

SUMMARY

The Use of Computers in Predicting the Results of the Finnish Parliamentary Election of 1966

By Risto Sänkiaho

1.1. The Objectives of Using Computers in Prediction

In the Finnish Parliamentary Election in March 1966 computers were used for the first time to speed up the giving of information about the election results to the mass media of communication and, through them, to the public at large. Computers were actually used in two ways: first, to make a prognosis of the final results on the basis of a selective national sample of electoral districts; and, second, to follow up the counting of votes and to predict the final result at regular intervals on the basis of the accumulating information obtained from the election boards.

2.1. The Finnish Electoral System and the Problems of Prediction

A proportional system of representation is in use in Finland, the seats in Parliament being distributed through d'Hondt's method. The country is divided into 15 electoral districts. The district of Aland elects one member and the others 9 to 21 members each. The political parties are permitted to form coalitions in the electoral districts. Thus, only the seats obtained by each coalition can be predicted immediately. The distribution of the seats obtained by any coalition among the parties included is not determinable until a rather late stage of the counting of votes.

No information is obtainable about the votes cast by the electors outside their own electoral districts until about a day after the election is over. Thus it is necessary in prediction to determine the number and distribution of these votes in advance, without any information about their final distribution.

Each electoral district is subdivided into several hundreds of voting districts, where the votes are counted first, the result being informed to the central election board of the electoral district concerned. The central election board summarizes the results by municipalities, and in this form the results are informed to the representatives of the press and the other mass communication media.

The voting places are closed at 8 p.m., and it usually takes a couple of hours to make the election results by municipalities available; hence, a sample of voting districts was planned, so as to enable the prediction of the final result of the election on the basis of the results for voting districts.

3.1. The Prognosis Based on the National Sample

Preliminary calculations indicated that it would be possible to receive and punch-card the results from some 300 voting districts before 10 p.m., when the prognosis was to be run on the computer.

Selection of the approximately 300 voting districts to be included in the sample was of course a difficult problem. A theoretical basis of the sampling was provided by studies concerning the political ecology and the theory of political behaviour. In political ecology one speaks of the regions or climates of political parties, characterized by this or that party's strong and stable support. Such regions have taken shape as a result of historical, social and other comparable factors. In Finland too there are clear-cut political regions, where the political behaviour departs from that typifying the other regions.

In each electoral district the voting districts were chosen from the region of the various political parties in such a way that, from each region, voting districts were chosen in proportion to the numbers of those entitled to vote. This procedure ensured that the section of the electorate included in the sample in each district became a miniature picture of the electorate in the entire electoral district; and, thus, the entire sample became a miniature picture of all the Finnish citizens entitled to vote. As regards the factors bearing on the formation of political regions, the sample was a miniature picture of the entire population.

3.2. The Success of the Prognosis

The columns of the table on p. 64 list, from the left, the estimated and the final numbers of votes and the estimated and final numbers of seats obtained by the various party coalitions in the whole country. Regarding the distribution of the seats, the prognosis erred by one in three electoral districts. In all three districts the vote concerning the last seat was very close. In the other electoral districts the vote was not equally close. In a sense, it was bad luck that the prognosis failed in all of these three districts, as it would have been more likely to prove correct at least in one of them. Nevertheless, the prognosis based on 307 out of the 5500 electoral districts of the country proved more successful than expected: it had only been planned to reveal the general trend, but it was also capable of furnishing rather accurate estimates of the final numbers of votes and the distribution of the seats.

4.1. The Prediction Based on the Cumulative Information

The distribution of the seats was also estimated on the basis of the data by municipalities received from the central election boards. An estimation of this kind on the basis of the information already obtained has been in use in all the countries where »computer elections» have been held. This method departs from a prognosis, in that, in making a prognosis, the voting districts from which the results are desired are determined in advance, whereas in cumulative counting an estimate is made on the basis of the totality of the information already obtained.

How the success of an election prognosis based on purposive sampling relates to one resting on cumulative information is clearly indicated by the fact that the cumulative estimation offered a more accurate picture of the distribution of the seats only when 68 per cent of all the votes cast had been counted.

5.1. The Future Prospects of Computers in the Estimation of Election Results

There is little doubt that purposive sampling will also be resorted to in prognosticating the results of future elections; for its speed and accuracy, compared with cumulative information, was clearly revealed in connection with the last election. Yet when the use of computers in the official counting of election results becomes increasingly general and the communications are improved, the official counting may be speeded up to such an extent that no form of estimation of the election results is necessary any longer.

Pressure Groups in the British Two-party System

By Erkki Teikari

The study of British pressure groups was not actually begun until the late half of the past decade. The investigations published since then have been criticized on account that they do not pay sufficient attention to foreign policy and military questions, and that only associations, but not commercial corporations, for instance, have been reckoned among pressure groups. The first studies regarded the pressure groups as rather insignificant political factors; in the next stage they were given increasing recognition, but even then the focus was on secondary matters. On the other hand, in the most recent studies more important topics have been concentrated upon.

The British legislative system does not regulate or restrict the founding of pressure groups to any appreciable extent. Therefore, in Britain there is an infinity of various organized groups, covering nearly all thinkable sectors of society. One possible basis of classification is whether they are sectional or promotional groups.

The members of the Government, as well as the members of Parliament, are subject to continual pressure. As various pressure groups have been allowed to appoint their representatives as members of varied advisory government committees, they have obtained an established, formal position within the administrative system. Pressure groups have numerous personal and other less official connections with the ministries. When pressures are brought to bear on the members of Parliament, the chief intention is to obtain a spokesman in Parliament or an indirect channel of influence to the Government.

Serving as a still more important channel of communication between citizens and those governing them than the one consisting of the political parties, pressure groups in a sense provide a compensation for the rather »rough» sort of representation created by the electoral system. Even though the party in government is usually able to carry its will through in Parliament, the pressure groups are capable of influencing the decisions largely in advance through concentrating their pressure on the ministries concerned. Moreover, the »stronger» political party can adjust more safely to the demands of the pressure groups and seek their support; for it is possible for it to control the given promises and ensure these promises sufficient support when they come up for decision as bills in Parliament.
