Proportional Representation

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ARTICLE 4.

Single Transferable Vote—Continued

In order that each of these articles may be quite intelligible to any reader who has not read the preceding ones of the series, I shall very briefly recapitulate what has gone before.

My first article pointed out that the present plan of electing representatives in single-member districts is the root cause of political evils, because it is wrong in principle and bad in practice. Representative government being founded on the popular vote, an unsound method of voting gives bad results from the foundation up. A rotten foundation means a shaky building.

The second article showed how small a change is required to abolish bad politics; namely, the election of representatives in districts from which several members are elected, but in which each elector has one vote only. To put it in a phrase, we want the Single Vote in a Multiple District. This plan was shown in detail in its crudest form—a Single Untransferable Vote.

The third article showed the friendly relation between Direct Legislation and Proportional Representation. It also introduced the Single Transferable Vote, mentioned some undesirable systems and described the simple Proxy Plan, giving rules for its use.

A Tried Success

The present article goes a long step further and explains the Single Transferable Vote on the Hare plan, as used with great success in Tasmania, for state and federal elections, and in the South African cities of Johannesburg and Pretoria for municipal elections. This plan comes to you bearing the hall-mark of practical use and success.

The essential factors of the Single Transferable Vote are three, and three only, namely:

1. The Multiple District. — This means that several members shall be elected from one district; not fewer than five or seven, and not more than will allow the ballot to conveniently hold all candidates.

2. The Single Vote.—Each elector shall have but one vote that finally counts, although he may mark several candidates as alternates; that is, he may mark a first choice, a second choice, etc.; but as soon as one of these choices counts, the others go for nothing.

3. Transfer of Votes.—That is, some plan by which votes shall be transferred from candidates who cannot use them to candidates who can.

An Illustration

Now let us describe the working of the Hare plan, using letters for names of the candidates. Suppose a seven-member district, in which there are twelve candidates, A, B, C, etc., down to L. The candidates are printed on the ballots in alphabetical order, and the voter marks as many as he likes, in the order of his choice or preference, with the figures 1, 2, 3, etc.

To make this perfectly clear, use names instead of letters. The voter says to himself: "I want Smith for my representative, if I can get him." So he marks Smith with the figure 1, as his first choice. Then he says: "Suppose Smith does not need or cannot use my vote then Brown is my next choice." So he marks Brown with the figure 2, as the person to whom his ballot shall go if Smith cannot use it. Similarly he marks a third choice with the figure 3, and goes on marking candidates in this way until he ceases to feel any preference. Or, if there is one candidate he especially wants not to be elected, then he may mark every name on the ballot except that one, thus casting a definite vote against the candidate he objects to.

Now, here are the rules of the game, put in simple fashion. In Canada we speak of "polling subdivisions" whereas they say "precincts" in the United States. And our terms "returning officer" and "deputy returning officer" are not used south of the border. For brevity's sake I will use the U. S. terms in the rules which follow:—

Rules of the Game

1. Each voter marks his ballot with as many candidates as he chooses in the order of his choice, with the figures 1, 2, 3, etc., etc.; understanding that his vote will ultimately count for one candidate only.

2. At the close of the poll, the precinct officers count and tally the ballots according to the first choice votes only, sorting them into a bundle for each candidate, and giving the results at once to the press. The newspapers can therefore immediately publish the result of the first count, such as I have tabulated below. The bundles of sorted ballots are then securely and separately tied up, put back into the ballot boxes, along with tally sheets, spoiled ballots, etc., etc., and taken to the central office.

3. At the central office the bundles of ballots, without being untied, are sorted into compartments in such a manner that the first choice votes for each candidate are together in his special compartment.

4. The precinct tallies are added up, and the total number of first choices for each candidate is officially ascertained. This has probably already been done informally in the newspaper offices.

The Scheme in Practice

Let me now interrupt these rules by an illustration. Suppose an election in which ten members are to be returned from one district, and that there are sixteen candidates. I take the large number of ten seats because it will enable the reader to follow all my figures easily, without having to use pencil and paper. If you think the numbers too small, add cyphers, and make the numbers as big as you like. We will use letters of the alphabet for the names of the candidates, and will use "round figures." Let the count of first choices be as follows:—

A	175
B	90
C	85
D	80
E	75
F	70
G	65
H	60
I	55
J	50
K	45
L	40
M	35
N	30
O	25
P	20
Total	1,000

The first thing to bear in mind is that here are sixteen separate and distinct groups of electors represented, and that the units or individuals of each group come from all over the electoral district. That is a necessary and most desirable result of the Single Vote in a Multiple District. The 175 voters who have marked A as their first choice are a different lot of voters entirely from the 90 who marked B as first choice; and so on all down the list until it ends with P.

Now, we have sixteen separate groups of electors; and in an actual election of ten members there might be eighteen or twenty or more groups. But we only want ten groups; and the purpose of the Single Transferable Vote is to reduce these sixteen or more groups to ten groups, each group being the supporters of one elected candidate.

"Quota" Elects Member

For this purpose a "quota" is got, on the principle that if a thousand votes are cast to fill ten seats, each one-tenth of the voters is entitled to fill one seat. On this principle, the 1,000 votes of our illustration would be divided by ten; any candidate getting his quota of a hundred votes would be elected; and any votes that he had over and above his quota would be regarded as a surplus, and would be distributed to second choices. In our illustration, A heads the poll with 175 votes. He would have a surplus of 75, which would be taken away from him as not being needed by him—100 being all he wanted—and this surplus of 75 would be distributed to second choices according to the wishes of the electors as expressed on their ballots.

Here is an illustration of the way the quota idea works: All the candidates are in the running when any surpluses are distributed, because that is the first operation in the Hare transfer. Suppose A and O are running in the same general interest, supported by the same voters, but that A is so much more popular personally that the greater part of the first choices go to him. This is, of course, an extreme case, but it illustrates the principle all the better for that reason. A's supporters all take especial care to mark O as their second choice. Then all A's surplus votes go to O; O gets the quota of 100; and O is at once elected, and is saved from being knocked out by the excluding process, of which we shall presently speak. Then two hundred like-minded voters, being two quotas, are proportionally represented by two elected members.

A Stricter Quota

Whilst on the quota question, I will describe another method of getting the quota, which is becoming largely used in practice. It is said nowadays that a candidate ought not to receive, by way of quota, any more votes than are required to elect him, and that, taking our illustration, 100 votes are more than he needs; in fact, that if a candidate gets 91 votes nothing can prevent his election. We are dealing with a total of a thousand votes, and electing ten candidates. Now, if ten candidates get 91 votes each, there are only ninety votes left; not enough to put anyone above the ten who have got 91 each. Hence this simple formula:

Divide the total number of votes by one more than the number of seats to be filled, and add one to the quotient. Applying the figures to our illustration, we get this:

Divide by 11)	1,000
	90
Add	1
	91

The "remainder" of 10 is disregarded, because it does not affect the result.

This latter plan is called the "Droop" quota, from the name of its inventor. Or you may call it the "small quota" and the other the "large quota." Another advantage of the small quota is that it leaves more votes available for transfer.

Principle of Transfer

Now comes the question, On what principle shall the surplus be transferred? Which 75 of the 175 ballots shall be transferred, if we use the large quota; or which 84 of the 175 shall be transferred if we use the small quota of 91?

It is in the distribution of surplus ballots that all the elaboration of the Hare plan comes in. A rough and ready way of doing it is to turn the ballots face down, shuffle or cut them several times, and then count the surplus off the top. That system is not used in municipal or legislative elections. Instead, there is a set of rules by which the surplus can be distributed with mathematical exactness by anyone conversant with ordinary school arithmetic. I will not take up space to describe this fully, because a complete set of working rules can be obtained from me at 20 Harbord Street, Toronto, Canada; from Mr. William Hoag, 19 Milk Street, Boston, Mass., or from Mr. John H. Humphreys, 179 St. Stephen's House, Westminster Bridge, S.W., London, England.

But a few words will show the principle clearly. Candidate A has 175 first choice votes, and on one of these suppose the voter has marked no second choice, thus leaving 174 votes capable of transfer. Suppose also that candidate F is second choice on half of these 174 votes and Candidate O on the other half. Clearly, therefore, half of A's surplus votes must go to F and the other half to O, because 87 of A's supporters have said: "Let F have all the votes that A does not need"; and the other 87 have said the same thing about O.

A great deal of unnecessary fuss is made about this matter of distributing surplus votes. An expert mathematician has calculated that in the ordinary British election a "chance" distribution could not affect the result more than once in ten thousand times, and then only as regards one candidate.

It frequently happens that the candidates who head the count of first choice votes are those finally elected, showing that the "transfers" have not made any difference. This shows that transfer provisions are mainly in the nature of a safeguard to meet contingencies. They also give the voter a feeling of confidence that his vote will not be wasted on a defeated candidate.

Counting Candidates Out

Now let us go on with our rules.

5. After all surplus ballots have been distributed, the candidate having the lowest number of first choice votes is declared "out of the count." His bundles of ballots are untied, and all his ballots are transferred to such other candidates as are second choice thereon. Thus the wishes of his supporters are given effect to. No voter need fear to mark any comparatively weak candidate as his first choice, because he knows that his vote will go to a stronger candidate if the first choice is defeated.

6. This process of excluding the lowest candidate is continued until only enough candidates remain to fill the seats of the district, and these are the elected ones. In our illustration, the ten candidates having the highest number of votes, at the conclusion of the transfers, would be those elected. At the beginning of the transfer operation, J stood to be elected; but the result of the transfers might be to give K so many more votes than J that K would be put above J, and would be elected.

The desirability of marking several choices is shown in this way: "P" having been counted out, we will suppose that "O" is the next one excluded. A ballot marked "P,1; O, 2; B, 3," etc., would go to B on third choice, because O having been counted out, the second choice could not be used. But if that voter had marked his ballot "P, 1; O, 2," and there stopped, his ballot could go no further and would become "null"; he would lose his vote, through his own fault.

Looks Complicated on Paper

The Hare system of the Single Transferable Vote has been proved beyond doubt to be a good workable and practical system, giving absolutely fair results. It is in use for legislative and municipal elections in Australia and South Africa, and it has been used hundreds of times for elections of societies and associations in Canada, England, Australia and elsewhere. The one obstacle to its adoption is that it looks elaborate when described on paper. If you want to know why, try to describe in detail on paper every process of the post office in regard to the transmission of a letter, from the time it is mailed until the time it is delivered; assuming that your reader does not know what a post office or a letter carrier is.