D R A F T   C O P Y

Developing a Link between Theory and Practice
in the Rules for Certifying New Political Parties.

A committee of eight people(coordinabr;Billie Wachter, 258-0439)
called a meeting for February 7th in San Jose on the Voters'Choice
Initiative to plan a petition campaign to get an initiative on the
November 1974 California ballot to change the rules for qualifying
new political parties from a requirement of signatures in the number
of 10% of the registered voters or 1% change in registration, based
upon the last gubernatorial vote. ---- to 1% signatures(the value
required prior to 1938).

The committee bases its arguments on fairly simple logic
related closely to objectives for improving the democratic process
to make our political systems more responsive to the needs of the
people. At this stage in the development of science, there have
been some spin-offs of mathematical principles which show potential
applications to political problems like the alternative structure of
the political parties, but have not been explained and applied in the
interests of the people. A number of these spin-offs from physical
science are used in decision theory by military strategists and
large corporation planners and other elite groups in our society.
It is time we determined, if such theories are valid and, if so,
use them for the benefit of the people rather than for special
interests.

A committe of computer scientists and operations research
specialists under the leadership of £ir Stafford Beer attempted to
carry out this function for the Allende govern ment of Chile, and
were partially successful, until the Allende government was overthrown
by the military junta in September 1973. (See articles in Science for
People(London), New Scientist(London), and International Section:
The Mensa Journal(New York)and February 14, 1973 Xerox copyd manuscript,
"Fanfare for Effective Freedom - Cybernetic Praxis in Government" by
Sir Stafford Beer.)

The present problem in California, the rules on qualification of
new political parties, involves a limited section of cybernetic
systems, namely the application of information theory in computing
the "communication entropy" or "political entropy" of the probable
distributions under different sets of rules.

is the application of Information Theory to the analysis of political
systems. In 1956 Frederick Bernard Wood, an electrical engineer,
at a seminar at the First Unitarian Church of San Jose, suggested that
the computation of the "negative entropy" of properties of a political
system should give a measure of how democratic the system is. No
practical test of the application could be found at that time. In 1959
Professor R. B. Lindsay, Physics Department , Brown University,
published an article, "Entropy Consumption and Values in Physical
Science," (American Scientist, v. 47, pp. 376-385), proposed a
measure of the entropy change in a social system as an ethical
principle, which he called the "thermodynamic imperative." In 1960
Dr. William Malamud, President of the Family Service Association,
New York City, suggested that the "thermodynamic imperative" might
lead to a measure of how well a society measures up to Albert
Schweitzer's "reverence for life." (The American Journal of Psychiatry,
v. 117, p. 1- , 1960)
      In 1963 F. B. Wood applied the measure of "negentropy" to an
ideal set of political systems on the size of city-states to measure
the"degree of democracy" in relative units of negative entropy(A.A.A.S.
Section L, History and Philosophy of Science and Society for General
Systems Research, Cleveland, December 1963). In 1967 Henri Theil,
University of Chicago, published a book, Economics and Information
Theory, in which the "entorpy" is computed for a number of economic
sub-systems. In 1969 Henri Theil published an article, "The Desired
Political Entropy," in The Political Science Review.(vol LXIII, No. 2,
June 1969, pp. 521-525). In this article he discussed the mathematical
formulae for the entropy of political systems with different rules
governing the representation of the people by sets of political parties.
Although his analyses were addressed to the common European problem
of their being so many small political parties that no one party could
obtain a majority, his paper is very important in that theory and
practice were finally brought closer together.

      In this short paper I will attempt to extend the methods of Henri
Theil to the analysis of the restrictions on the certification of new
political parties in California.