferences that voters have given, as now. If any candidate gets majority support (i.e. 50% +1), they immediately win the seat. If not, the candidate who has the fewest 1st preference votes is knocked out of the contest, and we look at the second preferences of their voters, redistributing these votes to the remaining candidates in line with these voters' number 2 choice. This process of knocking out the least popular candidate and redistributing their voters' choices as voters intended continues until one candidate gets 50 per cent.*

Many pro-AV commentators have argued that because all of a voter's preferences are recorded under the Australian version of AV, this accordingly eliminates any need for any voter to do tactical voting. They can instead just vote sincerely 1, 2, 3, 4 etc for the candidate they prefer, confident that whoever stays in the race to win a local majority, the system will ensure that one of their preferences counts.

This claim is simply untrue. In fact there is a complex mathematical proof, the Gibbard-Satterthwaite theorem, mentioned also in a recent blog on AV by Raffa Hortala-Vallve. It says that no meaningful electoral system can eliminate the possibility of tactical voting. This claim is very easy to demonstrate in the case of AV.

Consider the simple case of a constituency of 60,000 voters of whom 25,000 support Labour, 20,000 support the Tories and 15,000 support the Liberal Democrats. Let us assume that these people are distributed on left-right ideology scale with Labour voters on the centre-left, the Liberal Democrats grouped around the centre and the Conservative voters on the right as shown below:
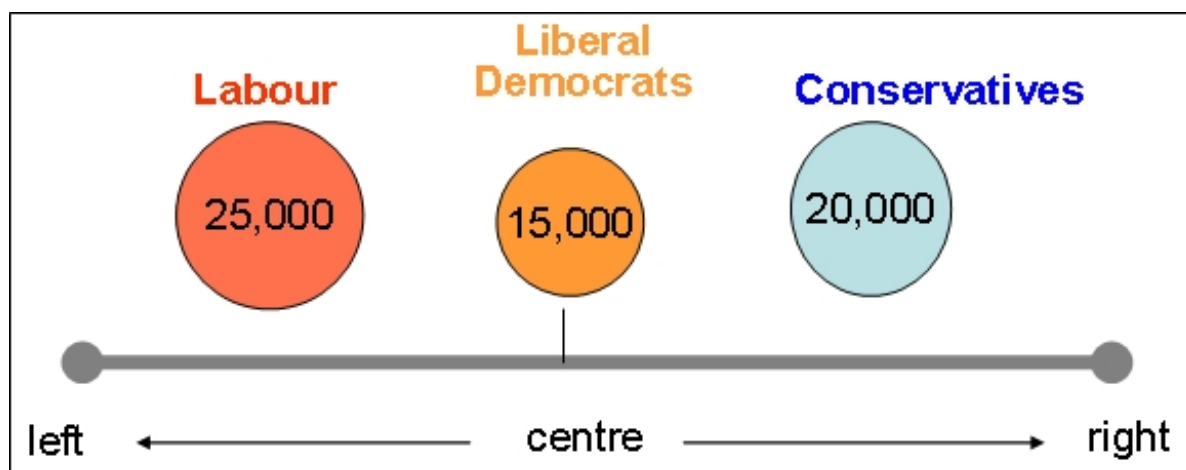
Under first past the post this would be a Labour seat. But under AV whichever candidate comes third will be eliminated and their voters' second preferences will be redistributed between the remaining two to see who wins. Given the set-up above, then Labour and Tory second preferences will split overwhelmingly in favour

of the Liberal Democrats rather than to each other. But Liberal Democrat second preferences will split pretty evenly between the other two parties – let's say 7,000 to Labour and 8,000 to the Tories.

So put yourself in the position of a Conservative voter whose main consideration is to stop the Labour candidate winning. If the Conservative candidate finishes second and qualifies for the final count, then the Liberal Democrat voters' second preferences will split as above, boosting the final votes for the other two candidates but otherwise not affecting the final result. Labour will still win:

OUTCOME 1: No tactical voting

	First round votes	*Transfers of votes*	**Final votes**
Conservative	20,000	*+8,000*	28,000
Liberal Democrat	15,000	eliminated	
Labour	25,000	*+7,000*	32,000

But now, what if some Conservatives were so determined to prevent a Labour win that they are prepared to vote tactically for the Liberal Democrat candidate, giving her their first preferences? If enough of them did so to just push the Liberal Democrat ahead of the Conservative and into the final round, then the Liberal Democrat beats the Labour candidate with the help of all the other Conservatives' second preferences. In the table below, 3,000 tactical votes moved from Conservative to Liberal Democrat are enough to ensure that Labour loses:

OUTCOME 2: Some Tories vote tactically

	First round votes	*Transfers of votes*	**Final votes**
Conservative	17,000	*eliminated*	
Liberal Democrat	18,000	*+15,000*	33,000
Labour	25,000	*+2,000*	27,000

So under AV there is a real incentive for tactical voting, because the order in which candidates are eliminated affects the result. And situations like this are unlikely to be especially rare under British conditions.

Yet if this gambit was ever applied then there is a further aspect to the possibilities for tactical voting under AV. Suppose that in this situation 1,500 Labour voters realize that Outcome 2 above will come about, and they are determined to prevent a Lib Dem win. Their best solution (perversely enough) is to switch their vote to the Conservatives. Now look what happens below!

Outcome 3: Some Tories and some Labour supporters both vote tactically

	First round votes	*Transfers of votes*	**Final votes**
Conservative	18,500	*+11,000*	29,500
Liberal Democrat	18,000	*eliminated*	
Labour	23,500	*+7,000*	30,500

Note: I have not got my maths wrong here: the Lib Dem second preferences split more to the Tory this time, because in Outcome 2 above 3,000 of the LibDem first round total are the concealed Tory tactical voters, and of course they will all cast their second preference for the Tory..

The Labour switchers are now just enough to push the Tory back ahead of the Liberal Democrat candidate, who is knocked out. Once again in a straight fight between the two old parties, Labour once again wins the final count (albeit with a much narrower margin than before).

So in this situation Labour supporters might need to vote tactically for the Conservative, so as to ensure that Labour wins! Of course that situation would be harder to engineer in practice – because too many Labour tactical votes would have precisely the opposite effect and give the seat to the Tories. But it is, nevertheless, real.

So in certain circumstances voting sincerely under AV can actually be counter-productive for voters, and voting tactically (i.e. not for your real first preference party) can make a lot of sense. This is a weakness of the AV system that its opponents have made surprisingly little noise about. But to repeat, tactical voting is possible in some form or another in all voting systems.

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