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WASTED VOTES AND OTHER MARES' NESTS: A VIEW OF ELECTORAL REFORM

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Author's note: this is the draft of a paper to appear in Volume I of my Collected Essays (forthcoming from Rowman and Littlefield). Since the intended readership includes people unfamiliar with the concepts of social choice theory, the paper explains some points that would normally be taken for granted in this series.

Wasted Votes and Other Mares' Nests: A View of Electoral Reform

Brian Barry

I THE RELEVANCE OF SOCIAL CHOICE THEORY

The conventional wisdom among those who have absorbed the principal theorems of social choice theory is that it is fruitless to talk about the intrinsic fairness of alternative voting procedures. The earnest efforts of electoral reformers to advance the superior claims of some system for counting votes without mentioning that it stands to favor their own side are regarded with the same kind of amused contempt as mathematicians in the past reserved for claims by amateurs to have succeeded in squaring the circle. This disenchanting view of voting procedures makes for difficulties, of course, when social choice theorists argue about the best method of deciding something among themselves. A few years ago, at a conference on the theory of democracy, a group of five eminent social choice theorists were trying to decide which of several restaurants to dine at. Since each knew the preferences of the \_\_\_\_\_

others and could immediately compute the outcome to be expected from any proposed procedure, it was impossible to find any agreement on a method of voting. (The impasse was in the end resolved by one of their number setting off in the direction of the restaurant he favored; after he had gone about thirty yards the others fell in behind.)

Such a ruthlessly instrumental attitude to voting procedures grates on the sensibilities of many high-minded people. When they consult a social choice theorist for advice about the best procedure for some important decision or election they are quite put out to get the answer: "Tell me what outcome you want and what the preferences of the voters are and I'll tell you what procedure to support." But if that is in fact the only possible answer then anyone who refuses to accept it is simply waiting to be taken advantage of by someone who is prepared to act on it.

A response that will naturally occur to anyone influenced by contemporary contractarianism is to suggest that the difficulty

arises from our taking the preferences of the parties as known. It may be recalled that this was Rawls's response in A Theory of Justice to the idea that justice should correspond to the outcome of rational bargaining.<sup>1</sup> Rawls assented to the general idea but insisted that the bargaining must take place behind a veil of ignorance that denied the parties knowledge of their own (and others') preferences. Somewhat analogously, we might hope that agreement on a fair voting procedure would be possible if we forced people to pick one without knowing about particular preferences and therefore without knowing how any given procedure would affect their chances of getting the outcomes they wanted.

What can be said definitely is that when we push the question up a level by asking about procedures without a particular decision in mind we can get away from the rather crass answer "Tell me what outcome you want and I'll tell you what procedure to support." Instead of tying our evaluation to specific outcomes

we can (indeed must) tie it to generic features of outcomes -- for example their tendency to bring about decisions in accordance with Rawls's two principles of justice or in accordance with utilitarian prescriptions. Moreover, when we pursue our question about voting procedures at the constitutional level, we can ask questions about the effects of a procedure over time that are not reducible to questions about the decisions that come out of it. For example, we can ask if a procedure stimulates innovative thinking about alternative courses of action, or encourages cooperative relations among the decision-makers.

But all of this still means, of course, that we are talking about various kinds of consequences of having one voting procedure rather than another. Does the shift to the constitutional level give any hope to those -- the great majority of enthusiasts for particular voting schemes -- who want to claim that it makes sense to talk about the inherent superiority of one voting scheme

to others? I do not think that there is any gain in this quarter except a heuristic one. That is to say, we can ask what would be a fair way of making a single decision just as well as we can ask what would be a fair rule for making a whole series of decisions. What can be said is that, where the preferences are known in a particular case, thoughts about fairness may be swayed by considerations about the way alternative procedures can be expected to turn out, whereas this confounding effect will be absent if we ask about voting procedures without any definite context in mind. But the shift in levels does nothing to meet fundamental objections to the whole project of recommending voting procedures without making any appeal to the consequences of adopting one rather than another.

We should not overstate the gravity of the problems posed by the proofs that social choice theorists have produced in the past four decades. But we should also not underestimate how deep

they cut. Thus, if there are two alternatives between which a choice is to be made, and it is agreed that the appropriate method by which to make the decision is voting with each member of some group having one vote, then most people would feel that an intrinsically fair procedure should have the characteristic that the alternative preferred by a majority of the voters should be chosen. Where there are more than two alternatives, an extension of this criterion would suggest that, if there is one outcome that would be preferred by a majority to each of the others in a pairwise comparison, that outcome should emerge from the voting procedure. (Such an outcome is usually called a Condorcet winner.)

Nothing in the literature of social choice theory impugns such conclusions. But there are two main lines of analysis that appear to show that what has been said so far is of limited comfort to those who want to make general claims for the intrinsic fairness of voting schemes. The first is that wherever there is no

Condorcet winner (and there may well not be) the trail runs cold. The well-known result proved by Kenneth Arrow<sup>2</sup> and a host of supplementary theorems show that there is no way of aggregating preferences that is capable of satisfying any elementary list of prima facie attractive requirements.

The other line is equally important. It may have been noticed that I have not written, as might naturally have been expected, of the relation between votes and outcomes but rather of the relation between preferences and outcomes. The reason for this is that we cannot assume that votes will correspond to preferences because a voter may be able to advance the prospects of his favored outcomes by departing from a policy of always voting for the alternative that he most prefers. If we are looking for criteria of intrinsic fairness it seems inevitable that we shall want to define them over the relation between preferences and outcomes. But then we are left with a gap between

criteria for aggregating preferences and methods of aggregating votes, that is to say actual voting schemes. The implication is that, even if we could define an ideal relation between preferences and outcomes, there is still a problem of turning that into a practical voting system. And it has in fact been proved that, as soon as there are more than two alternatives in the field, any voting scheme is subject to strategic voting.<sup>3</sup> It is the combination of these two lines of analysis that leads to the negative view social choice theorists normally take to the ever-recurrent attempts to propose voting procedures as having intrinsic merits.

In ~~an interesting~~<sup>a</sup> recent book, the Oxford philosopher Michael Dummett, best known for his work on the philosophy of Frege, has taken up the challenge.<sup>4</sup> Unlike most writers on voting procedures, however, he is fully aware of the two lines of social choice theory that I have just sketched. (He was, in

fact, co-author of one of the earliest articles on strategic voting.<sup>5</sup>) Indeed, he scolds other writers for not taking on board the findings of social choice theory (pp. 11-12). Nevertheless, he claims that it is possible to go on talking about the fairness of voting procedures even after assimilating what social choice theory has to say. As he explains his intentions in the Epilogue to the book, his aim is to bring to bear the insights attainable from social choice theory upon the question of finding an "equitable" voting procedure (p. 295).

Dummett's book is flawed in a number of ways. It is ill-organized. It is often unnecessarily arcane and complicated for any purposes that are served by it. The index -- a notorious Achilles heel with Dummett -- is inadequate. (The entry on "admissibility", for example, gives no references to the chapter devoted to the topic.) It is also, I believe, generally misguided in its substantive conclusions. For all that, it constitutes a valuable

endeavor. It is the right sort of thing, for all its faults.

For that reason, I intend to organize my discussion in the rest of this extended essay around Dummett's book. I shall not, however, follow it very closely either in order of topics or in relative emphasis on different topics. Dummett devotes fourteen chapters to methods of voting in committees on alternative proposals and two chapters to methods of voting for representatives. In contrast, I shall give <sup>four times</sup> ~~twice~~ as much space to the second topic. The first topic has a certain inherent interest, but I shall discuss it primarily for two other reasons. One is that it enables me (as it does Dummett) to get some analytic points made in a relatively simple context. The other is that Dummett makes an important and interesting claim, namely that the rationale for voting procedures is quite different in the cases of voting for representatives and voting on other matters. In order to address this I shall have to give a critical account of what

Dummett takes the rationale of voting procedures to be in cases other than the election of representatives.

I shall take up the question of voting in committees in sections II to V and then that of voting for representatives in sections VI to XIII.

## II THE RATIONALE OF THE PREFERENCE SCORE METHOD

Fortunately, it is not necessary for the present purpose to go through the various procedures that Dummett discusses for making decisions in committees. For there is a guiding thread that will lead us to Dummett's own recommendations. This leading idea is introduced in the chapter entitled "Fundamental Notions." (This is chapter 2 -- the book begins strangely with a chapter on "Successive Votes.") Dummett imagines the members of a family

of five trying to decide whether to go to a play by Beckett or one by Ayckbourn.

If we know only that three members of the family prefer Beckett and two Ayckbourn, we shall think that Beckett is the fairest choice: but if we are told that the three have only a slight preference for Beckett, while the two enormously prefer Ayckbourn, we shall alter our opinion. In a family, this will be expressed verbally: it is such feelings that we do not directly represent if we restrict ourselves to the use of preference scales. Suppose now, however, that other possibilities are considered: plays by Stoppard, Pinter, and Ionesco. The three members of the family who prefer Beckett rank the five options in the order: Beckett, Ayckbourn, Stoppard, Pinter, Ionesco. The two who prefer Ayckbourn rank them in the order: Ayckbourn, Pinter, Stoppard, Ionesco, Beckett. It is now obvious from the preference scales alone that Ayckbourn is the fairest choice. The fact that the

majority only slightly prefer Beckett to Ayckbourn is sufficiently shown by Ayckbourn's being their second choice. The fact that the minority prefer Ayckbourn by a wide margin is shown by their also preferring three other playwrights to Beckett. (Pp. 38-39.)

Notice that it does not make any difference whether or not plays by Stoppard, Pinter or Ionesco are in fact available alternatives (see pp. 56-7). Either way, we have, according to Dummett, additional information that is relevant to the choice between Beckett and Ayckbourn.

With this key to Dummett's book in our hands it is easy to understand Dummett's hostility to majoritarian voting schemes. For, as we have just seen, the majority choice may not be the best by his implicit criterion even in the simplest case where there are only two alternatives. We can also see why, where there are more than two alternatives, Dummett opposes any of the usual



schemes for eliminating options that are few people's first choice. For it is quite possible for an alternative that is few people's first choice to be selected by the implicit criterion at work here if it is also few people's last choice and a number of people put it in the middle. The implicit criterion, which Dummett later makes explicit, is that the outcome to be chosen is the one which most satisfies the preferences of the people choosing, when account is taken of both the numbers in favor of the various alternatives and the intensity of their preferences. More precisely, Dummett's criterion tells us to maximize aggregate satisfaction among the voters with the outcome chosen.

The possibility of saying this kind of thing about voting procedures presupposes, of course, that we are entitled to assume that rank orderings of alternatives are a reliable surrogate for intensities of preference. Dummett states his empirical assumption about preference intensities as follows: "we can only assume, as a general principle, that the gaps between consecutive outcomes

on any voter's scale are at least comparable. . . . Indeed, the only general rule we can reasonably adopt is that all the gaps are not merely comparable, but equal" (p. 132). This in fact greatly understates the strength of the assumption he requires, for we cannot get anywhere by assuming only that the utility loss represented by one place in the rank ordering is the same for any given person whether it occurs near the top or the bottom. What we have to assume is that a one place drop represents the same utility loss for every voter -- an interpersonal rather than intrapersonal comparison.

If we make this assumption then we can assent to Dummett's next move: "These considerations lead directly to the formulation of a criterion for the fairest outcome. . . giving equal weight to every preference of every voter, and thus aimed at picking out that outcome which will give the greatest overall satisfaction to the voters. We shall call this the preference score of an outcome" (p. 133). This is not very lucidly put, but what Dummett actually

means is that we can associate with each outcome a preference score, and the outcome with the highest preference score can be taken (if we make the very strong assumptions required) to give the greatest overall satisfaction to the voters. The method is the after its originator the chevalier de Borda. one usually called the Borda count. "If there are 5 outcomes, a voter with the strong preference scale abcde is. . . taken to allot 4 points to a, 3 points to b, 2 points to c, 1 point to d, and 0 to e;" and so on (p. 133). The points for each outcome are then added up and the one with the highest score declared the winner.

The preference scores. . . treat the distance on a voter's preference scale between two outcomes as a rough measure of the strength of his preference for the higher over the lower. His contribution to the preference score of any outcome can therefore be viewed as roughly representing the degree of satisfaction he would obtain if it were successful. One who believes the fairest outcome to be that which would maximize the collective

satisfaction of the voters will therefore adopt preference scores as the leading criterion, according to the principle [that] if b has a lower preference score than a, b cannot be a fair outcome. (Pp. 133-34.)

It is obvious that, if we are willing to assume that one place down in a preference ordering represents an equal utility loss for each voter, we will maximize aggregate utility by making each interval equal in the scoring system and choosing the outcome with the highest preference score. From this perspective, it is equally plain that other methods of voting, such as eliminative or majoritarian, are to be regarded simply as botched attempts at achieving the same result.

Dummett admits that, where two or more outcomes have identical preference scores, the tie should be broken by picking the one that is a Condorcet winner if it exists (Principle 15 on p. 141): that is to say, if several outcomes are tied for first place on the preference score criterion, and one of these outcomes is preferred by a majority of the voters to each of the others, that

is the one which should be chosen. But this is, obviously, only a small concession. It is worth observing, for one thing, that there could be an outcome capable of beating each of the others in pairwise voting, yet there is no guarantee that it will get the highest preference score. This illustrates how far the logic of maximizing preference satisfaction (on stringent assumptions) is from any kind of majoritarian approach. Dummett himself makes this clear:

Anyone seeking a criterion that will select a unique fairest outcome in almost every case must have recourse both to the criterion of majority preference and to the preference score criterion: the question at issue is to which to give the priority. The question turns on whether it be thought more important to please as many people as possible or to please everyone collectively as much as possible. The latter is surely more reasonable. The rule to do as the majority wishes does not appear to have any better justification than as a rough-and-ready test for what

will secure the maximum total satisfaction: to accord it greater importance is to fall victim to the mystique of the majority, which is only a superstition engendered by familiarity with the use in practice of majority procedures. We have seen in this chapter how inaccurate a test majority preferences may provide for which outcome would yield the maximum overall satisfaction. Failing as a criterion, they thus serve poorly as a test: a concern for justice in general, and for the rights of minorities in particular, must validate the preference score criterion. (Pp. 141-42.)

It should be said that Dummett goes on to add: "Many will remain unpersuaded of this. . . . The mere fact that many are imbued with the mystique of the majority bears on what voting procedures they will be disposed to accept as fair" (p. 142). But this remark is plainly offered in an anthropological spirit (or perhaps more precisely a missionary spirit) as a report on the unfortunate persistence of a widespread superstition.

When Dummett goes on to discuss practical (or allegedly practical) voting schemes, he says that "those who believe the fairest outcome is that which gives the greatest overall satisfaction will accept preference scores as furnishing the leading criterion for a fair outcome" (p. 176). He then goes on to say: "If, among the members of a committee or other decision-making body, there are people who, imbued with the mystique of the majority, insist on majority preference as an overriding criterion of fairness, they will be unwilling to employ the preference score procedure, but will demand one that conforms to [the principle that if there is a Condorcet winner it should be the outcome chosen] whenever all vote sincerely" (p. 178). On the basis of this he goes on to consider mixed schemes, but simply as a way of accommodating those with irrational ideas about fairness in voting. It is therefore legitimate to take the criterion of aggregate preference satisfaction among the voters and the method of preference scores as Dummett's own answer to the question that he set himself: that of finding a fair voting procedure.

### III A CRITIQUE OF THE PREFERENCE SCORE METHOD

What can be said about this answer? The most interesting and important issues are, I believe, raised by the criterion of aggregate preference-satisfaction, but before addressing those I should say something about the appropriateness of the procedure as a way of implementing the criterion. I have already said that, if each step down the preference ordering really represents an equal utility loss for each voter, there is no doubt that the preference score method will maximize the aggregate utility of the voters. But how plausible is that assumption?

In many

Such a priori psychology does not seem to me very convincing. In many kinds of choice situation we might well estimate that what matters most to people is getting a highly-ranked outcome and that they are relatively indifferent between low-ranking alternatives. Dummett says (stating a presupposition as if it were a

truth) that "we have no reason to think that the fact that one voter regards a candidate as the worst should count against him less than the fact that another regards him as the best counts in his favour" (p. 177). But in many situations I think that people looking at the workings of the preference score method will be quite disconcerted to realize that one person's ordering of two alternatives that makes one of them last and the other next to last has exactly as much influence on the outcome, insofar as it lies between these two, as someone else's decision to put one of them first and the other second.

A second difficulty stems from strategic voting. Suppose that we waive the first objection entirely and accept that it is reasonable to regard one step down in anyone's preference ordering as an equal utility loss wherever it comes, the preference score method can be counted on to produce a utility-maximizing outcome only if everyone actually fills in the voting paper in accordance

with his true preference ordering. But, as Dummett acknowledges, "a well-informed voter has considerable incentive to vote strategically" (p. 234) in order to improve the chances of his favored policy or candidate.

As Dummett,

notes (p. 236), the way to vote strategically is to put the most desired candidate or option that one thinks has a chance first, then fill in the next places with candidates one believes have no chance, and put the serious rivals at the bottom of the list. The trouble with this is, however, that if everybody follows the same strategy the most likely result is that an outcome that almost all the voters actually rate very low will emerge as the winner. Say there are three candidates that have real support and two with almost none. Then the three strong candidates will come at the top of some lists and at the bottom of the others, while the two weak candidates will come in second and third place, and this should be enough, provided support for the strong

candidates is fairly evenly divided, to give one of these weak candidates the highest score. (If we have four equally strong candidates and one weak one, we can say that the success of the weak candidate is practically assured with any substantial amount of strategic voting.)

Dummett acknowledges this possibility (p. 235) but argues that voters should realize what may happen and play it safe by voting in accordance with their true preferences (pp. 236-7). Thus, paradoxically, the radical instability of the procedure in the face of strategic voting is claimed to make it relatively immune to it. This is an ingenious attempt to salvage a procedure that is usually rejected for practical use by students of the theory of voting systems precisely because of its extreme susceptibility to strategic voting. There are, however, several powerful points to be made in rebuttal of Dummett's defense.

The most obvious objection is that, although it is fairly easy to see how to vote strategically if you know the preferences

of the other voters and expect them to vote their preferences, the analysis required to despair of hoping to outguess the others and hence vote sincerely after all is a good deal more sophisticated and scarcely the kind of thing to be counted on. I would in fact be inclined to predict that where we have intelligent people who are not sophisticated about voting analysis making decisions under conditions where there is good knowledge of one another's preferences, the result of using the preference score method is quite likely to be the perverse kind of outcome sketched above. (Elections for the headship of an Oxbridge college come to mind as cases where the conditions are met.)

has

What I have said so far implicitly conceded Dummett's claim that a sophisticated voter would vote sincerely unless he thought that he were uniquely well-placed to predict how the others were going to vote. But I question the universal validity of this analysis. It may well be, I conjecture, that the preference score procedure is liable to induce an n-person prisoners' dilemma,

where everyone thinks that the best decision for himself is to vote strategically even though all would prefer a regime of sincere voting if it could somehow be guaranteed that everyone would vote in accordance with his true preferences. <sup>P.]</sup> Suppose that we have a situation (not I think uncommon in small voting bodies) where people have a good idea about the preferences of others but little information about their actual voting intentions. Then the case for voting strategically along the lines already mentioned is quite strong. If few others vote strategically, Dummett himself acknowledges that it is more advantageous to vote strategically oneself: the chance of getting one's preferred candidate is increased and there is still no chance of electing someone that nobody (including oneself) wants. If many others vote strategically, it becomes possible that one will by voting strategically oneself tip the balance and turn a weak candidate from a loser to a winner. But there is also no doubt that strategic voting will produce a

definite improvement over sincere voting in the relative chances of one's own preferred candidate winning. To put the point in the terminology of collective goods: keeping out weak candidates is a collective good -- everyone benefits from it -- but there is a strong temptation for everyone to leave its provision to the others and to think that if the others do not contribute to it there is no reason for being the only public-spirited voter.

A further point which seems to me of great importance is that, when I said that the preference score procedure is especially susceptible to strategic voting, I did not simply mean that it gave large numbers of opportunities for it. That would be true also for any binary procedure, for example. A binary procedure is one such as the standard Anglo-American committee voting procedure where at each stage alternatives are partitioned into two sets. If we stipulate that a sincere voter would be one who always voted for the branch containing the most favored outcome

further along it, we can easily show that it would frequently be irrational to vote sincerely.

But it would be very hard to come up with any plausible story of strategic voting under a binary choice system whereby the universal last choice could finish up as the group decision.

When we consider the most familiar methods used to elect people to single positions in English-speaking countries, we reach the same conclusion. Thus, the system of awarding the position to the candidate with the most votes (a plurality or relative majority) obviously lends itself to strategic voting where there are more than two candidates, but it is hard to come up with a scenario of strategic vote-switching in which a candidate who is ranked last by almost everybody finishes up with a plurality of votes. The same can be said of the variant on the plurality system known as the alternative vote or sometimes "majority preferential voting." Under this the quota of votes

needed for election is set at one half of the total votes cast plus one. Any candidate reaching this quota on first preferences alone is declared elected. Failing this the candidate with the fewest first preferences is eliminated and his votes redistributed to his supporters' second preference. If this still does not produce a candidate who meets the quota, the process is repeated. Eventually either some candidate gets the quota or only two candidates are left in and the one with more votes is declared a winner. (A candidate can win without meeting the quota if not all electors include a preference for all candidates on their ballots.) Contrary to a common misapprehension, strategic voting can be advantageous under this procedure -- a point I shall return to in section VII. But it would again call for an extraordinary series of miscalculations for strategic voting to result in the election of a candidate whom scarcely anybody wanted. The peculiar propensity of the preference score method to produce really perverse results --



by anyone's standards of perversity -- seems to me an excellent reason all by itself for ruling it out as a procedure to be used in any situations except those where sincere voting can somehow be counted on.

Dummett is aware, as we have seen, of the problem of strategic voting, though I have argued that he is too sanguine about it. But he shows no comparable awareness anywhere in his book of the equally important problem -- one which has much exercised social choice theorists in the last fifteen years -- of agenda manipulation. This is a real problem for the preference score procedure because of the particularly comprehensive way in which it violates the criterion for a decision procedure of the independence of irrelevant alternatives. Dummett recognizes this feature of it and applauds it. Thus, he writes that the criterion of the independence of irrelevant alternatives

lacks complete intuitive justification, since it conflicts with

the more compelling principle that whether  $x$  would be a fairer outcome than  $y$  depends not only on how many (or which) voters prefer  $x$  to  $y$ , and how many prefer  $y$  to  $x$ , but on how strong [saw?] their preferences are. We say from the example of the family going to the theatre that, even when the preferences are not explicitly weighted, the specific positions of  $x$  and  $y$  on a voter's preference scale give a partial indication of the strength of his preference for one over the other: to take this into account is to reject the principle of independence of irrelevant alternatives. (P. 54.)

← The simplest way of explaining what the independence of irrelevant alternatives amounts to is to apply it to Dummett's example of the family deciding which play to attend. What it says is, roughly speaking, that if Beckett beats Ayckbourn when these are the only alternatives considered then Beckett should also beat Ayckbourn when other alternatives are added.

Now all voting schemes are open to agenda manipulation, but the preference score method is especially vulnerable to it. Because it makes the placing of an alternative depend on the rankings of all alternatives, the addition and subtraction of alternatives makes a particularly big difference. Thus, in the case given by Dummett, three out of five voters put Beckett first when the choice is made over five playwrights. A clear majority that puts one option in first place will win under just about any procedure, except the preference score procedure, however many or few other alternatives there are. But with the preference score procedure this is not so and with the preferences set out by Dummett the decision will change to Ayckbourn. Obviously, whoever determines the list of alternatives to be voted on can go a long way towards controlling the outcome -- especially, be it noted, if the voters do not vote strategically. The trick is to find several variants on one's own favored alternative that everyone finds slightly less attractive. These will follow it in the voting order thus giving the outcome one favors an artificial boost in the scoring relative to the other real alternatives.

#### IV. THE CRITERION OF AGGREGATE-PREFERENCE SATISFACTION

If what I have said here is persuasive, Dummett's case for the preference score procedure as a practical way of taking votes will have to be dismissed. But he could still maintain that aggregate preference-satisfaction among the voters is the criterion for the ideal relation between preferences and outcomes. What can be said about this?

The first and most obvious thing to be said is that Dummett is not competing in the intrinsic fairness stakes when he proposes this criterion, even though he talks the language of "fairness" and treats his criterion as if it were simply a rival of a logically similar kind to majoritarian criteria that are attempts to appeal to intuitive notions of intrinsic fairness. It is plain that what Dummett is putting forward is an external criterion for assessing the working of voting procedures, namely (although he never as far as I can see says so explicitly) utilitarianism.

We can see that what he offers is an external criterion by noticing that it is an entirely contingent matter whether or not in some case a voting procedure is the best means of meeting the criterion. Perhaps no voting procedure would be as efficient as having one person (either a member of the family or a well-informed impartial outsider) make a decision with the conscious objective of maximizing the aggregate utility of the five members of the family. It remains open that advances in psychometry might make voting in committees obsolete. Perhaps some combination of galvanic skin response measurements and readings from electrodes attached to the committee members' heads would indicate strengths of preference with enough reliability to enable voting to be replaced by the summation of indices of preference strength.

Clearly, someone who is attached to the notion that some relations between preferences and outcomes are intrinsically fair

is not going to be impressed by Dummett's way of proceeding. Such a person is likely to adhere to what Dummett calls "the mystique of the majority," and reasonably enough, it seems to me, if the object is to come up with a criterion that gives everyone an equal input into the decision. It is, I believe, this idea -- however chimerical it may turn out to be on close analysis -- that (I shall return to this point in the context of elections in section IX.) animates appeals to the intrinsic fairness of procedures. And where a majority prefers a to b, such a person is liable to conclude that counting everyone for one implies that a should be the collective decision. Giving the supporters of b the victory because they have more intense preferences will, on this view, amount to allowing them extra votes.

Suppose, however, that we accept the irrelevance of Dummett's criterion to the traditional arguments about the intrinsic fairness of voting procedures. Is it plausible as an external criterion? It seems to me that Dummett sets things up to favor himself by making the example one of a family making a decision. For it is

at any rate not too unreasonable that the members should accept aggregate utility as a criterion, especially if over a whole series of decisions this seems to work out roughly equitably. Even in such a context, however, it is by no means obvious that it is the right one. Thus, in the era when films were constructed as vehicles for stars, the studios discovered that group decisions were made by veto, so that the prime attribute of a box office success was an actor or actress who was not subject to violent dislike from any large segment of the filmgoing audience.<sup>6</sup> The distributive criterion that one should not go to a film or play that any member of the party violently objects to is apparently more popular in practice than the alternative of maximizing aggregate utility endorsed by Dummett.

When we move from a family to a unit with less solidarity, the case against utility maximizing is stronger. This is familiar ground and I shall not spend any time expanding on it here. The point I want to emphasize about the peculiarity of the family

example is a different one. When the members of the family vote, the people making the decision are identical with the people affected by it. But Dummett tells us that his book is designed to apply to the deliberations of "all who are involved in any corporate decision-making process: members of boards of governors and of directors as well as of the House of Commons" (p. 13). Now it is surely an important fact about such corporate bodies that, although they will occasionally take decisions that affect themselves alone (whether to serve coffee or tea at their meetings, whether to ban smoking, and so on) their raison d'être is to take decisions whose primary effect is on other people. Why should we suppose that maximizing the aggregate preference-satisfaction of the committee members with the outcome should be the objective of their voting procedure?

It may, of course, be said that we do not have to assume that the members of the committee are pursuing their own private gratifications. Their preferences may reflect public-spirited

intentions. Quite so. But the question remains: why should we think that an ideal voting procedure would be one that maximized aggregate satisfaction with the outcome among those charged with making the decision?

To break the hold of this model in the sharpest possible way, consider a jury in a criminal trial. The object of the procedure is to find guilty only those who are actually guilty, and the procedure of the trial, the form of the question the jury is required to answer, and the decision-rule for the jury's verdict, are all supposed to be set up to that end. It is surely clear that the aggregate preference-satisfaction of the jurors is neither here nor there. Nor, it seems to me, is there any a priori reason for expecting there to be any correlation between the strength of a juror's preference for a certain outcome and the likelihood that that juror has reached a good decision. If anything, we might speculate that prejudiced and ill-balanced jurors are more likely to feel intensely on one side or the other and

those with a more impartial and dispassionate attitude are more likely to feel less strongly.

I suggest that the case of ordinary corporate bodies is more analogous to that of a jury than it is to that of a family. That is to say, the members of the committee are supposed to be asking themselves the "right question" (to put it in Rousseauan terms) and there is no reason for anticipating a correlation between strength of preference and likelihood of being on the right side.

It is interesting to observe in this context that the Marquis de Condorcet, the pioneer of voting analysis, was imbued with Rousseauan ideas and carried on his whole discussion on the assumption that the members of a legislature are giving their opinions on the "truth," and that the object of aggregating votes is to come up with the decision that is most likely to be true given the votes cast. Thus, as Condorcet's biographer, Keith Baker, puts it:

The purpose of the Essai sur l'application de l'analyse à la probabilité des décisions rendues à la pluralité de voix was to answer the following problem. Under what conditions will the probability that the majority decision of an assembly or tribunal is true be high enough to justify the obligation of the rest of society to accept that decision?

Rousseau and Condorcet agreed, have the right to follow their own opinion. But reason dictates that on entering political society, they consent to submit to the general will -- or, in Condorcet's phrase, "the common reason" -- those of their actions that must be governed for all according to the same principles. In submitting himself to a law contrary to his own opinion, the dissenting citizen of Rousseau and the represented citizen of Condorcet are both following the same reasoning: "It is not a question of myself alone, but of everyone. Thus I must not act according to what I myself believe to be reasonable, but according to that which everyone --

like me, setting aside his own opinion -- must regard as in conformity with reason and truth." This quotation is taken from the Essai su l'application de l'analyse, but it would not come strangely from the pages of Du contrat social.<sup>7</sup>

We assign to each person's vote on some decision that is to be taken a certain probability of its being true. Using Bernouilli's theorem we can then calculate for any particular pattern of votes what is the probability of each of the alternatives being true. It was in this context that Condorcet came up with the criterion that bears his name today, though it is worth observing that he recognized the possibility of the Condorcet winner failing to be the truest outcome.<sup>8</sup> This shows how far Condorcet was from any notion of intrinsically fair procedures.

Baker is inclined to be apologetic for Condorcet's approach, suggesting that he would have been much better off if he had stuck to talking about the aggregation of preferences.<sup>9</sup> In this he follows the earlier account given by Duncan Black, who says that

there

seems to be nothing in favour of a theory of elections that adopts this approach. When a judge, say, declares an accused person to be either guilty or innocent, it would be possible to conceive of a test which, in principle at least, would be capable of telling us whether his judgement had been right or wrong. But in the case of elections no such test is conceivable; and the phrase "the probability of the correctness of a voter's opinion" seems to be without definite meaning.<sup>10</sup>

In judging these remarks we should bear in mind that most social choice theory has been written by economists (such as Duncan Black) and that economics has been the last refuge of logical positivism. When Condorcet claimed that a voter in a legislature who votes for A over B "affirms the proposition that A is better (vaut mieux que) B,"<sup>11</sup> he was of course presupposing that it makes sense to say one thing is better than another,

and not merely that one prefers it. In saying that the proposition has no "definite meaning" because there is no conceivable "test" for its truth, Black is doing no more than trotting out standard logical positivist prejudices.

In the event, social choice theory -- which in its orthodox form is about the aggregation of preferences -- has turned out to be incapable of offering normative guidance. The approach of the Marquis de Condorcet, so far from being a dead end, as those who have written about him suggest, is, I believe, the one that ought to be pursued.

## V HOW TO ASSESS VOTING PROCEDURES

My conclusion is, then, that Dummert is right to go for an external criterion for voting procedures. But his choice of maximum aggregate preference-satisfaction among the decision-makers depends on an overgeneralization from the example of the family deciding which play to go to -- and is quite controversial even for that. What then should we look for in voting procedures in committees? My answer is that the most important thing is not to worry too much about the details of alternative voting procedures. The main criterion is that any procedure should be easy to operate and easy to understand. In particular, it should be easy to see what effect on the outcome voting one way or another will have. But what should be emphasized is that the difference between a good committee and a bad one lies in the quality of its deliberations and is relatively unaffected by its voting

procedures. A good committee is one in which innovative suggestions are encouraged and taken seriously, arguments are scrutinized rather than treated as the obligatory time-filler before a vote is taken, and so on. An excessively fussy voting procedure can get in the way of this, but nothing can save a committee whose members have bad preferences from reaching a bad decision. The computer adage "Garbage in, garbage out" applies to voting procedures too. In my experience the committees that make good decisions are those on which the dynamics are such that just about any procedure would in the end produce the same decision. Conversely, I have never seen anything good come out of a committee whose members are constantly appealing to Robert's Rules of Order and debating procedural niceties.

It is an implication of what I have said that it is not necessarily a good feature in a voting procedure that it should streamline the process of reaching a decision. Where there is



very far from a consensus -- so that, for example, there is not a clear majority for any alternative -- it may be better if the members of the committee are forced to spend more time canvassing other alternatives and arguing about the merits of these and the existing ones. A good example is the election of the head of an Oxbridge college. The standard statutes are, I believe, of the form found in C. P. Snow's novel The Masters. That is to say, they simply state that there has to be a majority of the Fellows voting in favor of a single candidate and that candidate is thereby elected. Where there are two candidates this normally presents no problems. (In The Masters it did so only because there was a convention that the two Fellows who were candidates should abstain from voting.) But where there are more than two candidates it may obviously happen that no candidate gets a majority. The procedure envisaged by the statutes is that the Fellows should go on meeting until they do get a majority for

one candidate. But in recent years there has apparently been a tendency to panic at the thought of deadlock and therefore to replace the procedure laid down with one guaranteed to produce a winner; the statutes are then complied with by the Fellows voting for the winner under this procedure.

Dummett himself is widely rumored to have been responsible for one such procedure, based on his favorite preference score method, and a subtext of his book is, I would hazard a guess, an attempt to respond to those who have claimed that such a procedure tends to result in the election of mediocrities. (To provide a context, it should perhaps be said that it is widely believed that in this election a well-known philosopher who has sometimes been described as "the cleverest man in England" had a majority of first preferences but lost because the candidate who won had a lot of second preferences. In his book Dummett on several occasions takes up the complaint that the preference score system discriminates in favor of mediocrities. His remarks, however,

embody the characteristic fault of social choice theorists, namely taking some assertion that has no logical connection with preferences and treating it as if it were equivalent to one that refers only to preferences.<sup>12</sup> The charge he answers is not therefore the real one but one of his own invention. This he can deal with easily enough, but it has no bearing on the issue.

What Dummett writes is as follows. The preference score procedure, he says,

is sometimes accused of favouring mediocrity; but the accusation is false. A mediocre candidate is one on whom very few voters are keen, but to whom very few are strongly opposed; a controversial one is a candidate on whom many are keen but to whom many are opposed. The procedure favours neither. An utterly mediocre candidate would be one who was ranked in middle place by every voter, for instance fourth out of seven: he would then receive an average score, namely  $1/2n(\underline{r} - 1)$  points, when there are  $n$  voters and  $\underline{r}$  candidates, and could not win unless by some

extraordinary chance every other candidate received exactly the same score. An utterly controversial candidate would be one who was ranked highest by just half the voters and lowest by the other half: he, too, would receive the average score,  $1/2n(\underline{r} - 1)$  points. The procedure gives no advantage to the mediocre candidate, nor any to the controversial one: it measures how far the support for a candidate outweighs the opposition to him. In the extreme case, a candidate whose support marginally outweighs the opposition to him can win, if the support for and opposition to every other candidate but one are equally balanced: but it makes no difference whether the winning candidate in such a case is highly mediocre or highly controversial. Those who criticize the preference score procedure for giving an advantage to a mediocre candidate really mean to charge it with failing to give an advantage to a controversial one.

(Pp. 176-77.)

The shift in ground here is blatant. Without offering a shred of justification, Dummett stipulates that "a mediocre candidate is

one on whom very few voters are keen, but to whom very few are strongly opposed," and goes on to assume that the opposite of "mediocre" is "controversial." Given this definition of "mediocre," it is of course easy to prove that, if everyone votes sincerely (a proviso which Dummett requires here but does not make explicit), a candidate who comes exactly in the middle of everyone's preferences will garner an average score and can win only when support for more controversial candidates is evenly divided. By the same token, he would, I take it, accept that if there are four candidates three of whom are controversial and one of whom is everyone's second choice, this candidate (the "mediocre" one in Dummett's own terminology) will win so long as the other candidates have roughly equal support. But his argument would be, as we can see, that the support in this case outweighs the opposition so this "mediocre" candidate should win, according to the criterion of preponderance of preferences. (Such a candidate will also, incidentally, be a Condorcet winner in the case as stated.)

All this is, however, strictly beside the point. For a moment's thought will remind us that mediocrity is a personal quality, not a function of preferences in some voting body. On the authority of the Oxford English Dictionary, mediocrity is "a moderate or average degree of mental ability, talents, skill, and the like; middling capacity, endowment, or accomplishment. Now chiefly with disparaging implication, in contrast with excellence or superiority." <sup>13</sup> It obviously makes no sense to try to cash out the notion of mediocrity in terms of preference profiles. If all the members of some electoral body want a mediocrity, he will be unanimous first choice; if some are very keen on getting a mediocrity and the rest are strongly opposed, the mediocrity will be a controversial candidate; and so on. The claim (made by James Bryce a long time ago) that great men rarely become presidents of the USA is to be assessed by looking at the human qualities of the people who get elected, not by examining the preference profiles of American citizens. Similarly, whether

or not the preference score procedure has a tendency to result in the election of mediocrities is something that must ultimately be studied empirically by seeing how it actually operates.

We can push the analytical question a bit further by noting that other procedures (the alternative vote is a good example) will eliminate in the first round a candidate with no first preferences. (This is at any rate true with sincere voting, a point I shall return to in section <sup>VII.</sup> But a candidate with no first preferences can quite possibly come out top under the preference score procedure, as we have just seen. We can therefore reformulate our question so as to ask if there is some correlation between being mediocre and being nobody's (or few people's) first choice, since it is in giving such people a real chance of winning that the preference score procedure is distinctive. This is again an empirical question, but my own observations suggest to me that it is in fact rather common, at any rate among academics, for those with greater ability to attract a higher degree of

partisanship, both for and against, with mediocre candidates taking up an intermediate position.

To conclude this discussion of the preference score system and mediocrity I should add that everything I have said is predicated upon the assumption of sincere voting. Once we allow for strategic voting, we can immediately see another way in which the claim that the preference score system tends to favor mediocrities can be supported. Suppose we give voters the benefit of the doubt and assume that they do not actually want to put a mediocrity in the position that is to be filled. Then we might hazard the empirical assertion that a candidate who is low on almost everyone's preference ordering will tend to be a mediocrity. (It should be borne in mind that "mediocre" does not mean "in the middle" but "poor.") But, as we saw earlier, the preference score system can rather easily make a candidate who is perceived by everyone as weak into a winner under strategic voting. Since this is not true of other procedures, this is a good reason for connecting

the preference score system with the election of mediocrities.

I suspect that some such thought, even if it is not very precisely formulated, quite often lies behind the charge. Whether or not this is so, the argument greatly strengthens the one already given which was based on sincere voting.

It will be apparent that I have been illustrating for just one voting procedure (the preference score system) and just one characteristic (tendency to elect mediocrities) the kind of study that I think should be devoted to procedures for taking votes -- and, I should again emphasize, to the whole decision process in which voting is embedded. This claim will, of course, be denied by those who lay a heavy stress on the importance of attempting to demonstrate the intrinsic fairness of certain voting procedures. They will say that I am presupposing what may be lacking, namely some agreement about what constitutes a desirable property in a decision procedure. The argument they will make is that it is precisely where any such agreement is not forthcoming that we need

some neutral criterion for the intrinsic fairness of voting procedures. My answer is twofold. First, the quest is chimerical. As soon as we get beyond the easy cases for the majority principle it is inherently controversial what is an intrinsically fair procedure for aggregating votes. My second reply is this. Suppose that there is really so little agreement about the desirable properties of a decision procedure that there is nothing for it but resorting to a criterion of intrinsic fairness such as an extension of the majority principle to produce a decision in all cases. I can see no reason why those who regard the predictable outcomes arising under this procedure as horrendous should have such an exaggerated respect for this one procedural value as to let it override every substantive value that they hold dear. In any case, it is plain that in practice people do not accept arguments about the intrinsic fairness of, say, majority voting, as overriding when they dissent profoundly from the whole run of decisions under it. <sup>14</sup>

## VI VOTING FOR REPRESENTATIVES

I said at the end of section I of this essay that Dummett devotes only two of his sixteen chapters to voting procedures for electing representatives and the other fourteen to voting procedures for all other purposes. These include (as will be clear from the discussion so far) elections where the rationale is not supposed to be that the person or persons elected are representative of the voters but are the best ones to fill, say, academic positions of some kind.

Although this is Dummett's official position, he in fact spends part of these fourteen chapters discussing two methods that are used for electing representatives. One of these is the familiar method -- the so-called "first past the post" system -- used for national elections in America, Britain, and most other countries in the British Commonwealth. Under this procedure, the candidate with the largest number of votes (a plurality or, as Dummett calls it, a relative majority) wins even if he has less than half the votes. Dummett

gives this method short shrift but he devotes two chapters to an analysis of the simplest variant on it, the alternative vote. Under this, if no candidate has a majority of votes, the candidate with the fewest first votes is eliminated and his votes redistributed to the second preferences of his supporters. If necessary the process is repeated until some candidate has a majority of the total votes cast or until only two candidates are left in which case the one with more votes is declared elected. (If all voters list all candidates in order, this candidate will necessarily also have more than half the total. But if some ballots are untransferable because the voters did not list enough candidates in order, the winning candidate may have less than half the total.) This system is in use in Australian parliamentary elections for the lower house and has been advocated for many decades in Britain by those who are satisfied with the system of single-member constituencies but object to the way in which a candidate can win in a three-way contest on a little over

a third of the votes when it may be (but need not be, of course) that a majority of the voters would have preferred one (or both) of the other candidates. The alternative vote was in fact supported by a narrow majority of the House of Commons in 1918 on a free vote, and in 1931 was passed as part of a deal between the Labour and Liberal parties. In both cases it was rejected by the House of Lords, but in the second case it would probably have been enacted under the existing provisions for overriding opposition from the House of Lords but for the fall of the Labour government in August 1931.<sup>15</sup> It is worth observing that, although the alternative vote is supposed to be analysed in the context of decisions other than the choosing of representatives, Dummett's discussion of strategic voting and "wasted votes" under this system is carried out almost entirely in terms of parliamentary elections or (as in the example on pp. 214-5) elections for a city council.

When we observe that the last two chapters, which are officially about voting for representatives, are about voting in

multi-member constituencies, we might be tempted to think that the true division<sup>is</sup> between the first fourteen chapters and the last two is between voting for one outcome (be it a person or a policy) and voting for more than one person. (There is no precise equivalent of voting for more than one policy, since policy a plus policy b is treated as voting for policy "a plus b." This, however, would not be correct either. In fact the chapter<sup>that comes</sup> before the last two contains some material on elections (e.g. to prize fellowships) where more than one appointment may be made (see pages 247-54).

If we ask why then the last two chapters, which are about electing representatives, are confined to the discussion of systems of electing more than one representative from a given constituency, the answer is this. Dummett asserts dogmatically that any system for electing representatives must make room for the representation of minorities. But obviously if we insist that a minority within a constituency must be represented by a successful candidate (as well as the majority's being represented, of course) we must conclude that only multi-member

constituencies can meet the requirements of representation. "Since what principally distinguishes electoral procedures from other uses of voting procedures, from a theoretical standpoint, is the need to ensure representation for minorities, the method to be used by a single body of voters to elect a fixed number of candidates, greater than one, is central to the topic" (p. 256).

This insistence that voting for representatives must entail voting for more than one representative from any given constituency has a very unfortunate effect on the organization of the book. Dummett maintains that the criteria that are relevant for assessing voting systems used to elect representatives are different from those that are relevant for assessing voting systems used for other purposes. But this then entails that no part of his discussion of the kinds of voting systems that are in fact used for elections of single representatives, such as the alternative vote, is in fact germane to the discussion of representation. Actually, however, as I have pointed out, Dummett himself violates his own

restrictions by carrying out much of his discussion of the alternative vote method (see especially pp. 211-17 and 228-30) in terms of voting for representatives.

If the consequence appears to be that the discussion of voting for representatives in the book is a bit of a mess, this is I am afraid no more than the truth. What makes for a particular organizational weakness in the book is that Dummett's discussion of the alternative vote gets separated from his discussion of the single transferable vote (STV). Yet it is clear that the two are logically related (as Dummett himself notes on page 268), and that much of what can be said about one can be said about the other.

In fact Dummett has discussions of the notion of strategic voting and of a "wasted vote" in relation to both, but much would have been gained if these discussions had been integrated. I shall take the opportunity of dealing with them together in this essay.

In this discussion of electoral systems I shall make use of a recent collection of essays entitled Choosing an Electoral System.<sup>16</sup>



This brings together the two schools of thought that go into Dummett's book -- the naive enthusiasts for "fairness" and the skeptical social choice theorists -- but also includes contributions from a third school, the political scientists who have analysed the actual tendencies of alternative voting systems. A whole sub-field of comparative politics has developed out of attempts to connect types of party system with types of electoral system on the basis of comparisons between countries and also discussions of the way in which different changes in the party system of a certain country are related to changes in its electoral system.

(The relationships go both ways, of course.)

Dummett claims in his book to have built a bridge between the social choice theorists and the political scientists (p. 295) but I have to say that this claim seems to me to be without foundation. The essence of the political science tradition is that one cannot evaluate electoral systems without discussing their consequences for such things as

the kinds and numbers of parties they are likely to result in, starting from a given social and political configuration. And these phenomena are themselves to be evaluated by more general considerations such as the capacity of the system to maintain stable and effective government. Dummett at no point makes any contract with this tradition and its characteristic set of questions.

Insofar as he builds a bridge to people outside the social choice tradition it is not to this school of writers in comparative politics, but to those who are as a priori as the social choice theorists but less well-equipped: the people who talk about "wasted votes" and similar arcana of intrinsic fairness. Dummett excoriates the standard rhetoric of the Electoral Reform Society for its sloppiness and tendentiousness. But I believe that his own positive arguments about electoral systems are subject to what is in fact the most important charge against those who talk the language of intrinsic fairness: that their proposed procedure, although advocated on a priori grounds, has a quite evident

tendency to favor some kinds of political outcomes over others and is in fact favored for precisely that reason. But this real reason is not publicly advanced, and the desired outcomes are not therefore subjected to open discussion.

I shall divide my discussion of electoral systems into two parts. The next three sections take off from Dummett's criticism of the standard arguments of an a priori kind against the relative majority system and in favor of the single transferable vote. In section VII I shall take up, and in some ways extend, Dummett's attack on the claims often made for the alternative vote and the single transferable vote to the effect that they are virtually immune to problems of strategic voting. Then in section VIII I shall expound and criticize his account of what the partisans of STV mean by saying that the relative majority method "wastes" votes whereas STV does not. After that I shall (in section IX) put forward my own alternative explanation and try to show both why it attracts and why it is ultimately mistaken.

In the remainder of this essay, I shall consider Dummett's and advance a few of my own. ~~own~~ ideas about representation. Section X will be devoted to an examination of Dummett's claim, already mentioned, that the criteria appropriate to the assessment of procedures for electing representatives are different from those appropriate to the assessment of procedures for all other purposes of collective decision-making. Section XI will discuss Dummett's specific claim about election procedures, namely that representation entails representation of minorities. Section XII looks critically at Dummett's suggestion that elections in Britain should be carried out under a procedure that he has invented. Finally in Section XIII I shall put forward some thoughts of my own about electoral reform.

## VII STRATEGIC VOTING AND THE SINGLE TRANSFERABLE VOTE

Since there is a general proof (of which Dummett gives his own version in his chapter 11) that there is no "procedure that affords every voter a straightforward strategy, whatever his preference scale, given that there are more than two possible outcomes" (p. 204), we know in advance that the alternative vote and its n-candidate extension the single transferable vote will not be strategy-proof. Nevertheless, the advocates of such voting schemes commonly give the impression that their pet proposal manages to do the impossible.

Thus, Dummett quotes the extraordinary recommendation of a couple of the earliest enthusiasts, Hoag and Hallett, that in elections using a preferential elimination procedure the words "You cannot hurt the chances of any candidate you prefer by making lower choices for others" should be printed on the ballot papers (p. 216).<sup>17</sup> But, as he points out, "the only honest instruction to the voter would involve adding 'but you can in some cases hurt the chances

of the candidate you prefer by listing him first'"(p. 222).

The alternative vote, as Dummett points out, violates a condition that other voting systems such as the relative majority system and the preference-score system meet, namely the requirement that "listing a highest always maximizes a's chances of success" (p. 215).

This condition is called "monotonicity" by Steven Brams and Peter Fishburn, two social choice theorists, in an article in Choosing an Electoral System. They express it by saying that it is met "if more first-place votes can never hurt a candidate."<sup>18</sup> ¶ Having pointed out (as Dummett does not do explicitly) that STV fails this test in the same way as does the alternative vote, they write: "The fact that more first-place votes can hurt, rather than help, a candidate under STV violates what, in our opinion, is a fundamental democratic ethic."<sup>19</sup> I am far more doubtful than are these authors of the existence of a "democratic ethic" capable of such precise deliverances. What can be said with complete confidence is, however, that it shows how hollow are the claims of those who tout STV by suggesting that it leaves

voters with an easy decision about how to vote once they have determined their actual preference order. Other voting procedures in use do not have the defect just described. In other voting schemes you cannot actually make your most preferred candidate's chances less by listing him first, or (in non-preferential systems) voting for him rather than for some other candidate.

It may seem bizarre that ranking a candidate first can actually prevent that candidate from getting elected, so it is perhaps worth showing how it happens. I shall, however, spare the reader any fully worked out examples involving STV because (as Dummett's book illustrates) they go on for pages. I am concerned here with principles, not with enabling anybody to become a teller in an election conducted under STV. I shall therefore capitalize on the logical relation between the alternative vote (where one place is to be filled) and STV (where several are) by working through examples for the alternative vote and extending them to STV via the time-honored method of arm-waving.

Suppose, then, that we have three blocs of voters, whose preferences over three candidates are as shown.

I	II	III
<u>a</u>	<u>b</u>	<u>c</u>
<u>b</u>	<u>c</u>	<u>a</u>
<u>c</u>	<u>a</u>	<u>b</u>
(8)	(4)	(5)

at the bottoms of the columns

If the numbers of members in each bloc are as shown and everyone votes in accordance with his true preferences, b will be eliminated and the votes of bloc II transferred to their second preference c. This will give c a majority (nine votes) so c is elected. Now suppose that two members of bloc I depart from sincere voting and put b first. (It does not matter how they list the other two candidates.) The result is that a and b now have six first preferences to c's five; c is therefore eliminated and the votes of bloc III transferred to their second preference, who is a. This gives a an easy win, with eleven votes -- six from the members of bloc I who voted sincerely and five from the members of bloc III.

The upshot is that a wins with six first preference votes but not with eight, because the shift in the two first preference votes from a to b changes the order of elimination. The candidate who gets eliminated is now c instead of b, and this releases second choice votes from c's supporters sufficient in number to push a over the quota. In contrast, without the extra two votes b is eliminated, and his supporters' transferred votes go to c, giving him a majority.

I shall not attempt, the reader will be relieved to hear, to explain in detail the mechanics of the single transferable vote. Dummett spends several pages (pp. 268-72) expounding it, ending with the remark that, although "those who essay popular accounts of STV assur[e] their readers that it is not really complicated," the truth is that "it is complicated" (p. 272). (It is, for one thing, the only voting system in actual use that requires dealing in fractions of votes.) However, building on the account of the alternative vote already given, it is possible to give the general

idea. If we start from the alternative vote and think of it being used to fill two or more positions, there is a natural extension to give us the quota. With one position to fill it was  $1/2n + 1$ , where n is the number of voters. With two positions to fill it is  $1/3n + 1$ , and so on. The general (and slightly more precise) formula is that the quota is "the smallest whole number larger than  $n(k + 1)$ ," where k is the number of positions to be filled (p. 269). ¶ As before, candidates who reach the quota are declared elected, and candidates are in the same way eliminated and their votes redistributed. The process stops when enough candidates are over the quota or the number left in is equal to the number of places still to be filled. The only new feature, which makes the system complicated in practice, is that if a candidate goes over the quota after some round with votes to spare, his "surplus" is redistributed. This means (in most versions of STV) that his votes are transferred but with a fractional value, the fraction being smaller the narrower the margin of success. It may be seen, however, that the basic idea is still one

of eliminating candidates and transferring their votes to the next-preferred candidate still in the running.

To see how a group of voters can get the candidate they like best elected only if some rank another candidate first, consider an election under STV for three seats in which the voters are required to list all the candidates. (This proviso is not necessary but it simplifies the analysis.) The quota is one-fourth of the number of voters. Now imagine a bloc of just under a quarter of the total number of voters whose first preference is for a certain candidate a. It may be that if all the members of this bloc vote for candidate a he will not pick up enough transferred votes from candidates who are eliminated to push him over the quota. But there may nevertheless be some candidates who were eventually elected whose lower preferences, if they had become available by elimination, would have given a a quota. If some members of the bloc who like a the best were to list some other candidate first, they might, by changing the order in which the

candidates were eliminated, be able to knock out a candidate (or more than one) whose transferred preferences would elect a.

The analogue with the alternative vote example is, I hope, clear enough to suggest that this must, with some voting patterns, be a real possibility.

Propagandists for the single transferable vote are by this time quite hardened in sin. (More charitably, one might take the view that since they only talk to one another they know not what they do.) Thus, George Hallett, writing fifty-eight years after <sup>co-authored</sup> the publication quoted by Dummett, said the following in an article for Choosing an Electoral System.  
written Under the single transferable vote system the voter, he claims,

can safely vote his real order of choice as far as he has any, and no later choice will ever hurt an earlier choice. This is true because no later choice is ever counted unless and until all earlier choices are elected or defeated.

If you have a favorite candidate but don't think he has much chance of election, you can simply give him your first choice

anyway, with later choices to fall back on. Your first choice is always counted.<sup>20</sup>

Hallett just stays short of asserting flatly that you cannot hurt the chances of the candidate you most prefer by putting him first, but he surely suggests strongly that it can never hurt the chances of a lower-ranking candidate if the one you put first is not elected, because your vote for him will be redistributed to help a lower-ranked candidate. This is not, however, the case. It should also be said that there is no way in which it is true under STV that "your vote is always counted" in which it is not equally true in any honestly-conducted election. Thus, under the plurality or "first past the post system" everybody's vote is, obviously, counted, and that is all that is true for STV.

The claim that a lower preference cannot affect a higher one the lower choice is necessarily true since  $\wedge$  cannot come into play unless the higher preference candidate has already been either eliminated or elected with a surplus over the quota. But it amounts to a suggestio falsi to say this without the balancing statement that it may be

possible by listing a more preferred candidate lower than one which is less preferred to shift the outcome in a direction that one likes. As Brams and Fishburn put it for the alternative vote (to accommodate STV we have to add the words in brackets): "It is true that a first choice can never be hurt by ranking a second choice, a second choice by ranking a third choice, etc., because the higher choices are eliminated [or elected] before the lower choices can affect them. However, lower choices can affect the order of elimination [and election], and hence transfer of votes, so that. . . a higher choice (e.g. second) can influence whether a lower choice (e.g. third or fourth) is elected."<sup>21</sup>

Let me again illustrate the points at issue by analysing the alternative vote and then extend the discussion at STV by arm-waving. Suppose that there is no way in which the most preferred candidate of a certain bloc of voters could be elected

by their voting either sincerely or strategically. Hallett suggests that they cannot lose by putting the candidate they like most top, because if he doesn't have enough votes to win, the ballots of his supporters will be redistributed and will help to elect somebody else. Hence "your vote is never wasted." Is this true?

To see that it is not, consider the following example, where there are three blocs each of which ranks one of the three candidates top.

I	II	III
<u>a</u>	<u>c</u>	<u>b</u>
<u>b</u>	<u>a</u>	<u>c</u>
<u>c</u>	<u>b</u>	<u>a</u>

Suppose that none of the blocs numbers as much as half the total number of voters, so that any candidate who is elected will depend on the first preferences of one bloc and the transferred second preferences of another bloc. With sincere voting, the outcome is determinate once we know which is the smallest bloc. Whichever

bloc it is will have its first choice eliminated, and whichever candidate of this smallest bloc gets the redistributed second choice votes will have a majority and thus be elected. (Thus, if bloc I is the smallest, a is eliminated and b is elected.) In each case there will be some other bloc for which this outcome is the worst possible. (In the case where b is elected, this is the worst outcome of bloc II.) But in each case the bloc that stands to get its least preferred candidate elected with sincere voting can change the outcome by voting strategically so that its second preference wins.

The simplest solution for the members of bloc II, to avoid finishing up with the candidate they like the least, is for all of them to put their second-ranked candidate a first. Then a will get a majority straight off. But a far smaller amount of strategic voting than this will suffice. So long as enough of the members of bloc II switch their votes as to leave c with the fewest first preference votes, a will win. For c will now



be eliminated and with the help of his redistributed votes a will be elected. (It may be noted, incidentally, that the result is invariably the election of the candidate with the fewest first preferences.)

Let me in passing show how this example illustrates something I said in section V about the case of the candidate who was nobody's first choice but everybody's second. I pointed out that the alternative vote would wipe out this candidate in the first round. I added the qualification, however, that this was true only with sincere voting. Let me now explain this. Suppose that of the three controversial candidates one is significantly stronger than the other two, though falling short of a majority of first preferences. Then the supporters of the other two controversial candidates may be able to foresee that with sincere voting the result will be that the strongest of the three controversial candidates wins. Since (ex hypothesi) they also dislike one another's candidates, there is no room for

a deal among the supporters of the two weaker controversial candidates to vote for one of them. But they can gain by voting for the candidate they rank second. Thus, putting their second preference first in the ballot helps them get a candidate as the winner that they like better than the one they would have finished up with by voting sincerely.

Dummett remarks curtly in his discussion of STV that "most of the advantages advertised for STV are illusory; it is, for example, even further from the truth than under the alternative vote that a voter cannot lessen B's chances as against those of C by listing A first. . ." (p. 283). To see how this is so, consider again our case with three places to be filled and a bloc of a little less than a quarter of the total number of voters.

Let us suppose the worst case, in which all the voters other than those who rank a first rank him last. Then there is no way in which the supporters of a can possibly get him elected. But by

voting strategically it would certainly be possible for them to have some influence on who else gets elected.

Provided enough supporters of a defect to ensure his elimination in an early round, all the votes of a supporters (whether they listed him first or not) will go to some other candidate, and this presumably gives the supporters of a a chance to improve the outcome of the election from their own point of view. If, however, they vote sincerely their candidate will not be knocked out until the end and they will have no influence on the outcome. They are thus in an analogous position to bloc II when bloc I is the smallest <sup>in my alternative vote example.</sup> Their candidate stays in to the end so their votes are not transferred, but their candidate is not actually elected. The way in which to analyse the election is to say that the three-quarters of the voters other than the supporters of a have between them determined which candidates shall be elected.

The votes of the supporters of a in the STV example, like the votes of the members of bloc II in the alternative vote example, are counted in just the same way as the votes of those who vote for unsuccessful candidates under the relative majority system. We can say of all of them that, if there had been enough more of them, their candidate would have been elected. But we cannot honestly say that there is any sense in which everyone's vote counts under the alternative vote or STV that would <sup>not</sup> be equally applicable to the relative majority system.

These eliminative systems, the alternative vote and STV, have a further defect that is not shared by aggregative systems such as the preference score system or the relative majority system. I am not aware that the point has been made in the literature (it is not mentioned in their discussion of these systems by Dummett or by Brams and Fishburn) but it seems to me quite significant.

As we know, there is no voting scheme under which it may not pay to depart from a policy of sincere voting. But it would at

least be cheering to be able to assure someone that he would not do better, in terms of getting an outcome he likes, to stay at home rather than to go out and vote sincerely. It would be nice to be able to say "If you do vote sincerely you may not change the outcome, but if you do  $\wedge$  will improve the outcome. You can't make it worse." Such an assurance cannot be given for the alternative vote and STV.

This can be seen clearly in my example of the alternative vote where the candidate listed first by the smallest of the three blocs is eliminated and its members' votes are transferred to the second preference candidate of the bloc. Here we saw that, with sincere voting, one of two larger blocs of voters gets the outcome its members like least. But if some of the members of this bloc simply stayed at home so that it became the smallest bloc, its highest-ranked candidate would be eliminated and the transferred votes would go to elect the bloc's second-ranked candidate.

Similarly, in my STV example, let us assume that those who put a first form a bloc with a common set of lower preferences. Then if some members of this bloc simply did not vote, a would be eliminated and the transferred votes of those who did  $\wedge$  would play a part in determining who else got elected, thus presumably improving the outcome from the point of view of the members of the bloc.

It is important to get clear just what is the unique defect of STV here. It is not, of course, that it is open to strategic voting. That, to repeat, is true of all procedures. But there are no other voting procedures in actual use  $\wedge$  I believe, with the characteristic that voting sincerely can make the outcome worse than it would otherwise be. Thus, the preference score procedure favored by Dummett is, as we have seen, seriously defective in the face of strategic voting, but we have no need to warn a potential voter that he might do better not to vote at all than vote sincerely. Since the prospects of a candidate depend on the size of his

preference score, it can never do anything but help to have a larger score. Thus, adding to the scores of the candidates you favor by voting sincerely must, if it has any effect at all, improve <sup>the</sup> standing of a candidate you prefer more b a candidate you prefer less. It is, of course, true that you could usually do even better by voting strategically. But that is not now the issue. The point is that it is better to vote sincerely than not at all. It is easy to see that the same can be said of the much-maligned relative majority or "first past the post" system. If you favor a you might get a better result by voting for b instead; but you cannot get a better result by abstaining from voting altogether rather than voting for a.

It is worth emphasizing that the peculiarities of STV are not a price that has to be paid for having an electoral system of so-called "proportional representation," by which is usually meant a system in which a minority party of more than a certain size in

a constituency is guaranteed a seat. The party list systems in use in most of continental western Europe are logically similar to the relative majority or "first past the post" system. For like it these systems make use only of first preferences. That is to say, in both cases the voter simply votes for one political party. The seats are then divided in accordance with some formula so that the proportion of seats that each party wins within a constituency roughly corresponds with its proportion of votes. In such a system it can, obviously, never hurt the chances of a party to cast a vote for it as against not voting at all. (A fortiori, it would not improve a party's chances in such a system to vote for some other party instead, so monotonicity is not violated either.)

Thus, it would be easy enough to have "proportional representation" without the complexities and peculiarities of STV -- if that is what one wants. We might especially expect those who attack the relative majority system in Britain to support a party list system when we recognize that their standard line of criticism is to point out that it fails to produce a correspondence between

the proportion of votes cast for a given party and its proportion of seats. Since it is not designed to do this but something else (namely elect the candidate in each constituency who gets the most votes) this is not in itself a criticism of it. It becomes one only if it is tacitly assumed that the object of an electoral system should be to produce a proportionality between votes cast nationally for a party and seats won nationally by a party, but this is of course equivalent to assuming that the right electoral system is a party list system with the whole country as one big constituency.

Why do not those who make this attack on the existing system draw the logical conclusion? The explanation of the puzzle is, I think, that the strongest advocacy of STV has always come from those who either dislike political parties or support the Liberal party (insofar as these states of mind can be distinguished). The hidden agenda of enthusiasts for STV is, then, not the proportional representation of political parties but a system of personal

representation that makes political parties epiphenomenal.

Dummett recognizes that this is the really distinctive feature of STV and commends it for precisely this reason. In the end, he proposes an alternative to it, but his claim for it is that it does the same thing in this respect as STV but even more effectively and without some of STV's drawbacks. I shall take up Dummett's views about the representation of minorities in section XII. Next, however, I want to take up Dummett's discussion of the concept of the wasted vote which is so popular among supporters of STV.

## VIII THE WASTED VOTE AS A STRATEGIC CONCEPT

I began this essay by contrasting the attitudes towards voting procedures of the professionals with those of the amateurs.

On no matter is this contrast more pronounced than that of the so-called "wasted vote." If they ever addressed it, the social choice theorists would presumably say, in the words that Laplace used when asked about the relevance of God to physics, "I have no need of that hypothesis." But a large element in the amateurs' criticisms of the relative majority procedure and, even more, in their advocacy of the single transferable vote, consists of invoking as a criterion of an intrinsically fair procedure the requirement that it should not waste votes.

As I said in section VI, Dummett claims to be building a bridge between social choice theory and those who try to generalize about

the actual consequences of electoral systems but he does not deliver on this claim. What he does do, however, is bring the resources of social choice theory to bear on the arguments of the Electoral Reform Society and others who think it makes sense to talk about the "fairness" of electoral systems as a question detachable from that of their predictable political effects. This involves him heavily in an attempt to understand what electoral reformers of this kind mean when they say that under one system votes are wasted while another they are not. (One might expect the opposite of "wasted" to be "conserved." In fact it tends to be "effective." I shall discuss the significance of this in the next section.)

Like his discussion of strategic voting (with which it is closely linked), Dummett's analysis of the idea of the "wasted vote" is marred by its being divided between a chapter on the alternative vote in one of the first fourteen chapters and a brief discussion of it in connection with STV in one of the last

two chapters. But this is not simply, as it was with strategic voting, a matter of awkwardness. I believe that in this case dealing with two systems separately results in Dummett's going seriously astray.

The reason for this is that, as I shall try to show, those who talk about "wasted votes" really have two entirely different conceptions of what a wasted vote is. One is employed to attack the relative majority system while the other is used to push the case for STV. The first one does not lead particularly to STV. And the second, when applied to relative majority voting, does not produce the same implications as the first but ones that are rather bizarre: thus, on the first conception of a wasted vote, votes under the relative majority procedure can be wasted only when there are more than two candidates in a constituency; but on the second conception many votes (just how there are only two candidates. many is not quite clear, as we shall see) are wasted even where

Because the bulk of his discussion of "wasted votes" occurs in the context of the alternative vote, Dummett's interpretation

of the concept picks up only the first conception. He then notes that it does not support the case for STV but this does not lead him to ask if some other interpretation would do so. I shall try to show that there is indeed a second conception of a wasted vote that seems to be what those who commend STV for not wasting votes have in mind.

Dummett writes that

advocates of the alternative vote procedure invariably make great play with the concept of a wasted vote, claiming it as the great merit of the procedure that it reduces the number of voters who waste their votes. Unfortunately, they hardly ever attempt to specify what it means to say that someone has wasted his vote. The primary application of the concept is to the relative majority procedure; but it needs to be explained in general terms if we are to judge that some other procedure will involve fewer wasted votes. (P. 214.)

In this section I shall follow through Dummett's discussion of wasted votes under the relative majority procedure, and his three successive attempts to extend the notion from particular examples to create a general criterion of "waste." Then in the next section I shall work out an alternative conception of a wasted vote, derived from the writings of those who use the notion in the course of advocating STV.

Dummett begins by assuming without discussion that, when it is said that votes are wasted under the relative majority procedure, what is meant is that, when there are three (or more) candidates, all votes cast for candidates other than the one who came first or second are wasted. He then construes this (again without discussion) as an assertion about the way in which the outcome might have been changed if those whose first preference was a candidate who did not come first or second had switched their votes to the candidate who

came second.

It is easy enough to show, as Dummett does, that, if this is really what people mean, they are committed to an utterly absurd way of thinking about wasted votes. I shall not follow Dummett's own exposition because, as is his almost invariable practice, he obscures the points by making his examples unnecessarily complicated. (He never used three blocs of voters where seven, or eleven, or seventeen blocs will do instead.) But I shall make the same points.

Suppose, then, that there are three candidates in an election and that all those who support the candidate who came third (c) preferred the one who came first (a) to the one who came second (b). Then it is, of course, still true that those who voted for c could have changed the result by voting for b. But they would have changed it in a way that made the outcome worse, electing their finishing up with third choice candidate instead of ^ their second. It is obviously



ludicrous to say, on the strength of this, that those who voted for c wasted their votes.

Dummett then points out that we might refine the criterion to read as follows: those who did not vote for the candidate who won wasted their votes if they might, by voting differently from the way in which they actually voted, have altered the result to one that they would have preferred to the actual result. Thus, in the example already given, it could be that those who voted for b would have preferred c to a. They could then have got c elected if they had voted for c. Then, in the case hypothesized, in which the people who voted for c had the order c a b, we would have to say that there were wasted votes among those who voted for b, the candidate who came second, but there were no wasted votes among those who voted for c, the candidate who came third.

It is plain that if this is the notion of a wasted vote, then it has an essential connection with strategic voting. Thus, if we regard the analysis of strategic voting as being at the core of

the social choice contribution to the analysis of voting, we can say that Dummett here brings together social choice theory and the arguments of the naive proponents of "fairness" in voting procedures.

What exactly is the connection between wasted votes and possibilities of strategic voting? Dummett's attempt to state the criterion of a wasted vote on which the supporters of b waste their vote by voting sincerely, but the supporters of c do not, is not successful. He says: "When the relative majority procedure is used, therefore, we may say that a voter wastes his vote if he votes for a candidate who had no chance of winning, given the preference scales of the voters, provided that they voted admissibly" (p. 215).

I have so far avoided technical terminology but I can explain admissibility fairly easily by starting with non-admissibility. A strategy (call it S1) is non-admissible if there is some alternative strategy (call it S2) which, for every possible contingency (where a contingency is defined by the way in which everybody else

votes), would be better. That is to say, for any possible distribution of votes, S2 either produces the same outcome as S1 or it produces a more preferred outcome. S2 in this case may be said to dominate S1. An admissible strategy, then, is one that is not dominated by any other. There may well be many admissible strategies. Thus, where a relative majority procedure is in use, the only non-admissible strategy is to vote for one's least-preferred candidate. For there is some contingency under which it would improve the outcome to vote for one's next-to-least-preferred candidate, namely where what would otherwise happen is that the least-preferred candidate would win.

It is, of course, exceedingly unlikely that a single vote would change the outcome in an election, though it does occasionally happen. Dummett suggests, quite reasonably I think, that we should think in terms of voting by blocs of like-minded electors. An individual voter's decision can then be seen as following from a calculation about what those who have the same preferences as himself ought to do.

A voter who, in a British or American election, votes for the candidate of his second choice because he believes that the one he likes best is unlikely to get in cannot be presumed to think it at all likely that the candidate he votes for will win by one vote. If he thought of the votes of the other voters as something unalterably given, the only rational motive for his voting as he did would be the possibility that he might just tip the scale: but he does not so think of them. He votes, rather, as he hopes that others who share his opinions and preferences will decide to vote: he acts as if his decision were a sign of what the decisions of all who have the same preferences as he will turn out to have been. Is this a rational way to think? It is, provided that it is how most people think, for then those with the same preferences are quite likely to arrive at the same decision. If most people did not think in this way, it would not be rational for anyone to do so; but it is in fact how most people think when deciding how to vote, and, if it were not, it is doubtful that parliamentary democracy would work at all.

This is, I believe, an excellent piece of analysis. Although others have said it before, Dummett says it very well. We can therefore move between talking about voting by an individual and voting by a bloc without having to justify it on each occasion.

Let us now see what Dummett's proposed criterion for a wasted vote under a relative majority procedure amounts to. Consider again the example I gave of three blocs. The largest puts a first and votes for a; the next largest has the order b c a and votes for b; and the smallest has the order c a b and votes for c. We obviously cannot say that a has no chance, since a was actually elected and all the votes cast were admissible. (Nobody voted for <sup>his</sup> least preferred candidate -- in fact everybody voted for his most preferred candidate.) We cannot say that c had no chance, because c would have won if those who put b first had voted for their second choice c, and this would obviously have been admissible. Can we, then, say that b had no chance, given the actual preference orderings and the constraint that all votes are cast admissibly? Not necessarily.

We have not yet had any occasion to mention the lower prefer-

ences of those who voted for a. But suppose that enough of them put b second to elect b when their votes were added to those of the people who put b first. Then b could have been elected by admissible voting compatible with the actual preference-orders. It might be asked why supporters of a should vote for b when a has a plurality; but they may not know that a has a plurality and think that the choice is going to be between b and c.

It is precisely because there is a possible contingency in which it would improve matters to vote for a second-choice candidate that I said voting for a first-choice or second-choice candidate is always admissible in a three-candidate election. Admissibility is concerned, let me remind the reader, with possibilities and not probabilities. Thus, it may well be that in my example none of the three candidates was without a chance, given the actual preferences and the constraint of admissible voting. But I take it that nobody who wants to talk about wasted votes would be happy with such a conclusion.

Dummett's attempt to generalize his criterion for a wasted

vote from the relative majority procedure to all procedures does not include the reference to candidates' chances.

But it is even less satisfactory. He claims that

"the way of generalizing" the criterion is "to say that, under any procedure, someone wastes his vote if he adopts a 2-inadmissible strategy" (p. 112). The notion of 2-inadmissibility is another

piece of jargon that I should explain. A strategy is 2-inadmissible

(i.e. secondarily inadmissible) if it is inadmissible given the actual preferences of all other voters and if all other voters use (primarily) admissible strategies. Dummett says a little later that this entails

identifying "a wasted vote with the adoption of a 2-inadmissible strategy, i.e. a vote cast in a manner that could not be advantageous, given the preference scales of the other voters" (p. 229) -- and, one should add, their voting admissibly.

Under some voting procedures, the choice of strategies will be sharply reduced for a voter who knows the preference orders of all other voters and assumes (whether correctly or

not) that they will vote admissibly. Thus, Dummett's erstwhile co-author on strategic voting, the late Robin Farquharson, showed that for binary decision procedures such as the standard motion-and-amendment system of voting the stipulation of secondary admissibility will often determine strategies uniquely.<sup>22</sup> But the same cannot be said of voting under the relative majority procedure.

As we have seen, where there are three candidates it is primarily admissible for anyone to vote for either his first or second preference. And, given this amount of leeway in voting, it will for most possible configurations of preference orderings be secondarily admissible for a voter to vote for either his first or second choices. In other words, if we consider all the ways in which people could vote consistently with the requirements of primary admissibility, it will be hard (though not impossible) to think of patterns of preference among the other voters which will make the criterion of secondary admissibility any more restrictive than that of primary admissibility. All we have to find, for any given pattern of preferences, is one set of admissible votes on which it

would be best to vote for one's most preferred candidate, another on which it would be best to vote for one's next-most-preferred candidate, and so on down to the  $n - 1^{\text{th}}$  ranking out of  $n$  candidates. (An example to the contrary with three candidates, whose peculiarities should show why such cases are rare, is as follows. Suppose that there are three blocs with preference orders  $\underline{a} \underline{b} \underline{c}$ ,  $\underline{b} \underline{a} \underline{c}$ , and  $\underline{c} \underline{a} \underline{b}$ . Then it is 2-inadmissible for any members of the first bloc to vote for any candidate except  $\underline{a}$ , unless the first bloc is the smallest and the other two blocs are of equal size.)

It is, I think, clear that Dummett's identification of a 2-inadmissible vote with a wasted vote is misguided if it is really supposed to be an attempt to capture what those who say the relative majority procedure wastes votes normally have in mind. Dummett himself says of the kind of example I gave a little earlier, where the  $\underline{b}$  voters put  $\underline{a}$  second and the  $\underline{c}$  voters put  $\underline{a}$  second that "if we use the notion of a wasted vote at all, we must say that those who voted for  $\underline{b}$  wasted their votes, not those who voted

for  $\underline{c}$ " (p. 215). But his own proposed criterion fails to generate this answer reliably, as I have shown.

In fact, the whole business of admissibility is, I suggest, a red herring. Suppose that in my earlier example, perhaps because the two candidates have the same surname, a lot of the votes cast for  $\underline{c}$  really came from people whose first preference was for  $\underline{a}$  and whose last preference was for  $\underline{c}$ . If there is an argument for saying that those who voted for  $\underline{b}$  wasted their votes because they would have done better to vote for  $\underline{c}$ , it is surely unaffected by the reasons for  $\underline{c}$  getting the number of votes he did. The admissibility of other votes is not, therefore, a necessary condition for the casting of a wasted vote. But it certainly is not a sufficient condition either, as I hope I have demonstrated. For it will be common for a 2-admissible strategy (one admissible when all <sup>other</sup> votes have been cast admissibly) to be what a believer in wasted votes would call wasted.

Dummett in the end admits, when he shifts to discussing

the alternative vote, that what matters is actual votes and not admissible votes. He says that, on his earlier definition,

there would never be any wasted votes under the alternative vote procedure. This is because each voter has so many admissible strategies that a knowledge of the voters' preference scales, combined with the presumption that they will all vote admissibly, will never even restrict the possible course of the assessment process: hence every admissible strategy is also 2-admissible. This can hardly be held to capture what is meant when 'wasted votes' are discussed: our definition was too restrictive. (P. 229.)

As I have already suggested, the same is virtually true even of the relative majority procedure, so the earlier definition is irrelevant there too. However, Dummett's proposed new definition would, I think, work well enough to get the right answer in the relative majority case -- though not in the STV case! Dummett now suggests that "i wastes his vote if he, together with certain other voters, could have obtained an outcome they all preferred by

voting differently, this time on the assumption, not merely that all the rest voted admissibly, but that they voted as in fact they did. . ." (p. 229). This would of course imply that there is a lot of wasted voting under the relative majority procedure, where his earlier definition would have produced the answer that wasted votes scarcely ever occur. Thus, suppose for example that a has a plurality and the supporters of b rank c second, while the supporters of c rank b second. On Dummett's first definition there would be no wasted votes here; on his second definition both those who voted for b and those who voted for c have wasted their votes, since each bloc could have done better by voting differently, given the actual way in which everyone else voted.

Does this represent accurately the views of those who say that votes may be wasted under the relative majority system where there are three or more candidates but not where there are only two? I have never, I must admit, seen it

acknowledged as an implication of their views that in the hypothetical situation set out above the votes of those who supported both losing candidates were wasted. Perhaps it seems too paradoxical to say that two sets of wasted votes could together have elected a candidate. But I believe that a clear-headed exponent of this version of the "wasted vote" concept, if one existed, would be bound to admit that this is indeed the implication of his ideas on the subject.

Dummett points out, quite correctly, that if we define a wasted vote according to this new proposal, it will be hard to say that the alternative vote (or, we may add, its multiple-seat cousin STV) is picked out as an especially desirable procedure by the criterion of avoiding wasting votes. Dummett's definition says, in effect, that the members of a bloc waste their votes if they could have produced a better result (judged by their own system of preferences) if they had voted differently from the way in which they did. I think we should add a further point here. The particular criticism of the relative majority system is that votes are

wasted by sincere voting (i.e. voting for one's most preferred candidate). If the claim were to be made that STV does not waste votes, the parallel claim would be that a person's vote is not wasted if he lists all the candidates in the order of his true preferences over them.

As we saw in section VII, enthusiasts for STV are fond of making this claim, or at any rate one that sounds like it if one does not pay enough attention to the weaselly qualifying adverbs. But we also saw there that all such claims are false. Given the actual votes of the others, it can very easily be the case that the members of a bloc might have improved the outcome from their own point of view by departing from a sincere vote.

As an aside, I might add that it would not help if a partisan of STV were to say that, under the relative majority procedure, people may attempt to vote strategically but still (on this criterion of wasting a vote) waste their votes. This is undeniably true --

for example we might imagine that due to lack of coordination the supporters of b vote for c and the supporters of c vote for b, thus leaving the election result exactly what it would have been with a receiving a plurality. before, <sup>^</sup> But whatever can be said of the relative majority procedure on this score can be said equally of STV. If there is one optimal strategy for a bloc, given the actual votes of all other electors, any attempt at strategic voting other than one consisting of that strategy will constitute a wasted vote. The a priori odds against casting a vote that is not wasted under STV are thus quite small, given the large number of permutations of, say, ten candidates.

Let us go back to the more sensible claim that a vote is wasted if it is a sincere vote and could have been improved upon, given how the rest of the electorate voted. With this understanding, Dummett's finally revised definition of wasted voting implies that a voting procedure is liable to waste votes unless it offers every voter a straightforward strategy -- that is to say unless it is

strategy-proof. Then, since there is no such procedure, it is trivial that no method of voting avoids the problem of wasting votes.

If we say it is a question of the number of wasted votes, no comparison can be made in general terms. Where there are only two candidates or where there are more than two but one gets a majority, there are definitely no wasted votes under the relative majority procedure. Even where the winning candidate obtains less than a majority, we cannot say without further information whether or not votes were wasted. As far as STV is concerned, the remark all I can offer is <sup>^</sup> that it seems very hard to generalize about the conditions under which sincere voting could be bettered and <sup>to</sup> guess about the frequency of their arising. But it can at any rate be said that, if this is what the relevant criterion of wasted votes is, it does not lead naturally and directly towards STV.

Is it plausible, however, that those who argue in favor of STV by saying that "your vote is never wasted," mean by this no more



than that STV is uniquely strategy-proof? I do not think so:

It is true, I think, that there is some connection between the bogus claims about the strategy-proofness of STV and the claim that it avoids wasted votes. But the relation is not one of identity, as I shall next try to show.

#### IX THE WASTED VOTE AS A MONETARY METAPHOR

Dummett ends his discussion of the "wasted vote" in the context of the alternative vote as follows: "It is entirely possible that the proposed definition of a wasted vote does not accord with the intentions of those who employ the concept; there is no way of eliminating that possibility, since they never trouble to explain what they do mean. The reader may like to see if he can devise any more plausible definition" (p. 230). I intend to take up that challenge by laying out what I take to be the idea of an electoral system without wasted votes that animates the enthusiasts for STV. Because the idea cannot in fact be made coherent for voting, I shall have to give a metaphorical account of it.

Imagine then an auction for a certain number of valuable objects, say five. There are twenty-five bidders each of whom is given exactly one dollar on entering the auction room. Only this dollar can be used in the auction, and if it is left over

when all five objects have been auctioned<sup>it</sup> will be confiscated:  
 money not used to purchase (or contribute to the purchase of) an  
 object is therefore wasted. To cash out (literally) the slogan  
 of "one vote, one value" in this context, let us suppose we are  
 in California and the five objects are hot tubs. The bidders in  
 the auction can form consortia to bid for them. A consortium that  
 bids successfully for a hot tub owns it collectively. Each person  
 wants as large a share in one as possible and doesn't care with  
 whom it is shared. Under these conditions, any consortium that  
 has four or fewer members will fail to make a winning bid; but  
 nobody will join a consortium that already has five members (nor  
 will such a consortium let anybody else in). The upshot will  
 therefore be that each hot tub will finish up in the hands of a  
 consortium of five people. Everyone's money will have gone toward  
 the purchase of a hot tub and everyone will have the same share  
 in one.

Although I have never seen exactly this metaphor employed,  
 I believe that it will seem right to anyone who has read much of  
 the standard propaganda literature in favor of STV. The monetary  
 analogue can indeed sometimes be found though without the auction  
 story. Thus, another author in Choosing an Electoral System writes  
 that the "philosophy" of a "fully proportional system" is that  
 "everyone's vote should have the same weight in contributing to the  
 election of a member of parliament."<sup>23</sup> And a moment later this  
 physical metaphor of "weight" is changed to a monetary one of "price"  
 when he says: "A fully proportional system would have 'charged'  
 every party the same 'price' for a seat."<sup>24</sup>

Moreover, the idea of the voters forming consortia to share  
 in the election of a candidate is one commonly found in the pro-STV  
 literature, going all the way back to its inventor, Thomas Hare,  
 and its most famous propagandist, John Stuart Mill. Assuming, wrote  
 Mill in commendation of Hare's proposal for nation-wide STV, that  
 the number of voters divided by the number of seats is two thousand

(This is under the restrictive post-1832 franchise),

why should not any candidate who can obtain 2000 suffrages in the whole kingdom, be returned to Parliament? . . . Since one member can be given to every 2000, the most just mode of arrangement and distribution must evidently be, to give the member to 2000 electors who have voted for him, rather than to 2000 some of whom have voted against him. . . . No one is represented, or rather misrepresented, by a member whom he has voted against. Every elector in the kingdom is represented by the candidate he most prefers, if as many persons in the whole extent of the country are found to agree with him, as come up to the number entitled to a representative.<sup>24a</sup>

George Hallett at one point in the article that I have quoted from recognizes the objection that knocking out candidates starting with the one who has the fewest first preference votes may eliminate

someone who could have won if he had stayed in longer. His response is that the standard STV procedure

corresponds to what the voters would probably do if they were all there in person and deciding what to do next -- the smallest group would give up first and disperse to other candidates with an apparently better chance. In theory, the procedure is a succession of run-offs, all in one election. This objection is not a constitutional defect, for the voters who might, some of them, be better pleased to have the defeated low man as their representative get representation by helping to elect other candidates that they like.<sup>25</sup>

This is a beautifully naive statement of the underlying idea: under STV the electors "get representation by helping to elect other candidates that they like."

How does all this connect with the notion of the wasted vote?

The partisans of STV often suggest that the contrast to a wasted is an "effective" vote. And an effective vote is one that helps elect somebody. But that still, of course, leaves us with the question: what exactly does "helping to elect somebody" mean?

A simple and natural starting point might be to say that, whatever else it means, we should be able to say that those who voted for the winning candidate in a relative majority election helped to elect him. But the partisans of STV will not even admit this. Thus, Enid Lakeman, another veteran campaigner for STV, claims that "an election must involve giving the electors a choice and causing that choice to have an effect on which persons are elected."<sup>26</sup> One might think that all electoral systems in use in, say, western Europe and North America do this. But on Lakeman's conception of "having an effect" this is far from true: "As for affecting the result, in Israel about ninety-five percent of those who vote elect a member of the party they voted for;

in Britain about half the votes elect nobody, and many others are cast for candidates who would have been elected without their help."<sup>27</sup>

The curious reasoning implicit in this is allowed to effloresce in another contribution to Choosing an Electoral System, where it is said that the relative majority system

fails to take account of the voters' preferences. Many voters do not even have their first preference taken into account. Those in constituencies where their candidate wins, waste that fraction of the total vote for the candidate (and thus the same fraction of each elector's vote) that is in excess of the total needed to win the seat. Those in constituencies where their candidate loses waste all of their vote -- it is irrelevant to the final outcome of the election (in terms of the allocation of seats). In any one constituency, the number of effective votes may be relatively small.<sup>28</sup>

It is plain that this conception of wasted votes has nothing to do with those proposed by Dummett. Thus, consider an election in which there are only two candidates. The only admissible vote in this case is a vote for one's more preferred candidate. Since voting with two candidates is "straight-forward" -- everyone has a unique admissible strategy given his preferences -- there can never be any wasted votes. But on the view we are now discussing, there are wasted votes even in a two-candidate election. Suppose one candidate gets eighty per cent of the vote. Then the twenty per cent of the electors who voted for the defeated candidate wasted their vote. But so, apparently, did almost three quarters of those who voted for the successful candidate. Thus in all just under eighty per cent of the votes cast were wasted: twenty per cent cast for the defeated candidate and almost sixty of the eighty per cent cast for the successful one.

What, then, is an "effective" vote? The partisans of STV are so confused or careless that it would be easy to go wrong here. It is tempting to think that they must have in mind the idea that an effective vote is a decisive vote.<sup>29</sup> That is to say, a vote is effective only if it actually makes the outcome of the election different from what it would otherwise have been. In this sense, however, it can be said that in almost every election all votes are wasted. And again it is impossible to distinguish STV from a relative majority procedure on the basis of such a criterion.

A possible, and admittedly attractive, response at this point is to say that, judging from what they say, the partisans of STV must have something like decisiveness in the back of their minds, and that if this does not do them any good then we should just write the whole line of argument off. It was precisely in order to forestall such a response that I went through the auction

metaphor at the beginning of this section. For on the basis of this we can, I think, see an interpretation of the notion of an effective vote that has some connection with the presumed objective of making a case for the virtues of STV. An effective use of the dollar in the auction was, we might say, to use it as part of a minimum-sized successful bidding consortium. By analogy, we might suggest that an effective vote is one that forms part of a minimum-sized set of voters that is jointly successful in electing a candidate. To put it more briefly, an effective vote is one that forms part of a winning candidate's quota.

Now it may be said that it is odd to use such a notion to criticize the relative majority procedure, when the whole idea of a quota is foreign to it. But I should here repeat what I said in the previous section, that the tolerably common-sensical criterion of a wasted vote on which it might be said that some votes are wasted some of the time in three-cornered fights

(or a fortiori with more than three candidates) is not the one that the STV enthusiasts rely on. On this criterion, as I have pointed out, there would never be any wasted votes in two-candidate races, yet the case for STV is not intended to collapse in systems with only two competing parties. If we say that votes cast for losers and "excess" votes cast for winners are wasted, however, we can get the desired result.

The curious question still remains: if a gets 80% of the vote and b gets 20%, how many votes are wasted? I suggested the answer 80%, but perhaps partisans of STV would say 50% + 1. (I have not seen an explicit statement.) The rationale for this would entail stipulating a quota of 50% + 1 and taking all votes in excess of it (as well as votes cast for the losing candidates) as wasted. This is obviously entirely arbitrary, but that seems to me the nature of the argument. In effect it starts from the mechanics of STV and invents a definition of a wasted vote

to fit it rather than starting from any notion of a wasted vote that might naturally occur to someone reflecting on the operation of the relative majority procedure.

We now have a criterion of sorts: a wasted vote is one that does not go towards filling a candidate's quota. With this criterion in hand we can explain why, if you voted for a candidate who was in fact elected, you did not necessarily help elect him. For "helping to elect" somebody is to be construed in the light of this criterion, so "excess" votes don't count as helping to elect the candidate they are cast for.

What can be said about this criterion as a support for STV? The first point to be made is that STV does not satisfy it. It will be recalled from section VII that the quota under STV (the so-called "Droop quota") is, roughly  $\frac{n}{k} + 1$ , where  $k$  is the number of places to be filled and  $n$  the number of ballots cast. It will also be recalled that this means that a group of just

under the size of a quota will routinely fail to have its votes counted towards the election of any winning candidate, because its votes have gone to a candidate who just missed being elected. This could be avoided if the Droop quota were replaced by the original quota of  $\frac{n}{k}$ . The preference for the smaller quota illustrates the point that the partisans of STV abandon consistency with their own principles when they can secure something they really want, namely the election of minority parties and candidates with only limited support.

Suppose, however, that the objection that votes are wasted under STV were met by making the quota  $\frac{n}{k}$ . Then we would simply see even more clearly the basic objection, namely that it is hard to see why anyone who understood what was really involved would care whether his vote (in the relevant sense) was wasted or not. As before, it is clearest to begin with the alternative vote. With a quota of  $\frac{n}{k} + 1$ , up to half the votes

can fail to be cast for the successful candidate and are therefore wasted. With a quota of  $\frac{n}{k}$ , the quota is the same as the number of voters. This means that all votes will eventually be transferred to the winning candidate. Everyone "helps elect" the winning candidate -- even those who rank him last out of all the candidates. Since this winning candidate will invariably be the same one as would have emerged from an election with a quota of  $\frac{n}{k} + 1$ , it is hard to see why the voters should attach any significance to an extra stage of transfers with no conceivable consequences for the outcome.

When there is more than one place to be filled, a change in the quota may change the outcome from a given set of ballots. But the basic point is still the same. Suppose that, because all the other candidates have either been elected or eliminated, there are only two left in the running, then the votes of the one with the fewer votes will be redistributed. But since the only remaining candidate is the other one, their votes will have to go to that

candidate even if they listed him last. Thus, it is true that with a quota of  $\frac{n}{k}$  everyone's votes go towards a successful candidate, but they avoid being wasted only in a Pickwickian sense.

With a quota of  $\frac{n}{k} + 1$  we get the additional problem that some votes do not go towards any successful candidate's quota. We do escape the problem of a vote going to the least-preferred candidate. But we do not get very far. It is still possible that, because of previous eliminations and elections, someone's vote will eventually finish up by counting towards the quota of a candidate ranked next to the bottom out of all the candidates in the election. Thus if we talk the language of "helping to elect," we can say that your vote may either fail to help elect anyone, or it may help elect the candidate ranked next to last.

George Hallett, in his puff for STV, says that "you can safely mark more choices than are being elected" and offers as an illustration of this STV voting in the New York borough of Queens, where he says: "I once helped elect a first choice —————>



and the next time a tenth choice because several of my choices had been elected by others before my first choice was defeated."<sup>30</sup>

I think most people would find the news that their vote had gone towards the quota of a tenth-choice candidate rather less than gratifying. Insofar as they might feel any satisfaction with the election result it would be, I suggest, on the grounds that several candidates they liked had got elected rather than because they were tickled by the eventual destiny of their own vote.

This brings out why the auction for hot tubs is not a good basis for assessing electoral systems. In the auction it makes a difference whether or not you were among the successful bidders for a hot tub. If you were you have a share in it, which gives you certain rights that you would not otherwise have. If you failed to belong to a consortium that made a successful bid you have no access to a hot tub. If you belonged to an oversized consortium you will have to share it with a crowd and its value to you will

be diminished. The ideology of the wasted vote, in the form in which it is employed to give backing to STV, trades on the implicit assumption that the same ideas have relevance to voting. But they do not.

The reason is the fundamental one that makes politics distinctive: that it is concerned to a large degree with public goods. A policy -- say a law or an executive decision in foreign policy -- affects different people in different ways. But it does not affect them differently depending on whether or not they voted for it, or whether or not they voted for representatives who voted for the law or supported the government that took the action.

The same goes for elections. The election result is the collective effect of the votes of all those who voted, filtered through whatever election procedure is in place. It is the same result for everybody, though of course some will like it more

than others. But it does not affect people differently depending on how they voted -- or whether they voted at all. Hence the question about whether or not your vote helped elect someone is quite irrelevant to anything that matters. For there is no advantage that accrues to anyone from having helped to elect a candidate, in the sense used by the partisans of STV. (If you help run someone's campaign you may hope for preferment if he is elected, but the question of patronage is not currently at issue.)

This is not to say, of course, that there is nothing to be said about the pros and cons of electoral systems. I shall say some things in the remainder of this essay.

But it does mean, I believe, that the concept of the wasted vote (and its companion the effective vote) should be laid to rest. I have given it a longer run for its money than Dummett gave it, but in the end I conclude that it has nothing to offer.

#### X FAIRNESS TO OUTCOMES VERSUS FAIRNESS TO VOTERS

In this section I shall discuss Dummett's claim that the rationale of procedures for voting for representatives is basically different from the rationale of procedures for voting on any other question. Dummett propounds the contrast between the criteria for electing representatives and criteria for making other decisions in a slogan which turns out to be quite hard to unpack. What he says is that in contexts other than voting for representatives "our concern is not to be fair to the voters, but to the outcomes" (p. 173, italics in original). A "fair procedure" is "one that produces the fairest outcome" (p. 255, italics in original). But "when they are electing representatives, the voters may reasonably demand that the procedure be fair to them -- the voters, rather than the candidates" (p. 255). Now as slogans go "fairness to voters, not fairness to outcomes" is, to say the very least, on the obscure side. However, I think there is something in the contrast, though not in the use Dummett wants to put it to.

As we saw in section IV of this essay, Dummett has an external criterion for the assessment of voting procedures that are not used to elect representatives. It is not, I should add, as external as most external criteria, because it is defined entirely in terms of preferences. Thus, he has no way of talking about the mediocrity of candidates in terms of imagination, profundity of thought, or any other characteristic that any ordinary person would associate with it. He has to construe any criterion, even one like mediocrity, as a statement about preferences so as to fit it into his way of thinking. Nevertheless, his standard is external in that it does not simply define the outcome that should be chosen in terms of voting patterns or (to allow for strategic voting) patterns of ordinal preferences. Given Dummett's criterion, it might be that we could establish the outcome that should be chosen by informed judgment or psychometric testing more effectively than by using any system of voting, as I pointed out earlier.

It should be said that Dummett occasionally speaks as if there

exists some further criterion for choosing an outcome, and that maximizing aggregate preference-satisfaction is just a way of approximating it. Thus, he writes: "If we are simply trying to estimate which outcome is probably the best, there is no reason to give a special weight to majority opinion: what matters is the prevalent opinion, as judged by giving equal weight to each voter's preference between two possible outcomes" (p. 256). This obviously suggests that there is in principle a way of telling which outcome really is the best, and that there is simply a correlation between an outcome's being "prevalent" (i.e. maximizing aggregate preference-satisfaction) and its meeting whatever the real requirement for being best is. However, Dummett never vouchsafes any information about what this further external criterion might be, and it plays absolutely no part in his discussion of alternative voting schemes. For all practical purposes, therefore, we are safe in attributing to Dummett the view that the criterion to be used in assessing outcomes is the utilitarian one (restricted,

of course, so as to take account of the preferences of only the voters) and that proposed voting procedures are to be judged according to their tendency to bring about the best outcome on that criterion.

In the end, however, it does not in the present context make a lot of difference whether we treat maximum preference-satisfaction, aggregating preferences according to their number multiplied by their intensity, as the criterion of the best outcome or as a mere symptom. Either way, the essential point is that there is an independent standard for assessing outcomes, and voting procedures are to be judged by their relative efficiency in achieving it. Now it is true that Dummett speaks of the best outcome also as a "fair" one, but the concept of fairness plays no role in the assessment. The accolade of fairness is simply awarded to whatever outcome is "prevalent," that is to say, whichever outcome maximizes aggregate preference-satisfaction. If prevalence is the criterion of the best outcome, then the fairest outcome is the one that is best;

if prevalence is a surrogate for whatever actually constitutes the best outcome, then the fairest outcome is the one that is probably the best. Either way, I think that we can now see that, when Dummett says that the objective is to be "fair to the outcomes" this is no more than a misleading way of saying that the objective is to get the best outcome.

What, then, if this is what being "fair to the outcomes" amounts to, are we to say about the contrasting notion of "being fair to the voters?" Unfortunately, Dummett says almost nothing about what in general this means: his discussion of voting for representatives almost immediately moves to a discussion of mechanisms for ensuring the election of candidates supported by a minority of voters. However, we can get at least a clue from his application of the contrast to the alternative vote. It may be noted that, officially, Dummett cannot treat the alternative vote as a method for electing representatives because it produces only a single successful candidate. Luckily, however, he departs from

consistency sufficiently long to give us a start.

Thus, in his analysis of the alternative vote as a method of making decisions other than those on representatives (chapter 9) he argues that it is an objection to the alternative vote that, insofar as it takes account of preferences other than first choices it does so "in a haphazard fashion" (p. 173). (This, of course, is by the standard of the preference score procedure, which gives all first preferences the same value, all second preferences the same value, and so on.) Thus, he says, some voters get only their first choice counted, others their second or third preferences, but then "it assigns exactly the same weight to those second or third choices of which it does take account as to first choices" (p. 173). He then says that "advocates of the alternative vote procedure are disposed to comment that this is only fair" (p. 173): those whose first preferences are the only ones counted can have no complaint because they got their first choice anyway; and presumably (though Dummett does not complete the analysis in this

way) those who did not get their first choice should not be further penalized by having the value of their lower preferences reduced. As we may by now predict, his reply is that "the argument is quite fallacious: our concern is not to be fair to the voters but to the outcomes" (p. 173). And this is glossed by saying that it may be that the second or third preferences of those whose first choice was actually elected "show some other outcome to have a better claim to have been selected" (p. 174).

This is not much to go on, but it gives us at least a hint of what "fairness to the voters" as against "fairness to the outcomes" might be taken to mean. And in his opening discussion of electing representatives -- the brief page and a half that is all we get before he plunges into detail -- Dummett repeats substantially the same point about the alternative vote, saying now that "the notion of being fair to the voters is at least in place when representatives are being elected: there may be groups of voters who are entitled to be represented, even though the candidate they support

does not by other criteria merit election" (p. 256). The idea here is apparently that we have to make a distinction, where people are to be chosen to fill a position, between the aim of "appointing the best qualified to fill certain positions" and "selecting representatives" (p. 256). The "prevalence" test is the appropriate one for the first but not for the second.

As I understand it, Dummett's thought here is that a vote may be regarded in two alternative ways. In one, it is to be regarded as an input into a process whose rationale is that it will tend to produce the best result. In the other, it is an input into a process that is supposed to give everyone an equal chance of getting what he wants, or more precisely an equal chance of controlling the outcome. Hence the notion that someone whose most-preferred candidate under the alternative system is elected has no cause for complaint (p. 173) and that those whose first-preferred candidate is not elected should have his vote carried over without diminution to help elect a less-preferred candidate.

Dummett writes that "the use of the majority preference criterion in place of the preference score criterion for judging which outcomes is [sic] the fairest is in itself a concession to the principle of being fair to the voters" (p. 256). Now as this stands it is false insofar as it suggests that the majority principle cannot be related to the aim of producing the best outcome. As I argued earlier in section IV, if one thinks of voting in committees and legislatures as offering an opinion about the "right answer," there does not seem to be any good reason for giving additional weight to more intense preferences. One might well therefore conclude, with Condorcet, that the outcome with majority support has the best chance of actually being the "right answer."

Nevertheless, it is I think correct that the primary route to the majority principle is through the notion of fairness to voters. From this point of view the rationale of the majority principle is that, if everyone has one vote, more votes should beat fewer votes. As Hobbes put it in explaining why in an assembly the collective decision should correspond with the majority of votes:

And if the Representative consist of many men, the voyce of the greater number, must be considered as the voyce of them all. For if the lesser number pronounce (for example) in the Affirmative, and the greater in the Negative, there will be Negatives more than enough to destroy the Affirmatives; and thereby the excesse of Negatives, standing uncontradicted, are the onely voyce the Representative hath.<sup>31</sup>

The extension to the alternative vote and the single transferable vote comes via an extension of the same basic idea. As enthusiasts for STV sometimes express it, "one person one vote" is not enough; the right formula for giving everyone an equal share in decision-making is "one person, one vote, one value." I have drawn attention to the problems inherent in giving operational significance to this idea. But I think that if we take it seriously we can explain what underlies claims about the fairness or unfairness of voting procedures.

The reader will have observed that I am identifying Dummett's notion of fairness to voters with what I called earlier the intrinsic fairness of a voting procedure. This is why I said at

the beginning of this section that I think there is something in Dummett's distinction between fairness to outcomes and fairness to voters, but not in the use he makes of it. For I see no reason for accepting that what he calls fairness to voters is exclusively relevant to decision procedures for the election of representatives and that what he calls fairness to outcomes is exclusively relevant to all other decisions.

My own view is that there are two alternative ways of looking at any procedure for the making of decisions, taken by a group of people collectively, whether it be electing representatives or anything else. One is consequentialist, in the broadest sense. That is to say, any procedure is ultimately to be judged by its tendency to produce good consequences, where, it should be emphasized, the relevant consequences are not confined to those flowing directly from the decisions themselves but include any other consequence of the procedure that is of significance in evaluating the goodness of some state of affairs. The other is non-consequentialist and is driven by the idea that I have tried to adumbrate

of fairness as equal shares in the decision. Both of these alternative ways of looking at voting require some special treatment of voting for representatives, simply because we have then a two-stage procedure to deal with. But both are equally capable of dealing with both stages consistently in their own terms.

Suppose that we judge procedures by the standard of intrinsic fairness. Then the most straightforward (or most naive) approach is to disaggregate the process and treat each stage as an independent question about fairness. Thus, on this view we can talk about the fairness of procedures for electing representatives by simply treating the election of a representative as an outcome and stipulating that everyone should have an equal control over it. We then, as a separate matter, assess the fairness of the procedures to be used by representatives to take decisions, treating them as a committee and in effect ignoring their representative function. In other words we ask "Given that such-and-such legislators

support this and such-and-such legislators support that, what would the fair outcome be?" But the fact that these legislators happen to be representatives does not enter into consideration. In principle the same answer would be equally applicable to any voting body of the same size such as a faculty meeting.

A more sophisticated version of the intrinsic fairness doctrine -- and one that is seemingly too sophisticated for almost all of its supporters -- would insist that it makes no sense to disaggregate the two stages of decision-making in this way. We should instead focus on fairness to the electorate and treat everything else as instrumental. That is to say, we should start from the idea that each voter should have an equal share in the control of the eventual policy outputs of the system, and we should assess together from this point of view both the system of voting for representatives and the methods by which they act collectively (either in a body or through committees) to produce policy outcomes.



The analytical difficulties of making anything out of this desideratum are formidable, especially when we give due attention to the additional analytical complexities generated by the role played by governments both in the process of legislation and in producing outcomes itself. In a parliamentary system we have to analyse the way in which a government (which is itself a complex apparatus of decision-making) depends on the support of (or absence of opposition from) a majority of the elected representatives. In a presidential system (such as the USA) or a mixed system (such as France) we have to analyse the interaction between two independently-elected entities.

The previous section should have given a hint as to how hard it is <sup>to give</sup> operational significance to the notion of an equal share in control of outcomes even for the first stage of electing representatives, considered in isolation from all the rest of the system. But I think that it is in fact pointless to talk about the fairness of a system of electing representatives in any context except that of the system within which it is a part.

Suppose now that we judge procedures by their consequences.

Then we have no alternative to treating the whole process of electors choosing representatives and these representatives taking decisions as a single unit of evaluation. No part can be evaluated independently because we cannot say what is a good way of electing representatives unless we know what those representatives are to do and how they are to organize themselves to take decisions. And conversely we cannot say what they should do and how they should organize themselves to take decisions unless we know by what procedure they are elected. If we leave aside other consequences of procedures and simply look at the outcomes -- the substantive decisions taken by the representatives -- we will start by asking what good outcomes would be and then ask what combinations of procedures among legislators and procedures for electing them have the tendency to result in the representatives taking good decisions.

We shall, of course, not take it for granted that the best outcomes will tend to arise from any kind of process in which representatives are elected and take decisions. It is a purely contingent matter whether or not this will be so, one depending on our view of what constitutes a good outcome and our estimates of the behavior to be anticipated from citizens and legislatures under various alternative institutional arrangements. Suppose we take the view that school desegregation would be a generally good outcome in the USA, for example. Then we shall have to ask what decision-making arrangements are the most likely to advance this end. This question forms the focus of a recent book by Jennifer Hochschild, and her answer is, roughly speaking, that the further a decision-maker is from popular control the more chance there is of the outcome being favorable to school desegregation. Judges appointed for life are better than judges who have to face re-election, the federal bureaucracy is (or has until recently

been) better than the Congress, people appointed to run school districts are better than people elected to run them, and "cities where school policy-making is subject to popular control [e.g. the school budget is part of the municipal budget] show less change than cities with relative insulated policy-making processes."<sup>31</sup>

As Hochschild says in commenting on these findings, they should not be surprising. In fact, they should reassure those who value pure procedural democracy over particular outcomes. Roughly speaking, popular control works; elected executives and legislators do less to facilitate and more to impede desegregation success than do nonelected judges and bureaucrats. The catch, of course, is that success for popular control means little change in racial isolation and racial injustice. Blacks know this — why else have they relied on the courts (and, at times, OCR [the Office for Civil Rights in the Department of Health, Education and Welfare] in their drive to desegregate

schools? Judges and bureaucrats may be the least desirable agents for affecting desegregation success, except for legislators, mayors, presidents, and the general citizenry.<sup>33</sup>

The "new American dilemma" identified by Hochschild is, then, that in a society where racialism is deeply embedded and popular among a majority of the citizens, there is a flat contradiction between popular control and the dismantling of the institutions that perpetuate racial inequality and separation.

At the most basic level, popular control means just that -- the preferences of a majority of citizens are transformed, mutatis mutandis, into government policy. Most Americans are white; most whites resist large-scale or mandatory school desegregation.

It is a backhanded compliment to the viability of majoritarian democracy that school desegregation seldom occurs through channels of popular control and seldom takes the form of large, system-shaking changes.<sup>34</sup>

## XI · THE CONCEPT OF REPRESENTATION

Dummett recognizes that "the choice of an electoral system involves many complex problems" (p. 293) but that does not prevent him from putting forward a particular procedure as the best "given an electoral system with multi-member constituencies" (p. 293). Since he also maintains (as I mentioned in section VI) that "what principally distinguishes electoral procedures from other uses of voting procedures, from a theoretical standpoint, is the need to ensure representation for minorities" (p. 256) and also says that this can be done only in multi-member constituencies, it seems that he must in fact maintain that his proposed procedure is the best one for electing representatives. Thus, although he pays lip-service to the truth that a voting scheme is embedded in a larger system, he does not when it comes down to it accept what I would think to be the correct conclusion, namely that it makes no sense to abstract the discussion of schemes for voting in

constituencies from wider questions about the properties to be looked for in an entire political system.

In this section and the next I shall content myself with making two negative points. The first is that there is nothing in the notion of representation itself that demands the representation of minorities. The second is that the scheme proposed by Dummett -- a sort of mixture between STV and the preference score system -- would be unlikely to have the political effects, if it were introduced in Britain, that Dummett hopes for, and might well actually be counterproductive.

Dummett writes of advocates of proportional representation that "having gauged the probable effect of each rival system on the structure of political parties and the composition of Parliament, they argue in favour of that system most likely, in their judgement, to produce the effects which are most to their own taste" (p. 10). No doubt they do, but the same can be said with equal truth of Dummett. This, however, is not intended as a criticism because I

do not think there is any other approach that is sensible. My only criticism of Dummett in this matter is that, like so many electoral reformers, he plays down the way in which his proposed reform is driven by a concern for outcomes. Like them he pretends that he can provide reasons for accepting his pet proposal that should move people who are indifferent or hostile to the outcomes that he favors. But, as I shall try to show, nothing useful for his purposes can be gained from an appeal to the concept of representation.

It should be said that, immediately following the quotation I gave above, Dummett strikes a note that has potentially quite far-reaching implications, and it is unfortunate that he nowhere follows up the discussion later. He says, against the "advocates of proportional representation" just referred to, that the problem is not

to decide in advance what type of result is desirable, and then to impose a system that will make such a result probable: it is to devise a system that will, as nearly as possible, give

the electorate what it wants, whatever that may be. To foist on people an electoral system that will make it difficult to elect a parliament in which one party has a majority, even when the bulk of the electorate would prefer any majority to none, is not fairer or more democratic than to compel them to use a system that makes it very hard to achieve a coalition government, even though that might be what most electors wanted. Of course, the phrase 'what the electorate wants' does not always have a clear application: we are back with the problem what constitutes a fair decision, given voters' preferences. (P. 10.)

It is plain that "voters' preferences" here cannot be identified with their preferences for candidates or political parties in an election. We must conceive them as preferences for much more broadly-conceived outcomes. For what Dummett is here contemplating is that someone might support a change in the electoral system to one under which the party he most prefers gets fewer, or no, seats if this alternative system is a means to making it more likely that some party gets a majority.

A good example of this is provided by contemporary France. The parliamentary elections in 1986 were held under a system of list PR. The object of introducing this system, which was voted in by the Socialist majority, was to minimize Socialist losses and prevent any <sup>single</sup> party of the right from obtaining a parliamentary majority. The hope was that this would leave the Socialist President, Mitterand, with the maximum amount of room for maneuver. But precisely because of this property of making it hard for any party to gain a majority, the system is unpopular with the electorate. "All polls show that a majority of Frenchmen want to go back to the old majoritarian system, which they associate with strong, coherent and stable government."<sup>35</sup> Thus, we may say that in France the system of single-member constituencies with two rounds of balloting is better at satisfying the "voters' preferences" than the system of multi-member constituencies that is, according to Dummett, indispensable to representation.

It should, further, be borne in mind that most of the citizens in a country may quite reasonably in some circumstances prefer a political system that has no electoral component at all --

whether "representative" in Dummett's excessively narrow sense or any other. Thus, it may be that, in some society that is sharply divided into communal groups along racial, religious, or tribal lines, experience suggests that the whole process of electoral competition simply exacerbates conflicts, and that a non-elected government sensitive to the need to conciliate the different groups is better. ¶ This broad sense of "what the electorate wants" is not, obviously, identical with my claim that we should work back from desirable outcomes to procedures. But both of them have in common the feature that we cannot expect to get anything much out of trying to derive any institutional implications from the notion of fair voting procedure, considered in the abstract. Suppose, then, that "what the electorate wants" -- or what is regarded as having a tendency to good outcomes -- is a system that usually produces majority party governments. Does this

really entail a choice between an electoral system with this property and one that is representative? It does not seem to me that there is any legitimate basis for restricting the concept of representativeness in this way. The relative majority system, which is generally reckoned the best candidate for ensuring majority party governments, is a system that produces representatives. It is of course possible to define the notion of a representative so as to exclude this system but in my view doing so is simply an exercise in tendentiousness.

The basis of the relative majority system -- or any other that has single-member constituencies -- is that the person elected represents the district -- he is the Senator for Idaho or the MP for Darlington. The notion that the representative represents a district goes right back to the dim origins of the English parliament (and comparable bodies in other countries) in the thirteenth and fourteenth centuries. The parliaments in

that period met for a few weeks a year and traded redress of grievances for acquiescence in the taxation asked for by the king.<sup>36</sup>

The knights and burgesses represented counties and borough. Over time the criterion for being a representative of a county or a borough changed, with the introduction of elections and then changes in the franchise, but the basic idea remained throughout that the MP represented the constituency, not just those with a vote and a fortiori not just those who had voted for him. Except where zeal for electoral reform drives out common sense, everyone naturally thinks of representation in this way: a country is represented by its ambassador, who is the mouthpiece of the government and not the opposition; a local chapter of a national organization or a branch of a national trade union sends its representative to a national decision-making body, and so on.

Those who dislike the system of single-member constituencies are so carried away by their own ideas that they customarily put the word "representative" in scare-quotes when it is used for the relation between an MP or Congressman and his constituents. Thus,

Hallett writes that "millions of voters across the country [the USA] are regularly left with 'representatives' whom they voted against because they were outvoted in the district where they resided. Though they are all sorts of people, they form together a major class of unrepresented citizens just as surely as if they had been denied 'free exercise of the franchise'."<sup>37</sup> But this simply presupposes first that "representation" is a relation between an individual voter and an elected candidate and second that it is the relation of having voted for that candidate. Both assumptions are highly questionable.

Where an individual has a personal representative, we can say that that person is represented: for example, I may appoint an agent with power to negotiate on my behalf and make binding agreements. But where what is to be represented is a group (say a club, in my example of sending a representative to the national organization's meeting) it seems to me that it is logically inappropriate to talk about individual members being

represented except in the trivial sense that the club is represented and they are members of the club. We can ask whether the club is well or ill represented: whether its interests, or the preponderant views of its members, are being forcefully and effectively advanced at the national meeting. And we can ask what method of choosing a representative (whether by election or not, and if by election according to what voting procedure) is most likely to produce good representation. But we cannot sensibly ask which club members are represented by whoever gets sent. They are all represented insofar as the club is represented and that is all that there is to be said on that score.

In Choosing an Electoral System a West German political scientist, Dieter Nohlen, makes a good start at analysing concepts of parliamentary representation by suggesting that there are two and only two fundamental notions. One is the principle of proportional representation. As Nohlen correctly observes the operative ideal here antedates the practice (by over a century in

fact), going back to "Mirabeau's conception of representation as a 'mirror of the nation.'" <sup>38</sup> The famous phrase <sup>from an address in 1789</sup> reads as follows:

"Les états sont pour la nation ce qu'est une carte réduite pour son étendue physique; soit en partie, soit en grand, la copie doit toujours avoir les mêmes proportions que l'original." <sup>39</sup>

Nohlen states the principle of proportional representation as follows: "PR systems intend to reflect, as exactly as possible, the social forces and political groups in the population. The share of votes and of seats for the parties should correspond approximately to each other. This is the basic function of the principle of PR and the criterion of effectiveness of a proportional system." <sup>40</sup>

The alternative is called by Nohlen the "majority/plurality" formula. Under this "the gaining of a seat in Parliament depends on a candidate or party winning the required majority or plurality of votes. The election law reads as follows: The candidate or party who wins a majority or plurality of the votes cast in a given territory shall be elected." <sup>41</sup> So far so good. Nohlen seems



to me, however, to slip at the stage where he discusses the rationale of the formula. "Under majority/plurality systems," he says, "the goal is to attain a parliamentary majority for one party or for a party alliance."<sup>42</sup>

This may, indeed, be a consequentialist justification of such a system, but it is no more than a tendency and is too loosely related to it to form a rationale corresponding to that of the "mirror of the nation." We might just as well say that the goal of a PR system is to maintain a set-up in which a number of parties are preserved in being and no party gets a majority. Indeed, in the first two decades of the century when most PR systems were created in western Europe, the driving force was the fear on the part of the ~~declining~~ "bourgeois" parties of being wiped out by the newer mass parties whose fortunes were or expected to rise with manhood suffrage.<sup>43</sup> (The analogue with rising in the wake of suffrage extensions / the motives of the French Socialists in reintroducing PR to stem

decline and fragment the opposition is a piquant one.)

What, then, is the rationale of the plurality/majority system? Simply the one I have already implied. We start with the notion of a territory represented by a single person and we say that the candidate who should be chosen is the one that best represents it. This person is to represent everyone: those who are too young to vote, those who are not citizens, and those who are eligible to vote but choose not to. (Districts, it should be noted, are based on population and not numbers on the electoral rolls.) Given that one person is to be chosen in an election, the question is then who should be elected. And there are, it would appear, two obvious contenders: first that the candidate with the most votes should win, and second that the candidate with a majority of votes should win. Where there are more than two candidates, guaranteeing a <sup>majority</sup> / entails either elimination and transfer in a single election or holding a run-off election between the two leading candidates if none obtains a

majority on the first ballot. The double ballot system with less stringent rules for elimination of candidates may be seen as a hybrid: on the first ballot a candidate requires an absolute majority to win and on the second ballot only a relative majority.

We should note that the second of Nohlen's systemic concepts of representation is incomplete in that it addresses only the question of choosing a representative for a constituency. But it is silent on the question of determining the composition of constituencies. There are three possible answers to this question.

The first answer, which is the one that is most comfortable for the theory, is that what should be represented are "natural" constituencies. Each club sends its representative to the national meeting; each shire or borough sends its two MPs to parliament.

Where sizes of "natural" constituencies are very unequal, the larger ones may get additional representatives.

This conception survived in Britain through two reforms of the

franchise and still survives vestigially in the instruction to the Boundary Commissioners to try to avoid crossing major local government boundaries in creating parliamentary constituencies.

The second idea is a natural development of the first. After giving larger "natural" constituencies more representatives (the 1867 reform gave boroughs from one to three seats), the next step is subdividing them (single-member constituencies became the norm in Britain in 1885) and this naturally suggests a criterion of approximately equal constituencies. But here the path divides. One direction, followed by Britain and, on the whole, the Commonwealth, attempts to treat the question of boundary-drawing as a technical one. Formal criteria, such as compactness, good internal communications, and respect for local government boundaries, are given to an "impartial" Boundary Commission and its recommendations are normally enacted. This has in common with the first approach the feature that there is no overarching systemic criterion for drawing constituency boundaries. The attitude is "let the chips fall where they may."

Each constituency is represented according to the criteria of representation applicable at that level, and the overall result is simply whatever it is.

This approach has its academic supporters in the USA but in the past quarter century both the practices of the politicians (which date back far further) and the theories of the courts (which are new and still evolving) have pulled in systemic criteria that go outside the individual constituency to judge methods of apportionment. The simplest way of bringing in a wider systemic conception of representation is to ask for proportionality between the votes cast for a party and its seats within a state legislature of within a state's delegation to the House of Representatives. More complex efforts have been mandated to give racial minorities electoral majorities in a number of constituencies proportional to their numbers within a state. Thus, elements of the first systemic conception of representation have been grafted onto the second. Once we

see that the two have different subject-matters, we should recognize that the two conceptions are not mutually exclusive.

Nohlen maintains that the two rationales he has given for a system of representation are the only ones. But here I think his German background leads him to overlook the peculiarities of the English-speaking world. For it must be noticed that both the rationales I have set out (and the same would go for Nohlen's proposed rationale for the majority/plurality system) depend on a systemic conception of representation. What I mean by this is that both systems make representation a function of the system as a whole. We talk about the representativeness of the system, not whether Mr X or Mrs Y is represented. The difference between the two conceptions is in the systemic relationship to be looked for.

In the first case, the relationship lies between the electorate of the country as a whole and the set of representatives as a whole. The question to be asked is: do the representatives collectively mirror the political composition of the entire electorate? Do

their proportions reflect the proportions of support for various tendencies within the country? In the second case, the relationship lies between the voters in the designated territory and their representative. The question to be asked is: does the person elected best represent the territory as a whole? Is the person elected the one with preponderant support among the voters? If the representative's area is a whole country, the implication is that he should have a plurality or majority of the total vote. (This implies that the US electoral college is an anomaly, and so it is. It is worth noticing that it is not normally defended in terms of principle.) If the area is a district within the country, the implication is that the successful candidate should have a plurality or majority within that.

There is an interesting sidelight here. Until 1885, there were many two-member constituencies in Britain, but elections were treated as the simultaneous filling of two positions by the

plurality method. Each elector had two votes and the two leading candidates were elected. The result was generally that the same party won both seats. This is the logical way of conducting a double election if the object is to send two people to Westminster both of whom represent the constituency as a whole rather than sending one to represent the majority and another to represent the minority.

As Dummett notes, the same system -- giving each voter as many votes as there are places to be filled -- is often used with larger numbers of vacancies where committees are to be elected. It is characteristic of his total inability to understand that there is a rationale for majority voting that Dummett can think of only one reason for using such a procedure, namely "the convenience of the tellers" (p. 257). But if the object is to produce a committee that collectively represents the majority of the voters, the natural extension of the plurality system with one place and one vote is n places and n votes.

So far I have been arguing that the PR and plurality/majority systems are indeed based on two logically distinct and internally coherent ideas: Each of these principles of representation has a method that most perfectly fulfills it. In the PR case it is a party list system with large constituencies -- ideally the whole country as in Israel and <sup>(in effect)</sup> the Netherlands -- and a low threshold. In the plurality/majority case it is a system of equal-population constituencies each represented by one person according to one of three methods: plurality, the alternative vote, and a double ballot (under any of a variety of rules) if no candidate gets a majority on the first round. Both are, I have argued, systemic modes of representation: in the first the country as a whole is represented by the mapping from party preference to electoral outcome; in the second each constituency is represented insofar as the candidate elected is, in some relevant sense, the one with the largest following within it.

What Nohlen misses is, I wish to claim, that there is an alternative to both of these systemic concepts of representation.

This rationale is that representation is personal: it is a relation between the individual voter and his representative. An elector is represented by the candidate he voted for, if that candidate is elected. If the candidate he voted for is not elected, he is not represented. He is, as Hallett claims, effectively disfranchised, here echoing Mill, who wrote of the "complete disfranchisement of minorities" under the relative majority system.<sup>43a</sup>

As we saw in section IX, there is some question in a quota-preferential system about what "having voted for a candidate" means. A simple approach might be to say that if a candidate more than a certain distance down your list is elected you are represented. But the trouble is that your vote may have been unnecessary in either of two ways: if it was counted towards a candidate elected with many times the quota it was only fractionally "used"; and if it was transferred from an eliminated candidate, a high-preference candidate of yours may already have been elected. Thus, we saw that Hallett did not claim that he was represented in virtue of several of his high-preference candidates being elected, because they

had already been elected before his first-preference candidate was eliminated. Rather, he was represented because he "helped elect" a tenth-preference candidate. Thus, under STV, it appears that "being represented" is not a matter of correspondence between vote and outcome but the peculiar one of having "helped to elect" a candidate -- even perhaps one next to bottom out of all the candidates. I shall not rehearse here the discussion in section IX. It will be clear that I regard the notion of personal representation in this sense as an absurdity. What is important to realize, however, is that, bizarre as it may be, it really is a distinctive idea and one which has to be grasped if one is to understand the reasons for the attraction of STV over list PR in such countries as Britain, Australia and (to a lesser extent) the USA.

If we look at things in the way Nohlen suggests, we simply lump STV in with other multimember constituency systems and point out that, since it is practicable only with small constituencies

(because the voters have to vote for individual candidates) it is not a very proportional system. It should be said that the enthusiasts for STV give the impression that <sup>proportionality</sup>  $\wedge$  is what they have in mind too, when they are attacking the relative majority system. Very often one finds them saying after some election, "If the system had been one of proportional representation, the result would have been. . . ," when it turns out that they have not simulated any actual electoral system but simply divided up the total votes cast in the whole election among the seats. But as I have pointed out before, it is one of the endearingly dotty aspects of STV propaganda that there is a disjunction between the assumptions underlying their attack on the relative majority system and the assumptions required to lead to STV.

We can see clearly that the rationale of STV is not the "mirror of the nation" but a quite different idea of personal representation by noticing that any system can be judged by the

standard of proportionality, yet proportionality does not in itself satisfy the advocates of STV. It is not enough that the system as a whole represents the electorate as a whole, in the "mirror of the nation" sense. What matters is that individual electors should be represented by candidates for whom they voted.

Thus, consider the plurality system. Where there are only two political parties, this may do a quite fair job of producing proportionality between votes and seats over the electorate as a whole. Richard Rose has constructed an "index of proportionality" by taking "the sum of the difference between each party's share of seats and its percentage share of votes, divided by two and subtracted from one hundred. The closer the index is to one hundred, the more exactly proportional is the relationship between seats and votes."<sup>44</sup> The result of Rose's computations is to show that the correlation between actual proportionality, measured by this index, and the kind of electoral system is quite weak. The House of Representatives has an index number of 94, which puts it about half way down the rankings of list PR systems

rankings of list PR systems (Canada, Australia and Britain are at 88, 87 and 85 respectively.) Thus, looking at it systematically, we can say that the USA has quite a tolerable degree of proportionality.

If proportionality were really at issue, then, the system in use to elect the House of Representatives would not be open to serious criticism. But we have only to reflect on Hallett's line of criticism, and that of the other believers in the notion of "wasted votes" in two-candidate elections, to realize that such people would not be pacified by even the most perfect proportionality within the system as a whole. For they would shift from the systemic to the individual level and say that many individual voters are still unrepresented. It is, still, after all, true that in the USA at least a third of the electorate votes for candidates who are not successful, and these people are, according to the peculiar logic of personal representation, not represented. This shows clearly enough, I

think, that the conception of representation as a personal relation between the individual voter and the elected candidate is not reducible in any way to the underlying notion of PR, the systemic idea of the legislature as the "mirror of the nation."

Mill is again instructive because of his clear grasp on the implications of the concept of personal representation. Thus, in the Considerations on Representative Government he considered a defense of the relative majority on the lines that "as different opinions predominate in different localities, the opinion which is in a minority in some places has a majority in other, and on the whole every opinion which exists in the constituencies obtains its fair share of voices in the representation."<sup>44a</sup> And he conceded that "this is roughly true in the present state of the constituency; if it were not, the discordance of the House with the general sentiment of the country would soon become evident."<sup>44b</sup> His first reply was that this proportionality could not be counted on to

continue. But his second -- which is the one to which I want to draw attention here<sup>1</sup> consisted in saying: "Even now, is it not a great grievance, that in every Parliament a very numerous portion of the electors, willing and anxious to be represented, have no member in the House for whom they have voted?"<sup>44c</sup>

I have focused here on one version of the individualistic notion of representation, namely the one that underlies the characteristic argument for STV in terms of its not wasting votes. I should however say that the criterion of individual representation has been developed in a variety of other ways in the USA during the past quarter century. There are two reasons for the way in which the academic (and, to the degree that it exists, the popular) discussion of representation has taken an individualistic form. As with other issues (reverse discrimination is a good example) the two reasons are mutually reinforcing. One is that American culture is highly individualistic -- any European teaching in the USA is bound to be struck by the natural Lockeanism of undergraduates. The other is that once a question gets



into the courts it has to be turned into one of individual rights because that is the intellectual currency the courts use in deciding constitutional questions. Thus, moves that could be defended quite straightforwardly by saying that they make the system as a whole more representative have to be tortured to fit the requirement that they be shown to instantiate individual rights to "an equally effective voice" in the election of a legislature or <sup>to cast an equally weighted vote.</sup><sup>45</sup> The result has been to produce very strange rationalizations for decisions that are clearly motivated by systemic considerations. Thus, in the case of UJO v. Carey<sup>46</sup> the basic argument for a "benign" gerrymander to produce a predominantly black Congressional district was clearly systemic with the State of New York as the system. Mr Justice White wrote as follows:

. . . the plan left white majorities in approximately 70 percent of the assembly and senate districts of Kings County [Brooklyn], which had a countywide population that was 65 percent white. Thus, even if voting in the county occurred strictly according to race,

whites would not be underrepresented relative to their share of the population.<sup>47</sup>

At this point, however, White presumably felt that talking about "whites" was too overtly collectivist to go down well, so he tried to say the same thing over again in individualistic terms, writing as follows:

In individual districts where non-white majorities were increased, . . . it became less likely that white voters would be represented by a member of their own race; but . . . the white voter . . . in [such] a district . . . will be represented, to the extent that voting continues to follow racial lines, by legislators elected from majority white districts.<sup>48</sup>

This obviously opens <sup>White</sup> up to the charge of putting forward a theory of virtual representation: just as defenders of the unreformed British system claimed that Manchester was virtually represented by Liverpool because they had similar mercantile interests, so a white who is in the minority in one constituency is virtually

represented by the person elected in a neighboring constituency where whites have a majority.<sup>49</sup> But there is nothing wrong with the decision, only with the attempt to present it in terms of individual representation instead of sticking with the flat statement, an ineluctably systemic one, that the object is to ensure that in the State of New York the number of seats with black majorities is approximately proportional to the number of blacks in the state.

My conclusion is, then, that there are three fundamental conceptions of representation. One is the notion of personal representation. For the reasons set out in section IX I do not think that in its "helping to elect" form this is sensible as a rationale for an electoral system. And although much would have to be said to prove that there is no other version that makes sense, I believe that this could be done, I shall simply have to assume that result. Doing so leaves the two systemic conceptions: the ideal of proportionality between political sentiment in the country and its expression in the legislature, and the ideal of the best representative of a certain territory, —————→

measured by the achievement of a plurality or majority within the electorate of that area.

As far as I can see, both have impeccable historical credentials as conceptions of representation, though the latter is much older and has a wider range of other applications. I do not believe that anything is to be gained by asking which is the "true" conception of representation. In particular, it should not simply be assumed (as Dummett for example does) that the theory of representation as proportionality is unquestionably the correct one.

## XII THE POLITICS OF MINORITY REPRESENTATION

It has been well said that to the cobbler there's nothing like leather, and a similar attachment to the materials of the trade no doubt tends to cause those who write about electoral systems to overestimate their political effects. Thus, it is a well-worn generalization in comparative politics that "the plurality system tends to lead to a two-party system."<sup>51</sup> Of course, "tends" is a notoriously vague term, but no major country with a plurality system has only two parties<sup>52</sup> except the USA, which does not have parties at all in the ordinary sense because the voters pick the candidates, and these if elected become members of the Congressional party regardless of the relation between their views and those of the party leaders. Moreover, if "tends" is taken dynamically, the generalization is also questionable. In Britain, for example, it took the political upheaval of 1931 to reduce the Liberal Party to insignificance, and it seems quite possible that the current party

system, which is quite similar to the interwar one until 1931, may continue until some other upheaval produces a realignment. The notion that a party which is "squeezed" by the electoral system will lose its support over time does not stand up well to empirical testing. The Liberal Party in Britain provides a good counter-example. And in France, although the single-member double-ballot system of the Fifth Republic greatly diminished the Communist Party's share of seats, its share of the votes held up until the skill of Mitterand and the sclerotic ineptitude of its leaders led to mass desertions.<sup>53</sup>

We should also realize that causation runs in both directions -- from the party system to the electoral system as well as the other way -- <sup>and</sup> that the effects in the first of these two directions can be swift and decisive. In many countries all that is needed to change the electoral system is a parliamentary majority. Thus, while it is true that we seldom find three or more parties with roughly equal support in conjunction with the plurality

system, this can be plausibly explained by the tendency of the parties to accommodate the electoral system to the political situation by changing the plurality system to one based on the proportional principle of representation. Thus, to the extent that there is a correlation between the plurality electoral system and a party system in which two parties standardly get (say) at least eighty-five per cent of the popular vote, we might explain this by saying that the persistent violation of this condition by the party system leads to a change in electoral system rather than by appealing to some "tendency" in the electoral system to determine the shape of the party system.

Although it would be a mistake to overestimate the independent effects of electoral systems, it seems safe to say that a party list PR system with large constituencies and a low threshold of representation makes the proliferation of parties very easy though not inevitable. (The threshold of representation is the minimum

proportion of votes a party requires to be represented in the legislature.) We can also say that, where there are many parties, the effect of elections is to create a set (often a large set) of coalitional possibilities. Which of these is realized, and hence the composition and program of the government, depends on negotiations among party leaders. Elections in highly fragmented systems often leave much the same coalitional possibilities open as before, and such changes in support as there are have unpredictable implications. Parliamentary arithmetic may result in a party that has lost support in an election gaining office, for example. Thus, voters may well feel that, while they have an enormous choice of parties, they have very little control over government formation or policy.

It should be observed that we cannot deduce from voters' supporting small parties that they like the system. We have here the potential for a prisoner's dilemma comparable to that arising

from strategic voting under the preference score system. I may wish there were fewer and larger parties but also feel that, if everyone else is going to vote for the exact shade of opinion that is closest, leaving the party leaders to do the rest, I should be acting in a public-spirited but self-defeating way to support a large party that is more distant rather than a smaller one that is nearer.

The Netherlands, with a threshold of representation of two-thirds of one per cent of the popular vote, illustrates this state of affairs. There is broad agreement that the fragmentation is out of hand, but it is asking too much to expect the voters to fix things by their own choices within the existing electoral system. "Whereas all parties plead the need for duidelikheid (clear stands) and proclaim the urgency of giving the electorate a more immediate influence on the formation and actions of governments, the party system has become increasingly fragmented and complex."<sup>54</sup> Given the system, each voter votes for the closest party,

but "what the voters want" is a system with fewer but more potentially decisive choices.

We can say something (though with less empirical evidence to draw upon) about the single transferable vote. In its effects on the number of parties represented in parliament, it is comparable to a party list system with the same number of seats per constituency. Thus with constituencies with three, four, or five seats (as in Ireland) it would be incompatible with a large number of national parties but could accommodate several. Both systems have the effect that a bloc of voters larger than a quota can get its candidate elected no matter how unpopular he is with the rest of the electorate. (With STV there can be several candidates of the same bloc but so long as the members of the bloc list them all ahead of others the one most popular among <sup>these candidates</sup> ~~the~~ . will be elected.) There is, however, an implication for the number of candidates. Because STV is a preferential system it encourages parties with only little expected support to stand, since voters will be told

(even if it isn't true) that "your vote is never wasted."<sup>55</sup>

But with a party list PR system a vote cast for a party too small to reach the quota does not get transferred. There is therefore a stronger incentive not to vote for parties with little chance of capturing a seat.

There are two other implications of STV that we can derive analytically. One, which again follows from its nature as a preferential system, is that it is advantageous, in comparison with a party list system with same-sized constituencies, to parties that cannot obtain a quota of first choice votes but can pick up enough lower preferences redistributed from other candidates to reach the quota. Thus if there is a large party of the right, a large party of the left, and a small party of the center, it is possible for the arithmetic to work out so that the center party gets a seat out of transferred votes, even if every supporter of the large parties votes a straight party ticket before listing candidates of the center party.

Another and stronger centripetal force, which has been

observed in Ireland, is created by the way in which under STV voters vote for individual candidates, not for parties. This makes STV distinctive. The point is not simply that the party's candidates are in competition with one another: that can also occur under a party list system that permits voters to affect the rankings within the list. The point here is that they are competing for votes generally, not only among the party's supporters.

A large personal vote for one candidate does his or her copartisans no good unless it is transferred explicitly to them. Analogously, voters can support a particular candidate without embracing that candidate's party. Even the votes of a party's loyal supporters may be transferred to other candidates after all of its nominees are elected or eliminated. As a result, wise candidates will not restrict their quest for personal support to their own party, and they may try to attract personal support without necessarily encouraging support for other candidates of their party. The interpersonal competition that is characteristic of all systems with preference voting may thus

tend to supersede interparty competition, rather than taking place strictly within party boundaries.<sup>56</sup>

Although preference score voting is not in use in national elections anywhere, it is worth speculating for a moment about its properties. This system can be used to elect either one candidate or several. In the latter case, the preference scores are totalled in exactly the same way and those with the highest scores declared elected up to the number of seats to be filled. I shall discuss this latter version.

As a preferential system, the preference score system has the same tendency as STV to favor center parties but <sup>it has it</sup> in a far stranger form. Under STV, which is an elimination system, a party can benefit from transfers only if it has enough first preferences to stay in the running until the transfers' start coming in. But with the preference score system, it can get candidates elected with no first preferences. Thus, suppose there are four seats and two parties divide the first preferences between them. Then

under every system (including STV) except the preference score system only those two parties will get seats. But if, say, each of these two parties puts up two candidates and a third (center) party puts one up, it could get a seat.

A clear disadvantage of the preference score system, if it is used where there are political parties, is that it makes the number of nominees for each party a complex strategic problem unless the party can get its supporters to vote in a disciplined way. (It is thus like the cumulative vote and the limited vote.) For there is no way in which the votes for a party can be aggregated, even in the awkward way allowed for by STV. Thus, if a party puts up as many candidates as there are seats and its supporters spread their votes among them evenly, all may fail to get elected even though the same support concentrated on one or two candidates might have got them elected. It may also be noticed that the preference score system greatly accentuates the feature of STV already commented on, that which of a party's nominees gets elected may depend heavily on the votes of those who do not

give the party their first preference.

My reason for discussing STV and the preference score system at some length is that Dummett, in his last substantive chapter, proposes a scheme that he calls QPS (for "Quota Preference Score") that is a combination of the two. It takes from STV the idea that a candidate with a quota of first preferences is elected. It then extends this by picking up a feature of STV that Dummett likes, namely that the members of a bloc can get a candidate elected so long as they constitute a quota, even if they spread their votes over several candidates. The only condition is that they all rank bloc candidates, in any order, ahead of others. (See pp. 282-3.) This is formalized by saying that the tellers are to look for pairs of candidates whose voters are "solidly committed" to them, then threesomes, and so on. (See p. 284.) Preference scores enter in two ways. First, they are used to determine which of a pair (etc.) that gets a joint quota is

elected: the candidate with the highest preference score gets the seat. And second, preference scores are used to allocate any seats left over after the quota scheme has gone some predetermined number of rounds. (Dummett suggests  $k + 2$  where  $k$  is the number of seats to be filled -- see p. 287.)

This scheme is said by Dummett to be simpler to operate and easier to explain than STV. Also, since it is not an eliminative scheme, it avoids some of the quirks of STV, such as the lack of monotonicity. This is all, I think, correct. But we can also speculate about its other features. Dummett's proposed system has some of the features of STV mixed up with some of the features of the preference score system. Each aspect contributes to the overall political effects to be anticipated. Thus, the scheme is like STV in that it allows any bloc to get a candidate elected, so long as its members comprise a quota, however they rank the bloc's candidates. And far more so than STV it allows a party's choice of winning candidates to be made by those outside the party. Thus, it has the fissiparous tendencies →



of STV in a greatly enhanced degree. Insofar as the scheme turns into a pure preference score system when no more candidates are elected with quotas, it has all the characteristics already attributed to that system. It can, therefore, result in the election of a candidate with few or no first preferences.

Since there is no experience with this scheme in any national electoral system (nor is there ever likely to be), we cannot appeal to anything except deductions of the kind just made to estimate its political implications. What these suggest is, I think, that the scheme is favorable to two sorts of parties: small extremist parties whose supporters amount to a quota, and center parties that are few people's first choice. It would be bad for large parties of the right and left such as the British Labour and Conservative parties.

Dummett, as we have already seen, depends heavily on an a priori argument about the meaning of the word "representation." I have dismissed this, and in fact it is not, I believe, what really

motivates Dummett's concern for minority representation. In the end his preferences over electoral systems are as much driven by notions of the good society as are those of any of the people he criticizes. Dummett has for many years played an active role in protesting restrictive immigration policies in the UK based on (in effect) skin color, and demanding more equitable treatment for non-whites already in the country. Unfortunately, however, admirable as his objectives are, Dummett's political touch seems to me no more sure at the level of national politics than at that of college politics.

There is an immediate cause for suspicion in that Dummett writes as if he held the most naive of all versions of the "mirror of the nation" theory of representation, according to which representatives should have the same demographic characteristics as the population at large.<sup>57</sup> Thus, he says, extraordinarily enough, that since "the only two members of the racial minorities to be found in Parliament

are both peers" it follows that "it is undemocratic to propose abolishing the House of Lords" (p. 260). Even if this is intended as hyperbole, it still suggests that Dummett has an alarmingly weak grasp of what makes a political system democratic. Democracy is a question of collective control exercised through the electoral system. Even if the House of Lords were a perfect microcosm of the country on every thinkable demographic variable it would still have nothing to do with democracy.

Dummett goes on to say that "the adequate representation of minorities is one of the criteria by which a democratic system is to be judged" (p. 260) and it is clear from what comes before and after this statement that "representation" here means "demographic representation." That is to say, blacks are represented by virtue of there being blacks in Parliament. The standard is proportionality: "If there were the same proportion of those minorities in the House of Commons as in the population at large, there would be

about twenty-five black MPs; yet the prospect of getting even one seems bleak" (p. 260).

We have now established Dummett's standard of assessment. Electoral systems are to be judged by their prospects of producing MPs from racial minorities. Dummett thinks that a quota scheme such as STV or, even better, his own QPS, will aid in the achievement of this objective in two ways. First, he suggests that any multi-member system will lead parties to put up one member of a racial minority to pick up minority votes (p. 260). Second, Dummett suggests that QPS would make it particularly easy for the members of a racial minority to act as a bloc cutting across parties by listing those of its members who were candidates ahead of all others (pp. 286-7, 289-90). This presupposes, of course, a racial minority all (or most) of whose members would put a Labour candidate who was black first and a Conservative candidate who was black second. It is plain that only somebody deeply imbued with the spirit of descriptive representation would expect this to be such a common occurrence as to design a procedure with this contingency largely in mind.

Dummett also claims that, through some dynamic whose process he does not explain, blacks would do better with multimember constituencies quite apart from their improved prospects for descriptive representation. He says that

under such an electoral system, political parties will feel a greater need to woo the votes of a minority group; the history of British since 1965 is ample proof that, under the electoral system now in force, politicians see their best advantage as lying in an appeal to the prejudices of the majority and in a complete disregard for the minority. A fairer electoral system would have changed more than the identity of British MPs: it would have changed their behaviour. (Pp. 260-61.)

The logic of this escapes me, I must confess. If the present system of competition among broad-based parties does not stimulate the parties (and in particular the Labour party) to seek out votes from racial minorities, why should things improve with the introduction of STV or its cousin QPS? Should we not rather predict

a greater polarization, in which a new party representing the minority perhaps picks up a few seats while the rest of the politicians compete for the votes of the white majority by pandering to their racist proclivities?

We do not have to rest on a priori reasoning. Northern Ireland's experience with STV is again instructive. The introduction of STV for the elections of 1973 shattered the hegemony of the Unionist party among Protestants but its effect was to split Protestant votes among four groups all of which secured a number of seats. Of these only one group, consisting of those Unionists who followed the leader of the party and former Prime Minister Brian Faulkner, supported the so-called "power sharing" constitution. The other three, which competed in intransigence, were adamantly opposed.<sup>58</sup>

We can also learn from the introduction of proportional representation in France in the 1986 elections in place of the old two-ballot majority system. The campaign set in train a surge of racist outbidding. As R. W. Johnson has observed, under the earlier system Le Pen, the leader of the

overtly racist Front National,

could have said what he liked on this theme, got his 10 per cent of the first-round vote, and then watched his support flock towards orthodox conservatives on the second ballot without ending up with much leverage or a single seat. Under PR, however, every vote Le Pen takes is a direct loss for the RPR and UDF [the main conservative parties] -- and he will get lots of seats. His leverage is, accordingly, enormous: he can even dream of making and unmaking governments. The result is an alarming and escalating auction in racist promises and threats as the orthodox Right engages with Le Pen in a fierce competition for every last racist vote.<sup>59</sup>

The "key mechanism," he sums up, "is PR: it forces Chirac to compete with Le Pen; Giscard with Chirac; even the Socialist premier, Fabius, can be heard boasting on TV of the 'exceptional firmness' the Government would display against clandestins [illegal aliens]. PR has meant that Le Pen has been able to send powerful

ripples flowing across the entire political spectrum."<sup>60</sup> In the event, Le Pen got his ten per cent of the votes and his corresponding share of the parliamentary seats. Even more ominous for the future, the line between the "respectable" and "non-respectable" right, which might have been maintained easily enough under the old electoral system, collapsed as orthodox conservatives in a number of Departments concluded post-electoral alliances with the Front National to take control.

I find it only too depressingly plausible that the introduction of multi-member constituencies in Britain would come closer to duplicating the French experience than <sup>to</sup> producing Dummett's hoped-for outcome of a bevy of black MPs and a competition for the suffrage of racial minorities on the part of other candidates.

## XIII THOUGHTS ON ELECTORAL REFORM

I said at the beginning of this discussion in section XI that my objects in that section and the following one were negative: to argue against the identification of representation with the "mirror of the nation" conception and to put the case against Dummett's proposed electoral scheme. I hope I have achieved these aims. Even if I have not I do not intend to pursue them any further here. However, I must admit that if someone were to ask, à propos the British electoral system, "All right, wise guy, what would you do?" I should find it hard to deny that the question is a fair one.

I have argued that it is no use appealing to intrinsic fairness or to any supposed imperatives derived from the concept of representation. One can appeal only to consequences. But this does not have to reduce to an attempt to calculate what electoral system would give some particular political party the best chance. A good deal of advocacy is of this kind, though this is rarely made an overt part of the argument. An amusing example in Britain was the sudden conversion of many Conservatives to the case for proportional

representation after the Labour Party won a majority in 1974 with just under forty per cent of the vote. David Butler in his contribution to Choosing an Electoral System remarks that after the 1974 election, "a significant number of influential Tories recognized that PR offered the most respectable of constitutional safeguards against revolutionary changes being enacted by a minority party,"<sup>61</sup> and although there is something richly comic in the notion of the 1974 Labour government as a "revolutionary" body, the point is clear enough.

In the event a professor of politics at Oxford edited a pro-PR volume that was sponsored and published by a man who "started the Conservative Action for Electoral Reform group after the 1974 election."<sup>62</sup> And the Hansard Society set up a committee, which just happened to be chaired by a Conservative Life Peer, and which recommended the adoption of a PR system modeled on the West German system, where the Free Democrats, with barely five per cent of the

several decades popular vote, have been enabled to hold the balance of power over

Although the motives of these people should be clear enough, the actual arguments appealed heavily to abstract notions of fairness: the edited volume carried the claim that it is "pretty self-evident and rarely challenged in principle" that "electoral reform. . . would ensure greater justice or fairness in the representative process."<sup>63</sup> And the Hansard Society report said that "there can be no doubt that the first-past-the-post system does not produce a fair representation of the view of the people in Parliament. Indeed supporters of the present system do not attempt to defend it on grounds of fairness."<sup>64</sup> The edited volume also attempted to suggest that "adversary politics" was produced by the existing electoral system and was responsible for Britain's poor postwar economic record. When the Conservatives got back in 1979, however, winning that election and the next on similar minority votes and putting into effect far more genuinely radical changes, the unfairness and adversary

nature of the system did not, curiously enough, continue to excite the same people in anything like the same way.

I cannot take the space to set out and defend in any detail the criteria that I think should be used to assess alternative electoral systems in Britain. Let me therefore simply propose three. The first is that the system should be legitimate in the eyes of most people. The second is that it should preserve, as far as possible, the feature that a voter knows what the implication of his vote is for the formation of a government. (We can express this formally by desiderating a monotonic relation between vote and government: a vote for party X should make it more rather than less likely that party X comprises, or forms part of, the next government.) And (or parties of a similar kind) third, the racist National Front should not get any seats or be in a position to set the agenda as in the 1986 French election.

Given these criteria, the obvious question to start with is: should the electoral system be changed so as to accommodate the

present system of, in effect, three national parties plus some regional ones? (The Alliance of Social Democrats and Liberals can be counted as one in that its candidates do not compete in the same constituencies.) The present system should not, I argued in section XI, have to defend itself against attacks based on the inappropriate conception of representation as proportionality. However, even in its own terms it is hard to say that an MP with around forty per cent of the vote in his constituency represents the "preponderant" opinion, and the more such MPs there are the weaker the legitimacy of the system. It should also be said, of course, that in constitutional matters legitimacy is, in the end, as legitimacy does. To the extent that the barrage of propaganda in favor of proportionality as the criterion of representation is successful, the case for doing something becomes inevitably stronger.

I believe that the best outcome would be a return to a system of two broad parties collecting eighty-five per cent or more of the votes between them and gaining clear majorities in most constituencies.

But, as I have pointed out, there is no warrant for supposing that the plurality electoral system has the power to bring this about by some automatic "squeezing" process. (This could still happen, but it would be imprudent to count on it.) Historical experience suggests that the parties themselves have to act. The obvious move here would be for the Social Democrats to join the Conservative Party, with whose "wet" or non-Thatcher wing they already have almost everything in common. I have to say, though, that I do not expect this to happen.

If the decision is taken to accommodate the present tripartite system, the object should be to avoid the capricious operation of the plurality system when three closely-matched parties compete for a seat but at the same time <sup>try to</sup> ensure that elections determine the composition of the government and <sup>try to</sup> ~~and~~ <sup>cramp</sup> the style of small extremist parties. This implies, I think, retaining the system of single-member constituencies but changing the voting procedure. But how?

The alternative vote, as we have seen, is guaranteed to create a majority in each constituency by the crude but simple expedient of eliminating candidates automatically until the result is achieved. Its very automaticity, however, condemns it. Let me recall my discussion in section V of the procedure for electing Oxbridge Heads of Houses. I argued there that the requirement of making no election until a candidate received majority support was preferable to any procedure for guaranteeing an outcome from any set of votes, however randomly scattered over different candidates they might be. The fact that it required argument and negotiation was in itself to the good. The practical adaptation of the system of successive ballots until a candidate has a majority is the two-ballot system in which, if no candidate gets a majority in a constituency in the first round, a second election is held in which the candidate with the largest number of votes wins the seat. Obviously, in a national election, unlike a college, the negotiation has to take place among

the party leaders, though the arguments can be addressed to the voters between the two electoral rounds.

It would, of course, subvert the open-endedness of the situation if all except the two leading candidates in a constituency were eliminated or if the proportion of votes on the first round required for staying in at the second were so high as to create the same or almost the same result. Such a system (and some two-ballot procedures have taken this form) would have few advantages over the alternative vote, and if there were many candidates the violation of monotonicity that is possible with any elimination system might be even worse. The highest minimum for a candidate's staying in that would retain enough flexibility would, I think, be that now used for the forfeiture of deposits: one-eighth of the votes. This also happens to have been the figure used in the last two double-ballot elections in the Fifty Republic. (The figure was set at five per cent in 1958 and ten per cent in 1966.)<sup>65</sup>

As we saw in the analysis of the so-called "wasted vote" under plurality voting, we cannot say that the supporters of the party



with the fewest votes in a three-cornered fight 'wasted' their votes. With certain preference orderings it could be that those who voted for the candidate who came second 'wasted' them (in the sense of "waste," related to strategic voting, that is relevant here). So, the member of an alliance that is stronger in a certain constituency may withdraw either as part of a deal or in recognition that the voters' preferences prevent it from winning even if the other party withdraws. None of these refinements are available if only the top two candidates go forward. (Nor, of course, can they be accommodated by the alternative vote.)

There is a good deal of experience with the two-ballot system, though almost all of it is quite old outside France. A number of continental European countries employed it before they switched to party list PR. These include Belgium until 1900, and Italy, Germany, Austria, Norway and the Netherlands until after the First World War. It was in use in France during most of the Third Republic. Until 1919 not only could everyone who was in the first ballot stay in for the second but anyone could freely enter the second round. In

spite of this and the multiplicity of parties, the pressure towards a two-candidate fight in the second round still operated remarkably effectively. As Campbell <sup>writes,</sup> in his standard work on the subject:

at the first ballot electors would freely vote for the man they most favoured; at the second ballot electors and candidates alike disciplined themselves to bar the road to 'reaction' in the case of left-wing voters and candidates and to 'revolution' or 'atheism' in the case of right-wing voters and candidates. At the second ballot the less successful candidates of each side would usually withdraw and the electors of each side would rally to the candidate who had led at the first ballot. On the Left this process was called "republican discipline" and tended to be applied more thoroughly than it was on the Right. Sometimes the minor candidates persisted at the second ballot, but if they did so their supporters tended to desert them.<sup>66</sup>

The tendency for the second round to come down to a contest between the standard-bearers of two alliances is well-established empirically. If we assume that the system works in this way, we can point out that the double-ballot system, unlike the alternative vote, will generally satisfy two conditions that the alternative vote fails to: the requirement that voting for a party cannot hurt its chances of election (monotonicity) and the requirement that it should not be possible to bring about a more preferred outcome by abstaining from voting altogether than by voting sincerely. (Let us call this second condition "SVD" for "sincere voting dominance.")

On the first round, more votes for the party you favor will normally increase its chances of being the standard-bearer in the second round. (It is hard to see how it could reduce them.) And on the second ballot, if there are only two candidates it is a straightforward choice to vote for the one you prefer. That is to say, there is no contingency (defined in terms of the votes of others) in which there could be any  $\longrightarrow$

advantage in doing anything except voting for the candidate out of two whom you prefer. Since straightforwardness entails monotonicity and SVD, these requirements are necessarily met on the second ballot long as so  $\wedge$  all candidates except two are either eliminated for lack of first-round votes or withdraw to leave a straight fight between the standard-bearers of two alliances.

I must be careful here not to suggest that the two-ballot system has the property of providing a straightforward strategy on the first ballot as well. (Nor, of course, does it on the second ballot if there are more than two candidates. In this case the second ballot operates as a relative majority system, with the candidate having the most votes winning the seat.) Although straightforwardness entails monotonicity and SVD, the entailment does not hold in the other direction.

It is in fact easy to see how straightforwardness may fail on the first ballot. Suppose that there are two sets of parties,

those of the Left and those of the Right, and that the larger the share of the total Left vote a Left party gets on the ballot the greater its chances of being the standard-bearer of the Left in the second ballot. (The simplest case would, of course, be for there to be an agreement among the Left parties that the one with the most votes goes forward.) Suppose also that the same situation obtains among the Right parties. I am assuming, of course, that the two alliances are already in place before the first ballot rather than being put together between rounds.

Consider <sup>now</sup> the position of someone whose first preference is

for a party of the Left. He might vote for some party other than the one he most prefers for several reasons. First, he may vote for another Left party rather than his most preferred one. This could be rational if he thinks that another party of the Left has a better chance of winning in the second round than the candidate of the party he likes best and if he is <sup>above all</sup> concerned that <sup>some</sup> Left candidate should be elected.

He could believe that his party could make a poor standard-bearer because more first-round Left voters will prefer the Right candidate on the second round of because more first-round Right voters will switch to it on the second round if they don't like the Right standard-bearer. ~~If~~ Under some circumstances, it could be rational for someone whose first preference is for a Left candidate to vote for a candidate of the Right on the first round. One reason would be to make the Right standard-bearer a more defeatable candidate. Another quite different (almost opposite) motive would be to make the Right standard-bearer less obnoxious: this motive would be relevant where it seemed very likely that the candidate of the Right would win on the second round. (It would still, of course, be possible to vote against the Right candidate on the second round.)

It is, needless <sup>to say,</sup> artificial to talk about a single voter changing electoral outcomes. But I should here repeat the point that we can translate all such talk into statements about voting by

like-minded blocs of voters. We do not therefore have to think in terms of a single French Communist in a constituency where Communists outnumber Socialists imagining that he can single-handedly make the Socialist the standard-bearer of the Left in the second round by voting Socialist. All he has to do is think of himself as one of a number of Communists with the same priorities as himself. If enough of them vote for the Socialist then the Socialist will be the standard-bearer, and this provides an adequate reason for our individual Communist to vote Socialist. I should emphasize that reasoning in this way does not involve "magical" thinking to the effect that one's decision will cause others to decide similarly. It is simply a sensible decision rule in such situations to ask what would be best if others with the same preferences did the same and to hope that the others are thinking along the same lines.

It is illuminating to ask under what conditions sincere voting on the ballot would definitely be the best strategy. When, in other words, would sincere voting be guaranteed to produce an outcome

as high as possible up one's preference ordering over all outcomes of the election? Let us suppose as before that there are two pre-formed alliances and that within <sup>each alliance</sup> a party's chances of being the standard-bearer in the second round increase the more votes it gets on the first round. Consider a voter whose first preference is for a party which belongs to the Left alliance. He can vote for it without further calculation under these conditions:

- (1) There are only two Left candidates
- (2) He is indifferent between Right candidates (i.e. if one wins he does not care which it is)
- (3) He prefers either of the Left candidates to any of the Right candidates
- (4) The number of voters who will vote for the candidate of the Right in the second round does not depend on the party identification of either the Right or the Left candidate
- (5) The number of voters who will vote for the candidate of the Left on the second round does not depend on the party identification of either Left or Right candidate.

(The easiest way for conditions (4) and (5) to be met would be for all and only those who vote for a Left candidate on the first round to vote for a Left candidate on the second round and the same on the Right. The more general statements allow for abstaining on the first round but not the second, or the second but not the first, or even voting Left on one round and Right on the other -- but only so long as none of these choices is conditional upon the party identities of the candidates in the second round.)

Under these conditions our voter cannot possibly do better than vote sincerely on both the first and second round: he should vote for his more preferred candidate of the two Left candidates in the first round and for whichever candidate is the Left candidate in the second round. These conditions are strong, but they are not hopelessly unrealistic and may be approximated at some times and places closely enough to give a number of voters straightforward strategies. It is, at any rate, striking that it should be fairly easy to set out conditions for a straightforward strategy with the double ballot system.

Everything said so far holds only for the election within the constituency. We have been assuming that outcomes of the constituency election can be ranked in terms of preferences for the candidates. But the Achilles heel of multiparty systems is, as we have seen, that it is hard to know what the effects of a party's winning an extra seat are. Under certain not too stringent conditions, however, the political arrangements arising under a two-ballot system will make this problem a good deal more tractable than it is within other multi-party systems.

Provided there are two alliances, which are made nationally and are the same in all (or the great bulk of) constituencies, there is every reason to expect the alliance that wins the most seats to stick together after the election to form the government. In such a case the requirements of monotonicity and SVD are met for the relation between a vote for a party and its chances of forming or participating in a government. For such a system of alliances

will normally imply that monotonicity and SVD are satisfied at the constituency level. And it will also be the case that an extra seat for a party cannot reduce its chances of forming or participating in a government.

The notorious historical examples of collapsing alliances following two-ballot elections -- the "reversals of alliances" in France in the interwar period -- are in fact exceptions that prove the rule. For what on a couple of occasions undermined the cohesion of the coalition formed after the election and led to a government of the opposite tendency half way through the session was the equivocal position of the Radical Socialists. More a parliamentary group than a disciplined party, their members ran as standard-bearers of the left in some constituencies on the second ballot and as standard-bearers of the right in others. Since the Radical Socialists and other loose-knit groups occupied a pivotal position in the Assembly (that is to say, they contained the median Deputy on the left-right continuum) it is easy to see how electoral

dynamics and parliamentary arithmetic conspired together to produce government instability.

With coherent parties making national alliances, we can predict with some confidence that a double-ballot system would work in a way not too unlike the classical two-party model. (The operation of the system under the Fifth Republic is significant in this context.) It is scarcely worth speculating extensively about the longer-term dynamics of a party system of two electoral and parliamentary alliances in Britain. But it is perhaps relevant to point out that sustained electoral cooperation between parties has until now invariably led to amalgamation. On the left, the merger of the ILP into the Labour Party is an example; on the right, the Conservatives have absorbed a number of parties with which they had electoral pacts, from the Liberal Unionists on. One might therefore entertain the possibility -- though it is no more than that -- of the eventual result of a two-ballot system producing a revived

two-party system. This would require as a minimum condition that the same alliances persisted through a number of electoral periods. Even then we should be cautious about extrapolating from the experience of long-term electoral pacts between parties to stand down in favor of one another's candidates. For it may be that such pacts have different effects in a plurality system from those to be expected in a two-ballot system when the pact comes into effect only on the second ballot.

I have to admit that this proposal of a two-ballot system does nothing to meet Dummett's complaint that members of racial minorities are not getting elected, and, although I have argued against the fallacy of "descriptive representation," I think that the lack of West Indian and Asian MPs is indeed symptomatic of a neglect of their interests. However, the introduction of a system for representing minorities in multi-member districts would, if I am right, carry with it a danger of outcomes of a kind Dummett would deplore

more than anyone. American experience suggests that there is a partial solution within the single-member-district system. The prescription is that the Boundary Commission should engage in racial gerrymandering to produce some predominantly non-white constituencies. Britain does not, of course, have the huge ghettos of major American cities (for which one should be thankful), and this makes the job more difficult. On the other hand, there is an offsetting factor in that there is far more tolerance of unequally-sized constituencies in Britain. (In the USA the courts have become so fanatical that they have started invalidating boundaries that deviate by one per cent from an equal division within a state.) But to talk about the drawing of constituency boundaries is to stir a hornet's nest and I have already sent enough of the creatures buzzing, so I shall stop here.

## NOTES

1. John Rawls, A Theory of Justice (Cambridge, Mass.: Harvard University Press, 1971), especially pp. 134-35 n. 10.
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3. Allan Gibbard, "Manipulation of Voting Schemes: A General Result," Econometrica 41 (1973): 587-94; reprinted in Barry and Hardin (eds.), pp. 358-66.
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5. Michael Dummett and Robin Farquharson, "Stability in Voting," Econometrica 29 (1961):33-43.
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7. Keith Michael Baker, Condorcet: From Natural Philosophy to Social Mathematics (Chicago: University of Chicago Press, 1975), pp. 228, 230.
8. Ibid., p. 239.
9. See *ibid.*, especially p. 238.
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11. Baker, p. 238.
12. For another example see my "Lady Chatterley's Lover and Doctor Fischer's Bomb Party: Liberalism, Pareto Optimality, and the Problem of Objectionable Preferences" in Jon Elster and Aanund Hylland (eds.), Foundations of Social Choice Theory (Cambridge: Cambridge University Press, 1986).



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5. See for a development of this point my article "Is Democracy Special?" in Peter Lasless and James Fishkin (eds.), Philosophy, Politics and Society, 5th series (Oxford: Basil Blackwell, 1979), pp. 155-96.
6. Michael Steed, "The Evolution of the British Electoral System" in S. E. Finer (ed.), Adversary Politics and Electoral Reform (London: Anthony Wigram, 1975), pp. 35-53, at pp. 46, 49.
7. Arend Lijphart and Bernard Grofman (eds.), Choosing an Electoral System: Issues and Alternatives (New York: Praeger, 1984).
8. C. G. Hoag and G. H. Hallett, Proportional Representation (New York: Macmillan, 1926).
9. Steven J. Brams and Peter C. Fishburn, "Some Logical Defects of the Single Transferable Vote" in Lijphart and Grofman (eds.), pp. 147-51 at p. 151.

19. Ibid.
20. George H. Hallett, Jr., "Proportional Representation with the Single Transferable Vote: A Basic Requirement for Legislative Elections" in Lijphart and Grofman (eds.), pp. 113-25 at p. 119.
21. Brams and Fishburn, p. 150.
22. Robin Farquharson, The Theory of Voting (New Haven: Yale University Press, 1969).
23. William P. Irvine, "'Additional-Member' Electoral Systems" in Lijphart and Grofman (eds.), pp. 165-74 at p. 166.
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- 24A. John Stuart Mill, "Recent Writers on Reform" in Essays on Politics and Society, ed. by J. M. Robson, Vol. XIX in the Collected Works (Toronto: University of Toronto Press, 1977), pp. 343-70 at p. 360.
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26. Enid Lakeman, "The Case for Proportional Representation" in Lijphart and Grofman (eds.), pp. 41-51 at p. 41.
27. Ibid.
28. R. J. Johnson, "Seats, Votes, Redistricting, and the Allocation of Power in Electoral Systems" in Lijphart and Grofman (eds.), pp. 59-69 at p. 63, italics in original.
29. For a discussion of decisiveness, see <sup>my article</sup> "Is It Better to Be Powerful or Lucky?" Political Studies 28 (1980): Part I: 183-194; Part II: 338-57.
30. Hallett, p. 120.
31. Thomas Hobbes, Leviathan, edited and with an introduction by C. B. Macpherson (Harmondsworth: Penguin Books, 1982), p. 221.
32. Jennifer L. Hochschild, The New American Dilemma: Liberal Democracy and School Desegregation (New Haven and London: Yale University Press, 1984), p. 143.

33. Ibid., pp. 143-4.
34. Ibid., pp. 149-50.
35. R. W. Johnson, "Proportional Representation Casts a Shadow Over France," London Review of Books, 23 January 1986, pp. 3, 5, 6 at p. 3.
36. See for a compact account A. H. Birch, Representation (London: Pall Mall, 1971), pp. 22-29, especially p. 28.
37. Hallett, p. 114.
38. Dieter Nohlen, "Two Incompatible Principles of Representation" in Lijphart and Grofman (eds.), pp. 83-89 at p. 85.
39. Ibid., p. 89 note 1.
40. Ibid., p. 87.
41. Ibid., p. 36.
42. Ibid., p. 86.

43. See Dieter Nohlen, "Changes and Choices in Electoral Systems" in Lijphart and Grofman (eds.), pp. 217-29, especially pp. 222-3.
- 43a. John Stuart Mill, "Considerations on Representative Government" in Essays on Politics and Society, pp. 435-577 at p. 449.
44. Richard Rose, "Electoral Systems: A Question of Degree or of Principle?" in Lijphart and Grofman (eds.), pp. 73-81 at p. 74.
- 44a. Mill, "Considerations on Representative Government," p. 450.
- 44b. Ibid.
- 44c. Ibid.
45. See Ronald Rogowski, "Representation in Political Theory and Practice in Law," Ethics 91 (1981): 395-430 at p. 419. The quotations are taken respectively from the simultaneously decided cases of Reynolds v. United States 377 U.S.533 (1964) at 565 and Lucas v. Colorado General Assembly 377 U.S. 713 (1964) at 736.

46. United Jewish Organizations of Williamsburg Inc. v. Carey 430 U.S. 144.
47. Rogowski, p. 424.
48. Ibid.
49. See Birch, pp. 51-2 for the notion of virtual representation. The argument in the text is presented and criticized by Rogowski, p. 424.
- omit* ~~50. Nohlen, "Two Incompatible Principles. . .," p. 88.~~
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