SUMMARIES

The Level of Voting and Potential Unification of Local and Parliamentary Elections in Finland

by Pekka Väänänen

The similarity between Finnish local elections (for communal councils) and the general election for the (one chamber) parliament is discussed. The organizational similarity between them gives a chance for meaningful comparisons. The author's preliminary comparison of the elections on the societal level shatters some old stereotypes about the success of the political right in high voting turn-out elections and local elections.

The analysis then focuses on the level of voting districts and the similarity between communal and parliamentary elections in the impact of party support to level of voting is studied in greater detail. The communal elections of 1968 and the parliamentary election of 1970 are compared. By means of tree analysis, using support of different parties as the independent variables and level of voting as the dependent variable, analysis patterns for both elections are calculated and compared for differences and similarities. The most obvious difference was that in communal elections the support of large parties was the main explainer up to the third step of the tree, while in parliamentary elections the explainers in these steps were mainly small parties. The groups of communes in different branches of the patterns are also compared both in terms of homogenity (measured with variation coefficient) and in terms of general structural characteristics. The author concludes that the differences are obvious enough that the unification of the two types of elections (often recommended e.g. because of decreased costs) would influence on the character of the elections on the voting district level at least in respect to the characteristics studied. The value of the research technique used for this kind of problems is also discussed.

Analysis of Party Systems by Concentration, Fragmentation, and Entropy Indices.

by Raimo Väyrynen

Different approaches to the empirical description of parties and party systems are discussed. Then the focus is narrowed to the global descriptive

indices (e.g. those used by *Dahl, Deutsch* and *Russet)* and a more detailed analysis, empirical application and comparison of the concentration, fragmentation and entropy indices used to characterize party systems in presented. The following indices are introduced: CR (concentration ratio), *Lorenz* curve, *Galtung's* measure of dispersion, *Rae's* index of fragmentation, *Hall-Tideman* concentration index, estimate of variance and $\log_2$ -based measures of absolute and relative entropy.   These indices are calculated for all postwar parliamentary elections in the four Nordic countries (Denmark, Finland, Norway and Sweden). The product moment correlations between the fragmentation and time are also calculated in order to find out the trends of development for each country. On the basis of the empirical findings the author concludes that the only country where one can speak about clear trend of fragmentation is Finland and that all indices but Galtung's give the same rank order of the averaged indices for the time period studied.   The dimensionality of the indices is also analyzed by calculating their correlations for each country and comparing the size and the countrywise variations of these correlations. In general the CR, TH-index, and absolute entropy index on the one hand, and the fragmentation index and estimate of variance on the other form two separate but interconnected groups (CR and TH-index being the bridge between these groups).   Galtung's index of dispersion and relative entropy seemed to measure another dimension.   The comparison of the clusters of correlations for each country showed that the clusters for more fragmented party systems (Finland and Denmark) on one hand and less fragmented party systems (Sweden and Norway) on the other resemble each other.   This suggest that the level of fragmentation as such influences on the relations between the indices.

The possible uses of the indices for practical and theoretical analysis are discussed.   For example, (at least in Nordic countries) the political values adhered to demand that the fragmentation is not too high or too low and that the fragmentation in parliament must not differ too much from that in the electorate.   These values can be achieved via proper election laws and political measures.

The use of the indices as dependent or independent variables in empirical research is also considered.   As an empirical illustration, the validity of some information theoretical hypotheses about the relationships between fragmentation, level of voting, degree of cooperation between the parties (both immediately after changes and later after changes in fragmentation), the time elapsed from cabinet crises to the formation of the cabinet coalition (again immediately and later after the change in fragmentation), and the stability of cabinet coalitions, is tested with the data on Nordic countries.   The results indicate that systematic interpretation of the relationships in terms of information theory is possible.